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REPORTS

FROM

COMMISSIONERS:

TWENTY-TWO VOLUMES.

—*(2.)*—

SEA FISHERIES, Vol. II.

(MINUTES OF EVIDENCE, AND INDEX.)

Session

1 *February* — 10 *August* 1866.

VOL. XVIII.

1866.

REPORTS FROM COMMISSIONERS:

1866.

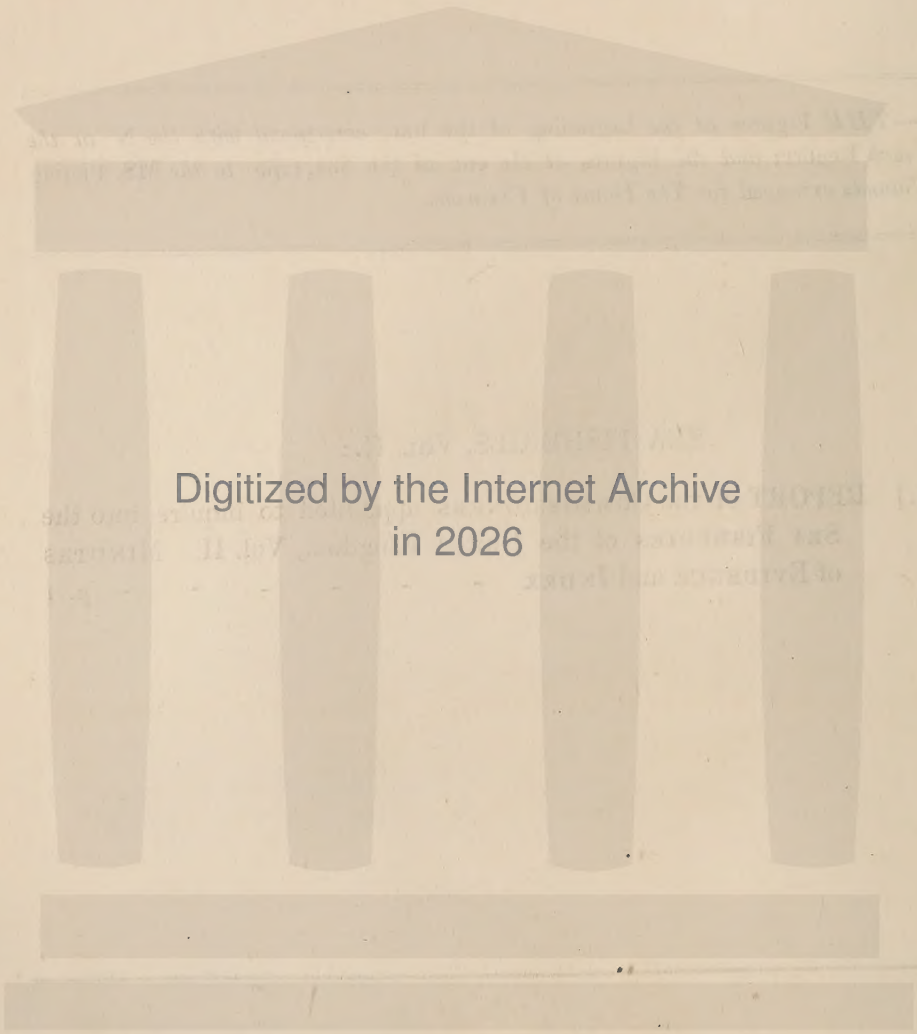
TWENTY-TWO VOLUMES:—CONTENTS OF THE

SECOND VOLUME.

N.B.—*THE* Figures *at the* beginning of the line, *correspond with the* N° *at the foot of each* Report; *and the* Figures *at the* end of the line, *refer to the* MS. Paging *of the Volumes arranged for The House of Commons.*

SEA FISHERIES, Vol. II.:

[3596-I.] REPORT of the Commissioners appointed to inquire into the Sea Fisheries of the United Kingdom, Vol. II. Minutes of Evidence and Index - - - - - - p. 1



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REPORT

OF

THE COMMISSIONERS

APPOINTED TO INQUIRE INTO THE

SEA FISHERIES OF THE UNITED KINGDOM.

Vol. II.

MINUTES OF EVIDENCE AND INDEX.

Presented to both Houses of Parliament by Command of Her Majesty.

LONDON:
PRINTED BY GEORGE EDWARD EYRE AND WILLIAM SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.
FOR HER MAJESTY'S STATIONERY OFFICE.

8077. 1865.

LIST OF PLACES VISITED.

ENGLAND AND WALES.

Name of Place.	Date of Visit.	No. of Question in the Evidence.	Name of Place.	Date of Visit.	No. of Question in the Evidence.
Billingsgate (London)	18th Nov. 1863	12,402–13,507	London	9th March 1865	58,753–59,022
Boston	28th Nov. 1863	15,156–15,893	„	16th March 1865	59,840–61,041
Brightlingsea	11th March 1865	59,023–59,839	„	25th March 1865	61,042–61,831
Brighton	7th Dec. 1863	17,486–18,123	(*See also* Billingsgate)		
Brixham	10th Oct. 1863	8022–9440	Lowestoft	21st Nov. 1863	13,693–14,401
Carnarvon	4th Oct. 1864	56,382–56,488	Mevagissey	29th March 1864	21,984–23,042
Cullercoats	22nd Sept. 1863	1–1097	Morecambe	30th Sept. 1864	54,569–54,987
Exeter	23rd Dec. 1863	19,371–20,016	Newbiggin	23rd Sept. 1863	1098–1697
Falmouth	30th March 1864	23,043–23,960	Penzance	31st March 1864	23,961–24,604
Filey	1st Oct. 1863	5673–6412	Plymouth	22nd Dec. 1863	18,607–19,370
Flamborough	2nd Oct. 1863	6413–6859	Polperro	28th March 1864	21,273–21,983
Fleetwood	1st Oct. 1864	54,988–55,578	Ramsgate	17th Oct. 1863	10,081–11,078
Great Grimsby	30th Nov. 1863	15,894–16,830	Shoreham	7th May 1864	25,156–26,069
Great Yarmouth	16th Nov. 1863	11,079–12,401	Staithes	30th Sept. 1863	5023–5672
Hartlepool	29th Sept. 1863	4045–5022	Sunderland	28th Sept. 1863	2733–4044
Harwich	7th March 1864	20,529–21,272	Sunderland, North	24th Sept. 1863	1698–2404
Hastings	5th Dec. 1863	16,831–17,485	Swansea	8th Oct. 1864	57,143–58,025
Holy Island	25th Sept. 1863	2405–2732	Tenby	7th Oct. 1864	56,489–57,142
Hull	3rd Oct. 1863	6860–8021	Torcross	21st Dec. 1863	18,124–18,606
Ives, St.	1st April 1864	24,605–25,155	Torquay	12th Oct. 1863	9441–10,080
King's Lynn	27th Nov. 1863	14,402–15,155	Whitstable	4th March 1865	58,026–58,752
Liverpool	3rd Oct. 1864	55,579–56,381	Wyke Regis	24th Dec. 1863	20,017–20,527

SCOTLAND.

Anstruther	28th July 1864	28,248–28,726	Inverary	23rd Sept. 1864	52,268–53,061
Ardrishaig	22nd Sept. 1864	50,958–52,267	Kirkwall	3rd Aug. 1864	31,172–31,743
Ballantrae	26th Sept. 1864	Page 1189–1191	Lerwick	4th Aug. 1864	31,744–32,205
Broadford	8th Aug. 1864	33,291–33,426	Peel (Isle of Man)	13th Aug. 1864	34,273–35,037
Broughty Ferry	28th July 1864	28,692*a*–28,836	Peterhead	29th July 1864	29,146–29,770
Campbeltown	10th Aug. 1864	33,648–34,272	Port St. Mary (Isle of Man)	15th Aug. 1864	35,038–35,261
Cromarty	30th July 1864	29,771–30,160	Portree	8th Aug. 1864	32,970–33,290
Dumfries	29th Sept. 1864	53,821–54,568	Stonehaven	29th July 1864	28,837–29,145
Dunbar	26th July 1864	27,247–27,759	Stornoway	6th Aug. 1864	32,206–32,969
Edinburgh	25th July 1864	26,070–27,246	Tarbert	24th Sept. 1864	53,062–53,820
Eyemouth	27th July 1864	27,760–28,247	Tobermory	9th Aug. 1864	33,427–33,647
Greenock	21st Sept. 1864	49,885–50,957	Wick	1st Aug. 1864	30,161–31,171

IRELAND.

Arklow	22nd Aug. 1864	37,933–38,441	Galway	7th Sept. 1864	44,467–46,119
Balbriggan	17th Sept. 1864	49,716–49,884*a*	Howth	19th Aug. 1864	35,978–36,987
Bantry	30th Aug. 1864	42,409–42,942	Inver	10th Sept. 1864	46,120–46,591
Carlingford	15th Sept. 1864	48,090–48,501	Kenmare	29th Aug. 1864	41,714–42,408
Carrickfergus	14th Sept. 1864	47,278–48,089	Kingstown	18th Aug. 1864	35,397–35,977
Dingle	1st Sept. 1864	42,943–43,812	Kinsale	26th Aug. 1864	41,178–41,713
Dublin	17th Aug. 1864	35,261*a*–35,396	Moville	12th Sept. 1864	46,592–47,277
„	20th Aug. 1864	36,988–37,368	Ringsend	20th Aug. 1864	37,369–37,932
Dundalk	16th Sept. 1864	48,502–49,066	Skerries	17th Sept. 1864	49,067–49,715
Dungarvan	25th Aug. 1864	39,908–41,177	Westport	6th Sept. 1864	43,813–44,466
Dunmore	24th Aug. 1864	39,045–39,907	Wexford	23rd Aug. 1864	38,442–39,044

MINUTES OF EVIDENCE

TAKEN BEFORE

THE SEA FISHERIES COMMISSION.

Cullercoats, Northumberland, 22nd September 1863.

COMMISSIONERS PRESENT :

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.
G. SHAW LEFEVRE, Esq.

The Rev. ROBERT FAULDING WHEELER called and examined.

1. (*Mr. Caird.*) You are the incumbent of this parish, I believe ?—I am the incumbent of the parish of Whitley.

2. How long have you resided in this parish ?—I have been here about two years and a half.

3. Have you directed your attention much to the question of fisheries ?—Very much indeed. Having a population under my care who are chiefly engaged in fishing, I have considered it my duty to make myself acquainted with the subject.

4. Can you tell me what is the population of Cullercoats ?—The population at the last census was 866. I speak of those who are dependent upon fishing. Of course it has very much increased since then.

5. Does that embrace the whole number with regard to whom your attention has been directed in reference to sea fishing ?—Yes, that is the fishing population of Cullercoats.

6. The fishing population ?—Yes.

7. Can you inform me how many boats are engaged in the fishery ?—There are 38 engaged in the 'white-fishing,' as it is called, that is the fishing for haddock, ling, cod, and so on.

8. Is that what is called line-fishing ?—Yes, it is line-fishing exclusively.

9. How many people are employed in each of these boats ?—I believe the boats carry three men, or three men and a boy each.

10. Is there any trawl-fishing upon this part of the coast ?—A few of the older fishermen follow trawling during the summer time for soles.

11. Is that the same description of trawling as that in which we are specially interested, namely, the beam trawling ?—No, the beam trawl used by the Cullercoats men is a very much smaller trawl than that which is used by the men from Hull and other places.

12. How many boats are engaged in that trawl-fishing for soles ?—About six, but I think it is only carried on during the summer time and by the older men. The trawl-fishing here is almost exclusively carried on by the older fishermen.

13. Is there any salmon-fishing ?—A few men occasionally go out during the summer time 'trouting' as it is called.

14. With regard to the herring fishery, is it practised here with any amount of success ?—Yes, the herring fishery forms the harvest, so to speak, of the Cullercoats men.

15. How many boats are engaged in the herring fishery ?—I believe there are about 40 boats engaged during the herring fishery.

16. Does that include the 38 which you say are engaged in the white-fishing ?—No, a herring boat is a rather larger description of boat, but it is manned by the same boatmen as those who are engaged in the white fishery.

17. The same boatmen use both descriptions of boats ?—Yes, the same boatmen generally ; there may be a few engaged in the herring fishery who come from other places.

18. Can you tell us the average product of the white-fishing ?—The average product of the white-fishing, as nearly as I can calculate, is about 5 stones per man per boat.

19. Is that the daily product ?—Yes, daily, and they may go out on an average perhaps four days in a week.

21. How many pounds do you reckon to the stone ?—14 lbs.

22. Then what would the monthly product be ?—About 32,000 lbs. of fish.

23. How many weeks during the year would each boat be engaged in the fishing ?—They would be engaged from about the end of September until the middle of July, when the herring fishery begins.

24. Then from the end of September until the middle of July the white-fishing takes place ?—Yes.

25. And the herring fishery begins about the middle of July ?—Yes.

26. And how long does it last ?—It lasts until about the middle or end of September, according to circumstances. This year it has been rather later than it is some years ; last year, if I remember rightly, it ended about the 15th of September.

27. Are there many different kinds of fish caught by the men here ?—Altogether, I believe, there are about 24 different kinds.

28. Can you name them ?—Yes, I think I can.

29. What are they ?—Haddock, cod, ling, skate, halibut, turbot, whiting, flounders, plaice, thornback (that is one of the ray fish), cat fish.

30. They do not eat cat fish, do they ?—Yes, they are one of the most delicious fish caught on the coast, although I admit they are very ugly to look at.

31. What other fish are caught here ?—Mackerel, soles, crabs, lobsters, gurnet, salmon, trout, 'sea sow' (I do not know what that is), eels, conger eels, wrasse, hake (very rarely), tusk (also rarely), and black jack or coal fish.

32. Can you tell us the proportion of each kind of these fish that is caught weekly ?—I do not know that I can give you the proportion caught weekly.

33. Can you give us the proportion in reference to the whole ?—Yes, with regard to the whole I can. Haddock would stand No. 1.

34. Can you tell us the weight of haddock caught ?—No, I cannot possibly do that.

35. Can you give us any idea ?—No, I am afraid I cannot ; I have tried to ascertain, but I have been unable to succeed. Haddock would stand No. 1 ; cod, No. 2 ; whiting, No. 3 ; ling, No. 4 ; skate, No. 5 ; thornback, No. 6 ; halibut, No. 7 ; flounders, No. 8 ; soles, No. 9 ; plaice, No. 10 ; gurnet, No. 11 ; and eels, No. 12. I think we need not go beyond that.

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36. Have you made up any statement with regard to the total quantity of fish caught from the end of September to the middle of July?—No, except a rough one arising from the monthly statement, 32,000 lbs. a month.

37. They fish for about 10 months, or about 42 weeks?—Yes.

38. Then you think it would be a fair estimate of the quantity of fish taken to multiply the number of months from the end of September to the middle of July by 32,000?—Yes.

39. That would amount to 320,000 lbs., or 142 tons in the whole?—Yes; I was very careful in making that estimate, and I strove to be under the mark rather than above it.

40. Are you aware of your own knowledge whether or not that supply is increasing or diminishing annually?—I am not aware of my own knowledge. From the statements I have received from others engaged in the fishery, I believe that the quantity is decreasing, and I believe that the average earnings of the men are decreasing.

41. You have no facts to lay before us to establish the correctness of that statement?—No, I have not.

42. Your own knowledge, or the information you have received, does not enable you to furnish us with facts?—No, I would rather leave it to men who have been engaged in the fishery all their lives to speak upon that subject.

43. Speaking of the herring fishery, can you tell us what quantity of herrings is caught here during the season?—I cannot; but there are witnesses here who will be enabled to give you full information upon that point.

44. What is the bait which is principally used in the white-fishing—the white line-fishing?—Mussels.

45. Do you happen to know the quantity of mussels which is used for bait?—About 16,000 bushels per annum; in addition to that a large quantity of dog-fish, crabs, sea anemones, and sand eels are also used for bait.

46. Where are the mussels obtained; are they got off this coast?—They are obtained chiefly at the mouth of the Tyne and partly from Stockton; they even come so far as from Boston in Lincolnshire.

47. Has anything interfered to diminish that supply of bait?—Some time ago the supply at the Black Middens at the entrance to the Tyne fell short, but it is now increasing again.

48. Was there any particular cause for that?—I think the cause was that the beds were rather overdrawn upon; they used them much too freely.

49. Are crabs and lobsters caught here to any extent?—Yes; there is considerable crab and lobster-fishing during the spring months.

50. Do you know whether the crab and lobster-fishing is improving or declining?—I believe that this year it has not been quite so good as usual.

51. But there has been no marked decline?—Not that I am aware of.

52. Have you any opinion to give as to the injurious character of any particular mode of fishing practised upon this coast?—I believe that the trawl-fishing tends to the destruction of the spawn deposited upon the ground; but I know nothing whatever except from statements which have been made to me.

53. You have no particular knowledge upon the subject yourself?—No, I have no personal knowledge, but there are persons in this room who I believe have been engaged in trawling, and who can give you evidence upon that point.

54. I see a statement made here by you in a paper I hold in my hand in regard to the corporation of Boston. You say that the corporation of Boston imposed some regulations which had the effect of enormously increasing the supply of mussels?—Yes.

55. What were the regulations which they established?—They prohibited the men from taking mussels under a certain size. When the mussels were taken they obliged the men to pass them through a riddle or sieve, and all the mussels which fell through the sieve were rejected; but it was found by the fishermen that the regulation thus established could not be enforced by law, and they now take the mussels indiscriminately. I believe the consequence has been that the supply has again fallen off.

56. Is there any other point you desire to bring before the commissioners?—No, I think not. I have no other evidence which would be useful to you. By-the-by I think I can give the commissioners a return of the number of fishing-boats engaged upon the coast of Northumberland.

57. We shall be very glad to have it. Will you be good enough to state what the number is?—Cullercoats, 38 fishing cobles; Blyth, 2; Newbiggin, 27; Cresswell, 5; Hauxley, 10; Amble, 1; Alnmouth, 7; Boulmer, 3; Craster, 14; Newton-by-the-Sea, 7; Beadnel, say 4; North Sunderland, 15; Holy Island, 16; making altogether 155.

58. In what way have you procured that return?—I obtained it by private inquiry. The information has been given to me by those who are practically engaged in the fishing.

59. Do you think the return is a correct one?—It is as correct a return as can be obtained.

60. (*Professor Huxley.*) I understood you to say that you have known this district only during the last three years?—I have been here only two years and a half. I am the first incumbent.

61. Have you obtained any information as to the condition of the people here during the last 20 years?—I have from conversations which I have had with persons in the district.

62. Can you tell me whether the social condition of the people here (of course I am speaking of the fishing part of the population) is better or worse than it was 20 years ago?—In what respect?

63. For example, with regard to their mode of living, do they live as well now as they did 20 years ago?—Not so cheaply or so abundantly, I should say.

64. That is not what I want to know. I wish to know if they live as well. I do not speak of the money they spend in mere luxuries and drink, as sometimes happens in the case of fishermen, but what I refer to is the substantial comforts of life?—I can hardly answer that question.

65. Has the number of fishing boats increased here.—Yes?

66. And is it still increasing?—Yes; I think it is.

67. Can you give us any idea of the increase?—No, I cannot personally, but I believe there are those in the room who can do so.

68. You doubtless hear a great deal from your parishioners about the social condition of the people and the condition of the trade here; do you think there is any existing law which at all interferes with the prosperity of Cullercoats?—Do you mean in reference to the fishing.

69. Of course, I am speaking in reference to the fishing?—No, I cannot say that any existing law does interfere with the prosperity of the place so far as the fishing is concerned.

70. You do not hear of any complaints on that score?—No; the great complaint which I hear here is of the interference of the trawlers.

71. Then the law as it stands is not complained of?—No, that is a question which never came before us at all.

72. (*Mr. Lefevre.*) Can you tell us whether the fish caught off this place are all brought into the haven here, or are they sent elsewhere?—They are taken chiefly by the women of Cullercoats, who sell them principally in what they call 'creels,' in Newcastle, Shields, and the immediate neighbourhood.

73. Then they are not sent away to distant markets by railway?—I believe that a certain quantity is sent away by railway, but the vast majority of the fish is disposed of in the manner I have referred to.

74. Then there is no mode of ascertaining the relative number disposed of in the immediate neighbourhood and sent to distant markets by rail?—No.

75. Do you know of your own knowledge, whether the absolute quantity of fish taken by the Cullercoats

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fishermen has increased?—I should say that the absolute quantity brought in has, but the proportion per man has very greatly decreased.

76. Is the average of 32,000 lbs. which you gave, the average quantity taken during the winter months?—I think it is about the average taken in the whole season.

77. Is the fishing interfered with much by rough weather here?—Yes, sometimes it is put a stop to for days together.

78. The boats used here are small, I believe?—Yes; and they are all open boats.

79. But the winter is a good time for fishing, is it not?—Yes; the winter is the white fishing season. In the calculation I gave you, I only took four days a week as the fishing days.

80. You cannot tell us any mode by which we can compare the quantity of fish caught now with what used to be caught a few years ago. I mean, can you give us any other information than a general calculation made with regard to the subject?—That is the only information I can give you. I have no accurate statistics as to the weight of fish brought ashore on any part of the coast.

The witness withdrew.

ROBERT NICHOLSON called and examined.

R. Nicholson.

81. (*Mr. Caird.*) Are you a native of this place?—Yes.

82. Have you been many years engaged in the fishing here?—Yes; I have been engaged in it for 49 years.

83. Have you been engaged in all the different kinds of fishing practised on this coast?—Yes; all the fishing used in this place I have been at.

84. Have you heard the evidence of Mr. Wheeler?—Yes.

85. I presume that you agree with him as to the period during which the different kinds of fishing last?—Yes. The white-fishing lasts from the end of September to the middle of July, when the herring fishery begins.

86. Do you agree with Mr. Wheeler as to the average quantity of fish caught during that period?—I agree with him as to the quantity caught at the present time, but it is not now as it was in my day, not by a long way.

87. It is not so good at the present time as it was years ago?—No.

88. What is the weight of fish got on the average per man per day now?—On the average about 5 stone a man a day, when it is weather for them to get out to sea.

89. Comparing that quantity with your earlier knowledge, say 30 years ago, how much has that daily average fallen off?—I should say one-half.

90. What was the quantity which each man got at the time to which you refer?—I have known 60 stone got in one coble in the course of the day.

91. How many stones a day are got now?—Not more than 15 or 16.

92. Were the 60 stones you speak of an average during the whole of the season?—No; that quantity was got in the winter season when we could get to sea.

93. Was the season the same as that to which the 15 stone would apply?—Yes, just the same.

94. Do you mean to say that a man 30 years ago could get 60 stones of fish where now, using the same exertions, he could only get 15?—Not one man, but three men.

95. There are three men in a boat?—Yes, three in a boat; and I have known them get as much as 60 stone in one day. That has been the take in one boat with three men.

96. Was that beyond the ordinary average; was it beyond a common day's fishing?—Yes; they were drove in by heavy gales of wind.

97. Are the fish ever driven in now by heavy gales of wind?—There are heavy gales; but as to the fish there are none to drive in. You know they cannot be driven in when there are none.

98. Then it was during the heavy gales of wind that you always got the most fish?—Yes, we often got a good deal of fish after a heavy gale; the take was very often as much as 40 stone in a day in one boat.

99. For how long would the take continue at 40 stone a day?—It would continue up till after Christmas, perhaps till the middle of February, and then they would begin to take off.

100. What would the take fall to then?—They fell away during the spawning season. After Christmas the haddock would be busy spawning, and it was then that they took away, and we got very little until the month of May, when they began to come in again.

101. And then after the month of May how much would you average in a take, I mean in the old time to which you refer?—Sometimes we would get as much as 40 or 50 stone a day in the month of May, and sometimes we should not get so much.

102. Would you on the whole say that a boat and its crew 30 years ago would get double the quantity of fish during the fishing season that it gets now?—Yes, I am perfect on that point.

103. You are quite certain on that point?—Yes, I am perfectly certain that we could get double the quantity of fish that we can get now.

104. You could get double the quantity during the fishing season?—Yes, we could.

105. You are speaking now of 30 years ago?—Yes.

106. What was it 10 years ago?—It has declined little by little, especially during the last six years.

107. Then 10 years ago was the fishing as good as it had been 30 years before?—I daresay it was; there would be little difference 10 years ago. I was then a servant to a gentleman. I was not engaged in fishing, but I had to look after boats that were engaged here, and to send the fish off to Birmingham for a fishmonger there, and I should think that many a day I sent off 60, 70, 80, or 100 stone a day to Birmingham, besides 60 or 70 cod fish in the season; but now when I go down on the sands on a morning, I do not think that there is such a thing as a cod fish to be got.

108. How many boats were engaged in fishing there at the time you speak of, 30 years ago?—There would be about 23 or 24 boats.

109. How many men were employed at that time in fishing?—I should think about 70.

110. Then there has been a considerable increase both in the number of boats and in the number of men?—There has so.

111. And have the returns the men have received for their labours been less during the last 10 years than they were during the earlier period to which you allude?—The fish were much larger in those days, and they were sold much cheaper. For instance, I have known the haddocks of those days to measure from 13 to 18 inches in length. Of course 18 inches was rather out of the way, but still I have known them as large as that.

112. Are the haddocks got now-a-day not so large as they were then?—No; they are all taken now before they come to that size.

113. You think they are taken at an earlier stage of maturity than they used to be?—Yes, they are all taken before they get that old. If you had not taken the measures that you did with regard to the salmon, I think you would not have had a salmon at all some years hence, and so it will be with regard to the haddocks. If this trawling is not done away with there will be no haddocks at all. With regard to haddock-fishing, trawling destroys the spawn. The haddock when she lays her spawn lays it along the bottom.

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It comes to a ball; then it lies perfectly solid on the ground until it takes life. Now, when these trawls go over the ground, if there was a shilling lying on the ground they would take it from the bottom. The consequence is that they take all the spawn away, and there is nothing left at all to breed from. It is just the same as the locks in the river with regard to the salmon; if those locks were not done away with there would have been no salmon. It is just so with the haddock; if trawl-fishing is not done away with you will have no haddocks in a couple of years more. England will cry out for want of fish if this trawling is allowed to go on.

114. Have you observed since the railways have been extended down to the coast here that there has been a much higher price paid for fish than there used to be in former years?—If there had not been a better price given for fish the fishermen could not have lived at all.

115. Then the price has increased?—Yes, it is more than double what it was in my day. We were nine in family, but my old woman could get a haddock for twopence which would serve for all our dinners, the whole nine of us. I had nine of them in family at home for some years, but she would not get as much now for 9*d.* or 10*d.* as would serve the same number for dinner; the price has a long way more than doubled.

116. Is the increased price, in your opinion, the cause of the increase in the number of the fishermen and in the number of boats to which you refer?—It was sure to do that, for the male population are all fishermen's sons, and they take to the fishing.

117. Can you tell me if you are as well off with that increased price as you used to be when you had a larger quantity of fish and sold it at a lower price?—I do not think I am. I think I was better off in my earlier days than the fishermen are now with the increased price they get. They do not get anything like the number of fish we used to get in my day.

118. Then it is your opinion that although there is an increased number of men and boats there is a diminished quantity of fish on the whole, caught on this part of the coast?—There is not one half of the fish caught now that were caught in my day.

119. Not by all the boats put together?—No, I am not taking one boat more than another.

120. Do you think that the 24 boats which you had 30 years ago, caught more fish than the 30 boats which are now employed in the fishing?—Yes, they caught a long way more.

121. Do you think that there is a destructive mode of fishing practised off this coast?—Yes, I do.

122. Is it practised by any of the fishermen of this coast?—No, not by the fishermen on the coast.

123. None of the people of Cullercoats practise that destructive mode of fishing?—None at all; they all fish with a hook, only at a certain time, when they fish with a small trawl close under low water merely for small soles.

124. Is there any spawn where they fish with the small trawls?—I cannot say if there be any or not, but I know that they do not get any in their small trawls.

125. Did you never see any spawn taken up in the small trawls?—No, I never did.

126. Have you ever heard of its being taken up?—No, I never heard of it.

127. You never heard of any loss to the breed of fish being sustained in consequence of trawl-fishing in shallow water?—No, and for this reason; because, I think, the soles were in-shore, going into the rivers to spawn.

128. Do you speak from your own personal knowledge of the matter?—Yes.

129. And you in practising this system of trawling in shallow water never found that the spawn was disturbed, or that it came up in your trawl?—No, it never came up in the trawl in-shore.

130. (*Professor Huxley.*) In what depth of water do you trawl for soles?—About 3 fathoms.

131. Then in water within 3 fathoms in depth you find no spawn?—No, I think they go up the rivers to spawn?

132. (*Mr. Caird.*) Then who is it that practises this wasteful system to which you attribute the destruction of the fish?—It is the smacks which fish off the coast.

133. Do the smacks come off your shore?—Yes, they do.

134. Within what distance do they come?—They are trawling within 5 or 6 miles, and from that to 8 miles.

135. Do you go out with your lines fishing to that distance?—Yes, some of our men do, and there are persons in this room who have lost all their lines.

136. From what cause?—Why, the smacks have taken them all away.

137. Do the smacks and your vessels go over the same ground?—Yes; but the trawls sweep the bottom. When our lines are stretched out on end the trawl comes down upon them, gets into contact with the lines, and takes them all away.

138. Have you yourself ever lost any of your lines in consequence of the trawls taking them away?—No, I have never been fishing since the smacks came off the coast; but there are others here who have lost their lines.

139. You have not been fishing since the trawling commenced outside?—No.

140. Then, if you have no knowledge yourself of the injury done by the trawling, if you have never fished upon the trawling-ground, you cannot speak distinctly upon that point?—I cannot speak any further than to tell you what I have heard from men who have told me of the loss of their lines.

141. Are there any men here who can tell us what they have seen?—Yes, there are men in this room who have lost their lines by the trawlers, and let me tell you, sir, that we are sure they disturb the spawn and take it all away, and when once it is disturbed it will take no more hold.

142. How are the boats manned here; how many men are there in a boat?—There are three men and a boy in each boat.

143. That is for line-fishing?—Yes.

144. Is one of the three the proprietor of the boat, or does the boat belong to all of them?—In the case of some of the boats one man is the proprietor, in the case of others they join together and have a boat among them.

145. Does the proprietor usually fish in the boat?—Yes.

146. Then, I suppose you share the fish according to the property and the number of men in the boat?—They do not keep their fish together at all, they keep it separate. Every man keeps what he gets on his own line, and then his own wife goes away with them and sells them at market.

147. That, I suppose, is where the ownership of the boat is divided among the men. On other occasions does not the owner get a share for the boat?—No; there is nothing of that here.

148. Then, I am to understand that each man gets what he fishes?—Yes.

149. (*Mr. Lefevre.*) Are any wages paid here?—No.

150. Does the owner of the boat get no advantage?—No, none at all; they have different cobles and they shift about. For instance, one man uses his coble for three months and then another man will use his for three months.

151. Each of them will have his own coble?—Yes.

152. (*Professor Huxley.*) I understood you to say that you have been fishing here for more than 30 years?—Yes, for the last 49 years.

153. Can you recollect when the beam-trawling began outside?—Yes, very well.

154. How many years ago will it be?—It is about six years since they first came here; but I do not know how long it is since they began southward.

155. They began here about six years ago ?—Yes.

156. You mentioned just now, that up to 10 years ago, so far as you knew, there was no particular difference in the catch of fish ?—No.

157. But I also understood you to say that you were not fishing at that time ?—No, I was not.

158. Then you would not be so likely to know as if you had been fishing ?—O yes; I was taking the fish all that time, and I knew as well as if I had been at the fishing. I was taking the fish in and sending them off to a gentleman, a fishmonger at Birmingham.

159. Were you taking in the fish six years ago when the trawling began off this coast ?—No ; I was fishing then.

160. You were fishing yourself ?—Yes.

161. Then you would be in a position to know what the fishing was ?—Yes ; the fish had fallen off to that extent, that the gentleman for whom I was employed could no longer pay the money necessary to send them off to Birmingham ; there was such a scarcity of fish.

162. How long ago is it since the fish began to fall off and obliged the gentleman to whom you refer to give up buying them ?—About five years ago.

163. So that, as the trawling began six years ago, the very year afterwards there was such a diminution in the take of fish that he was obliged to give up his business ?—The men gave up taking the fish.

164. Do you attribute that decrease to the trawling ?—I think that it arose partly from the trawling. The trawling had only commenced then off our coast ; but I do not know how long it had been practised in other parts before that.

165. I thought you said it commenced here six years ago ?—Yes, upon this coast ; but you must understand that all the fish do not breed upon this coast.

166. You say that you know the fish were very abundant up to 10 years ago, and that the supply of fish fell very short about five years ago ?—Yes.

167. About six years ago you say the trawlers began to come upon this coast ?—Yes.

168. That is all within your own knowledge ?—Yes.

169. About six years ago they came upon this coast, and ever since that you say the fish have diminished ?—Yes.

170. Did you ever see haddock spawn ?—No.

171. You mentioned that the spawn of a haddock goes into a ball ?—Yes ; I do not say that from having seen it myself, only from hearsay. I believe it is the same with the spawn of the herring.

172. But you never saw haddock spawn ?—No.

173. Then how do you know ?—All spawn goes into a ball. As soon as the fish shoot the spawn it goes into a ball. I have seen different kinds of spawn from fish, but I never saw haddock spawn.

174. You said just now that every fisherman's son became a fisherman ?—Perhaps not every one, but nearly all of them. Some give their minds to the sea and some to other businesses.

175. Then the number of fishermen must be always increasing, and it increases every year ?—Yes, every year there is some increase.

176. Is it a very large increase ?—It has increased very largely since I came here. When I came here I only made the tenth coble ; there were nine before, and mine made the tenth. That was just after the loss of the lifeboat at St. Mary's Island.

177. That is 30 years ago ?—No, 49 ; perhaps 50 years ago.

178. The fishing population goes on steadily increasing, as well as the number of the boats ?—The boats increase but the fishing decreases.

179. Suppose there were no trawling, do you think that the fishing population would have gone on increasing in that way. If the number of people had gone on increasing would they always have caught the same number of fish ?—That is more than I can say, but we know that when the spawn is taken away there is nothing left to breed from, and there can be no fish come to life where the spawn is taken away.

180. Do you think that there must be a certain limit reached. Suppose, for instance, that 30 years ago you had 50 people fishing, and that now there are 100, do you not think that the time must come when the quantity of fish caught will begin to decrease, because there are more people engaged in catching them ?—No doubt there is a greater advance of people, but there is a larger decrease of fish than the advance of people has been.

181. Do you not think that there may be something in addition to the trawling to interfere with the spawning—the quantity of fish, for instance, may have decreased ?—I do not know; all I can say is, that they do not get the quantity of fish ; they do not get the quantity that even we did.

182. And you do not think that this arises simply from the increase in the number of fishermen ?—It does not arise from the increase in the number of fishermen, but from the diminution in the number of fish.

183. You are quite clear that you never heard of spawn being taken up in trawling for soles in shallow water ?—Not in shallow water; certainly not in water two or three fathoms deep, where the small trawls are used.

184. Then am I to understand that, in your judgment, the trawling in small boats in-shore does no harm to the breeding of fish ?—I never knew it to do so.

185. You were speaking just now of what, I dare say, is a very important matter, namely, the interference of the trawlers with the long lines. I understood you to say that the long-line fishermen lay out their lines, and that the trawlers come up and sweep them away ?—They put them down in the morning, and they lie there all day and night till the next morning. The vessels engaged in trawling over the ground come over them while they are lying there, and they take them away.

186. So that I understand beam-trawling does two kinds of harm—it destroys the spawn, and, in addition, it sweeps away the lines of the long-line fishermen?—Yes.

187. These are the two charges that you make against the trawlers ?—Yes.

188. One of these complaints is of course a question for discussion. With regard to the other, there can be no doubt that injury would be done in sweeping away the fishermen's lines. But have they no remedy? —They have never got any.

189. If a fishing boat were to sweep my lines, could not I summon the men engaged in it before the police magistrates ?—I do not know ; they never have done it.

190. Surely that would be like the destruction of a man's property in any other mode ?—I think the fishermen should have some recompence.

191. In the herring fishery, I believe that if a smack damages the herring-nets the fishermen can recover damages ?—Yes, I believe they can.

192. Then why cannot you do the same thing with regard to the long-lines ?—Perhaps we could if we were there present at the time, and able to get the number of the vessel that did the damage. No doubt in that case we should recover damages. But when we leave our lines there we come ashore with the fish that we may have caught in a previous haul. We leave them in the water until the next morning, and then when we go away to them the next morning we find that our lines are gone, but of course we do not know who has got them.

193. Can you suggest any kind of remedy for that? —I do not think that I can. I don't think that any remedy would do for it except to have this trawling knocked off. That is all that could be done. There is no other remedy.

194. Does it not happen sometimes that the fishermen take up one another's lines—I mean the long-line fishermen ?—I never knew it happen here.

195. I should be glad to hear if you have ever been told that such a thing has been done ?—Perhaps it may have been done, but not upon this coast.

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196. Then it is not a complaint here?—No, there is no such complaint amongst us as that.

197. Is there much herring-fishing here?—Yes, we have a good deal of herring-fishing.

198. How many boats are employed in the herring fishery?—I believe there are about 44.

199. Do you think that the beam-trawling does any injury to the herring-fishing?—Yes, I do; I think that the vessels which destroy the spawn must destroy the spawn of the herring as well as of other fish.

200. Do you happen to know whether the take of herrings has fallen off of late years?—Yes, the takes have fallen off all over the coast; they are not so numerous as they were in my time, not near hand.

201. Do you think that the herring spawn off this coast?—Yes; I am talking of getting them one night all full fish, and the next night they are all spawn fish.

202. Do you know whether any herrings are caught here in the early part of the year, in January and February?—No, we don't catch any then.

203. Do you set your nets then for herrings?—No.

204. There are herrings here at that time, are there not?—No, not at that season of the year. At the latter end of September we are all done.

205. (*Mr. Lefevre.*) Does the decrease of fish of which you complain relate principally to the white fish or to the herring?—It is a decrease all through; but the herring-fishing is not white-fishing.

206. Have you noticed the decrease more in one kind of fish than in the other?—We have noticed more in the white-fishing than in the herring.

207. Can you tell us whether the whole quantity of herrings caught off this coast is less than it used to be, or whether it is less per boat?—It is certainly smaller according to each boat—it is much smaller according to each boat. They do not catch anything like the quantity now that they caught in my day.

208. Do you think that the whole quantity is smaller?—Yes, or otherwise the boats and the nets they have now would get more, because they have larger boats and larger nets now than we used to have.

209. You have larger nets?—Yes, they are more than one-half larger than they used to be. Some of them have the length of 20 nets now in each coble. Formerly we never carried more than six.

210. The beam-trawlers from the south now compete with you off this coast?—Yes, they do.

211. They catch the white fish, I believe?—Yes.

212. And catch the white fish in very great numbers?—Yes, they catch great quantities in the trawl.

213. And I believe that you can see them fishing sometimes when your boats cannot go out?—Yes, they are constantly fishing. The weather must be coarse if they don't fish, because they are decked vessels, and can go to sea when open boats cannot go out at all.

214. Can you give any idea of the number of beam-trawls that fish off this coast?—Either on Tuesday or Wednesday last week, there were 22 fishing off this coast, and one day there were 28.

215. How long do they stay out? Do they fish all the year round?—There have been more this year than we have ever had before. When they first came here we used only to have a matter of three or four at a time.

216. Where do they mostly take their fish to?—I think they take them to Hartlepool and Sunderland mostly.

217. Do they catch the white fish; the haddock and cod you used to catch?—Yes.

218. Which of the white fish have you particularly noticed are declining?—We find that all the white fish are declining, and especially the haddock and cod. I know that the cod of late years have declined very greatly, because when I took the fish for the gentleman to whom I referred to send to Birmingham, I used to get 60 or 70 cod a day, and now when I go down to the beach I cannot get one at all.

219. Are you enabled to say whether the beam-trawlers catch cod in large quantities?—I do not know, but I believe that the trawls take all kinds of fish in.

220. Have you known men coming here and engaging themselves in the fishing trade who have not been natives of the place?—Yes, I believe there are a few who have married fishermen's daughters and such like. After they have married fishermen's daughters they generally commence the business here.

221. Then the increase of fishermen has not solely consisted of the children of fishermen?—Not of fishermen's sons in every case, but I believe that anybody that pleases to come can fish.

222. (*Mr. Caird.*) Do you know what quantity of herrings is caught in a season here?—No, I cannot say that I do. It is very uncertain.

223. But you know that the quantity has declined of late years?—Yes, it has declined very greatly.

224. But you do not know to what extent the herrings have declined?—No, I do not.

225. You do not know how many thousand less are caught now than used to be caught, say 20 or 30 years ago?—I do not know how many thousand, but there are many thousand less than used to be caught in my time, although we have twice the boats now, and there are more nets. Notwithstanding the larger boats and the greater quantity of nets we do not get the quantity of herrings we used to get in the small boats with less nets.

226. Has the season for herring-fishing upon this coast changed?—No.

227. Has it always been the case that the herrings come here in the middle of July and remain here until the end of September?—Yes.

228. And do they come here at any other time of the year?—No, they come at no other season; they come here in the middle of July and they remain here until the latter part of September.

229. (*Mr. Lefevre.*) I understand you to say that you think they spawn here?—Yes; we get them all full fish one night and the following night we get them all spawn fish.

230. And do you leave off fishing when you find them spawning?—No; as long as we can get any we keep up the fishing.

231. Do the fish sell as well when they have spawned?—No; they are not so good then.

The witness withdrew.

J. Templeman.

JAMES TEMPLEMAN called and examined.

232. (*Mr. Caird.*) Are you a native of this place?—No, I am not.

233. Are you a fisherman here?—Yes, I am a fisherman here.

234. Upon this coast?—I have been a master on this coast, and I have been fishing the herring-fishing for the last 25 years.

235. But you don't live here?—No, I live in South Shields.

236. Have you had a personal knowledge of the fishing on the coast during the last 25 years?—Yes, in every point, both with regard to trawling, lining, and herring-fishing likewise.

237. Have you found in the course of these 25 years that the quantity of fish caught here has diminished or increased?—I have found that in the last 10 years there has been a great decrease in the haddock-fishing, and also in the herring-fishing. It has even declined from here to the Dogger Bank, the Well Bank, the Whiting Bank, and what we call the "Silver Pits."

238. Has the decrease been great in cod and

whiting?—Yes; in cod, whiting, haddock, and ling. All these kinds of fish in the places I have mentioned have greatly declined.

239. And the decrease has chiefly been within the last 10 years?—Yes, chiefly within 10 years.

240. Has that decrease been principally in the size of the fish caught or in the quantity?—There has been a decrease both in the size and in the quantity of the fish. I have been master of a vessel trawling myself, and from experience I can give you some information upon the matter. We go away for about six hours, from tide to tide, and when we go six hours upon a stretch with the trawl we get all sorts of fish, big and small. We sort our fish, put those which are of the largest size on one side, and then we have to shovel overboard quite as much in bulk as we have left for the market. They have, however, been so much injured by the trawl that they are dead, and they are of no more use.

241. They are fish which are not worth taking to the market?—No, they are not worth taking to the market.

242. Do you say that the quantity of fish thrown overboard would amount to one half of the catch in the trawl?—Yes, more than one half what we get for the market. That is very often the case.

243. Then will it, upon the average, amount to half as much?—Generally so.

244. Then one half of the trawl is filled with unmarketable fish?—Yes, they will not look at them in the market.

245. And you say that they are dead when they are hauled up?—Yes, they are quite dead, and they are hove overboard. If we go for live plaice we haul up the trawl every two hours. We then get live ones, and throw the small ones overboard. I have seen an equal quantity. There is quite as much in bulk thrown overboard as we have had of marketable fish.

246. You say you have seen that?—Yes.

247. Then, was it an exceptional case?—No; it generally occurred every time the trawl was taken up. I should say that that is the general rule, and that is the cause why the Torbay fishermen have left Torbay and come here. When they first came off this coast from Torbay they came to Hull. They used then to trawl in the Big Silver Pit, a place I am as well acquainted with as with Cullercoats, and I have got as far as four, five, and six pads of fish. When these smacks first came to Silver Pits they used to get from 50 to 60 pads.

248. What is a pad?—A pad is a basket with a lid to it. Each pad will hold about 27 pairs of soles of fair size, and about 30 of a middle size.

249. Has the take increased or fallen off?—It has fallen off very much indeed. Our boats now go to the Silver Pits, and they cannot get three pads in a tide.

250. And how many did you say they used to get?—When the smacks first came to Hull and Grimsby they used to take from 50 to 60 pads. That was their original catch.

251. Then, in your opinion, there has been a great falling off in the quantity of fish taken off that coast of late years?—There has been a very great falling off of fish indeed. The destruction, both of fish and spawn, that is occasioned by the trawlers, is enormous. I have hove up myself three tons and a half of spawn of all sorts. I am not prepared to say that it was spawn of any particular kind, but I have had that quantity in my net myself.

252. You have had as much as that in one trawl-net in one haul?—Yes, in one haul.

253. Was that off this coast?—It was at a place we call the Smooth Ground, inside the Bank.

254. How many miles would it be from the shore? The bank, I think, is about 62 miles from the shore.

255. Do you refer to the Dogger Bank?—It will be about 60 miles within, inside the Dogger Bank, about 54 miles from the head.

256. Is that the line-fishing ground?—Yes.

257. And do your boats go that distance?—No; our line-boats do not, but the smacks go that distance off.

258. Then your boats do not go on the trawling-ground at all?—No, they do not go there; but last fall, when the herring season was about to close, I had occasion to go to Sunderland upon some business of my own, and while I was there I saw a smack come in, and lay in on the north shore. I saw the skipper of that smack, and I actually heard him offer a man at Sunderland about a ton and a half of spawn (I believe it was principally herring spawn) for sale.

259. What use could he make of it?—In this case it was offered for sale as manure. In addition to the spawn the smack had 20 scores of haddocks, 5 or 6 pads of soles, and a good many brill and turbot.

260. Was that spawn that you speak of purchased as manure?—No; the man to whom it was offered would not purchase it.

261. Have you ever seen it purchased?—No; I have only seen it offered, I never saw it purchased.

262. Are you aware of any boats that bring in spawn to sell as manure?—No, I cannot substantiate that; but in the case to which I refer, I saw the man offer it, although I did not see it purchased.

263. Did you ever see any other case than that, or was that the only one?—That was the only one.

264. You never saw spawn offered for sale as manure, in any other case?—No, but I have seen large quantities of spawn taken up in our trawl-nets.

265. Is it in any particular season that the spawn is so taken up?—It is generally in the latter part of September and in the beginning of October that we get such heavy hauls of it.

266. Is that the best fishing season?—Yes, it is the best fishing season for the trawlers. Large quantities of fish accumulate about the spawn, and the trawlers work about and get the fish. They don't like, however, to haul up the spawn, as it gives them much trouble to heave it up.

267. Have you ever known the spawn drawn up except during that season?—During the time that haddock spawning is going on you will get haddock spawn in your nets just in the same manner.

268. Can you tell what is the time for haddock spawning?—February and March.

269. Is there any other time during the trawl-fishing when the spawn can be taken up except the periods you have mentioned?—Yes; the herring spawn can be taken up now. There (*pointing to the sea*) is a smack trawling out there now, and I warrant ye that he will get a good lot of it.

270. Is there any particular period when the spawn is liable to be broken up and carried to the surface of the water?—The fish deposit the spawn at the bottom of the sea, and the trawls in passing over it are productive of a great amount of evil to the spawn of the fish.

271. Have you been engaged during the whole of a season upon a trawling boat?—Not altogether in trawling. We used to trawl during a certain season, and then we went codding.

272. Were you ever for the whole season engaged in trawling?—No, not for a whole season.

273. Then you cannot tell us whether for a whole season you got spawn in your nets?—No, but a person whom I engaged told me so, and I said that if what he told me was true, the fish would soon be all cleared out.

274. Is the Dogger Bank about 60 miles from the shore?—I believe it is about that distance from Flamborough Head.

275. Do the smacks trawl upon the Dogger Bank?—Yes, upon the Dogger Bank and upon the Well Bank, and upon the Whiting Bank.

276. How long have they been there?—They have been there a long time now.

277. (*Mr. Lefevre.*) Will you give me the name of all the Banks off this coast upon which they trawl?—There is the Dogger Bank, the Whiting Bank, and the Haddock Bank. That bears east from the Humber about 22 miles. The Whiting Bank is just outside that.

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278. (*Mr. Caird.*) Have you ever seen as many as 50 trawlers engaged in trawling together on the Dogger Bank?—Yes, I have.

279. How many years has that continued within your own knowledge?—It has gone on within my knowledge during the last 10 years.

280. Has the take of fish declined greatly this year?—Yes, it has declined very much on the Dogger Bank. Not one quarter part can they catch now as compared with what they used to catch.

281. In making that statement, do you speak from your personal knowledge?—Yes, from my personal knowledge, both with regard to haddock, cod, brill, and all sorts of fishing.

282. Do you know whether the number of trawl-boats on the Dogger Bank, is increasing?—They have increased within these last few years 10 per cent.

283. They are one-tenth more than they were previously?—Yes, quite that.

284. And yet you say they are getting one-fourth less fish?—Yes.

285. Then they must be making a very bad business of it?—Yes; some of them have been seriously affected. They have made a very bad living of it. They have impoverished all the places they used to fish, and now they have come to impoverish the ground here. The consequence will be that in a very few years there will be no fish here, either herring, haddock, cod, brill, or any other fish.

286. You were speaking of the Whiting Bank, does your answer apply to that?—I have shot my nets there, and have got 10 score of beautiful cod in them. The trawlers have been over them since, and I have often shot seven nets and have only got three score.

287. Do you attribute that falling off to the trawlers coming there and sweeping up the fish?—Yes, they take everything before them; even if there are any stones in their way they take them up.

288. Is it the same with respect to the other banks to which you have referred—the Haddock Bank and the Silver Pits. Do you suppose that the quantity of fish in those places is decreasing in the same way?—Yes. That is what is driving them to this place. This coast was not much frequented by trawlers until within the last five or six years. They used to come up to Hartlepool in the summer time; but most of the trawlers used to go to Iceland for salt fishing. Now they keep their trawlers here because they can make a good deal more money; they can make 4*l.* or 5*l.* a day trawling here, and that pays expenses very well. But the result has been that they have destroyed the fish at Hartlepool and Sunderland. Those fishing-grounds are ruined altogether, and now they have come to the small patch of fishing-ground that lies off here, and they are sweeping it as clean as can be. In a very short time, if this trawling is allowed to go on, fishing here will not be worth calling fishing.

289. How far from the coast do they fish?—About five miles and a-half or six miles, in 32 fathoms of water. They generally commence in about 22½ fathoms. Outside that all is mud, and there is nothing to catch.

290. Is that the ground upon which the line-fishermen here go?—Yes, it is the ground upon which they fish for a living.

291. And I understand you to say that they now find it very much interfered with by these trawl-fishermen coming in there?—Yes, undoubtedly. They go as far as Souter Point, and if they get a westerly wind with an ebb tide they sweep it clean. They go over it again with the flood. I counted 28 one day off this place. Their beams would be from 34 to 35 feet in length. They would soon scour the whole patch of ground clean, for it is only about four miles broad.

292. (*Mr. Lefevre.*) What is four miles broad?—The ground the trawlers run over where they get the principal part of their haddocks. In point of fact, they can only get them here because all the rest is hard ground.

293. How far off is that ground?—About six miles.

294. How many men are there in these vessels that you speak of?—Three men and a boy.

295. How many men are there in your boats?—Three men and a boy.

296. What weight of fish will a trawl-boat catch in the course of a day?—Why, some of them will catch 10 cwt. of fish in a day.

297. Will they get that quantity of marketable fish?—Yes, of marketable fish.

298. And they will obtain that by the labours of three men and a boy?—Yes.

299. And what weight of fish will a line-fisher catch in the same time?—They consider themselves to do very well if they get four or five stone in a boat.

300. Five stone as compared with 10 cwt.?—Yes.

301. Is that the same kind of fish?—Yes.

302. And equally marketable fish?—Yes. The line will not take fish which are not marketable. They may get a few small ones occasionally, but nothing as compared with what the trawlers get.

303. Are the fish caught by the trawlers in as good a condition for the market as those which are caught by the line?—No, their insides are all broken and burst, and the gall is spilt upon them.

304. Can you tell me whether the fish caught by the trawl would fetch a lower price in consequence of the deterioration of quality?—Yes, they fetch a very inferior price. They have to take the gut out of them as soon as they catch them, while the fish caught by the fishermen here are taken into the market in a fresh state.

305. What would you, as a practical fisherman, do if you had the power and desired to effect an alteration in the matter in order to restore line-fishing—what legislation would you adopt?—I would pass an Act of Parliament to do away with trawling, and I would substitute line-fishing in its place.

306. Would you oblige a man to fish in a certain way?—Yes, I would oblige a man to fish with hooks and lines.

307. Do you think that the effect of establishing such a regulation would be to increase the supply of fish for the consumption of the country generally?—Undoubtedly it would. The young fish would not then be taken. They would not take the hook, and they would be allowed to come to maturity before they were caught.

308. Is it not your opinion that if you were to do away with 10 cwt. of fish, and put only 5 stone in its place, that you might decrease the supply to the market?—No, I don't think there would be any decrease whatever. The supply would be generally large, because, at present one-half of the fish that the trawlers catch they are compelled to heave overboard.

309. But I understood you to say that about 10 cwt. was marketable fish?—Yes, but if they have calm weather the boats cannot get to the shore so rapidly as they could wish with their fish. The consequence is that when the fish comes in it is not in a fresh state, and is not fit for the market, whereas the men with the boats who fish with the long lines can always get to the shore and bring in their fish.

310. Yes, but the long-line fisher is fishing 5 miles off instead of 50?—That is one reason why the difference takes place. When the weather is calm, if the trawler hauls up he has no wind and finds he cannot get to the shore.

311. If you were to limit yourself to 5 miles distance surely you would not be able to catch as many fish as you would if you extended the limit to 50 miles?—No, that is true; but what I say is this: If this trawling is to be permitted in British waters there will soon be that decrease in the quantity of fish that there will be none for the market at all.

312. Is there any law or any restriction imposed by

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the law which, in your opinion, injuriously affects you as a fisherman?—Yes, there is, and I mean to say it is a very bad one too.

313. What law is it that you refer to?—It is that which at the present time permits the Frenchmen to approach too nigh our coasts. The consequence of allowing them to come so near is that they deprive us of our living. They fish with herring-nets much heavier than ours and we dare not go near them. What with the Frenchmen and the trawlers we can scarcely pick up a living, whereas before they came here we were able to catch plenty of herrings. At that time we only got 15*d.* per 100 for the fish, but we could make a better season with that low price than we can make now when we get 2*s.* 6*d.* per 100 for them.

314. What kind of fish do the Frenchmen fish for?—Herring.

316. Do they fish with the same sort of nets as yours?—No, they are not like ours.

317. Are they better nets than yours?—They are considerably heavier.

318. But are they better adapted for catching fish?—We cannot compete with them. They can heave their nets faster than we can do.

319. Are they more active men than you?—No, but they have a capstan and 20 or 30 men upon each boat. They can work their capstan at such a speed that almost at one turn they will heave a vessel far ahead. In that way they have a considerable advantage over the fishermen who are working in the cobles.

320. Then I understand that they are superior to you in the use of machinery?—The reason they do us so much damage is simply this, the law of England permits them to come in among the small boats and take away our fish from us. That is exactly the grievance we have.

321. Do they come in within the limits prescribed by the law?—The law says that they are to keep three miles off, but they come within two miles and a mile, and shoot their nets. They shoot their nets wherever we shoot ours.

322. And is it in consequence of that that they take the herrings that would otherwise be caught by the fishermen in shore?—Yes.

323. Do the Frenchmen come here in large numbers?—Two or three French fleets of enormous length will go among a shoal of herrings.

324. What is a fleet?—I mean a fleet of nets.

325. What length will a fleet of nets be?—Perhaps will be 200 or 150 nets, as the case may be. The French will go in with nets like that among a shoal of herrings. Perhaps 10 Frenchmen may go in. The consequence is that they cut the shoal up, and the fish take off.

326. Then they fish with larger nets than you are in the habit of using?—Yes.

327. Is that in consequence of the larger size of their boats?—Yes; if they had not larger boats they would draw near the land, and catch no fish at all.

328. If you employed larger nets, could you not catch more fish?—No; we have nets in proportion to our boats.

329. The nets then must be regulated by the size of the boats?—Yes; but I may add that many fishermen have larger nets than they have a right to use according to the size of their boats.

330. When you spoke of a fleet of nets, how many French fishing boats would they belong to?—I have seen 30 or 40 boats fishing off here at a time.

331. Were they fishing off here during the time that you were fishing?—Yes, they were fishing off here during the whole of the time there were any herrings to catch. Then as soon as they found there were none to catch, they were off. As long as the herring was here, the Frenchman was here, and when the herring went away, he went away; I have seen their nets upon the shore in Blyth Bay.

332. (*Professor Huxley.*) But that is illegal, is it not?—I know it is.

333. (*Mr. Caird.*) Did nobody object to it?—No, not one. If we do object, there is no one to take notice of us.

334. Is there not a fishery vessel employed here?—Yes, I believe there is, but she is good deal more often in harbour than on her own post.

335. Have you never made complaints?—Once I had a net destroyed by a Frenchman. The gun boat fetched him on board, and I got a small remuneration, but nothing in comparison with what I had lost. As a general rule the fishery boat is to be found nowhere except at Shields, Sunderland, or Holy Island. A fisherman had his back broken by a Frenchman not very long ago because he wanted to take his number.

336. Practically you say that of all the herrings caught off this coast, the French take one half?—Yes, I should say the French take two-thirds, and leave one-third for us.

337. And is that within the limit of three miles from the shore?—Not always. If you were fishing here close in shore they would come in alongside of you if they thought there was anything to be got by it.

338. Do they take the fish they catch to France?—Yes, they salt them, and they get a premium for every first-rate cargo of fish taken to France, and they have a French steam boat here to take them very quickly.

339. Do you think that any legislative provision could be made to prevent the Frenchmen from getting so large a share of the fish on the Englishman's ground?—Yes, there ought to have been a law made long since. I am glad you have taken notice of it, and I hope you will do something in the matter.

340. Is that the only ground of complaint you have to make?—No; there is the point of trawling. That I think ought to be abolished entirely if we want our fishing to exist. I speak of the white fishing—haddock, ling, skate, sole, and so on. If that is to go on at all, trawling must be done away with. As to trawling in shore, I don't think much harm arises from that; the meshes of the nets are much larger than those which are used by the big trawls.

341. Have you ever been engaged in trawl-fishing for soles near the shore?—No, I have not been engaged personally.

342. Are there any oysters caught off this coast?—No, I think there are no oyster beds off here.

343. Have you ever fished here for lobsters?—Yes, I have fished both for crabs and lobsters in one year.

344. Do you find that the supply of crabs and lobsters is increasing or diminishing?—They are decreasing very greatly. We can get but few now.

345. They are not upon the ground which is fished over by the trawls, are they?—No, they are upon the rocks.

346. Can you tell us what is the reason of the decrease?—No, I cannot say. I have often thought about the matter. I cannot say whether the suggestion is true; but I believe there is a great quantity of nuisance imported from the Tyne into the water; the refuse of alkali, for instance, finds its way into the sea, and I believe that it is very destructive to white fish. It is taken out from the Tyne and deposited in between 14 and 15 fathoms of water.

347. How long is that ago?—Why it is going on at the present day.

348. And do they continue to take out that refuse now?—Yes, I believe they do, and they throw it out in 14 fathoms of water, even so low as 10 fathoms sometimes.

349. Do you partly attribute the destruction of fish to that?—Yes, especially with regard to the shell-fish.

350. Is it shell-fish alone that it destroys?—Yes, it does most damage to them. I believe it has destroyed them greatly.

351. Are there not as many shell-fish here as there used to be?—No; in former years I have in one day got as many as from two to three scores of nice saleable lobsters the proper length for taking to market; but for the last year or two there has been very little to catch.

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352. (*Professor Huxley.*) You are a long-line fisherman, I believe?—Yes.

353. And you have done a good deal in that way?—Yes.

354. What is the length of line that you commonly use here?—Four fathoms go to a half piece; there are two of them to a piece; six of them in a line, sometimes only five.

355. How many snoods are there on a line?—Some have two fathoms only in a piece.

356. How many hundred hooks are there on a line?—There are 1,500 or 1,600, but I should say there are 1,000 on the average.

357. How many lines have you in a boat when you are white fishing?—Every man has one. In Scotland I believe every man has two.

358. You bait them and lay them out?—Yes.

359. How many fish did you get in former years?—When I was a young lad I have seen us get as many as 50 score on a line.

360. That would be a fish upon every hook?—No; I mean upon two lines. I have seen 250 score got in a boat.

361. That would be with two lines each in a boat?—Yes.

362. (*Mr. Lefevre.*) You say you have seen 50 score caught in a boat?—Yes, upon two lines. I have often seen 50 score upon two lines.

363. (*Professor Huxley.*) That is a fish for every other hook?—Yes, about that.

364. Do you commonly get all the fish that have been caught on your hooks; do not the dog-fish destroy a great number?—Yes, the dogs take a good many from us. They will eat them very fast, and pick the bones too.

365. I believe that sometimes you get only the head of the fish on the hook?—I do not know that I have brought up the lines with only the heads upon the hooks, but I brought them up with the fish very much eaten sometimes.

366. Then sometimes a large proportion of the fish brought up on the lines will be damaged, destroyed, or unsaleable?—Yes, by dog-fish and suckers.

367. I suppose that sometimes a whole night's fishing or the larger part of it is ruined?—That is generally the case when the dogs are on the coast. We commence hauling at the other end whenever we know the dogs are about, and we don't give them time to eat the fish. But if we let the lines lie in the water the dogs will commence eating the fish off the hooks as they are lying in, and very often they will take away the snood too.

368. Then a good deal of fish is wasted in that way?—Yes, a good deal.

369. You were speaking just now of bringing up large quantities of spawn. Now is it not the case that fishermen call many different things spawn?—No; practice makes perfect. A man who has been much engaged in fishing soon knows spawn from anything else.

370. Then I suppose you know what spawn is?—Yes, I do.

371. Now I have been a sailor in my time and I have heard sailors call all sorts of things spawn. I daresay you have too?—Yes; but when you are going along with a trawl and you take spawn up, if you examine it with a glass you will soon see that there is life in it. I have a large glass at home and I have examined various things with it which I have got at the sea bottom, and I have seen spawn with actual life in it. There is a sort of skin over it. It is very hard, and you would be surprised at the impression it would take to remove that skin. But I believe that when it is once removed the spawn becomes dead.

372. Have you ever seen any herring-spawn?—Yes.

373. If ever you have taken herring-spawn and placed it in a bucket and let it remain there for a short time, the spawn will get set to the bottom so that you can hardly scrape it off?—Yes, I am aware of that.

374. Well, that fact will show you that fish spawn adheres very firmly to the bottom?—Yes. Whelk-spawn adheres to the rock, I believe. The spawn of ling is generally deposited in the mud.

375. In trawling with the beam-trawl, you have the beam about 30 or 40 feet long?—Yes, 37 feet long.

376. At each end there is, I believe, a large thing made of iron, like a crutch?—Yes, they are the heads.

377. And the mouth of the net is upon that?—Yes.

378. And it is made fast to the heads and you haul it astern?—Yes.

379. Can you tell me what is the use of the heads?—Yes, it is to keep the trawl off the ground.

380. It keeps the beam to a certain extent from the ground?—Yes.

381. Then the beam does not absolutely touch the ground?—No, it is about $2\frac{1}{2}$ or 3 feet above the ground.

382. So that the fish are caught in it by being disturbed, and they run into the net as the vessel sweeps along?—Yes; if you give a vessel good way and heave a good press of canvas on her, and give a good deal of rope, then your trawlheads will come quite down, level with the ground; but if you let your vessel lie dormant while you are shooting the trawl net, the net will likely turn upside down. If you carry a press of sail the trawl goes down because it is of great weight.

383. I suppose there is something attached to the beam to keep it from going upon the ground?—Yes, there are trawl heads.

384. How many knots an hour do you drift?—Generally about three, allowing the ebb to take us a knot and a half. If we go faster than that, we call it 'swimming the trawl,' and we get nothing but haddocks then.

385. Have you ever been out oyster dredging?—No, I never went oyster dredging.

386. If you make a knot an hour, it is the outside?—Yes.

387. I suppose the dredge bites the ground?—Yes.

388. (*Mr. Lefevre.*) Do you take the trawl against the tide?—No, we work it with the tide.

389. (*Professor Huxley.*) Would it not be impossible to drift your trawl at the rate of 3 knots an hour, if you bit the ground?—No, we could not do it.

390. The beam is round, I believe?—Some are made of oak and of ash, and they are very crooked.

391. But they are round, like the barrel of a quill?—Yes.

392. I perceive it is your object to have the least possible bite upon the ground?—Yes, as long as we keep it to the bottom of the ground, that is all that is required.

393. Have you ever seen any large stones brought up in a trawl?—Yes, I have seen very big ones, and we have been very glad to get them up in sight, so that we could cut a hole in the net and get clear of them. The ground rope of the trawl is made in four pieces. Then there is a chain, the same as in a mackerel-net. They are then welded with a large piece of rope. If we catch a rock with that the ground-rope may break, and yet you will not lose the whole of your net. You may split your ground-rope, but still save your net.

394. Then the weight of a ground-rope acts as a scraper to a certain extent?—Yes.

395. You stated that you had seen large quantities of spawn brought up in that way?—Yes, I once saw 3 tons brought up.

396. What was done with it?—We hove it overboard as soon as we got it. I cannot tell how long it had been in the trawl; it might have got in six, or 11 or 12 hours before.

397. Then you are quite of opinion that the trawling does bring up a considerable quantity of spawn on the average?—Yes, it brings up large quantities. I should say that the trawl is very destructive to spawn.

398. Have you any reason to believe that all that spawn is dead when it goes back?—Yes, I think it is quite dead.

399. Why do you think it is dead?—I think it is because it is so much jumbled together, and the skin is so much broken.

400. But a friend of mine had some herring spawn dredged up, about two years ago. He took it home and examined it, and found it all alive?—That is quite possible, but it would have been according to the time it might have been dredged along with the trawl. The trawl might not have been in long enough to have done much damage; but if you get an immense weight of fish in the trawl, and also a large quantity of spawn, I imagine you may have 6 or 7 tons in the trawl at one time. You have to heave it all up. You have then to get hold of the bag and take it forward to the windlass and heave that tight. That operation cuts through a certain portion of the fish. You have then another rope which you call the cod-end rope. You put it on a break and heave it up. You shake it out, make the ends fast again and run it out and heave it. You do that five or six or seven times, until you get your nets cleared.

401. So that you consider the spawn is a good deal bruised in getting the contents of the trawl nets into the boat?—They will often get haddock and other fish quite cut through.

402. Do you get fish in large quantities in the trawl?—Yes, in very large quantities sometimes. Upon the Dogger Bank I have occasionally made one haul, and it has been so large that I have come straight home with it.

403. Do not the flat-fish feed a good deal upon spawn?—I do not think they do.

404. Why do you arrive at that opinion?—Because when the spawn is upon the ground I am convinced it can hardly be broken by the mouth of a flat-fish. A flat-fish has not sufficient power in its jaw to do that.

405. Have you ever been informed by those who have obtained flat-fish and cod and the like, that their stomachs are found full of spawn?—I have seen spawn in the whiting.

406. Have you ever found a turbot full of spawn?—No; I have found haddock and whiting in his maw, but no spawn.

407. Then I may tell you that there have been flat-fish sometimes found with 2 or 3 pounds of spawn in them?—I never knew such a case. I once caught a halibut weighing 14½ lbs. and he had a cod in his mouth, but I never found any with spawn in them. I believe that the whiting destroys a great deal of spawn. They have got long teeth, and they can tear it to pieces. They are as injurious to spawn as any fish with which I am acquainted; they have, as I said, such powerful teeth.

408. Do you know when the whiting spawns?—Yes, I believe they spawn about the same time as haddocks.

409. When is that?—In the months of February and March, and then they commence being good in May again. That is the time for whiting, haddock, and ling, but the ling is a little later in spawning than the haddock.

410. Then would it meet your views if trawling was prohibited during the time that fish are spawning?—If trawling were prohibited here, and upon the coast altogether, I believe it would tend materially to increase the number of fish.

411. What I speak of is this; would your views be met by prohibiting trawling at the time the spawn of haddock and other fish is on the ground?—I believe it would be very beneficial.

412. I do not understand you to mean that trawling does any harm when the spawn is not upon the ground?—Oh yes, it does; it must do harm when it takes all the small fish in. I have seen one half of the catch taken out and thrown overboard, and of course as they were dead they never came to life again.

413. Why were they thrown overboard?—They were thrown overboard because they were so small that they were not fit for the market.

414. Then there is a second objection. If there were only the objection that the trawling takes the spawn you might put a stop to that by prohibiting trawling when the spawn is upon the ground. Now with regard to the second objection, could it be met by the mesh of the trawl being fixed at any particular size?—It might, but who is to attend to it?

415. You know what has been done with regard to herring-nets; if the herring-nets are not 36 meshes to the yard they may be seized and forfeited?—I have nets with 33 meshes to the yard, and that is a long way from that. I have been in Scotland and have had them examined. They have told me that the meshes were very small, but the men who examined them never said—put them out.

416. We will put aside for a moment the practicability of carrying out the law. Suppose that it was well carried out, do you think it possible to make the mesh sufficiently large to permit the small fish to pass through and not be destroyed?—You might do so to a certain extent, but when the vessel is going at the rate I mentioned I cannot help thinking that it would very materially injure the small fish. How are they to get out through a large body of fish such as you often have in a trawl? They cannot press their way through such a body of fish. There are only two egresses, one on each side; there is none at the bottom. I am not at all prepared to say that the small fish would go out at the sides of the trawl.

417. Do you not think that a limit might be fixed with regard to the mesh which would meet the necessities of the case?—I do not think that would remedy the evil. I have seen the trawl worked, and I have got one up when it had only gone a short distance and I have found it choke-full. I think if the small fish once get in the pressure of water alone would keep them in. They would not be able to get out. I cannot see how they would get out.

418. Then you do not see any way in which trawling can be legalized so as to make it otherwise than injurious to line-fishing?—It should be abolished from the coast altogether, but if it is to be permitted at certain times, limits should be assigned to the trawlers, and yet if that were done there is nobody to keep them within their limits. If such a law were made perhaps they would keep to their limits for a month, and then they would soon come back again.

419. But suppose they could be kept within limits, what limit do you think would be advisable?—I can hardly say. For my part I think they ought to be kept 12 miles outside the Dogger Bank, and if they got no fish there they would go somewhere else.

420. (*Mr. Lefevre.*) Why, that is 60 miles away?—It is 130 miles from here. The Dogger Bank east of this place is more than 30 miles wide. It is about 130 from here off the shore. In my opinion trawling is fast impoverishing the British fishing-waters. It is impoverishing them so rapidly that in a very short period of time, according to my judgment as a fisherman, they will render fishing extinct altogether in the shape of long-line fishing. They have destroyed the Channel fishing entirely. There was a beautiful place at Torbay. They have destroyed that, and now they are destroying the Silver Pit. They cannot make a living there and they come here. If they could get plenty of fish in the Silver Pit they would not come here, because they would have a far better market in the Humber than they have here. At the present time I believe they are going down as far as Scotland.

421. (*Professor Huxley.*) Do the trawlers do you any harm by under-selling you in the market?—Yes; we cannot compete with them. We have three men and a boy who catch so many fish, but the trawlers catch a much larger quantity, and having so large a quantity to sell, we cannot compete with them.

422. The trawlers catch the larger quantity of fish, you say?—Yes, a very much larger quantity.

423. (*Mr. Caird.*) I think the proportion you stated

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was 5 stone to 10 cwt.?—Yes; what I mean is that in line-fishing we cannot compete with them at all.

424. (*Professor Huxley.*) I presume that you cannot compete with the French boats? Their boats are larger and better boats, are they not?—Yes, they are much larger and heavier than ours.

425. Then why do you not set up bigger boats here?—We cannot do so, because the British Government do not uphold our fisheries like the French Government do theirs.

426. Do the French Government uphold their fisheries?—Yes; they give a large premium for a good cargo of fish; half of the premium so given is set aside and goes to make a fund from which, when a vessel has been 10 or 12 years in the fishery, a new one is supplied. The old one is taken away from the place altogether, the new one is sent in her room, and the premium goes towards paying for it, so that the fishermen themselves are never asked to contribute one farthing towards the expenses of their boats. Now, on the other hand, we are obliged, if we want a new boat, to put our hands into our pockets and pay for it, and of course if we had bigger boats it would be a great advantage to us. With bigger vessels we could prosecute the fishing during the course of the winter. There are some men here who have been constantly at the herring-fishing, and they will tell you that, if they had suitable vessels, they would be able to do much more than they can do at present.

427. What I understand you to say is that the purse of the Government backs the Frenchman, while in this country it does not back the Englishman?—Yes; it certainly does not back the Englishman in the same way as the French Government back their men.

428. But they might back the English fishermen by sending out gunboats to protect them?—Yes, that might be done, but I am sorry to say that those in command of those boats do not do do their duty. We petitioned some time ago for some gunboats to be sent down, and they were sent down in reply to our petition, and did their duty with great vigour for a short time. That is now some time ago, but since then the work has been greatly neglected. I think I have seen one gunboat in Shields this year, but when the Frenchmen have been off the coast breaking the law, there has not been one to be found.

429. Is it not the law that no French vessel shall fish within 3 miles of the coast?—Any French vessel found within that limit can be prosecuted?—Yes, I am perfectly aware that that is the law.

430. Then if that law were strictly enforced do you think that it would give you constant protection against the French?—We should have protection this way; if the herring were lying four miles within the coast, then the Frenchmen would be three miles outside of us again. The captain of a man-of-war who was once in command on this coast told us that the distance was to be measured from headland to headland; that they were to be three miles outside of a straight line drawn between such points. Now, if a parallel line were drawn from Foulness to Peterhead, then the French would be three miles outside of it. If a Frenchman got within that distance he would be seized and fined. The captain to whom I allude said, "That is my code of rules." He added, "I therefore take the parallel of any two heads I may think proper, and if I catch a Frenchman inside the three-mile limit then I can fine him."

431. The French fishing boats can be interfered with and fined if they are within three miles, which is the limit laid down by the law?—Yes; we just want the French to be clear of us; we do not want the bread to be taken out of our mouths altogether.

432. You cannot expect protection in every case in which you may desire it?—All that we want is that a gunboat should be stationed off the coast, and should see that everything is properly attended to.

433. Do you want the French to be three miles outside every shoal of herrings wherever it may be?—No; I cannot say that we want that, but what we want is that they shall not interfere with us in our fishing.

434. Wherever a shoal of herrings makes its appearance within your reach, perhaps at a distance of 10 miles off the coast, what you want is that a gunboat should be employed to keep the French three miles outside of that?—We do not want them to be allowed to come amongst us. I know that if a French vessel catches an English vessel half-Channel over, within their limits, that is to say, if they catch the English vessel within their limits of half the Channel, they will take her to France and not allow her to go out again until the fishing season is over. I have seen that done myself.

435. (*Mr. Lefevre.*) I think, Templeman, you said that you were on board a trawling boat yourself for some time?—Yes; I have been the master of a trawling boat.

436. For how long were you so employed?—I belonged to her for three years.

437. Where did you fish?—We fished upon the Dogger Bank, the Well Bank, and upon the Whiting Bank, and I have also fished off here.

438. How far did you generally fish off this coast?—I once had a haul within about six miles of this coast. I think that that was about all.

439. How long ago was that?—It would be about four years ago.

440. Then I suppose that you left trawl-fishing to come back to the fishing in which you are now engaged?—No, I did not leave it; the vessel was sold, and then I came back to long-line fishing.

441. Then practically you did come back to this fishing?—Yes, I did.

442. Will you be kind enough to inform me what your earnings were; your average earnings on board a trawl-boat?—I was paid by the week, and not by a share.

443. What did you earn in a trawl-boat as compared with what you earn now?—I earn more now than I did then; my wages were 12*s.* a week and poundage.

445. Was the trawl-boat provided by a company?—Yes, by a firm.

446. And now you have got your own boat here? Yes.

447. And you say that you make here more than you did when you were employed as a trawler?—Yes; because the whole gear in the boat I use now is my own.

448. You say that the Dogger Bank extends above here in this direction?—Yes; part of it will be about 60 miles from Flamborough Head.

449. Do the line-fishermen go as far out as that to fish?—The line-fishermen do not go out as far as that with their small boats.

450. But the trawl-boats fish off there?—They go into, I should say, 25 fathoms of water. They go right away to the other side of the bank.

451. I understood you to say that there was a channel about six miles, or probably about five miles from this coast where they also come in their trawls?—There is a piece of ground there called the 'smooth ground' or the 'hard edge,' which runs to about 30 fathoms, and I have seen the trawls all the herring season upon that piece of ground.

542. Is the width of that piece of ground from four to five miles?—Not quite so much, it is only about three or four miles.

453. Then I take it that, between that piece of ground and the coast, there is a considerable space of ground upon which the line-fishermen can work?—Yes, there is.

454. And they can work beyond that also?—Yes.

455. Where the trawlers cannot work?—Yes.

456. In that channel do they get most of the fish which they take?—Yes, that is the place where the Cullercoats fisherman principally get their living.

457. Is it there that the fish spawn?—Yes.

458. What kinds of fish spawn there in particular?—Haddocks.

459. Do the herrings spawn there?—No, I think they come further in shore to spawn.

460. Then the trawlers do not interfere with the herring spawn?—The smooth ground to the southward of the Souter runs closer in there than it does here. All that I know is that where a large shoal of herrings spawn the smack goes directly over.

461. I understood you to say that there was a bank six miles broad, on which the men cannot use their trawls, and where the herring spawn?—The trawlers trawl anywhere.

462. But I thought you said that they could not trawl upon the rough ground?—As a general rule they use their trawl anywhere,

463. But as a general rule they confine themselves to the smooth ground, do they not?—Yes, as much as possible.

464. And they keep some six miles off from here?—Yes.

465. And the herring come in within that distance, and spawn within that distance?—Yes.

466. Then I take it that, as a general rule, the trawling does not interfere with the spawn of the herring?—No; perhaps it does not interfere so much with the herring spawn as it does with the spawn of other fish.

467. Now, as a practical fisherman, I would ask you another question. Do you consider that there has been a great diminution in the herring fishery here?—Yes, I think it has fallen off a very great deal.

468. Do you mean that there has been an absolute diminution of the whole quantity caught, or that each boat has caught less than each boat formerly caught?—I think there has been a decrease in the whole quantity caught.

469. Do you attribute that to the trawling?—I believe that that is one cause of the decrease; but I believe also that allowing the Frenchmen with a large number of nets there to fish, is another, and perhaps the greatest cause of the falling off.

470. Can you tell me whether the number of French fishing boats has increased of late years?—Yes, it has increased more than 10 per cent.

471. Within the last how many years has that increase taken place?—I should say that it has increased as much as that within the last 10 years.

472. Do the French fishing boats use larger nets, now, than they used to do?—Yes, they use much larger vessels, and a greater number of nets.

473. Do they catch more fish now than they used to do?—They catch a much larger quantity of fish.

474. Do they catch now more than they did 10 years ago?—Well, I think they do. I have seen some of them load their vessels in two hauls.

475. Do you consider that the diminution in the catch of fish is owing, mainly, to the French fishermen, or to the use of trawls?—In my opinion it is owing to both.

476. Do the French ever use the trawl?—No, they only use the net, and do not fish for white fish at all.

477. What I mean is, do they not ever catch haddock, cod, and ling?—No, I believe that they do further south, but they do not off this coast. I have been told that they have been off the coast of Ramsgate, and there have been great complaints of the destruction committed by the French fishermen there. Large quantities of fish are taken by the Frenchmen off that coast. I have myself seen 40 Frenchmen trawling at a time off Ramsgate.

478. Can you say whether the French fishing interferes with the catch of haddock, cod, or ling?—No, I cannot.

479. Then the diminution in the take of those fish you consider to be owing to the trawlers?—Yes, they have diminished the haddock, cod, and ling, the skate, the halibut, and such like. They have diminished that description of fishing more than 15 per cent.

480. Taking into consideration the quantity of herring caught by the French, should you say that there is a diminution in the number of fish caught here?—Yes; we have never had such fish of late years as we used to have here; the number of French boats has increased so largely that wherever there is any fishing near us they always come in, and we cannot get a place among them.

481. Do you think that, having regard to the quantity of fish caught by the French, the absolute quantity caught off this coast has increased or not?—I think it has decreased, and the Frenchmen are the probable cause of the decrease. They sweep the whole sea, and we have no chance.

482. Then you cannot say whether the quantity caught altogether by Frenchmen and Englishmen has increased or not?—The French take nearly all; you cannot compete with them; they get quite round the shoals, and if you put your nets in you will soon find the Frenchmen heaving them aboard, and if you go near them to ask them what they are doing with your nets they will break your head with an oar.

483. How far do your line-boats go out to fish with the line from Cullercoats?—In the summer time, during the time that the long-line fishing lasts, they will go away in the morning and sail six or seven hours before they set their lines. Perhaps in that time they will go 22 or 23 or 24 miles.

484. I suppose that in bad weather they will not go so far as that?—No, not in coarse weather.

485. In bad weather do they see the trawls coming nearly in shore?—Yes. They have altogether impoverished that ground. That place is now swept literally clean, the same as if a man had been sweeping a house with a besom.

486. Have you seen any of the trawlers still fishing here?—Yes, I have.

487. Do they continue to make large catches of fish?—No; but I have seen them come into Shields with 52 baskets of fish. They have inquired if I would purchase any fish of them. I asked them, for curiosity, how much they had got, they said they had 52 baskets; then I told them to go somewhere else with them. I looked at them, but would have nothing to do with them at all.

488. Was that in consequence of their being so much damaged with the trawl that you declined to purchase them?—Yes; they were very much injured; they had no scales on them, and they looked as if they had been washed about in the sea for a week; many of them had no fins.

489. Then, was it because they were damaged or because you had a disinclination to buy fish from the trawlers that you declined to take them?—Well, I never buy from trawlers.

490. I understood you to say that the trawling boats go to the Dogger Bank because there is a great accumulation of fish there about the time of spawning?—Yes, they accumulate there to spawn.

491. They are not attracted by the spawn of other fish?—No, I think not.

492. Then you are of opinion that they do not go there to feed on the spawn of other fish?—I do not think they do.

493. Can you tell me whether the herring spawn there?—I believe that they are about to commence going on that ground in order to fish for herrings.

494. I think you said that there had been a great increase in the number of trawls on this part of the coast?—Yes, there has been a very great increase.

495. Are you sure that they have deserted the ground further south?—Yes; there were plenty of fish there some time ago; but there are none there now.

496. Do you think there has been a diminution of trawlers further south?—Undoubtedly there has; they used to come down here six or seven years ago after they had been fishing on the south ground, but now you will not see them on the south ground at all, because they have entirely cleaned it out. They are trawling at the present time as far north as St. Andrew's Bay, in Fifeshire.

497. Do you think it would not answer to trawl

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from here?—No, I believe it would not answer the fishermen to trawl from here.

498. Why not. Would it require larger boats?—No, it is not that. It would require much more capital, and there is nobody here to uphold that capital.

499. But supposing that the capital were provided, and the boats were built, would it answer then?—No, I think not.

500. Do you think that there are not sufficient fish o catch, or that the fishermen here could not compete with the men further south?—If the men had trawls and trawling vessels they would be obliged to have them as big as the others, and I think that there is not that quantity of fish to catch that would maintain three or four trawlers all the winter, and three or four would not be sufficient to maintain all the fishermen here. Then again, they would very speedily clear the fishing ground; they would take away all the fish there are off here, and they would have to go further to seek for fish. They would gradually impoverish the place, and the consequence would be that they would have to go further afield to seek a living.

501. I understood, from what you said, that there has been a considerable increase of trawlers upon this coast latterly?—Yes, there has been a great increase.

502. Then, suppose that the trawling boats were sent from here, would it not be more convenient than to send them from Hull and further south?—That is very good, but will the fish increase as fast as they can catch them?

503. I presume that the trawlers must catch fish or they would not come at all?—That is a question I cannot answer.

504. Now, supposing that the capital were provided and the boats built, do you think that it would answer for the people of Cullercoats to adopt trawling?—No; they would not do it; they could not make anything out of it.

505. Why not?—Because they have no harbour to put their boats in.

506. But there is a harbour close at hand; could they not go into Tynemouth harbour?—Yes, they could do that, but there is no fish to supply them and they would impoverish the ground.

507. You think it would not answer here because there is not enough fish to catch?—There are not enough fish to keep them continually trawling; they would catch them all very rapidly, in the same way as they have caught them at Torbay and off the Humber.

508. Then how do you account for the fact that the trawlers come from the south and fish here?—Why they come and fish here because there is nothing south for them to fish.

509. Then, in your view, the fish southward of this have diminished to such an extent that the fishermen are obliged to come here to fish?—They will augment again further south when the herring fishery commences.

510. According to your opinion the fish in the south has very greatly decreased?—Yes; they send the trawls away here because they cannot find enough for them at their own place. In winter time they send them here; in the summer they are obliged to send them to Iceland and Faroe. I speak of these boats now because they have been making great catches of cod, and have been going out again; but in a few years there will be nothing left for them.

511. How long have they been off this coast?—For about two years. To my knowledge they have been trawling here for two years.

512. Do the fishermen here occupy themselves all the year round with fishing?—Yes, they have no other occupation.

513. Then they do not go alternate voyages?—Some do, but not always.

514. The general occupation of the men is fishing?—They fish all the year round; they take the herring season and the haddock season, and then they fish for white fish generally. The greater number of them do that.

515. They do not go small voyages and go back again, but they fish for the greater part of the year?—Some of them may go for short voyages, but generally they are fishermen and engaged in fishing all the year round.

516. Do any of them belong to the naval reserve here?—Yes, I believe that a good few do.

517. Can you say how many belong to the naval reserve?—No, but I believe about eight.

518. (*Mr. Caird.*) At what rate do the trawl-boats drag the trawl through the water?—If there is a strong wind it depends upon the kind of fish you are expecting to catch. If you want to catch soles you must not go fast because you have to get them out of the mud; and if you want haddocks and plaice you must let the vessel go at a greater speed. You cause your vessel to go according to the fish you desire to take and the ground which the fish inhabits. If you want plaice or haddock you must make the boat go fast through the water.

519. At what rate would the vessel go when you are engaged in plaice or haddock-fishing?—A knot and a half, or two, or even three knots an hour.

520. Would not that cause a strong stream in the net?—Yes; the net is all bulged right out until she gets her weight into her.

521. Would not the stream be so strong that small fish could not get out through the meshes if they once got in?—I think they might get out until the quantity of fish became so great that it would prevent them.

522. (*Mr. Lefevre.*) Do you think that there is any means of enforcing a close time? Do you not think that the constant fishing without intermission has a tendency to decrease the fish? Would it not be better to require the fish to be caught only at particular seasons?—No, I do not think that fishing with a line requires any regulation. I do not think that it would ultimately prove injurious to the increase of the fish. The greatest destruction of fish is caused by the trawling, because one half of those which are caught are not fit for the market, and they are thrown overboard.

523. And taking the herring fishery, do you think that any arrangement might be come to with regard to a fence time or close time, which might have the effect of increasing the supply of herrings?—I think you would increase the number of herrings caught if you could put an end to the fishing by Frenchmen. They take such very large quantities, and they take them too at spawning time.

524. But that is not my question. I want to know if in your opinion the establishment of any fence or close time would increase the quantity of herrings?—There is one particular time and only one, and that is the winter fishing. Now if that were prevented, say for a couple of seasons, I really believe there would be a large addition to the quantity of fish.

525. What fishing is that?—The Yarmouth fishing and the fishing off the coast. You can go 60 miles off this coast and get a boat load of herrings down to December. I have known the Whitby boats come into the Tyne with very large catches of fish.

526. Are they fish that have spawned?—Yes.

527. In your opinion do those fish spawn in the deep water?—No, there may be some of them that spawn in deep water, but I have caught some very full herrings near the mouth of the Tyne quite ready to spawn. I do not know that I ever saw one on the deck with the spawn running out of her. Now I believe that if something were done to prevent that winter fishing for a few years it would greatly augment the number of fish. What I maintain is that the French fishing boats carry such a large number of nets upon our coast as to destroy our herring fishery.

528. With regard to the diminution in the catches of other fish, you think that the destruction of the fish is mainly attributable to the trawlers?—Yes.

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529. (*Professor Huxley.*) Do you happen to know where soles and turbot spawn?—No; the soles spawn in the river, and I have caught a lot in the river when trawling there.

530. Have you caught large ones there?—Yes; I mean by a "full fish" a fish full of spawn.

531. I quite understand you. When do turbot spawn?—I cannot say when turbot spawn, but I should think about June.

532. Do turbot and plaice go to the banks for the same purpose that the white fish do?—Yes, I think so.

533. But they do not go there at the same time of the year?—No; I have caught them full of spawn, and I have also caught them quite empty.

The witness withdrew.

T. Bolam.

Thomas Bolam called and examined.

534. (*Mr. Caird.*) How long have you been a fisherman here?—I have followed the herring fishery for 21 years, and the white-fishing for about six years.

535. I will speak to you first about the white-fishing. In the course of those six years have you found that the supply of white fish has increased or diminished?—It has diminished a little gradually each year that I have been at it.

536. Has that diminution been in the number of the fish caught, or in the size of the fish caught, or in both?—There has been a diminution both in the number of the fish and in the size, besides which they have not been in quite so good a condition. We have not caught such large fish as were formerly caught here.

537. Have you noticed any marked diminution in the size of the fish?—No, I cannot say that there is any marked decrease.

538. There has been no such marked decrease as to have enabled you to observe it?—No, I think not.

539. You have been longer engaged in the herring fishery than in the white fishery, have you not?—Yes.

540. Then with regard to the herring fishery, in your experience do you find any great diminution in the total quantity caught?—Yes, very much so indeed, there are not near so many caught as there used to be.

541. Can you give us any idea in figures of what the decrease has been?—No, not in figures; but when I first went to the herring fishery 21 years ago, up to 14 or 15 years since the shoals certainly seemed much larger than they now are. We sailed about more; we first put our nets down in daylight, and if not successful we would then haul them in and sail about to find the shoals of fish somewhere else. Now we find them, it may be east, west, or north, and when we come across them they are quite small shoals, they are not one-tenth the size of what they used to be.

542. Then to that diminution in the size of the shoals do you attribute the decrease in the total catch of herrings?—Yes; formerly when we fell in with the shoals we were generally successful, and we would get in 14 or 15 cwt. with a couple of nets. Now we may fish for a month and four or five thousand will be a good take.

543. Is there any cause to which you attribute the diminution in the size of the shoal of herrings?—No, but I consider it is the natural consequence of trawling; the trawl sweeps over the ground, and it is calculated to sweep away the spawn and everything else. That is one great reason.

544. Then you attribute the decrease in the herrings to the trawls gradually impoverishing the ground?—Yes, I do.

545. But you only suppose so, you have nothing to prove that that is the cause?—Yes, that is the only feasible reason that I can see.

546. Have you noticed any difference with regard to the size of the herrings now caught as compared with what were caught formerly?—No, not in the size.

547. Is the season for catching the herring the same as it used to be?—Yes, we commence in July, and this is about the time we generally close the fishing.

548. Do you know whether the herring spawn here?—They spawn here when the weather is fine; at such time the herring will approach the land very closely. In fine weather we have to increase our nets; the fish come in so fast that we have had the nets fastened to the bottom with the weight of the fish in them. We have frequently drawn up the nets full of tangles hard spun.

549. Then you would say that the fish deposit their spawn near the shore?—I think they give the preference to in shore, but they do not entirely confine themselves to in shore.

550. Have you any knowledge as to whether a shoal of herrings comes nearer in shore now than in former years?—The small shoals do not approach the land so near as the large ones. I have generally found that the heavier the shoal is the nearer they make towards the land.

551. (*Mr. Lefevre.*) Do they come near the land for the purpose of spawning?—When the weather keeps particularly fine they approach near the land, but if the weather is at all stormy they keep at a greater distance from the land.

552. (*Mr. Caird.*) With regard to the deep sea trawlers, do they come in shore at all?—If the ground is not hard they come in. We have hard ground here generally speaking up to about six miles off the land; then after that we have a sandy bottom for about three miles east and west, that will give nine miles. The trawlers come all over that three miles of sandy bottom, and four-fifths of our fishing entirely depends upon that ground. At certain seasons of the year we get fish on the hard ground,—well-matured fish. We get there bigger fish than we get upon the smooth ground, but it is only the poor fish that is found nine miles off. After you have passed the smooth ground you come to a clay bottom, a sort of mud bottom where there is nothing but suckers. You get no fish there at all. You frequently find haddock on the bottom about nine miles off.

553. (*Mr. Lefevre.*) Do you think that the herrings take to the smooth ground in preference to the broken ground near the shore?—All I can say is, that we get the herrings on the smooth ground at the commencement of the season and that as the season advances the fish come in upon the broken ground.

554. When the fish begin to spawn do they come near the shore?—At the commencement of the season we get them on the hard ground in very good condition.

555. Then that is before they have spawned I presume?—Yes.

556. Then I gather from that that they come near the shore for the purpose of spawning?—As the season advances the fish come nearer.

557. Do they come on the hard ground before they spawn?—I cannot say that they do. I think they do spawn sometimes on the hard ground. I do not know if they spawn on the smooth ground. At the commencement of the herring-fishing there are no spent fish; it is only towards this month that we get spent fish.

558. (*Professor Huxley.*) You told Mr. Caird that you had to come into the shallows to get your fish. What was the length of your head line there?—Do you mean the float?

559. Yes.—We had none there.

560. What is the depth of the net you used?—Six fathoms. It was allowed to go to the bottom where the fish were.

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561. So that one half of your net would be dragging on the bottom?—Yes, and at each end would be an anchor.

562. (*Mr. Caird.*) Do you find that between one season and another you have a great difference in the catch of herrings? I mean that you have one good season followed by another that may be very inferior?—The fact is that there is a very great difference in the seasons; but within the last few years the seasons generally have been a great deal worse than they used to be in former years.

563. Have they been gradually becoming worse?—Yes, the catches of fish have been gradually decreasing for nine or ten years. There may have been one good season, another middling, another worse than that, but taking it generally there has been a gradual diminution.

564. Do I understand you to say that the whole of the herrings caught off this shore have gradually diminished in quantity?—Yes.

565. Notwithstanding that the boats have increased in number?—Yes.

566. You say that there is not as much caught as formerly?—I think there is not as much caught as formerly if you take both the French and us together.

567. Do you find that the French fishing boats interfere much with your fishing here?—Yes, they interfere with us very much.

568. Do they come in-shore as close as three miles?—Yes, they come in a great deal closer than that; they get in sometimes where they have no water for their nets to float, and they frequently come in with us. We have had our nets down in the water in the fore part of the night when they have come in and shot their nets over them. They have barrels and kegs for floats while we have only bladders, and if their nets come into collision with ours, as theirs are by far the strongest and heaviest, we are under the necessity of giving way to them or we should lose our nets altogether. If there is a strong wind they run down much faster than we do, and then they are sure to come into collision with us, and we are under the necessity of making way for them.

569. Do you agree with the previous witness that of the total quantity of fish caught off this coast the French fishing boats take more than one-half?—No, I do not think that; their nets do not suit the fishing as well as ours. They are heavier and clumsier nets. We have a lighter net, which is more pliable, and we can catch more fish in them; they are under the necessity of having such nets as suit their vessels. If they had nets like ours they would not pay them at all, they would not stand the knocking about they would get in such large vessels. Ours take one-half more the quantity of fish which theirs will.

570. Then you do not agree with the previous witnesses that the French fishing boats take more than one-half of the whole quantity of herrings caught off this shore?—I cannot say that I do; they take a certain portion, however, but our nets being better and more adapted for catching fish I think we get the greatest quantity.

571. Are you able to estimate the proportion which the French fishing boats take?—No, I cannot do that.

572. (*Mr. Lefevre.*) With regard to the French nets, can you tell me if they sink deeper than yours?—I do not think that their nets are any deeper than ours, but at any rate they use a good deal thicker twine. If their nets were similar to ours they would be much more pliable than they are, and they would catch more fish. The evil at present is that their nets being so much stronger, if we come into collision, as we have done very often, we either have our nets driven away or we have to haul them up at a place where there is plenty of fish. If we do not do that the consequence would be that we should either lose our nets altogether or have them fearfully torn. We are therefore forced to give place to them; we dare not come into collision with them. On the other hand, they do not mind anything with regard to us. We do not want to come into collision with them, but they do not care at all what they do with regard to us.

573. (*Mr. Caird.*) You mean that, you being in much smaller boats, they are stronger than you?—I am not speaking of the boats, but the nets. We have bladders for floats while they have barrels, and if our nets come into collision with theirs we are sure to come into collision with their barrels, which will go right through our nets, while our bladders do not interfere with their nets at all.

574. Then I presume that when you see them coming down upon you you have to move?—Yes, we have to move away and give place to them.

575. Does that occur very often?—Yes, and they know better where the fish are than we do. There are certain signs for the fish; they come in where they know the fish are, and when they get in we are obliged to go out of the way of them.

576. Do you think that if the French fishing boats were entirely prohibited within the three mile limit there would be any considerable increase in the supply of herrings to our market?—I think that if they were kept within their limits it would do us a great deal of good. If the law had been adhered to we should not have suffered so much, and I think it would be very much to our interest to enforce that regulation now. Unfortunately hitherto the limit has not been at all attended to.

577. May I ask if there was not a scheme got up here some time ago for carrying on the deep sea fishing?—Yes, there was.

578. I believe there was a certain amount of capital subscribed?—Yes.

579. Are you able to state what was the amount so subscribed?—I do not know exactly what was the amount subscribed, but I believe there were five vessels built which would cost from 300*l.* to 600*l.* each.

580. Were they built here?—They were built in Sunderland and on the Tyne.

581. Can you tell me what came of the scheme?—It proved quite a failure.

582. Did the men of Cullercoats go out in the boats?—Yes.

583. Were they fitted up as trawl-boats?—No, they were not trawl-boats at all.

584. Were they not intended to be used for the same purposes as the Brixham trawl-boats?—They were for line-fishing, not trawl-fishing.

585. They were not for trawl-fishing?—No.

586. Were they intended to compete with the trawl-boats?—Not at all.

587. Did they go to sea?—Yes.

588. And were they not successful in their fishing?—No, they were not.

589. To what do you attribute their want of success?—Well, there was a variety of circumstances. One thing was that they started at an unreasonable time of the year. And then, again, the fish they brought in were stale when they came to the market; they had been caught perhaps three or four days before, and the consequence was that they could get no price for them, and they found that the scheme did not pay.

590. But were they different in that respect from other deep-sea fishing boats?—No, not at that season of the year, but it was not carried out for long.

591. Am I to understand that you found it better to return to your old and usual mode of fishing?—Yes.

592. Are you able to tell me if there is any law or regulation in regard to fishing that in any way interferes with you in prosecuting your business?—No, I think not.

593. Is there any regulation as to the size of the meshes?—I think that there are 42 meshes to the yard in our herring fishing nets.

594. Does nobody come to inquire into the condition of your nets?—No; nobody ever comes here.

595. How do you know that there is such a law?—We do not know anything about it, we only hear of it.

596. (*Mr. Lefevre.*) Do you fish with nets of that sized mesh?—Yes, I do.

597. (*Mr. Caird.*) But I understand that it is not because you are restricted to that particular size by the law that you adopt it, but because you find that a certain size is the best size for catching fish?—Yes; it suits the fish better.

598. Nobody comes here to inquire whether you are breaking the law or not?—No; I have never seen anybody.

599. Is there any restriction for fishing any particular kind of fish?—No; I never heard of any.

600. You have no regulations whatever upon that subject?—No; not as regards white fishing at any rate.

601. Nor any other fishing?—No.

602. Is there any regulation with regard to trout-fishing?—Yes, I believe there is with regard to trout-fishing, but nothing else.

603. Is that by the recent law?—Yes.

604. Are there any regulations in reference to fishing oysters, crabs, or any other shell-fish?—No; shell-fish come at certain seasons, and we always fish for them if they are there.

605. There is no prescribed rule for the regulation of the different sorts of fishing?—No.

606. Nobody interferes or comes to enforce the law?—Not that I know of.

607. No one has come in the course of your experience which extends over a period of 20 years?—No; no one ever came here.

608. And now with regard to the boats. I believe that the Queen's vessels lie off this coast, do they not interfere with you?—No; they only come here to prevent collisions between us and the French fishing boats.

609. Do you think it advisable to have any fence months, or any restrictions as to the size of your nets?—Yes; I think they should be restricted.

610. Would you as a fisherman like to be restricted, or to consult your own convenience, and follow your own opinion?—Well, so far as I am concerned, I should like to have a thing that would suit myself and others.

611. Would you desire the interposition of the law in fixing the size of the meshes instead of allowing you to fix what size you considered to be right yourself?—If the law fixed the size that was right, I would rather have it than allow the fishermen to be left to fix it themselves.

612. Would you rather have it left to you, or would you prefer that the law should step in and tell you what size your mesh should be?—I would rather have the law step in.

613. Would you rather have every fisherman compelled to have his meshes of a certain size than allow him to fix them at what size he chooses?—Yes; because I am sorry to say that most of the fishermen are very selfish. Occasionally, in order to catch more fish, they will do what is not at all necessary.

614. Have you found that any loss has occurred to you from not having a fixed size of mesh?—I cannot say that we have.

615. Then why should you require anybody to interpose and fix the size?—Because what we have fixed ourselves is the mesh that suits the fish, namely, 42 to the yard. I think the law would do good if it fixed that as the size which all fishermen should have.

616. But suppose another fisherman takes another size of mesh, would you be injured in consequence?—No; I do not think it would injure us much. The only result would be that smaller herrings would be got, and that might have a tendency to reduce the quantity of fish. For my part I do not think that the fishermen in general would have their meshes different from what they are now.

617. Are there many shrimps caught off this coast?—Not many.

618. Are there any sprats caught here?—There are plenty of sprats here, but we do not fish them.

619. Is that because you do not find them worth fishing?—They are not found to be beneficial here.

620. Have sprats never been fished off this coast?—No; I think not.

621. You say you are aware that they come here?—Yes.

622. How do you know that?—I have seen them in the water. We get them in the river in large quantities at certain seasons of the year.

623. I understand you to say that it has never become an object for the fishermen here to fish for sprats?—No; but I have frequently seen them quite visible in the water.

624–5. At what season of the year do they come?—Just before the herring-fishing season.

626. Then that will be in June or July?—Yes.

627. In trawling for shrimps, I understood the last witness to say, that he had sometimes seen the spawn of soles destroyed by the trawl?—I cannot say anything about that; I have never been a trawler.

628. (*Professor Huxley.*) Would it be difficult to establish police regulations, by which the French fishing boats might be kept off the shore?—If we had the protection we ought to have, I believe there would be no fear of not having the law attended to. Sometimes we have had vessels down here which have kept the French boats within their limits, but I do not think that any attempt has been made to enforce the regulations as they ought to be enforced.

629. The fishing generally takes place in the night, does it not?—Yes it is all night work in the herring fishery.

630. Then suppose that the Frenchman shoots his nets five miles from the shore, will he not drift with his nets down upon you?—Yes, frequently he does.

631. I understand by that, that if he shoots his net outside the proper limit, then by the force of the tide or the current he drifts in?—Yes.

632. In such a case would you seize his nets and turn him out?—Yes, if he was beyond his limits I would do so.

633. But would it not be very difficult to do so?—I do not think there would be much fear of that if he shot his nets five miles off; the current does not generally set east and west.

634. But suppose there was an easterly breeze?—No doubt it would help it a little, but I have seen boats go out to sea even with an easterly wind.

635. To enforce the regulation would it not be necessary to have boats pulling all night over the fishing ground?—I do not think it would; sometimes we have had men-of-war here, and the French have known as well as we that the shoals of fish were in shore, and as soon as ever it got dark they came in shore and shot their nets among us.

636. Would it not be necessary for a gunboat to have a guard-boat pulling all night?—They must be there all night if they really intend to catch them.

637. Is it enough simply for a vessel to be here on the coast as a guard-ship, or is it not necessary that a guard-boat should be pulled over the fishing ground every night?—Both would be necessary. They would get along with a small boat much better than they do with the larger ones, but one vessel would, in my opinion, be insufficient to keep the French boats at their proper distance.

638. At any rate the vessel should be under weigh every night?—Yes, I think so.

639. In your opinion it would not be enough for the vessel to be at anchor at Holy Island?—No, certainly not.

640. It would not be much to the advantage of the fishing-boats for the gunboat to be lying there when the French boats were breaking the law at Cullercoats?—Certainly not.

641. Do you think that if a gunboat cruised up and down every night that that would be sufficient?—It would be necessary that she should do so, but I think there ought to be more than one vessel. There should always be vessels enough to keep the French boats within their limits.

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642. Have you any means of knowing what amount of fish is taken by the Frenchmen?—No, it depends entirely on the shoals of fish. There is one thing however in favour of the French, they always have an idea where the largest quantity of fish is to be caught, and they generally make for that place.

643. But you say that you do not know how many they catch?—No.

644. You state that the take of herrings has diminished of late years?—Yes, very much so.

645. Is that owing to the competition which you have had, or has it arisen from any other cause?—I do not believe that any people who catch fish in a fair way would diminish the quantity of fish at all. If there were not some other means of destroying the spawn, I do not think that the fish would at all diminish.

(*James Templeman, the previous witness.*) Three weeks ago I heard of a boat getting 7 lasts, and there are 10,000 in a last. There were none of the boats around but what could haul the same quantity. All those were taken in two or three nights; our boats cannot compete with them at all. In my opinion the Frenchmen catch by far the greatest quantity of the fish taken on our coast.

646. (*Mr. Caird.*) You are speaking of the herrings?—Yes.

(*Thomas Bolam.*) Within late years we have been under the necessity of shooting smaller nets although we have no large shoals; that has been because there has been occasionally a greater strain upon the nets, and we found that a thicker net in some cases would answer a good purpose, though in a general way our nets are thinner than those used by the Frenchmen in consequence of being made of a thinner twine. In large shoals slender nets will sometimes break away, the fish get into them with that force. Taking it as a general rule, however, the nets made with the smaller twine will catch more fish on the whole.

647. (*Mr. Lefevre.*) Is that because the fish see the thicker nets and fail to perceive the thinner?—No, that is not so, but where the nets are made of smaller twine they are much more pliable, and the fish are fastened in them much more securely.

648. (*Professor Huxley.*) Have you seen no signs to show you where it is that the fish breed?—I believe myself that they breed on this coast, but that is only a mere surmise.

649. Have you seen mackerel here?—Yes.

650. Do you fish for them?—No, that kind of fishing is not practised here. We have no nets for mackerel-fishing when they come in.

651. Do you go out habitually in bad weather in January and February?—We go out if the weather will allow us. We have to consider whether we shall be able to stand it or not.

652. I believe that none of your boats are decked?—No, they are not.

653. Then you cannot keep the sea?—As long as the sea keeps from breaking, these cobles are the best things that can be upon the water, but if the water breaks then they cannot keep the sea.

654. Does the quantity of herrings taken from year to year vary very much in other parts of the coast?—Yes, I believe it does.

655. For example, may there not be a very large quantity taken one year, and then very little in another for perhaps 10 years afterwards?—All I can say is, that upon this ground there has been a gradual diminution. Twenty years ago there were very heavy takes, and if the fishing had been prosecuted with the industry with which it is prosecuted now, the takes would have been enormous. I have seen the fish in shoals east and west, north and south, but I never see that now.

656. Is it 10 years since that took place?—There has been considerably less fish taken these last 10 years than there were in the previous 10 years.

657. Do you ascribe that entirely to the trawling?—I do to a certain extent. The trawling destroys both the fish and the spawn, and I think that is the reason.

658. But we hear that there was no considerable trawling on this coast until within the last 6 years?—I do not think that that makes it different. The fish come at certain seasons of the year, and if they are destroyed at other places why they cannot come here.

659. But they have been trawling down south for a great number of years,—for a century or more,—so that the work of destruction should have made itself felt before. I think you all agree that the falling off here only took place about 10 years ago?—Yes, about 10 years.

660. The trawling down south has gone on for a great number of years; are you not aware of that fact?—Yes, but it has not affected the fish here until within the last few years. They have now recently begun to come near our place, and the fish are rapidly diminishing. I think that may be the reason that the falling off has been more noticeable than it was 10 years ago. My opinion is that if the spawn is destroyed it must stop the fish from coming here.

661. (*Mr. Lefevre.*) Have you yourself ever trawled at all?—No, I have not.

662. Then you have no experience that enables you to say whether the trawls do really fish up the spawn or not?—No, I have only the evidence of other fishermen; I think myself that the very nature of the thing must be destructive when we know, and it is acknowledged by all, that the trawls bring up small and immature fish. Surely that is likely to destroy the fish.

663. How far does the fishing off Cullercoats extend?—From Souter End, the south part of the Tyne, to Blyth, and perhaps rather further than that.

664. Do you meet the Newbiggen boatmen there?—Yes, there are no more fishermen until we get to Newbiggen.

665. Do you and the Newbiggen fishermen interfere much with each other?—Sometimes we come into collision with the Newbiggen men, but it is not often.

666. Do you consider that you and the Newbiggen men occupy the ground off this coast?—Yes.

667. I believe that you have had more experience with regard to the herring-fishing than the white-fishing?—Yes; there are various reasons assigned for the fish having fallen off. Some think that there are too many fishermen. Now I do not think so. For instance, there were 10 boats when our friend commenced fishing, now there are 40, and our fishing extends from Souter's End to Blyth. Now if there were only 10 boats, I do not think those 10 would be sufficient to fish the ground over, and if the fish became as numerous as they did before, each boat would be as successful as they were before they were interfered with by the trawlers.

668. You think that ten boats would not be sufficient to occupy the ground, if the fish were as plentiful as they used to be?—Yes, there is that space of sea to fish in, and each would be clear of the other, and there would be no collision.

669. (*Professor Huxley.*) Do you think it would be the same thing if you had 500 boats fishing?—No, there is a medium in everything; but if the fishing were not carried on in a destructive way—if the only fishing practised was the hook fishing we practise—I do not think it would impoverish the sea.

670. Then, you do not think that the decrease in the number of fish is due to the Frenchmen?—No, I do not think so; what are taken by the Frenchmen are as nothing compared with the quantity of fish that are destroyed by the trawlers.

671. Taking into consideration the increase in the number of the French boats, you do not think that the ground is over fished?—No, I do not think so; when we take into consideration the large number of fish that arrive, I think it is only a small portion that would be caught if fished for in a legitimate way.

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It must be borne in mind that there are large numbers of white fish which feed upon other descriptions of fish themselves.

672. Where did you see that question argued; have you ever seen it discussed?—When we catch a cod fish we frequently find inside him perhaps a score of herrings, and we find as many as that in the inside of a black jack. Now, at times, we take 3,000 or 4,000 fish in a net, and when these fish come into collision with the nets they would take every one of our fish out.

673. (*Mr. Lefevre.*) Is there a large number of dog-fish on your coast?—Lately there has not been so much as there used to be; when we had more herrings off this coast there used to be far more dog-fish.

674. Then your opinion as to the diminution in the quantity of fish having been caused by trawling is rather from what you have heard than from what you have seen?—I understand the nature of trawling, and when I know that in trawling the trawl scrapes up everything, even large quantities of immature fish to be heaved away, I cannot help being convinced that trawling must be destructive.

675. But what do you say with regard to the herrings?—Why, if they destroy the spawn of the herring, then it must have the same effect that it has with regard to other fish.

676. (*Professor Huxley.*) Do you think that all these immature fish you speak of would grow up to be full-sized fish?—I cannot say.

677. Are there not many other fish that prey upon them?—Yes, a great many.

678. Can you form any opinion as to how many per cent. would grow up to be full-sized fish?—No, I cannot say.

679. Nor how many of the eggs?—No, I cannot say.

680. (*Mr. Lefevre.*) With regard to the white-fishing—the haddock, cod, and so forth, do you attribute the diminution in them to the trawling?—I think it is the most reasonable thing to say that it has been occasioned by the trawling. In hook-fishing all the fish are useful when they are caught, but when you get immature fish, spawn, and such things as that, as you do in trawling, it must be fearfully destructive.

681. How far does your fishing for ling, haddock, and cod extend; is it confined within the same boundaries?—No, you have to go further for the big fish. For ling and turbot, and so on, you have to go from six miles to nine. There are six or eight boats that follow the big fishing which go out considerable distances—probably 20 miles from the land.

682. Have you often been out that distance yourself?—No, I have never been out there.

683. Where is it that you have been fishing?—Over the ground that I described before.

684. Have you suffered any injury in consequence of the trawlers carrying away your lines?—Yes, I and the other men in the boat with me came into collision on one occasion with the trawlers, and they took away a piece 68 fathoms.

685. How often did that happen?—Only once.

686. How long is that ago?—That was about two years since.

687. And it has only happened once?—Only once.

688. And that occurred within your own experience?—Yes.

The witness withdrew.

JAMES BAILEY called and examined.

J. Bailey.

689. (*Mr. Caird.*) I believe you are not a fisherman yourself?—No.

690. You are a herring merchant, I believe?—Yes.

691. Do you buy the herrings as they are caught here?—Yes; I buy them here and in different places.

692. Do you sell them fresh?—Yes, both fresh and salt.

693. Have you been long engaged in that business?—Yes, for about seven years.

694. Then do you buy most of the herring that comes ashore here?—I buy a great portion of it.

695. Can you tell us with any accuracy—can you give us any figures—to show us the relative quantity that was caught seven years ago, and in each year since up to the present time?—No, I cannot. I have kept an account for the last two or three years, and I find they have been diminishing greatly. The average fishing per boat last year was 31,000 per boat. That was in the year 1862.

696. You do not know what the average fishing was seven years ago?—No, I do not.

697. Can you tell me what it was six years ago?—No, I did not keep any account then.

698. Nor what it was in any other year except the year you have mentioned?—No.

699. Then you cannot tell us really as a fact what the difference is?—No.

700. But you believe that the quantity has greatly diminished?—Yes, it has diminished very greatly.

701. Can you place any figure on the diminution; has it diminished a quarter or a half?—I should say it has diminished by a quarter.

702. Do you think that the total catch of herring off this coast has diminished one-fourth within the last seven years?—I should certainly say that it has.

703. Was the catch of fish last year a good catch?—No, it was a bad year.

704. Is there any improvement this year?—Yes, there has been a slight improvement, and my calculations will be better this year than they were last.

705. Does the catch vary much from year to year?—It has only varied for the worse. I have found the quantity caught gradually diminishing year by year. I have been connected with the herring trade upon this coast for about 10 years, and every year I have found it getting gradually worse.

706. Has the price of herrings during the last seven years varied much?—It has got a little higher.

710. Seven years ago was there any railway communication here?—Yes.

711. Then there is no difference in that respect?—No.

712. You had the same facilities for getting the herrings to market then that you have now?—Yes.

713. Has the price of herrings increased during that time?—Yes it has.

714. Is the price of herrings much higher than it was seven years ago?—Oh yes, a good deal.

715. Can you tell us how much?—About seven years ago I could have bought herrings, when the fishing was on, for about 10*s.* or 14*s.* per thousand.

716. And what is the price now?—The price at the latter end of the year 1861, and during the year 1862, was never below a pound a thousand except one morning, when it was 18*s.*

714. When did that increase of price begin? In what year?—I think it has been a gradual increase.

715. And has that increase of price been caused, do you think, chiefly by a diminution in the supply?—Yes, I think that has been the cause.

716. Then it is because the supply has been getting less every year?—Yes, the supply has been getting less every year. I was born here, and I have been about the fishing all my life. About 15 years ago the herrings were as low as 3*s.*, and from that to 5*s.* a thousand.

717. But you are giving us your experience of a time when there was no railway communication, and that is hardly a fair comparison?—But there was railway communication at the time I am speaking of. Most of the fish at that time went from here to London.

718. But not by railway?—Yes, they went by railway; they were taken by way of South Shields, and sent on from there.

719. How many years ago are you speaking of?—About 15 years ago.

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720. What do you say was the price then?—From 3*s.* to 5*s.* a thousand.

721. And the price has gone on increasing until it is seldom under 20*s.* now?—Yes.

722. With regard to the consumption of the fish, are there a greater number of fish consumed in the immediate neighbourhood, or is the majority sent away?—There is a great number consumed in the neighbourhood, and a good deal is sent to Carlisle, Liverpool, and other places.

723. Are there any herrings caught on this coast except during the months of August and September?—Yes.

724. So the market is always supplied with herrings during the other months of the year?—Yes, it is.

725. Where do the herrings come from then?—They come from different parts. They sometimes get them north of the Forth, and sometimes from the Isle of Man, and from different parts of the coast.

726. Is it fresh herrings to which you refer?—Yes; there are fresh herrings in the market nearly all the year round.

727. Has there been any appearance of herrings here when in winter they have been caught in the Firth of Forth?—No.

728. Then you never saw them come here except in what is commonly known as the herring season?—No.

729. (*Mr. Lefevre.*) Do they come from the north down here?—My opinion is, they do not travel the island. They come out of deep water, they deposit their spawn, and then go back again.

730. (*Professor Huxley.*) Have you ever heard of herring appearing here in the months of January or February?—I have heard fishermen say that they have seen a shoal for a day or two, but they disappeared again, and they have not been seen so that they could be caught.

731. Have there ever been any signs, such as those which usually precede the arrival of herrings,—gulls, and so on?—I can hardly say. I have been told that large shoals have been seen, but they have not been tried for.

732. Have you any notion of the cause of the diminution that has taken place in the quantity of herrings?—I have no notion, except it is, that there is a destructive agency with regard to trawl-nets going on.

733. I understand you to say that the diminution that has taken place has been going on regularly for the last 10 years?—Yes.

734. But we have been told that the trawling has only been going on for the last six years?—I cannot state how long the trawling has been going on.

735. I presume you know that the catch of herrings varies very much even where there is no trawling?—Yes, I believe it does.

736. (*Mr. Lefevre.*) Do you confine your purchases to Cullercoats, or do you purchase from Newbiggen and other places?—I do not purchase from Newbiggen, but I purchase fish at Boulmer and other places.

737. Have you noticed the same diminution in those places as that which you have observed here?—I cannot say that I have, but they have not had boats very long at Alnmouth. At one time it would scarcely pay for the getting of the fish in.

738. Do you purchase other descriptions of fish?—Yes.

739. Have you observed the same diminution in the other fish that you have observed in the herring?—Yes, particularly in the cod fish.

740. Do you purchase them off the coast in the same way as the herrings?—Yes.

741. Have you also noticed the same diminution in the quantity of haddock and ling?—Yes.

742. How long has your experience been with regard to the other fish?—About four years.

743. To what do you attribute the diminution in the case of the white fish?—I attribute it to the same cause, namely, to the spawn being destroyed by the trawlers.

744. We understand that the beam-trawlers do not bring in their fish to these parts?—No.

745. Then you have had no opportunity of purchasing ling, or haddock, or cod of them?—No.

746. Then you do not know what they have caught on the average?—No; but I was over at Sunderland the other day and they wanted me to purchase a number of fish that had been caught by the trawlers, but I would have nothing to do with them.

747. Did you look at them?—Yes, I examined them, but I did not think them fit for the market.

748. You do not know what the quantity caught off this coast by the beam-trawlers is?—No, but taking into consideration the fecundity of the fish I should think it must be very great. But at the present time there must be at least 100 per cent. destroyed, or even more than that; there are more destroyed than the quantity of fish taken and sent to the market. The destruction years ago compared to the present time was very small indeed.

749. Do you mean the destruction years ago by the trawlers?—No; I mean the destruction with regard to the fish taken by the hook, but if you calculate that 100 per cent. of the fish were destroyed you would find that there ought to be a still greater quantity of fish than is caught here.

750. I want to know what is the quantity caught by the trawlers, not by the line-fishers?—I cannot say what is the quantity that is caught by the trawlers.

751. (*Mr. Caird.*) In your experience has the size and weight of the fish diminished of late years?—Yes, it has.

752. Have you noticed that perceptibly?—Yes, in the haddock and in the cod particularly.

753. Are there more immature fish taken?—They are not so large as they used to be.

754. Probably they are younger fish?—Yes, of course.

755. Are they in the same condition?—No, they are not. Both this season and last season I could scarcely get a cod at all.

756. But you say that you buy nothing of the trawl-fishers at all?—No, I buy nothing of the trawlers.

757. (*Mr. Lefevre.*) Do you know whether the trawl-fishers caught many cod fish last year?—I have not heard much of cod being taken by the trawl.

758. (*Mr. Caird.*) You speak of the size having diminished, what would be an average-sized fish? What would it weigh?—We consider that a good cod weighs a stone, or a stone and a half; some weigh more than 3 stone.

759. But the average would be from 14 to 21 pounds?—Yes.

760. Do you think that fish of that size has greatly diminished?—Yes.

761. Then you are not getting so many fish now weighing from 21 to 30 pounds in weight as you used to get in former years?—No.

762. What do you think the average size is?—From 14 to 21 pounds.

763. And they used very often to exceed that?—Often, previously. But in point of fact they are much smaller here than they are further north.

764. Has the price of cod increased?—Yes, very greatly so.

765. Can you tell us what the difference is within your experience since you began to deal in fish?—Since I began to sell, the price has gone up from 20*s.* to 25*s.* per score.

766. What was the price 20 years ago?—It would be about 20*s.* per score.

767. What is the price now?—Twenty-five shillings.

768. (*Mr. Lefevre.*) The codfish follow the shoals of herring, do they not?—Yes, you get cod now wherever the herring is.

769. Do they remain off the coast all the winter, or do they leave it when the herring leaves?—They leave it when the herrings leave.

770. (*Mr. Caird.*) What may be the weight of a

score of cod?—Why a score is simply 20 fish; 18 inches from the tail to the head, we call that a size fish.

771. Then you sell them without relation to the weight of the fish?—It would only count as one even if it were as large again.

772. Has the standard altered at all?—No.

773. But if the size has diminished, surely it ought to have been altered?—There ought to be an alteration, but the fishermen get so few fish now that they will not allow it.

774. But it would be rather to the interest of the fishermen to diminish the standard?—I should think it would be, but it would not be to the interest of the buyers. They have taken off 4 inches from what it used to be 20 years ago; it used to be 22 inches, and now it is only 18.

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775. Then there has been a change?—There has been no change for some time. Further north there is a difference, I believe.

776. There has been no change in the standard here?—No.

The witness withdrew.

EDWARD CLARKE called and examined.

E. Clarke.

777. (*Mr. Caird.*) Do you live at Cullercoats?—Yes.

778. How long have you been engaged in the fishing here?—About 27 years.

779. Is your occupation solely that of fishing?—My occupation is solely that of fishing now.

780. Then for 27 years you have been engaged in white-fishing and herring-fishing?—Yes.

781. Do you fish for soles?—Yes; close in at the Castle where we can do no harm. The trawlers in the deep sea take away the spawn, but no spawn lies where we fish.

782. How far do you lie off the shore?—About a quarter of a mile.

783. In what depth of water do you fish?—Six fathoms is the greatest depth; sometimes it is only two fathoms.

784. In what manner do you fish for soles?—We fish with a trawl similar to that which the smack has.

785. But a trawl of a lesser size?—Yes, a smaller size.

786. At what seasons do you fish for the sole?—We begin about the month of July, and we fish as long as we have a mind to continue.

787. And how long is that?—We are thinking about knocking off now. They will be going more into fresh water now.

788. Do you ever find that you bring up any spawn in your nets?—No, I have never seen such a thing. There is nothing there but just the bare fish at all.

789. Nothing but the sole?—Nothing but flat-fish and sole.

790. Do you get any small fish—young fish?—No; we sometimes get a gurnet or two. We got two gurnets this morning.

791. Do you not fish at any other season than from July to September for soles?—No, we only fish about four months in one year.

792. Has there been any complaint made against you for disturbing the spawn?—No, I never heard of any.

793. Do you ever fish for shrimps?—No, never.

794. Do you ever fish for sprats?—No.

795. Do you ever see any sprats off here?—Yes, sometimes in great numbers.

796. Do you not think it worth your while to go for them?—No, they would go through the nets just the same as shoving a needle through.

797. Have you no nets adapted for catching sprats?—No.

798. Then they come here and go away without being caught?—Yes.

799. When you have seen them, were they in large numbers?—Yes, in very large numbers. We sometimes get them close in shore to bait our lines with when we are going for sandeliers and such like as that.

800. Do you catch them with nets?—No, with our hands, when they are tied in entirely.

801. Do you mean when they are stranded?—Yes.

802. And now with regard to soles, how long have you been catching soles?—I have been at it for about 20 years.

803. In the course of those 20 years have you found that the number you take has diminished? Do you catch less now than you used to catch?—Yes, a great deal fewer than we used to catch, and there is not half the immensity of fish there used to be in the haddock-fishing.

804. Are the soles about the same size they used to be, or are they larger?—They run very small. This year they are smaller than I have seen them for many years.

805. Do they run smaller some seasons than others?—In some seasons I have got 40 and 50 pair in a night, and in the whole of the 50 pair there has not been any pair over a decent size.

806. You are speaking now of this year?—Yes.

807. With regard to last year was it the same too?—Yes.

808. The year before that—was there much difference in that year?—I cannot say; they might run a little bigger, but they have been uncommon small these few years past.

809. What do you think has been the cause of it?—There have not been such great quantities as I have seen. I have seen greater quanties also of haddocks than come now. The sole-fishing has also decreased.

810. How many boats are employed in the sole-fishing here?—There have been only 4 engaged in sole-fishing this year.

811. Were there more than 4 in former years?—There have been 9 or 10, and I have seen as many as 14; but the men have got more into the way of going herring-catching with their big boats now. The young men go into the trawl-fishing, and us old men keep to the sole-fishing.

812. Does the other fishing pay better?—I should think so.

813. You say that you have also been employed for a considerable time in the line-fishing?—Yes, for 27 years.

814. Do you fish the line-fishing when you are not fishing the sole?—Yes.

815. Is it at a different season?—Yes.

816. When do you begin the line-fishing?—In about a week's time from this.

817. And do you continue it during the whole of the winter?—Yes.

818. Do you get as many fish now as you used to get?—No; not one half or one quarter the quantity. When I first came into the boats we used to carry 28 pieces of line. I have gone off and just shot half of my lines in coarse weather and I have got 15 creels. Six or seven of the boats now will not bring the same quantity ashore. If we had shot all our lines we should have got 30 creels.

819. What time is this of which you are speaking?—Do you mean when we could have caught 14 or 15 or 30 creels?

820. Yes?—It would be about 14 or 15 years ago.

821. When did the fish begin to fall off?—About eight or nine years ago.

822. Were there more caught then than there are now?—Yes.

823. When did they begin to fall away perceptibly?—I believe about six or seven years ago.

824. Do you find that the size of the fish you catch now is larger or smaller than it used to be?—They are smaller fish. We have got 30 creels of fish

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each of which would be as much as one woman could carry, and we have also caught nearly as many as 40 large haddocks. Two or three of our boats may go off now, and they will not bring four creels among the whole of them, and what they do bring are quite small things, just half-grown haddocks.

825. Have the cod equally fallen off in size?—No, I do not see any difference in the codfish.

826. Are they as large as they used to be?—Yes, they are just about the same size.

827. Then is it only the haddocks that have fallen off in size?—Yes; I know there is a vast deal of difference in the big haddocks from what there used to be.

828. What do you think is the cause of the fish falling off?—I can blame nothing but the trawl-fishing. They are trawling exactly on the ground on which we used to shoot our lines, and if we were to fish there we should run the chance of losing the whole of our lines because they trawl right across where we should fish.

829. Do not the trawlers generally trawl outside of where you shoot your lines?—No, they do not, sometimes we have to go outside of them into 26 or 27 fathoms of water.

830. How long is it since these trawl-fishers came upon your ground?—I cannot tell how long it will be.

831. Is it two, three, or four years since?—I do not know. It may be more than that, but they have been more here this summer than they were known to be before.

832. And have you caught fewer fish than usual this year?—There is nothing to get now but a few small whiting, and that is a fish which swims between the top and the bottom. The haddock swims close to the bottom, but the whiting swims betwixt the top and the bottom.

833. And they are not in the way of the trawl?—No; but the trawlers take away the spawn of the fish. There is no fish but that has to leave its spawn. I believe they leave all their spawn in deep water and none in the shallow water.

834. (*Professor Huxley.*) Do you trawl habitually?—Yes.

835. Do you bring up your trawl pretty full occasionally?—No.

836. Have you done so in former years?—We have got a long way more in former years than we do now.

837. Is the fish which you bring up with the trawl spoiled?—No; there is not over 10 minutes between set and set till such time as the trawl will have taken the fish and we heave it into the boat.

838. Do you mean that your trawl is not overboard more than ten minutes at a time?—No.

839. Do you ever find that you get fish with the gall bladder burst?—No.

840. And you have no spoiled fish?—No.

841. Have you ever been out trawling in the deep water?—No.

842. Do you know of your own knowledge whether large quantities of fish are spoiled by that mode of trawling?—Yes, it has been known that they have heaved tons overboard.

843. What do you ascribe that to?—I think it is owing to the trawlers making such a long continuance before they haul their trawls aboard.

844. Is the mesh of your net the same size as the deep-sea net?—I cannot say.

845. What is the size of your net?—It has a mesh that runs from about an inch to an inch and a half.

846. Do you ever catch small fish in your trawl?—No, none.

847. That is to say, that although the size of your mesh is not large you catch no small fish?—All we catch are in shallow water; they are generally soles, except a chance time, when we get a chance gurnet.

848. Do not you catch small soles as well as large ones?—Yes.

849. Then what do you do with the little ones?—We take them all away to market.

850. How do they get out of the net if the mesh is not more than an inch and a half wide?—I only catch them so big (*measuring*); they must come to more perfection before they come into shallow water.

851. Then, in trawling in-shore you never catch small fish?—No, we do not.

852. Did I not understand you to say that you caught sand eels?—No, never. I catch sandeliers.

853. What are they?—They are a sort of flat-fish.

854. Then, the fact is, with your trawling in-shore you never get small fish?—Never smaller than what I told you.

855. What is the length of the smallest fish you get in your trawl?—About 5 or 6 inches.

856. Do you ever get spawn in your trawl?—No; it is impossible for us to do so. There is no spawn where we trawl.

857. What is the depth of water where you trawl?—It will be from four to six fathoms in depth.

858. Then you do not believe that the trawling in-shore does any harm to the spawn?—It cannot, because there is no spawn to take from the bottom. We cannot do any harm. Where the fish cast their spawn is not the place where we fish. It is the other trawlers that take all the spawn.

859. I do not, at present, want to know about the trawlers outside; but I want to hear from you what your own experience has been. You say that you never take any spawn in your trawl?—No; during a storm and with a heavy sea the sea will rise and break 12 feet, and no spawn could lie there. It must be in deeper water.

860. In your judgment, at what time do soles spawn?—I cannot tell that; that passes my judgment.

861. When do you get them full?—I cannot even tell you that. When we get this kind of fish we do not open them, and therefore we do not know if there is spawn in them or not.

862. I understood you to say that you are a line-fisherman when you are not engaged in trawling for soles?—Yes.

863. Do you suffer much from the dog-fish?—Yes, a very great deal.

864. How much fish will a dog-fish take?—We have been off and come ashore with only one large fish between a cod and a codling. I have seen every other fish on the hooks destroyed.

865. Did you find the remainder of the fish on the hooks?—Yes.

866. You mean the heads of them?—Yes.

867. How many fish do you think had been caught that night?—I should say as many as three or four women folks could have carried.

868. And all of them had been eaten by the dog-fish?—Yes.

869. So that you are liable to have a good deal of waste even in line-fishing?—Yes, when the dog-fish come in they are terrible things.

870. (*Mr. Lefevre.*) The beam-trawlers do not catch the whiting, do they?—No, we are not in the habit of catching whiting or anything of that sort with a trawl.

871. I mean the people who trawl outside?—Yes, they get everything.

872. Whiting as well as other kinds of fish?—Yes, whiting, haddocks, gurnets, and everything we fish for in the winter season. They take all those fish away in the summer season. Whiting are principally on the top; the haddock is near the top too.

873. Have you observed the same diminution in the number of whiting caught as in the other fish?—Yes.

874. Have you yourself lost any lines in consequence of the operations of the trawlers?—I have not lost any myself, but some of our people have lost them even before they commenced the herring season.

875. But you have not lost any yourself?—No, I have lost none, but three or four other people have.

The witness withdrew.

WILLIAM SCOTT called and examined.

876. (*Mr. Caird.*) Are you a native of Cullercoats ?—Yes, I was bred a fisherman in Cullercoats.

877. Have you been long engaged in the fishing here ?—Yes, between 30 and 40 years.

878. And have you been engaged in fishing for all the kinds of fish that are caught off this coast ?—Yes.

879. You have been employed in the herring-fishing ?—Yes, at all kinds of fishing; both herring and haddock, ling and turbot, soles, and all other kinds.

880. Have you ever been engaged in the deep-sea trawling ?—No.

881. In the course of your experience over so long a time, do you find that you cannot catch as many fish now as you used to catch, in the same boat ?—No, not half the quantity.

882. When did the great falling off begin ?—About seven or eight years ago, I think.

883. About seven or eight years ago had the number of fishermen employed in the boats increased considerably compared with what it had previously been ?—Yes, the number had increased but they were getting less fish.

884. Were they still getting a good many fish each boat ?—About seven or eight years ago they were getting a great many fish.

885. Did the quantity of fish taken begin to diminish about six or seven years ago ?—Yes.

886. How much has it fallen off since?—I know that a great quantity of fish were got at that time; 10 or 12 creels of fish were got then where we do not now get half that quantity.

887. Do you mean in the same length of fishing ?—Yes.

888. Then you think it has fallen off one half at least ?—Yes, I think so.

889. Has the size of the fish fallen off as well ?—Yes.

890. That has been perceptibly noticeable ?—Yes.

891. You have no doubt about it ?—No; the haddock we now get are quite small fish They are very small. We scarcely get a large haddock among them.

892. Does the same remark apply to the cod ?—I do not think they are quite as big now as they were then.

893. There is not such an evident falling off in the cod as in the haddock ?—No; I think not.

894. I understood you to say you had had some experience in trawling for soles ?—Yes; I trawl close in here. I go with a brother of mine; we yoke together. I have since gone to the herring-fishing. I have also been trawling and fishing for salmon trout.

895. Can you get the salmon trout in the trawl ?—No; we have proper trawls for that sort of fishing.

896. Do you ever find spawn in your nets ?—No; never in my life.

897. Have you observed that the size of the sole has diminished as well as that of other fish ?—Yes; they are quite small now. We get them in the roadstead where the ships bring up in from two to five and eight fathoms of water.

898. When do you fish for salmon trout ?—In the latter part of May we generally begin, and we knock off in September.

899. How do you catch them ?—With a salmon trout net.

900. What is the size of the mesh ?—Four inches.

901. How do you use it ?—We put one end close to the shore and moor it there. We then lie by the nets.

902. And I presume you lift them when you think there is anything in them ?—Yes.

903. Are the fish caught in the meshes ?—Yes; they are properly meshed.

904. Do you get many ?—Sometimes we do.

905. Have you observed any falling off in them ?—Oh yes; the bag nets and stake nets have been a great injury to us.

906. Does that apply now ?—No; the Act of Parliament has taken them away, but this is only the first year they have not been used.

907. Have you noticed any difference ?—Yes; there has been a little difference this year. There was a bag net off St. Mary's Island. We fish down the river.

908. Was there any bag net at the mouth of the Tyne ?—There used to be on the Hard Sands, but they are done away with now.

909. Has the use of bag nets diminished the quantity of salmon caught here ?—I daresay it has.

910. But you do not know ?—No; but with their being done away with, I think that in the course of a few years the increase will come on again.

911. You will catch them then ?—I think we ought to catch them.

912. Have you had anything to do with the French fishermen on this coast ?—No; in the course of my lifetime I have, but not for many years.

913. Have you been engaged in the line-fishing ? Sometimes I have been, but we do not go so far off as the young men do. We follow in-shore fishing.

914. Have you ever seen large shoals of sprats off here ?—Yes; I have seen them in great quantities.

915. But we understand that they are never fished for ?—No.

916. Do you not fish for them because you do not think them worth fishing for ?—We never made a practice of fishing them. Nobody on this coast ever made a practice of trying for sprats.

917. They are saleable in other places, are they not ?—They may be, but they are not here.

918. Is there any shrimping here ?—Very little; there is not much.

919. Would it improve the fishing if any regulation such as fence months—certain seasons when people are not allowed to fish for certain fish—were established ?—I cannot say.

920. Do you think it would be better to allow you to regulate your own fishing ?—Yes, I think that would be the best way.

921. You have not been interfered with by any fishery officers ?—No.

922. Nobody has ever come to say that you were to make your nets this size or that size ?—No one.

923. Do you desire to have any such interference here ?—I do not know; we can have any kind of hole we choose now.

924. Do you think that that is better than having the mesh fixed at a certain size ?—We are not fixed now at all.

925. I know you are not, but do you desire to be fixed ?—No, it would not do at all.

926. A previous witness said he would like to have such a regulation ?—The general size we have in salmon trout fishing is 4 inches; the salmon net is a $5\frac{1}{2}$ inch hole.

927. Is there any regulation, do you think, that could be adopted, by which the supply of fish could be increased here ?—No, except these trawling boats were done away with; they are the proper ruin of Cullercoats; they are just taking all the fish off the coast, and if something is not done with them it will come to starvation among the fishermen.

928 And what do you think is the best way to remedy it ?—In my opinion the best way would be to knock the trawling boats off.

929. Do you not think there could be a proper limit established within which they might come ?—Yes, if they were kept outside the Dogger Bank.

930. (*Mr. Lefevre.*) That is where there is no fish? —There is plenty there, I believe.

931. You do not fish out as far as the Dogger Bank, do you ?—No, but we go as far as the 50 fathom waters. In the summer season we go with our long-lines to a depth of 50 fathoms.

932. But there is a considerable distance between that and the Dogger Bank, is there not ?—Yes.

933. Would you have no fishing there ?—No.

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934. Then you would confine the fishing of the trawlers outside the Dogger Bank?—Yes; and then they would be out of the way of us altogether.

935. Do you think they injure you?—Yes, they take the small fish, and they get tons of them. Many of them are brought on to the deck all jumbled up together. They are tossed on the deck dead, and then they are tossed overboard.

936. Do they catch the fish you ought to catch, or do they spoil their own market?—They are catching the fish we ought to catch, and they are also spoiling their own market by catching small fish; they spoil their market by catching fish which is not saleable.

937. Have you ever been in one of these beam-trawlers?—No; but I have heard it said that the fish which comes in a trawl-vessel is not saleable.

938. What does it cost to buy one of the boats used here,—I mean one of the cobles?—Do you mean a big class fishing coble or a white line-fishing boat?

939. I mean a herring boat?—It would cost about 25*l.* or 30*l.*

940. And the nets, what would they cost?—They would require perhaps from 14 to 17 nets, and they would run about 3*l.* or 3*l.* 10*s.* a net, before they are put into the sea.

941. How many do you say?—Why some will have as high as 20 nets, some 15, and so on.

942. What does it cost to fit a man up in a herring boat?—I should say about 150*l.*

943. And what is the cost of a line-fishing boat?—That does not cost so much. You can get a good coble for about 20*l.*

944. What would the lines cost?—I cannot rightly say; perhaps every man's line would come to about 2*l.*

945. How many would they want?—There are three men and a boy. The boy has a half man's line.

946. What would it cost to set a man up with proper lines?—Do you mean with lines and boat together?

947. Yes?—Perhaps about 30*l.*

948. I presume it would cost a great deal more to set up one of these beam-trawlers?—Yes, a good deal more for the big ones.

949. You have none of those boats here?—No.

950. (*Mr. Caird.*) Do you ever see any mackerel off here?—Sometimes we see shoals of mackerel, but we do not fish for them at all. Occasionally they get in our nets.

951. What is the reason you do not fish for them? They are saleable, are they not?—Yes, they are, but we never make a practice of it. We have no mackerel nets. I believe a man named Nicholson has.

952. (*Professor Huxley.*) Do you ever catch mackerel with the hook?—Yes.

953. But you do not make a practice of it?—No.

The witness withdrew.

ROBERT CARR called and examined.

R. Carr.

954. (*Mr. Caird.*) Are you a fisherman?—Yes.

955. Are you a native of this place?—Yes.

956. I believe you chiefly deal with shell-fish?—Yes.

957. Do you fish shell-fish?—Yes.

958. And you also buy them?—Yes.

959. What kind of shell-fish do you catch?—Crabs and lobsters.

960. No oysters?—No.

961. Have you long been engaged in that business?—For about three years.

962. Have you been engaged as a fisherman much longer?—It is about 17 years since I first started.

963. During those years have you always been in the habit of fishing for shell-fish?—Yes.

964. Do you find that the number caught now is increasing or diminishing, as compared with what was caught in former years?—The lobsters are decreasing.

965. Are there many boats employed in the fishing?—Yes.

966. I mean in fishing for shell-fish?—Yes.

967. Do you know how many are employed?—There are different seasons, and the number varies.

968. But you think the number is increasing?—Yes, the number of boats is increasing.

969. And yet the quantity of shell-fish is decreasing?—There are more crabs caught, but there are more boats to catch them.

970. Are there more crabs than lobsters?—The lobsters are diminishing. They catch them when they are berry-fish,—in spawn.

971. And do they send them into market in that state?—Yes.

972. Do you think that that has a tendency to diminish the supply?—Yes.

973. Why do you not do the same with the crabs?—Because the crabs are of little value at such times; they have nothing in them.

974. Then you find that the crabs are not diminishing in supply?—No.

975. Is that because the spawn is not injured?—Yes, the lobsters have been decreasing ever since I was a boy.

976. Are they very much fewer?—There are very few now at all. A man may often go and fish and get none at all; in fact, in the summer, when the season was against it, there were none caught.

977. Is the crab fishery valuable here?—Not particularly.

978. Does the value of the fish come to much money in the course of the year?—No, they do not fish long for them.

979. Have oysters been found here?—No, I have seen small ones on a crab's back, but nothing particular to speak of.

980. (*Mr. Caird.*) Have you observed, in fishing for salmon, when the nets are 4 inches in the mesh, that sprats have sometimes been caught in those nets?—I have seen some hundreds in shore at a time in Tynemouth when we have been sweeping for salmon, and we have gathered them for bait.

981. (*Professor Huxley.*) That is when you have been using the net as a dragging net?—Yes.

982. Was there a great quantity of sprats caught in that way?—Yes, some hundreds; we might pick up three or four hundred for bait.

983. (*Mr. Lefevre.*) Do you know where the lobsters spawn?—I think they will spawn up the rocks.

984. They do not spawn far out, do they?—No.

985. (*Professor Huxley.*) Do you know the time of year at which they spawn?—No, I do not.

986. (*Mr. Lefevre.*) Do you believe that the beam-trawlers far out interfere with the lobster's spawn?—No, they cannot.

987. (*Professor Huxley.*) The lobsters carry the spawn along with them, and therefore it cannot be interfered with?—No.

988. In what depth do you catch lobsters here?—Ten fathoms. We do not catch lobsters here.

989. Do you know anything about the time at which soles, or turbot, or plaice spawn?—No.

990. (*Mr. Lefevre.*) What do you attribute the diminution of lobsters to?—I think it is owing to their taking the berry-fish and selling them.

991. Do you think there ought to be some regulation to prevent that?—I think they should be set away in May or June, when they are generally the fullest. If they are taken then they ought to be returned to the water.

992. Are they as good for eating then?—They are about the same.

(*Thomas Bolam.*) When a quantity of fish gets into the trawl net, it drags the meshes together, so

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that any small fish that may have got in cannot get out again.

993. (*Professor Huxley.*) You mean by that, that as soon as the fish get in they pull the meshes together and no small fish can get out?—That is what I mean.

994. If you used a small mesh you would catch more fish, would you not. For instance, if the mesh were half an inch instead of 4 inches you would get a great deal more?—Yes.

(*Mr. Caird.*) We have now exhausted the list of witnesses which has been supplied to us, but if there are any fishermen in the room who desire to add anything to the evidence already given, or who wish to make any suggestion, we should be glad to hear them.

(*William Lyall.*) I wish to make an observation. I do not think it will affect the trawl making the meshes larger, because, if we make them larger the soles will go through. He is a fish which if once he gets his head through he will go right through very rapidly.

996. (*Professor Huxley.*) Does he bend his fins up?—Yes, he seems to bend them up altogether.

996*a*. A sole would not get through this (*showing a net*)?—A sole 6 or 8 inches would. If he once gets his head through his body would quickly follow after him, and if one finds his way out they will pack themselves, and all go through.

997. So you think that if the mesh were enlarged you would not catch any fish?—We might get haddocks, but the soles would go through, and then I do not think it would affect the small fish, because as soon as a weight of fish gets into the net the meshes are drawn together. A small sole would go through while a small haddock would not. With regard to spawning, I believe that the fish do not spawn in shore, but further out. About the month of May and June we get the ling with spawn in them, and I have got haddocks at that time with spawn in them.

998. (*Mr. Lefevre.*) Have you been engaged in trawling?—I generally follow the deep-sea fishing.

999. What do you make at that?—From 20*s*. to 30*s*. a week.

1000. Is that all you can earn?—Yes, on the average.

1001. Is that the average that a young man will earn?—Yes, but those who generally follow the small lines will not make that.

1002. How much do they make?—I cannot say.

1003. Does that include the herring season?—Yes; it includes the herring season as well.

1004. I believe you make a good sum of money during the herring season?—Yes; those who are fortunate do; 70*l*. or 80*l*. is considered an average season for a boat.

1005. And that is divided among three men, or three men and a boy?—Yes, or perhaps one man will get two shares.

1006. Do you think that you make better wages by fishing in this way than by going to sea as a sailor?—Yes, and we are our own masters; but I think we might get more fish here if we had a better harbour to come to. There are plenty of times when we might get fish at sea when we cannot get out over the bar.

1007. And do you see the trawling boats go in during bad weather?—Yes.

ROBERT BLAIR called and examined.

R. Blair.

1008. (*Mr. Caird.*) I believe you desire to offer us some evidence?—I am a sea pilot of the port of Shields, and I think I am able to give you some evidence. I think I am able to tell you something as to the practice of fishing on the north-east coast. I can say this with regard to trawl-net fishing, that I have been practised in the pilot line for the last 30 years, and I have had the privilege of examining the various stations that the trawlers have taken up from time to time up to the present time. When I was a young man, say 25 years ago, these trawlers were not known to fish between Rawcliffe and here; that is, on the Yorkshire coast; since that period they have got down as far as the Tees. For the last 10 years they have fished between there and Seaham, and from Seaham they have now got down as far as Sunderland, and from Sunderland they have got as far as Cullercoats, and even north of Cullercoats. It is evident, according to what I see and understand, that if these trawlers go on fishing with their trawls, the whole of the fishing on the north-east coast will be totally destroyed; and the information I have received from fishermen belonging to Hartlepool, Whitby, and other ports, leads me to believe that the in-shore fishing is entirely done away with, and that the fishermen have no possibility of making a living with their short line fishing along the coast. They say that they have now to go further off the land to attempt to gain a living, and to supply the public market with good wholesome food; and I must say that their efforts have failed to a great extent, for wherever they have gone the trawlers have followed them. Indeed, I have been towing astern of a trawler when the nets have been pulled up, and I have observed the spawn come up in the nets. I have seen the nets almost full of spawn, some of it of a dark red colour, some of it a pale red, some of it blue, and part of it of a salmony-coloured red. I have asked the master of the smacks what was the cause of the difference in the colour of the slime that came up in their nets, and they told me that the spawn which came up of one fish was of a different colour from that of another. They explained to me how it was that the different colours of the spawn belonged to different kinds of fish, but I am not qualified to give you the information from my own personal knowledge. They showed me certain portions of spawn that came up as big as your fist, or thereabouts, and they told me that their trawl net went over and destroyed the spawn; of course, there must be millions of fish destroyed. That is all I know, except that they have got down as far as this place. I think it is quite as possible for an aerial machine to be passed over Great Britain, and to drag all over the land without doing injury, as for these trawlers to continue their fishing on the north-east coast without destroying the fish.

1009. (*Mr. Caird.*) Will your experience enable you to say whether by the gradual advance of the trawlers northwards the in-shore fishing has been diminished?—Yes, I believe it has.

1010. But do you know it?—Yes, I believe it has. When I was a young man, 20 years ago, any two men could take a small boat and go off and get a load of haddocks in a forenoon and come ashore with them. There is nothing of that kind now.

1011. May not that be accounted for by the fact that there are a greater number of men employed?—No, I think it is because the spawn of the fish, which amounts to millions of young fish, is destroyed.

1012. Are there not at the present day a greater number of men employed in fishing than there were when you were a boy?—I believe there are perhaps two-thirds more, but at that time I could get a large haddock for twopence, and now I have to pay upwards of ninepence for one.

1013. You tell us that the trawlers began by coming a certain distance along the coast, and that then in the course of a few years they got a certain further distance, until at last they arrived off Cullercoats; do you know whether, as they have advanced northwards, the people who fished with the lines have been injured in their fishing?—Yes.

1014. Do you know that as a fact?—Yes; I know that at Hartlepool the in-shore fishing has been entirely destroyed by the trawlers. The fishermen cannot get any fish in-shore at all.

1015. How long ago is it since that injury was first done?—Perhaps about 10 years. Since that

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period they have gone across the Tees to Seaham, and they have come now as far as Cullercoats.

1016. Have the fishermen there discontinued fishing?—No, because they cannot live without it.

1017. But the fishing is not so productive?—It is not nearly so productive.

1018. (*Mr. Lefevre.*) When you say that these trawlers have drawn up to the north, do you mean to say that they have deserted the south, or only that they have increased in number?—I believe the trawlers have increased very much of late years. According to my recollection, there used to be not more than five or six off the Tees, and now there are more than 30.

1019. Do they sail from the Tees?—No, from different parts. I know that there is a greater number of them than there used to be formerly. In pulling up towards the Tees I have seen as many as 30 sail of them, and for the last 10 years they have been gradually increasing. They have come down north from Seaham to Sunderland, and from Sunderland here.

1020. You do not say that they have deserted the ground off the Tees; they still continue to trawl there, do they not?—They do not now. I have been several times there and I scarcely see one there now.

1021. (*Mr. Caird.*) You say the trawlers came first off Hartlepool, and that since then they have come further north and north?—Yes.

1022. Did they remain off Hartlepool for any length of time?—No, not long. I believe they have cleared that ground.

1023. Do you believe that there is no fish being trawled for south of Hartlepool?—I do not believe that there is that quantity being trawled south that there is north. There is one remark I should like to make, and that is, that some of our fishermen have stated that there is a small net fishing practised on the north-east coast with regard to old men. Now they only go to this work when they are not capable of prosecuting the deep-sea fishing, and when there is no possibility of the trawlers coming into their water. The nets the trawl-smacks carry would bear no comparison with them. The small coble is only 18 feet in the keel, and can only drag a very small net, and work in a very small depth of water; consequently there is no possibility of their doing any injury there, because we do not believe that any fish of any kind will spawn in water only three or four fathom deep; they must spawn somewhere where the commotion of the water will have no effect upon them.

The witness withdrew.

T. Bell.

THOMAS BELL called and examined.

1024. (*Mr. Caird.*) Have you had much experience of Cullercoats as a fishing station?—Yes, for the last 52 years.

1025. In your experience have you noticed that there has been a change in the quantity of fish caught here?—I can recollect when there were only seven boats, and they would bring in seven cartloads of fish each per day.

1026. Was that an average take?—Yes. I have known sticks put up the sides of the carts to hold the fish in; ling and turbot and so on.

1027. How long is that ago?—About the year 1816.

1028. (*Mr. Lefevre.*) Were they extraordinary takes or were they of every-day occurence?—There were two boats which had nine cartloads of haddocks and different kinds of fish.

1029. (*Mr. Caird.*) What would be the weight of a cartload of fish?—I have seen all the men hailed to shove them up the bank. There would perhaps be near a ton.

1030. Do you think that all the boats now engaged do not bring seven cartloads of fish ashore now?—They do not bring the half of it.

1031. How many years back is it since the diminution in the quantity caught began to take place?—I should think it has been within the last 20 years.

1032. Has it been decreasing gradually within the last 20 years?—Yes, all the time.

1033. There has been no sudden decrease during that time?—No, it has been a gradual decrease.

1034. When did the trawl-boats first come?—I cannot say.

1035. You have not observed them very long, have you?—No, not until lately, and since then there has been the decrease I spoke of.

1036. Have you observed whether the size of the fish has decreased?—Yes; the cod are not so large as they used to be.

1037. And the haddocks?—I could get a haddock the length of that (*measuring*) for a penny.

1038. And you seldom get haddocks that length at all now?—Not often.

1039. (*Professor Huxley.*) Does your impression about the decrease of the fish apply to the herrings as well as to other fish?—As a proof that the fish never are so cheap now as they were then, I have known them at 3*s.* 6*d.* a thousand.

1040. How long ago is that?—Twelve or 14 years ago.

1041. Might not that arise from the want of a sufficiently large market. The price of herrings you know will go down when there is a great take?—But the railway was open then.

1042. Do you think there has been a decrease in the take generally?—Yes, I think so.

1043. Do you think it has decreased in the same way as the white fish and cod?—Yes.

1044. Then you think that all the fish have decreased together?—Yes.

1045. Are you aware that the cod, whiting, ling, and other fish all feed on herrings?—Yes, as a proof of that they always take cod when they are fishing for herring.

1046. Then do you not think that the diminution of herrings may to some extent account for the diminution in the other fish, seeing that they have not had the same supply of food?—I cannot answer that.

1047. (*Mr. Lefevre.*) Do you take into your consideration the quantity of fish caught by these trawl-boats?—I have no knowledge of them at all.

1048. You merely look to what is caught off the coast and brought here?—Yes.

1049. Are you aware that large quantities of fish are caught by the trawlers off this coast?—Yes, I have heard it mentioned by our people.

1050. I suppose you think that ought to be taken into consideration in estimating the increase or diminution of the fish caught off this coast?—Yes, it ought to be.

1051. (*Professor Huxley.*) How long have you known this place?—For 52 years.

1052. And have you been intimately acquainted with the condition of the people?—Yes, I have been thoroughly acquainted with their condition.

1053. Are you a tradesman here?—Yes.

1054. Do they keep accounts with you?—Yes.

1055. Then you will have good means of knowing?—Yes.

1056. From your observations during the last half century, do you think they live as well as they used to live?—I do not think that they do.

1057. Then you do not think that the increase in the price has made up for the diminution in the take?—No.

1058. Is there much pauperism here?—The poor rates are a shilling in the pound.

1059. Do you know how many people are in the receipt of relief?—No.

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1060. I suppose we can obtain accurate information as to that ?—Yes.

1061. Do your accounts run over for two or three years sometimes ?—Yes.

1062. Are the people temperate ?—Yes, more so than they were formerly.

1063. That is to say, that when they got plenty of money they spent it on the Saturday nights ?—Yes.

1064. (*Mr. Lefevre.*) Do you know the general rate of wages paid here ?—No, they do not fish on wages, so I have no idea.

1065. Do you know what a man can earn in a week ?—No, that would be rather difficult to get at.

1066. Do you think 30 or 40 shillings a week is rather a high figure, or would their earnings average that ?—I think that if they got that they would do.

1067. (*Professor Huxley.*) How is it then that the men obtain capital for their boats. For example, a herring boat will cost 100*l.*?—No, it will not cost as much as that; I should say 50*l.*

1068. But you know the boats have increased of late years ?—Yes.

1069. Then the capital for fitting them must come from somewhere; how do they get it?—A good deal of it has been got and never paid for.

1070. Has it been advanced by merchants and traders and never redeemed ?—Yes.

1071. (*Mr. Lefevre.*) Still the fact remains that the number of boats has increased and that the capital has been advanced ?—Yes.

1072. (*Professor Huxley.*) Do you think that a portion of the capital advanced upon these boats has been a loss ?—Yes, I know it has been to me.

1073. (*Mr. Caird.*) Has the condition of the people themselves rather deteriorated than otherwise ?—No.

1074. It has not ?—No.

1075. (*Professor Huxley.*) Are they worse off than they were ?—I think they are.

1076. (*Mr. Caird.*) Is there any legislative enactment or other means by which you think the supply of fish could be increased here ?—I cannot say.

1077. (*Professor Huxley.*) Do you think that trawling does sufficient damage to justify the interference of the legislature ?—Yes, I should say so, judging from the reports the fishermen make.

The witness withdrew.

Thomas Hutchinson Pyle called and examined. *T. H. Pyle.*

1078. (*Mr. Caird.*) You are a medical man, Mr. Pyle ?—Yes, at Hursley, near here.

1079. Have you been acquainted with the condition of the people of this village for some time ?—I have.

1080. Have you observed whether it is improving or deteriorating ?—I think the condition of the inhabitants was much better formerly than it has been lately.

1081. Has there been any recent material decline in their condition ?—Not that I am aware of.

1082. Are the people here on the whole comfortable and well off ?—Their habitations are not very good; their cottages are very small, and so on.

1083. Are they worse than they were ?—I think not.

1084. (*Mr. Lefevre.*) I suppose the cottages are the same they have always been ?—I think they have somewhat improved.

1085. (*Mr. Caird.*) To whom do they belong ?—Some of them belong to the Duke of Northumberland, but Mr. Brown, a grocer, is the principal owner. With regard to fish, I may say that there has been a great falling off both in the size and quantity. I used to be very fond of going down occasionally and looking at the boats when they came to the shore, and I noticed the large numbers of cod and haddock that they used to bring ashore. I have fancied lately that there could not be as good fish in the sea as there used to be, or that if there are our men do not get them.

1086. (*Mr. Lefevre.*) Do you know what wages the men will make ?—No, I have no means of knowing that.

1087. (*Professor Huxley.*) What is the rate of mortality here ?—It is not much greater than at other places. I should say it was rather below the average.

1087. What are your principal diseases here ?—They are principally epidemics.

1088. Have you fevers ?—Occasionally.

1089. Do you have typhus ?—Not much.

1090. Have you had cholera here ?—It was very bad in 1832.

1092. It was bad everywhere then, but is this a place that is visited by cholera ?—Not particularly so.

1093. Is the drainage good ?—It has improved lately.

1094. As to the mode of living, do you know whether *delirium tremens* is of frequent occurrence here ?—Not so much as formerly.

1095. How many cases will you see in a year ?—I very seldom see a case of that kind, but I do not come so much as I did before.

1096. From what you have observed, do you think that the people here live less comfortably than they did 10 years ago ?—I think not. There are great complaints that they do not get so much money as they used to get.

1097. Is there a noticeable difference in the mode of life or in the comforts of the people ?—They complain that they cannot get on as they used to do. They cannot pay their bills, and they do not earn as much as they used to do.

The inquiry was then adjourned until Wednesday, the 23rd September, at Newbiggen.

Newbiggin, Northumberland, Wednesday, 23rd September 1863.

Present:

James Caird, Esq., M.P. (Chairman.) | Professor Huxley, F.R.S.
G. Shaw Lefevre, Esq.

NEWBIGGIN.

William Dawson called and examined. *W. Dawson.*

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1098. (*Mr. Caird.*) Are you a native of this place ?—Yes, I am, born and bred.

1099. Have you been long engaged in the fishing business here ?—I have been engaged in fishing for upwards of 50 years.

1100. Can you tell me what are the different kinds of fish caught on this coast ?—There are cod, ling, turbot, haddock, sole, skate, herring, mackerel (not much mackerel), and several other kinds of fish.

1101. Are there any shell-fish, any crabs and lobsters ?—Yes, we have both crabs and lobsters.

1102. Are any oysters caught off this coast ?—No, there are no oysters.

1103. Are you still a fisherman ?—Yes.

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1104. You are still yourself engaged in fishing?—Yes, but I do not follow deep-sea fishing so much; I only follow in-shore fishing now.

1105. Is that for crabs and lobsters?—Yes, and soles.

1106. Do you trawl for soles?—No, I fish them with the hook and line. We have not used trawls for several years now.

1107. Has the number of fishermen and boats employed in the fishery here increased or diminished within your memory?—They have increased a deal.

1108. How many boats were there employed 50 years ago?—Not so many as are employed now.

1109. How many?—There were not above eight out of Newbiggin in 1808. Three were lost in that year. In the herring fishery there is a larger number, but not so many in the winter time.

1110. How many boats are employed in the fishing now?—I believe there are now about 30; perhaps about 26 go to the haddock and cod-fishing; there are upwards of 40 engaged in the herring fishery.

1111. Were the boats about the same size 50 years ago as they are now?—No, they were not more than half the size they are now, and not so much as that.

1112. Were they manned by the same number of men?—Yes, except that they have a boy extra in the winter now.

1113. Were they manned by three men?—Yes, three men then, and three men and a boy now.

1114. (*Mr. Lefevre.*) There are two men only for the herring fishery. Is not that so?—Formerly there were only two, but now there are three.

1115. (*Mr. Caird.*) Did the boats in the winter time carry as many lines as they do now?—I think they carried nearly the same, but at that time they were not quite so large as they are now.

1116. And when they were going to the net fishing had they as many nets as they have now?—No, not so many; not one third part of them; but they could hardly have carried what they carry now. The boats now used are much larger. The boats used at the time I have been speaking of were scarcely large enough to carry the number of nets they carry now.

1117. You say the boats now carry three times as many nets as they did 50 years ago?—Yes, fully three times as many.

1118. In your experience have you noticed whether the quantity of fish taken by each boat has increased or diminished of late years?—The quantity of fish taken has decreased greatly.

1119. The fish have fallen off, have they?—Yes, they have, especially within the last few years.

1120. Let us speak first of the white fish, not the herring; have they decreased of late years?—Yes, by a very great deal; in 1812, on the 14th of December, which well I remember, I was going to sea on that day, every boat that went off returned loaded with haddock and cod, but there were far more haddock than anything else. There is not a boat living that gets as much now. I am speaking now of 51 years ago.

1121. Then a boat 51 years ago brought in a much heavier load of fish than a boat brings in now?—They brought in as much as they could carry, as much as a cart could carry away.

1122. Was that a regular thing?—I had two brothers lost at sea on the same day. That circumstance makes me remember the date very well. The day before they were lost every boat was loaded with fish.

1123. But what I want to know is this, was that better than a usual day's fishing, or had you such large takes regularly?—Why that was just a common thing then; the boats, however, were small. When we had fine weather we had large takes of fish. In stormy weather the boats did not all get their lines out; if they fished at all they had to fish nearer in shore.

1124. But it is the same now, you have stormy weather as well as fine?—Yes, but there is not as much fish to get.

1125. Having better boats now, do you go more often to sea than you did then?—Our boats are much superior to what they were at the time I am speaking of, but I do not think we go oftener to sea. With regard to the little boats, I think we could handle them better when they were less than we can now.

1126. Then what I understand from your statement is, that a boat half the size brought in a much larger quantity of fish fifty years ago than a boat of the present day?—It brought in quite a superior quantity altogether.

1127. Have you observed any difference in the size of the fish caught now as compared to what they were at the time you speak of?—I think there is very little difference in the size, at the same time I think they are a little smaller; there are more caught young now.

1128. Is there any particular kind of fish that is fallen off more than any other?—There are some kinds which I believe are fallen off very greatly. The haddock-fishing and even the herring-fishing has very much diminished.

1129. Are the haddock of as good a size as they used to be?—I consider that the haddock is a fish that spawns on the coast, but it varies very much, it comes backwards and forwards with the storms and the tide, and sometimes we get much larger fish than we do at other times. For instance, it may be a good spawning season this year for fish; the next year you will see small haddock, but there will still be some large ones among them; the large ones will be those that were spawned a year or two before. They will get mixed up in that way.

1130. But you have noticed no perceptible falling off in the size of the fish caught. The falling off, so far as you have observed it, has been only in the quantity?—It has not been so much in the size, only in the quantity. There has been a great deal of difference in the quantity.

1131. With regard to the cod, are they on the average as good in size as they used to be?—I think they are just about the same, but they are vast scarce to what they were. We have got as many as 100 cod-fish a day on our small lines which we used to catch haddock with, now we cannot get half a score; there is that much difference.

1132. With regard to the herring fishery have you noticed any falling off in the quantity of herring caught on this coast?—Perhaps there may be as many herring caught, but it must be remembered that there are six times the number of boats engaged in catching them.

1133. You think on the whole there are as many caught?—There are nearly as many caught among the whole boats, but in my day there were not one-tenth of the number of men employed in catching them as are employed now.

1134. You think that the small number of men employed then caught as much as the whole of the men employed now?—Yes, and if they had had the nets then which they use now they would have caught a great deal more. There are men sitting here in this room who caught as many then in one boat as are caught now by all.

1135. Does not the herring-fishing vary very considerably year by year?—In some seasons we get them better than at others.

1136. But there is no perceptible falling off lately in the quantity caught?—I think they have diminished a great deal.

1137. When did they begin to diminish?—I should say they have fallen off during the last 10 or 12 years, or perhaps even more than that. I think they have gradually turned worse.

1138. You think they have fallen off within the last 12 years?—I should say so; perhaps it may be more than that, say 20 years.

1139. The yield for each man has got worse, but the total yield continues the same?—Yes, that is through having more boats to catch them.

1140. Now, with regard to mackerel, do you fish

mackerel here?—We catch very few mackerel; we have no proper mackerel nets in Newbiggin. We only take them in our herring nets, or we go hooking for them. We have not sufficient nets for them, and we only get the straggling ones which get entangled in our nets. Some people go out with the line and fish for them, but they are not regular fishermen.

1141. Do considerable shoals of mackerel come off here?—There are large quantities at times, but we have no nets to catch them. We have no mackerel nets here.

1142. Are there any sprats on this coast?—There are plenty of sprats at times, but nobody catches them except the children.

1143. I understood you to say that you do not trawl for soles here?—No, we do not trawl for them; we fish for them with hook and line. They may trawl for them sometimes, but it is not very often. I believe there has been only one boat this season trawling for soles.

1144. Have you any idea of the cause of the falling off in the quantity of fish caught?—I cannot account for it except it is in consequence of their having been destroyed so much south of this place. The fish used to shift backwards and forwards in stormy weather and heavy tides, but as they are all caught now in the south of course they have no chance of coming back again.

1145. You do not think they are caught off this shore?—They may be by the smacks, but it is only within the last few years that the smacks have come on this coast at all.

1146. Did you ever see any of the trawling smacks on this coast before last summer?—No, they never came here before. I do not know that we could perceive any evil to us last summer.

1147. Do you notice them doing any evil now?—Yes, some men have lost their lines and tackle through them.

1148. Do they come on the same ground as that on which you fish?—Yes, they do, and they sweep away our lines.

1149. How far do you go out?—We go out as far as from 12 to 14 miles from the shore.

1150. You say that the smacks trawl over the same ground?—Yes.

1151. Did you never object to their coming on this ground and interfering with your lines?—We have never challenged them with it because our lines reach three miles in length, and when they trawl our lines away at one end we may not be near hand to see them.

1152. You say that your lines reach three miles in length?—Yes.

1153. Are they set across the tide?—Yes.

1154. Are they buoyed up on the surface?—There is only a buoy to every mile.

1155. Then you have three buoys on the full length of line?—Yes, and two in the middle. At one mile we put on a buoy, at the end of another we put on another buoy, at the next mile we put on another, and we steer by it until the line is fished.

1156. Does everybody that goes out from this place carry lines of the same quality and the same length?—Yes.

1157. Do they shoot in parallel lines?—Yes, quite in parallel lines.

1158. What distance will there be between the lines?—They should be about a quarter of a mile apart, but sometimes they get nearer hand, and if they get on the ground they may drag together.

1159. (*Mr. Lefevre.*) You say they are set a quarter of a mile apart?—No, I only say they should be. It is necessary they should be at that distance apart in order to have a fair cast of the sea for fishing.

1160. (*Mr. Caird.*) In talking these matters over here among other fishermen, is there anything that has occurred to you that ought to be done, in order to prevent this continued decline in the supply of fish?—I think we can do nothing for it unless we could get these trawl-vessels stopped.

1161. But the trawl-vessels came here only last year?—Yes, but we never get any supply now. We used to get a vast of fish, and now we never get any except they come from the north side of us. The storms used to send in a large quantity of fish.

1162. You get more from the north after storms than from the south?—We never get any fish now unless the storms send them in from the north, from that side which is not fished by the trawlers.

1163. You used to get fish after a south-east storm?—Yes, we did.

1164. And you do not get fish after a south-east storm now?—No, the weather makes them worse; still we get fish after a north-east storm.

1165. Then you prefer a north-east to a south-east storm?—We think a north-east storm is best for us.

1166. Do you notice any very perceptible difference in the quantity of fish which follow a north-east or a south-east storm?—Yes, we never look for any after a south-east storm now.

1167. When did you begin to give up looking for them after a south-east storm?—Perhaps it may be 20 or 30 years since.

1168. And within your recollection, which goes as far back as 50 years ago, did you find that as many fish used to come in with a south-east storm as with a north-east storm?—An old mate of mine told me there were far more after a south-east storm than after a north-east storm.

1169. But was that so within your own experience?—I know there were fully as many.

1170. (*Mr. Lefevre.*) Are you talking now of the herring or of the white fish?—I am talking of the white fish, not of the herring. It has nothing to do with the herring fishing. At the same time we prefer a north-east storm at Newbiggin for the herring-fishing.

1171. (*Mr. Caird.*) Does anybody interfere with you to regulate the size of your nets or lines? Are you required by anyone to have your nets of certain dimensions?—Nobody interferes much with us in that respect.

1172. Does anybody tell you that you are to have them either this or that size?—A man comes about, I believe, and he reckons us to have 36 meshes to the yard, but I daresay he never interfered and took any away.

1173. Then within your recollection there has been no interference with regard to the size of your nets and the size of your lines, or the time of year at which you should fish?—No.

1174. Have you any fixed close time?—We have different seasons for different fish; the fish come here at different times.

1175. That is not what I mean. Does anybody come here to regulate your fishing?—No.

1176. Do you think it would be of advantage if the Government were to do something of that kind?—I do not suppose but what it might be of some advantage.

1177. Perhaps you would be kind enough to tell me what would be the advantage?—Why, if the Government would make a law that from sunrise on Saturday morning to sunset on Monday there should be no fishing, I think that would be a very great advantage to the herring fishing. I think it would be a very great advantage indeed.

1178. Is there anything else that the Government might do?—If they would make a law that would prevent both Frenchmen and Englishmen from fishing from Saturday morning till Monday evening, that would be about 60 hours, and would give the shoals time to draw together. They get very much broken up in consequence of being fished among both day and night. They get so much broken up that they cannot get together again. I think the want of some such regulation as that is one of the causes why the fish have been diminishing on this coast.

1179. Do you think it necessary that there should be a close time also for white fish?—No, not in the case of white fish.

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1180. Is there any other point in regard to which you think the Government might interfere with the prospect of increasing the supply of fish here?—I cannot say that there is. There is nothing else they could do except they could stop these herring vessels, or confine them to their own coast. In 1829 I applied for a licence, and I had a boat or two built, but they would only allow us a licence to fish over a certain distance, 24 miles from the land between Whitby and Holy Island; that was the only distance I was allowed to fish.

1181. Are you at all interfered with by the French fishing boats?—We are terribly interfered with by them at times; they do not mind us a bit.

1182. Have they been here this year?—Yes, they have.

1183. Did they do you any injury in your fishing?—They did not do us so much injury this year as they have done in other years, but still there have been persons injured this year.

1184. Did they come in on your fishing grounds?—Yes, if they see us here they fly off to us together. They come among us just as they like.

1185. Do they know that they should not come within certain bounds?—They know very well that they should not come within three miles of the land.

1186. Do you catch your herring within three miles of the land?—Most of it we do.

1187. Is a large proportion of the herring caught off your shore caught by the Frenchmen? Is a half or a fourth so caught?—They get more than most of our boats get. The French may have had 300 sail on this coast this season, and each vessel will be upwards of a hundred tons burden; most of them I believe have gone home loaded with fish.

1188. I suppose these 300 have not been exclusively on this shore, but have been going about all along the coast?—Yes, they have been fishing all along the coast; they have been shifting along as the herring shifted. They are fish that seldom stay long in the same place. The herring in general comes in on the north coast.

1189. You have been speaking of the whole fleet of French fishing vessels?—Yes, on this coast.

1190. And you think that that fleet of 300 vessels has caught as many fish as the whole English fishermen on this coast?—Well, I do not quite believe that, but they have caught a large quantity. It is not so much what they catch as the way in which they interfere with our fishing. I think they shoot their nets far too soon; there should be no nets in the sea till the sun sets, because they frighten the fish away.

1191. Then do you think it would be a good rule for the Government to establish that no net should be shot until sunset?—Yes, that would be a very good rule indeed.

1192. That herring nets should not be shot till sunset?—Yes, and they should be out again before sunrise.

1193. Is it your custom and the custom of fishermen here never to shoot your nets until after sunset?—We very seldom shoot them till after sunset, unless the fish are very thick together.

1194. And do you find that the French fishing boats shoot their nets without waiting till sunset?—Yes; they constantly shoot them before sunset in order to keep us off the ground.

1195. In order to get possession of the ground?—Yes, for then we cannot shoot as near them as we ought to do; we have nothing but bullocks' bladders for buoys, and they have kegs and barrels.

1196. When the fishery cutter comes round do they decamp and go away?—When any of the Queen's cutters come round they fly off directly.

1197. And they go outside?—Yes, they go more than three miles off the land; but when the vessel goes away they come in again and shoot their nets.

1198. Are you able to state whether shell-fish—crabs or lobsters—have been increasing or diminishing on this coast?—I believe they have diminished a little—the lobsters, not the crabs.

1199. What is the cause of the lobsters diminishing and not the crabs?—I think the lobsters are more taken.

1200. Does it pay better to catch lobsters?—We catch lobsters nine months in the year; we only take crabs for two months.

1201. Then you think that the lobsters are too much fished, and that they are consequently getting scarcer every year?—Yes, I certainly think so; and they have got a different method of catching them.

1202. Do you think that a boat's crew now, in consequence of the increased price of fish, make as much money by fishing as they used to do, when the price of fish was much less?—I do not think that they make as much money now.

1203. Do you think that a fishing boat and crew do not earn as much as they did 30 or 40 years ago?—I do not think they do.

1204. Are the people not as comfortable in their houses, or in their mode of living, as they used to be 30 or 40 years ago?—Their lodgings are a deal better, and they are provided with far superior accommodation.

1205. But you think they do not earn as much money in the course of a year as they used to do?—I do not believe they do.

1206. Can you give us any statement as to what a fisherman would be able to make 40 years ago?—I had a statement of my own as to what I earned in one year. I earned 126*l.* my own self during the whole of a year. The last time I took any account I found I had only earned 78*l.*

1207. Are you speaking of one man in a boat?—Yes, just one man.

1208. And these are the sums that you earned in the course of a year?—Yes.

1209. The first sum was 126*l.*?—Yes, and I kept an account for another year, in which I found I had only made 78*l.*

1210. In what year did you earn 126*l.*?—It would be about the year 1825.

1211. Was that about the average earnings of a fishermen at that time?—No; I believe I had about the best boat at that time. Some would not get half as much as I did. I would not have given my share for some two men's share; but their tackle was not so good as mine.

1212. In what year was it that you made the second calculation?—I don't remember the year.

1213. Was it within the last five or six years?—No; it will be more than that back.

1214. (*Mr. Lefevre.*) The year in which you earned 126*l.* was an extraordinarily good year, was it not?—Yes; it was the best year of which I had ever kept an account. I have had very few better years than that; it was the year 1825.

1215. (*Mr. Caird.*) Can you give us any idea of what your average earnings were 30 years ago?—The best idea I can form is that I might have made somewhere about 100*l.* a year.

1216. And what, on the average, have your earnings been during the last five years?—During the last five years I have not made 20*l.* a year.

1217. But perhaps you are not as able now as you used to be?—In point of fact I am not following the same fishing.

1218. Then it is not a fair comparison to make?—No, it is not.

1219. Cannot you give us something that would be a fair comparison?—No, I cannot exactly say; but I believe there are none of them now at the white-fishing who will make 50*l.* a year; but then they have the herring-fishing besides. They may make another 50*l.* at the herring-fishing.

1220. (*Professor Huxley.*) When you earned 126*l.* was it made principally by the herring-fishing or by the white-fishing?—It was just the white-fishing the year round.

1221. Did you make most out of the herring or out of the white-fishing?—I made most out of the white-fishing.

1222. You were saying that the long-lines are supported by buoys?—Yes.

1223. How big are the buoys?—They are just the size of a sheep's skin.

1224. The size of a whole sheep's skin?—Yes; it is gathered together. It comes round by being tied together. It sticks up six feet high, so that it can be seen two miles off at sea.

1225. Then buoys so large are placed about a mile apart?—Yes. They are placed upon our lines, and perhaps a neighbour's buoy will be not a quarter a mile apart from mine.

1226. Still the buoys are so large that the trawlers cannot help seeing them?—They can see them very well in daylight. The line is lying at the bottom of the water, and when the trawlers sweep in they catch the line and drag it away.

1227. But suppose the trawlers wished to avoid the lines, can they always make sure where the lines are by noticing the buoys?—Yes.

1228. Then if the trawlers were to say that the buoys were so small that they cannot see them their statement would not be true?—If they chose to look for them they certainly would see them. They would not do so, however, at night, and there is a vast of trawling at night.

1229. There is a good deal of trawling at night?—Yes, if they trawl they trawl at night. They never came till last summer on this coast, and I cannot give much information about them.

1230. (*Mr. Lefevre.*) Is your line-fishing at night?—We go very soon in the morning.

1231. (*Professor Huxley.*) Then your great complaint against trawling operations is not that they destroy the fish, but that they take away your lines?—They both destroy the fish and take away our lines.

1232. They do both?—Yes, and they must be kept along their own coast, or done away with altogether, or the fisheries of England will soon be exhausted.

1233. Then I understand that you object to trawling on two grounds: in the first place that it destroys the fish, and in the second that it takes away your lines?—Yes, there is great destruction to the fish, and they also destroy our tackle because they trawl away over our lines, and if they get hold of them we are sure to lose them. The line will break away perhaps half a mile from where they have caught it. It is gone directly, and we never see it again unless some one falls in with it on his lines.

1234. You said that the number of fishermen in this place has increased within the last 20 or 30 years. I think you said it had doubled or trebled?—Yes.

1235. Has the number of boats increased also?—Yes.

1236. What does a new boat cost?—We generally give about 20*l.* for a small boat fit for the line-fishing, and about 30*l.* for a boat such as we use in the herring-fishing.

1237. Does that include fittings?—No, only the hull. With the fittings it would cost nearly double that.

1238. Then it would be 40*l.* for a boat used for the line-fishing, and 60*l.* for a boat used in the herring-fishing?—60*l.* would not fit a herring boat out.

1239. Then shall I say 70*l.* or 80*l.*?—I think it will take 100*l.* at least to fit a herring boat out with full tackle.

1240. That is a good deal of money is it not?—And even that sum is rather low. I think no man can fit a herring boat out for 100*l.*

1241. You say the number of these herring and long-line boats has increased three or four times over within the last 40 or 50 years?—Yes.

1242. Then how have the fishermen got the money to fit out the new boats?—They have done it partly out of their own earnings and sometimes they have found a friend.

1243. (*Mr. Lefevre.*) Where do you remain with the boats when your lines are out?—We set our lines and then we stop at the last buoy.

1244. Until you begin to haul in the line?—We stop for about three quarters of an hour. We stop as long as we think there is any bait remaining on the hooks, and then we draw in the line back again over the same ground.

1245. (*Professor Huxley.*) You say that the men get the money for the new boats partly out of their savings, and that it is partly money advanced to them by their friends?—Yes.

1246. I presume that the people who advance the money will want some return for it?—Commonly they do.

1247. Then the fishermen must have earned enough to pay for the expense of their boats in some way or other?—Yes, some of them.

1248. So that if they have saved enough to double or treble the boats during the last 50 years they must have saved a good deal of money?—I consider they have saved no money at all.

1249. Then how do they get their boats?—They got them to keep their living good. I have had a few boats in my lifetime but I have had no money. As soon as I had got 20*l.* or 30*l.* saved I have had to buy a new boat.

1250. The money has been saved?—Yes, to a certain extent.

1251. Do you lose much fish upon your lines in consequence of its being spoiled or destroyed?—We lose a good deal by the dog-fish; they destroy great quantities.

1252. Does it often happen that you take up your lines and find nothing but the heads of fish on them?—That is when the dog-fish are plentiful. There is also another kind of fish that destroys a great deal; it buries itself in the fish, leaving nothing but the skin.

1253. What will a man lose in a night; how much will he lose by the dog-fish and suckers on the average?—I cannot say.

1254. Do you suppose he would lose one third?—Sometimes I have lost a whole shot.

1255. And sometimes you have lost none at all?—Yes, sometimes none.

1256. Can you give a notion of what your loss is commonly?—No, I cannot give an estimate of that.

1257. Do you happen to know when the haddocks spawn?—Yes.

1258. At what time do they spawn?—They spawn in the month of February or March, the latter end of February or the fore part of March.

1259. When do the flat-fish spawn; plaice and soles?—About the month of June.

1260. When do the turbot spawn?—About July; I think it is about that time.

1261. Do you have herring here in the early winter, say in December or January?—They are here, but there are none fished for. We used to fish them formerly, but since we have got larger boats we cannot manage them.

1262. Did you ever catch them in January or February?—No, but I have caught them in December.

1263. Were they full fish then?—They were fine fish.

1264. Were they getting full?—No, they were not full.

1265. Have you ever seen full fish here about January or February?—No, I cannot say that I have.

1266. Then you never caught any at that time?—No, I have never seen them full at that time that I have taken any notice of it.

1267. Are you sure they are here in January or February?—Yes, I am sure of it.

1268. (*Mr. Lefevre.*) How far does the fishery of Newbiggin extend along the coast?—It extends no distance now. We have no licence now; no licence is necessary.

1269. How far do you generally fish?—To Emmanuel Head.

1270. How far do the fishing boats from here generally go?—They go from Tynemouth Castle to Dunstanborough Castle.

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1271. Where do they meet the Cullercoats boats generally?—Between Cullercoats and here.

1272. Then northwards how far do you go?—I cannot say positively; perhaps they stop at Hartley.

1273. I understand you to say that you recollect the fishing here for the last 50 years?—Yes.

1274. Has the increase of the boats been gradual from that time to this?—Yes, it has been gradual. The rising generation increases the boats.

1275. Do you recollect the time when no Frenchmen came off the coast?—Yes, I recollect when there were none at all.

1276. When did they first begin to come here?—I think it would be about 1824.

1277. Did you notice any diminution in the quantity of herring caught immediately afterwards?—No, I cannot say but that the fishing remained good for many years after that, but they did not catch any then. At that time they had 8*s.* bounty. Their own nets were not fit for fishing. They used to buy fish from the boats here, and pass them off in their own country and get the bounty.

1278. The French fish on Sunday, I believe?—All days are alike with them.

1279. Do your boats go out fishing on the Sunday?—No.

1280. Then they put up on Saturday night?—Yes.

1281. Can you tell us what a young man ought to earn at the present time by fishing?—Well, I think he ought to earn 100*l.* a year. He will want a third of that to keep his tackle, boats, and everything else up to what they should be.

1282. Does that include something for his boat?—I include the cost of keeping his boat, nets, and everything else in fishing order.

1283. Out of the remainder can he lay by anything for a new boat?—I do not know; that would depend upon various circumstances.

1284. Do you find that new boats are being built here?—There are none built at Newbiggin; we get them further up.

1285. But are any being bought and brought here for fishing? Is the number increasing?—A very great deal. As the men increase, of course they need more boats to go in, and a boat does not last a very long time. About 14 years is as long as any of our boats will last. We condemn them then; people may go out with them for pastime after they are 14 years old, but they are not considered seaworthy.

1286. Is the increase of fishermen here confined mainly to their own families, or do strangers come among you?—Strangers come and take part in the herring-fishing, but not in the other fishing. Some men will come for half as much as they get, and they buy no tackle or anything else.

1287. How do you sell your fish?—We ask so much money for them in the first instance, and then the price comes down until we effect a sale.

1288. It is like a Dutch auction?—Yes.

1289. To whom do you sell your fish; do men come round the coast and buy the fish as it comes ashore?—There are men in our own town who make a living by buying and selling fish.

1290. How do they send it away?—Principally by railroad now. It generally goes direct. It used to go to Hexham formerly.

1291. How long have you had the railroad here?—I think about eight or 10 years.

1292. Have you lost any lines yourself in consequence of the trawlers carrying them away?—No, I have not; they never came on this coast until last year, but there are some men here who have lost lines. There were only two or three of the trawlers seen here last summer, and there were none except during the herring season.

1293. Do you know of any cases where lines have been lost in consequence of the trawlers?—There are only two or three instances. I believe Robert Jefferson and John Jefferson have lost lines.

1294. How many cases altogether have you heard of?—Perhaps three or four; I believe that William Armstrong lost some.

1295. And those lines were lost within the last year or two?—They were all lost last year; when I come to recollect I think it was not last summer, but this present year.

The witness withdrew.

P. Jefferson.

PHILIP JEFFERSON called and examined.

1296. (*Mr. Caird.*) You are a fisherman here, I believe?—Yes.

1297. And you are cockswain of the lifeboat?—Yes.

1298. Have you been here all your life?—Yes.

1299. How many years have you been engaged as a fisherman?—For about 35 years.

1300. And do you follow all kinds of fishing on this shore?—No, not all.

1301. What do you practise?—I practise the herring-fishing.

1302. Do you practise line-fishing?—Yes, line-fishing, and I fish for salmon, salmon trout, crabs, lobsters. I have caught all these kinds of fish in my time.

1303. Is there any other kind of fishing practised here in addition to those I have mentioned?—We catch no other kind of fish. We have not got mackerel nets.

1304. Have you heard the evidence which has been given by William Dawson?—Yes.

1305. Do you generally agree with him in all that he has stated to us?—No, not in all.

1306. With regard to the increase in the number of boats and fishermen within your own recollection, can you state what that increase has been?—William Dawson has given you an account for 50 years, which is long before my time.

1307. But let us take your time, 35 years ago; can you tell us what the increase has been during that time?—No, I cannot give an account for the last 35 years.

1308. What was the state of the fishing 35 years ago; how many boats were employed in fishing then?—There were 17 or 18 engaged in the white-fishing.

1309. And how many are there employed now?—In the white-fishing do you mean?

1310. Yes.—There are about 26 employed in the white-fishing.

1311. And in the herring-fishing how many boats were there employed 35 years ago?—I think there would be about 20.

1312. And how many are there now?—I should say about as many again.

1313. About 40?—Yes, there are upwards of 40.

1314. Has the size of the boats increased during that time as well as the number?—Yes, they carry more nets now, and more fishing tackle.

1315. And more lines also?—Yes, and more lines too.

1316. Have you observed any perceptible difference in the quantity of fish brought in each boat to the shore after the fishing now, as compared with what it was 35 years ago?—Yes, it has differed very much.

1317. Is there less brought to the shore now or more?—It is less; the quantity has decreased very much.

1318. About what time did that evident decrease begin?—I should say about the year 1843 or 1844. Before then we used to bring as much as each boat could carry—as much as any cart could take away, and we used to have to put straw in to keep the fish in the cart.

1319. (*Mr. Lefevre.*) Is that line-fishing,—white-fishing,—of which you are speaking?—Yes, I have

brought them in and sold them for 1*l.*, and received the money.

1320. (*Mr. Caird.*) Has the decline in the quantity of fish been gradual?—Yes, year after year, until now.

1321. Then from the year 1843 or 1844 it has been gradually getting worse and worse?—Yes.

1322. Has there been no variation; has there been no good fishing at all since that time?—There has been none like what there used to be before.

1323. Then the decline has been a constantly progressive decline?—Yes, it has been going down and down every year.

1324. Have you observed any difference in the average size of the fish as well as in the quantity?—Yes, I think the fish are much smaller now.

1325. Much smaller now than they used to be?—Yes.

1326. Does that answer apply to all the fish, or to any kind in particular?—Yes, it refers to all the fish I have caught. I attribute the falling off in size to the destruction of the spawn. There is no other reason for it that I can imagine.

1327. Is it the fact that all kinds of fish caught here now are smaller upon the average than they were 35 years ago?—Yes, they are much smaller now than they used to be in those days.

1328. You refer to haddocks and cod?—Yes, haddocks, and cod, and skate, and turbot, and ling. They are all very much smaller now.

1329. So that within your recollection there has been a perceptible decrease in the size of the fish, and that decrease has been progressive?—Yes, from that time until just now. There has been a decrease year after year until now.

1330. I presume that you are speaking now of the take of each boat; but taking the increased number of boats that are employed now, as compared with the number that were employed at the time to which you refer, do you think there are as many fish brought to shore now as were brought to shore formerly?—No, I think they brought in far more in former times. We used to bring very heavy loads ashore; very heavy loads of clean haddocks. I have brought a cart-load ashore and sold it for 1*l.*, and now we can only get 5, 6, or 7 stone in a boat.

1331. With regard to the herring-fishing, have you practised that within the period you have mentioned?—I have been constantly engaged in the herring fishery. I have never been out of Newbiggin all my life.

1332. We have been told that the number of boats employed in the herring fishery has doubled during that time?—Yes it has.

1333. And that there has been a proportionate increase in the size of the boats and the nets?—Yes.

1334. During that period have you found that there has been a decline in the quantity of herrings caught?—Yes, very much so.

1335. Has it been a gradual decline?—In my day we durst not put all our nets out. Now we may put 17 or 20 nets in. We used to get 5,000 or 6,000 in a net at one time.

1336. And what do you get now?—Why we scarcely get 5,000 altogether.

1337. How many nets would you have put out at the time to which you refer?—About eight or 10 nets.

1338. And you would get 5,000 in each net?—Yes, we have brought 34,000 ashore in one night, with 10 nets; that is more than 5,000 a net.

1339. No, not quite so much?—Well, we have got that number in a net, and what can we get now. Why we can only get about 2,000, or 4,000, or 5,000 in a boat. Some may have more, but it is not many that have. The highest would be about 10,000, and from that it would range from 8,000, 5,000, 3,000, 2,000, 1,000, down to 800, 700, and 600.

1340. Have you any idea of the cause of that decrease in the quantity?—Yes, it is entirely owing to the spawn having been destroyed.

1341. What is it that you imagine destroys the spawn?—These trawl-smacks. We have every reason to say so.

1342. When did the trawl-smacks first come upon your shore?—Last summer.

1343. Last summer was the first time that they came here?—Yes, and there were only two of them then. I had my turbot nets in, and I was obliged to bring them ashore. A neighbour of mine lost two of his nets with the trawl-smacks.

1344. But if the decline in the quantity of fish has been going on for 35 years, how can you attribute it to the destruction of spawn, which only began last year?—If they destroy the spawn below this how can the fish come to us? If the eggs are destroyed how can we look for the young?

1345. You said that the trawl-boats never came opposite your shore until last summer?—Yes, that is quite true, but what is the reason that they have come now? It is because they have beggared the coast they have been on, and they have now come to beggar us, and to destroy the spawn. How will the fish be able to come to us if the spawn be destroyed?

1346. Have you yourself ever seen any trawling?—I have not actually been on board a trawling vessel, but I have seen it going on.

1347. You have seen it going on?—Yes, I have seen the trawlers fishing close by, and I have been obliged to tell them that they would take away our turbot nets. Indeed we had to bring them out, or else they would have done so.

1348. Do you agree with the former witness as to the difference in the quantity of fish brought upon your shore by a south-east gale as compared with a north-east gale?—Yes, I have seen plenty of haddock come in with a north-east storm and with a south-east storm also. I don't believe that the fish leave their spawn all on one spot. I have been told that in Hartlepool one of these smacks took the spawn not many miles from the land.

1349. Am I to understand that you have not noticed any difference between the effect of a north-east gale and a south-east gale in bringing fish to the shore?—I have noticed plenty of fish come both with a north-east gale and a south-east gale, but I do not notice that they come in now.

1350. Have you any complaint to make with regard to the French fishermen coming upon your ground here?—Yes, we have a very great complaint to make. We have had no protection at all here, and the consequence has been that the French fishermen have taken the fishing ground nearly away from us, year after year, altogether.

1351. Have there been any years in which you were well protected against the French fishermen?—Yes; when Captain Randolph was on board the "Cornwallis," and Mr. Vickers was in the gunboat, we had very good protection, but we have none now. Of late years we rarely have seen a gunboat. In former years they used to come and ask what the fishermen wished to have done, but now none of them come at all.

1352. How long is it since you had good protection?—It will be about two years ago.

1353. Then two years ago, when you had that protection, did you catch more herrings than you do now?—We got more when we were not entangled with the French, but still not so much as we got in former days. If it had not been for that protection we should have been obliged to leave the ground and let the French have it all to themselves.

1354. Then do you consider it a great injury to your fishing grounds that the Frenchmen should come here?—Certainly; we suffer a great deal from it.

1355. Did you ever complain to the men-of-war which have been stationed here?—I have complained to Captain Randolph, of the "Cornwallis."

1356. Since the protection of which you spoke has been taken away, have you complained?—Yes, I have.

1357. Did you complain this year?—Yes, I did, but what is the use?

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1358. Who did you complain to?—To Captain Ord, and he sent us to the "Cornwallis" to have our complaint heard.

1359. Was any notice taken of your complaint this year?—Not a bit.

1360. Has there been any interference with the French fishing boats this year?—I have seen none at all, but I don't know whether any other fishermen have. I have known a gunboat come into the bay and ask what the fishermen wanted to be at, but there have been none now for some years.

1361. Are there any regulations enforced on this coast, or do you agree with the previous witness that nobody regulates the times of your fishing or the size of your nets? Are there any officers authorized to do that?—I have not seen any lately; one used to come, but he has been done away with, and I have not seen him for a few years back.

1362. Do you think it would be of any advantage for the Government to interfere to regulate the size of your nets?—The greatest advantage we could derive from Government interference would be to send us protection against the French, and to do away with the trawl-smacks.

1363. Would it be of any advantage to fix rules as to the time for shooting your herring nets?—Yes, I think it would; they should not be shot until sunset.

1364. Would that be an advantage?—Yes, I think it would do good.

1365. Would all the fishermen think it an advantage?—Yes, I think so.

1366. Then would you be willing to accept a regulation of that kind as an improvement upon the present system?—Yes.

1367. (*Professor Huxley.*) You said that all the fish have become smaller of late years?—Yes, very much smaller.

1368. Much smaller?—Yes.

1369. Do you think that the herrings have become smaller?—I do not see so much difference in the herrings as in the other fish, but I think they all have gone a little smaller; still there are plenty of large ones.

1370. Have you used the same mesh for the last 30 years, namely, 36 meshes to the yard?—Yes.

1371. Then I suppose the herrings cannot have got much smaller?—No, perhaps not.

1372. Have you any notion as to where the haddock and cod spawn?—I believe they spawn on the banks off here—the Dogger Bank for instance.

1373. Do you think that they spawn on the Dogger Bank?—Yes, I think so, but I believe that they spawn at different places.

1374. Do they spawn between here and the Dogger Bank?—I have not been at the bottom to see, but I should think they do.

1375. Don't you think that they probably spawn all about here?—I should think they might, but mostly about the banks.

1376. Do you think, for example, that if the coast south of here were to be well trawled the destruction of the spawn that would ensue would interfere with your fishing here?—Yes, I certainly think it would.

1377. Do you consider that the fish which come off this bay are bred down further south?—I think they come from different parts, both north, east, south, and south-east. I don't mean to say that they come from the west, but I think they come from different parts all along here.

1378. Then you think they are bred out at sea and that they come in here?—Yes, I think so, perhaps they do not come so much north; they come north-east,—free of the land north-east.

1379. Notwithstanding that they are bred in all parts where there is a sea bottom, do you think that the trawling further to the south interferes seriously with the production of fish?—Certainly, it interferes very much with it. The trawl nets will bring up the spawn, and if they destroy the eggs there can be no young; it is a sure thing that. You are well aware that if they destroy the eggs there will be no young, and they will do that before they come from you end.

1380. You have been a line-fisherman, I believe, to a great extent?—I have fished in that line of life all my life. I have never been out of the place.

1381. Have you noticed a large portion of the fish spoilt and destroyed by the dog-fish and such like?—Yes, a great deal.

1382. What is the average loss you sustain?—Sometimes we have 1*l.* worth on the line destroyed, sometimes 25*s.* worth.

1383. What proportion of the whole fish you catch is carried away by the dog-fish?—Not a great deal nowadays.

1384. The last witness told us that sometimes the lines were altogether cleared?—Aye, that would be in his day, but there is not so much now.

1385. There are not so many dog-fish as there used to be?—No.

1386. Are there as many suckers?—Yes, I think there are.

1387. Do they destroy many fish?—Yes, a great many.

1388. You heard what the last witness said about the spawn of the flat-fish?—I don't know much about that.

1389. (*Mr. Lefevre.*) You say that during the 35 years you recollect the fishing here the boats have increased double in number?—Yes.

1390. Do you think that each boat now catches less than half what used to be caught by one boat?—I should say that each boat catches less than the half.

1391. Then the whole quantity caught must be smaller?—Yes, I think it is much smaller.

1392. But with regard to each boat, what is the proportion now caught?—Less than one half I should say.

1393. How much less; do you think it would be one third?—I should say less than a half.

1394. Do you think it would be one-third?—I will say no more than that.

1395. Then it would be somewhat more than one third?—It is less than a half.

1396. I believe that the price of fish has increased very much here?—What is the use of that?

1397. Is it not true that the price of fish has increased very much?—I don't know. There are no fish caught now.

1398. Do you make the same earnings now that you used to do in one way or another?—No, I do not.

1399. Then tell us what the difference is?—I should say I make about one half.

1400. In round money?—Yes.

1401. What can you make a week now throughout the year?—Sometimes 1*l.*; sometimes I get nothing.

1402. But take the year through, what do you get?—I am telling you,—the half of what I used to get.

1403. In round money?—Yes.

1404. Then formerly it was a very good business indeed?—You must remember there was a lot of expense attending it of which you have no idea. There was a lot of these things (*pointing to a buoy*) and other things to provide.

1405. But the expense is the same now as it used to be, is it not?—There is more line to keep up now. In consequence of the increase of the nets there are double the quantity used now as compared with what were used in former days.

1406. What I want is to get at some comparison between the earnings now and what they used to be?—I come as near to it as I can when I say about one half.

1407. I don't want to be inquisitive, but I should like to know what your earnings are now, taking the year round?—I have not kept any account of that, but I should say about one half.

1408. What were you in the habit of making when you were young—say 35 years ago?—Why, in the herring fishery I used to make 100*l.* in those days, and that is as much as I can make in a year now.

1409. You made 100*l.* in those years by the herring fishery?—Yes, if the fishing was good.

1410. But that was a very good year when you made 100*l.*, was it not?—Now I make scarce 20*l.* a year.

1411. This year have you made 20*l.*—Yes, and formerly I have made 100*l.*

1412. But was not the year in which you made 100*l.* a very good one?—I generally made 80*l.* or 90*l.* in those days, but now there are no fish.

1413. Do you attribute the diminution of the fish to the trawlers?—Yes, certainly. I lay the blame entirely upon the French and the trawlers.

1414. But the Frenchmen only catch the herrings?—Yes, but the herrings are the fisherman's harvest.

1415. Thirty-five years ago the Frenchmen were not here at all?—They did not fish so much in those days, and yet there were double the quantity of fish. As I told you before, they durst not put the nets out in those days that they use now.

1416. Taking into consideration what the Frenchmen catch now, and adding that to what you catch, do you think that the whole quantity of herrings caught now is less than it used to be?—Yes, taking the French and altogether. The herring does not come on the ground as it used to do.

1417. With respect to the decrease in the number of fish taken by the long-line fishing, do you attribute the diminution to the trawlers?—Yes.

1418. How long do you recollect the trawlers fishing off this coast?—I was obliged to fetch the nets away for them only last year.

1419. Have you seen them farther north upon this coast?—No; they have not been much about this coast. They have been more south.

1420. More towards the Humber?—Yes. I think the first place they were seen at near us was Sunderland.

1421. How long is it since they were seen off Sunderland?—It would be about five months ago since I first heard the complaints made; but they were constantly going backwards and forwards to Hartlepool long before that.

1422. Have you observed that the diminution in the fish has been gradual for some years past?—Yes, it has been going on year by year.

1423. (*Mr. Caird.*) Take an average-sized boat for the line-fishing here, what would be the cost of such a boat with its tackle and fishing lines complete? What capital is there in it?—Do you mean for the white fishery?

1424. Yes. That is one of the largest boats, is it not?—No; our herring boats are the largest boats.

1425. But I will take a line-fishing boat first. For an average-sized boat what would be the cost of the boat, of its tackle, and of its fishing lines?—I got a boat last year and I paid into the builder's hands 19*l.* 10*s.*

1426. And how much would it cost to make her fit for the sea; I presume that that sum did not include masts and sails and fishing tackle?—No, only the boat's shell. The sails would be 5*l.* each.

1427. Would it cost about 43*l.* or 44*l.* to make her ready for sea?—Yes.

1428. What do you suppose is the annual wear and tear of that boat and tackle?—If they are not well taken care of and protected they will all go down in the first season. Everything will be done if they are not looked after as they should be. The very first season will do for them in the white-fishing.

1429. That is with regard to the white-fishing boats. Now with regard to a herring boat, what will that cost?—A herring boat will cost 100*l.*

1430. All ready for fishing?—Yes.

1431. Have every three fishermen who go to sea in the line and herring fishery both a line boat and a herring boat?—Some will have a line boat, and some will have one boat between two. They have different ways.

1432. The two boats together, the herring boat and the line boat, will cost very nearly 150*l.*?—Yes.

1433. Can you tell me what will be the annual depreciation upon that capital of 150*l.*, in order to keep the boats good, taking into account the occasional loss of a boat, the wearing out, and the repairs that are necessary?—Do you mean the cost of taking care of them as well?

1434. I want to know how much it would cost in a year to keep all that good?—I should say it would not cost less than from 25*l.* to 30*l.* to keep it up.

1435. (*Mr. Lefevre.*) Have you both a herring boat and a line boat yourself?—Yes, I have a line boat and a herring boat, and every kind of boat, and they are all paid for.

1436. (*Professor Huxley.*) There is one thing about the mode of fishing you spoke of on which I wish to ask you a question. You spoke of a turbot net. What kind of net is that? Down south we catch turbot with hooks?—You know what a salmon net is?

1437. Yes.—The turbot nets are somewhat similar. The meshes are large. The turbot is a round fish. The nets are set on the bottom, and you work them the same as a salmon net. They have cork floats.

1438. Is there a pocket at the end of the net?—No, there are no pockets.

1439. Then I suppose the fish entangle themselves in the meshes?—Yes.

1440. Do you bait the nets at all?—No.

1441. They simply walk in?—Yes.

1442. Do you know the places the turbot haunt?—Yes, we find them upon a smooth bottom close to the edge of the rock.

1443. And you simply sink your nets down?—Yes.

1444. And you leave it just a matter of chance for the turbot to go in?—Yes. We take in the nets every other day.

1445. (*Mr. Lefevre.*) How many men are there engaged in the fishery here?—I can hardly tell you at present. Do you mean young and old?

1446. Yes, in round numbers.—Do you mean how many men there are engaged in the white fishery?

1447. Yes, and in the herring fishery as well?—I hardly know. Perhaps there are 150. There may be one or two more or less, but it is about that.

1448. (*Mr. Caird.*) Do you use the same net for catching salmon trout that you do for catching turbot?—It is made of the same kind of twine.

1449. But it is not the same net?—No, it is not the same mesh. The salmon trout would never stop at a turbot net.

1450. Do you get much salmon trout here?—No.

1451. Do you get much salmon?—Just a chance one now and then.

1452. Do you set a net for salmon?—We catch all that come.

1453. But do you set a net for the purpose of catching salmon?—No.

1454. Do you set the salmon trout net, or just put it out of the boat?—We set no stake nets. We have one net on the top of the water and another net below. The salmon net floats on the top. The one is close to the bottom in deep water, and the other is on the top.

1455. (*Professor Huxley.*) How long is your turbot net?—About 50 yards long, and we set perhaps 18 or 20 nets together.

1456. Don't they foul when the tide shifts?—Very often they do.

1457. (*Mr. Lefevre.*) Does it not answer to fish for mackerel here?—Sometimes. I think if we had proper nets we could catch them. We have some shoals off here sometimes, but this year there have been very few.

1458. None of you have mackerel nets?—None.

1459. (*Professor Huxley.*) How wide is the mouth of the turbot net?—We simply drag the net along.

1460. (*Mr. Caird.*) When you stated that the herring season was the fisherman's harvest, did you mean that you get more money from the herring than from all the other fish put together?—Yes; in the winter time we don't often get to sea.

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1461. Then the herring-fishing generally yields you a larger sum than the rest of the fishing?—Yes, and therefore we think we ought to have very good protection during the herring season.

1462. (*Mr. Lefevre.*) The herring-fishing lasts for six weeks or two months, does it not?—As long as we see any in fine weather we follow them.

1463. How long should you say that the herring-fishing lasts?—About two months, and sometimes as high as three months.

1464. Then do you earn more during those two or three months than in all the rest of the year put together?—We ought to do so, but lately it has gone down greatly. We have lost a great deal in the fishing for want of protection. When Mr. Vickers was in the gunboat here he was a very good man for us, but they took him out and placed him in the Channel fleet, and now we have no one to protect us.

1465. Then you attribute the loss you sustain in the herring season to the French fishing boats?—Yes.

The witness withdrew.

H. Jefferson.

HUNTER JEFFERSON called and examined.

1466. (*Mr. Caird.*) Have you been long a fisherman here?—I have been a fisherman all my life.

1467. And have you practised all the kinds of fishing which are practised on this coast?—Generally speaking I have caught nearly all the kinds of fish that are caught here.

1468. Have you noticed any falling off in the quantity of fish caught here within your experience?—Yes, I have.

1469. Do you agree with the previous witnesses who have been examined in the statements they have made?—Yes, I quite agree with them.

1470. You are of opinion that they have given a correct statement of the case?—Yes, I quite agree.

1471. Have you yourself ever been engaged in trawling?—I was engaged in it when I was a little boy, but I have not followed it for many years now.

1472. Was that deep-sea trawling?—No, it was trawling in-shore.

1473. You mean trawling for soles?—Yes.

1474. Does anything of that kind go on here now?—No, little or nothing. There has just been one boat out, I believe.

1475. When you were engaged in trawling for soles, did you ever find any spawn in your trawl net?—I cannot say that I ever noticed anything of the kind, but I do not think the spawn will be so close in-shore.

1476. Have you ever drawn up any spawn in your trawl net?—I cannot say. I hardly knew what spawn was when I went out trawling. I was a very little boy indeed.

1477. I understood you to say that you have never been deep-sea trawling?—No, I have not.

1478. Have you lost any of your lines in consequence of the deep-sea trawls passing over them?—Upon one occasion I lost two nets and part of another one, and one of these buoys (*pointing to a buoy in the room*).

1479. When was that?—Last July.

1480. (*Mr. Lefevre.*) Were they herring nets?—No, turbot nets. They were taken clean out of the ground.

1481. (*Mr. Caird.*) Did you not see the boat that did it?—Yes; we saw him and spoke to him, but he had no number. He had it painted or tarred out, and he would not tell us what it was.

1482. Do you think it a good regulation that a conspicuous number should be painted upon every trawl-boat?—Yes, that would be very well; but it would be far better if the trawl-boats could be done away with altogether.

1483. Is there a number upon all the trawl-boats?—Yes; all fishing boats ought to be numbered.

1484. You think you ought to have had some means by which you could have proceeded against the man who destroyed your lines?—Yes, and we should have had, if he had had his number there; but he had no number, it was painted out.

1485. Was your loss considerable? What was the value of what was destroyed?—I do not know exactly, but I can give a rough estimate. I should suppose the loss would be between 4*l.* and 5*l.* But we lost in addition the quantity of fish which might have been in the nets. We had caught several fish that day, and I have no doubt there were fish in the nets.

1486. You say that this occurred last summer?—Yes, it was in the month of July.

1487. Have you observed, after a trawl-boat has passed over your ground, that there is any difference in your lines?—I have not noticed that very particularly.

1488. Do you get as many fish after the trawl-boat has passed as you did before?—I have not noticed any difference in that respect.

1489. With regard to the herring fishery, have you noticed the same decline in that as in the white-fishing?—I should say that there has been a gradual decline in the herring-fishing as well as in the white-fishing. But there are more boats engaged in catching the herring than there used to be.

1490. You mean that there has been an increase in the number of boats here and of the French fishing boats which come in among you?—Yes.

1491. Have you any reason to complain of the want of protection you receive against the French fishing boats? Do they interfere much with your fishing ground?—It appears from what the coxswain has stated that he made a complaint, and that he got no satisfaction.

1492. Do the French boats interfere much with your fishery?—Yes, they have done us a good deal of harm this year.

1493. Upon your fishing ground?—Yes.

1494. What proportion of the herring caught is caught by the Frenchmen on your ground?—I have no idea, but they catch a good deal.

1495. Will it be one half or one third?—I should say it must be nearly a half, for their boats are very large.

1496. Do they remain during the whole time the herring is here?—They are here all the season passing along where they think the herrings are.

1497. Do you think it of advantage that any regulation should be adopted to provide that no herring nets should be shot until after sunset?—Yes, I think that would be an advantage.

1498. Do you think that shooting the nets before sunset operates injuriously against yourselves?—Yes.

1499. And you think that a regulation to prevent it would be of advantage?—Yes, I think it would.

1500. Do you think that such a restriction would do injury to the supply of herrings?—No; I think it would do good in some respects.

1501. In what way?—When the nets are shot before dark,—and they are sometimes shot a long time before dark,—if the herrings are there they fly to one side, either the inside or the offside; whereas if they are put down when the sun is going down, and it is beginning to darken, the fish would lie among them.

1502. Have you had any proof of the advantage arising from shooting the nets after dark?—We have noticed that when they have been put in before sunset the fish have slipped away from the ground where we have got them the night before. They see the nets before it is dark, and they fly from them as a necessary consequence.

1503. Have you seen many mackerel off this shore?

—I have seen large shoals sometimes, but not many this year.

1504. Have you seen many in former years?—Yes, I have seen quantities in former years.

1505. Are there mackerel caught as a rule off this coast?—At Blyth there may be. I believe that some men there have been catching them with the line this summer.

1506. Do they make a good business of it?—Sometimes they make a good day's work.

1507. (*Professor Huxley.*) Do you recollect the price of fish here when you brought them ashore 20 years ago?—Fish would be considerably cheaper then.

1508. Do you recollect as far back as that?—Yes, I think I can.

1509. What was the price of haddocks 20 years ago?—I can hardly say; one does not notice these things minutely.

1510. Can you give a guess. You say they were cheaper. How much cheaper were they?—I should say that the price will have varied one half. I should think that they were one half cheaper than they are now.

1511. Was that the case with herrings?—The price of herrings varies very much.

1512. I speak of a general average. What is your impression as to the difference. Do you think on the whole that herrings were much cheaper?—Yes, I think they were.

1513. To the same extent as the white fish?—I do not know exactly. I think they would be to the same extent.

1514. Do you think that any kind of police regulation would be of advantage in preventing the destruction of your lines by trawls? Is there any kind of regulation you can think of that would be of use to you to have enforced?—Why, sir, if there was anything of that kind it ought to be on the sea, or they could not stop the trawlers. For my part, I don't know how any police could stop them trawlers.

1515. Is it not possible that something might be done by a man-of-war's boats or gunboats; have you any remedy that you could suggest short of putting down the trawlers altogether?—The only remedy we are seeking now is to try to get them put down, if possible. If they are not put down, in the course of a few years the fishing here will be of no use, and the fishermen may lay by their lines and nets as soon as they like.

1516. Do you think that the trawlers can work without damaging your lines?—No, I think not.

1517. Not by taking care and keeping out of the way of the buoys?—I don't think they could. Where we have as many as 20 boats fishing a certain distance from each other they cannot trawl between them without getting fast with some of them.

1518. You do not think it possible for line-fishing and trawl-fishing to go on together? You are of opinion that one of them must go to the wall?—Yes, and we must go to the wall, because their nets will take ours.

1519. Did you ever hear of an expression common in Scotland, namely, 'breaking the eye' of a shoal of herrings?—I cannot say that I ever did.

1520. What it means is breaking up a shoal. You spoke just now of putting down the nets by daylight; the Scotch fishermen say that if you do that the shoal disperses. Do you think that is the case?—Yes, I do.

1521. Have you yourself seen anything of that kind occur?—Yes; I have set them down at a certain spot, perhaps at night, and I have gone the next night and shot them in the same place, but I have found myself compelled to go further in. I have shot them before sunset and I have found that the herrings have shifted away.

1522. Do they shift as a shoal, or do they break up?—The whole body shifts just on one side.

1523. (*Mr. Lefevre.*) Have you observed the French fishermen fishing on the Sunday off here?—They fish all times,—Saturdays, Sundays, and all times.

1524. Have you observed them?—They mind no more about Saturday night or Sunday night than any week-day night.

1525. You have seen them fishing on Sunday?—Yes, just the same as on any other day.

1526. And do they come within the three-mile limit?—They generally get the greatest catch on a Saturday night; there are no boats of ours there then.

1527. And on Sunday does the same thing take place?—Yes; all nights are the same to them.

1528. Do any other fishing boats come for herrings from the south besides the French boats?—Yes, sometimes large Yarmouth luggers and the Lowestoft boats will come, but they are not so many in number. There are only six or seven. The French boats, however, come in swarms, and they do a vast deal of harm.

1529. Do I understand you to say that you have only observed the beam-trawlers here during the last six months?—They have only got down here during the last six or eight months, but they have been trawling lower down for a long time; they have been down at Hartlepool and Sunderland.

1530. And they have only been six or eight months here?—No.

1531. In what number have they been off here?—I believe that one night last week there were 16. There were nine off here last night.

1532. Were they trawling on the ground you fish upon?—Yes.

1533. How near the shore?—The nearest they would come would perhaps be three miles, or off and on that way. They trawl away in the sea.

1534. What is the greatest distance at which you set your lines?—We set them sometimes further out and sometimes nearer in.

1535. But what is the furthest distance?—Last summer some of our boats went as far as 20 and 30 and 40 miles.

1536. That is rather a considerable distance, is it not?—Yes.

1537. Is that the general distance, or is it only exceptional?—We generally fish from six to seven or eight miles off the shore.

1538. Can you suggest any regulation for preventing the trawlers from coming a certain distance within the coast?—I do not think I can.

1539. You cannot suggest any regulation of that kind?—I think the best thing we could get, if we could accomplish it, would be to have them put off altogether, because wherever they go they destroy the fish.

1540. You do not mean off this coast alone, but everywhere I suppose?—If they would only keep to their own homes they would not do us as much harm as they do.

1541. How near the coast was your boat when you lost your nets?—As near as I can guess I should be about seven or eight miles from the shore.

1542. Do you know many instances of the same kind where nets or lines have been lost?—During last summer there were four or five cases.

1543. Four or five?—Yes.

1544. (*Mr. Caird.*) Are the Yarmouth and Lowestoft boats large boats like the French boats?—Yes, they are about the same size.

1545. And have they nets of the same description?—Yes.

1546. They are altogether fitted in the same manner as the French boats?—Somewhat similar. There is little difference, I think.

1547. And do they come among your nets the same as the French boats?—Yes, they do.

1548. But you do not object to them, do you?—Yes, we do, because their nets are far stronger than ours, and they have kegs to float them, and if they get among our nets they are sure to do us harm.

1549. Do they do you as much harm as the French boats?—Yes.

1550. Speaking of your experience of 25 years ago, what weight of fish would a boat bring ashore from

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line-fishing then?—They would sometimes bring a ton of fish in a boat.

1551. Would that be a common day's fishing?—Yes.

1552. What would be an average day's fishing now?—It would be considerably short of that. There is nothing like one third of that now.

1553. Will a boat bring on shore now on the average about one third of a ton?—Nothing like that.

1554. Then what weight of fish should you say will be brought ashore now?—Sometimes 3, and 5, and 6, and 10, and 15, and 20 stone a day, on the same lines we used to be fishing when we got a ton.

1555. (*Professor Huxley.*) In speaking of a stone, do you mean a stone of 14 pounds?—Yes.

The witness withdrew.

J. Dawson.

JOHN DAWSON called and examined.

1556. (*Mr. Caird.*) How long have you been a fisherman here?—Since the year 1830.

1559. Have you been employed in all the different kinds of fishing practised here?—Yes, in all the different kinds.

1560. Do you agree generally in the evidence which has been given by the other witnesses as to the gradual falling off in the quantity of fish caught here?—Rather more so. I differ with them a little on that point.

1561. I am now speaking of the time when you say you commenced fishing. In 1830 what was the average take here?—I was only a boy then. I would rather confine myself to the years 1840 and 1841.

1562. That would be 20 years back. What would your boat bring home then as an average day's fishing?—I can recollect one day, on the 16th of February 1841, there was a boat belonging here, the Rose of the Valley, owned by Thos. Jefferson, which fetched in more than 30 cwt. of good haddock, and the whole of the boats, about 20 in number, on that day averaged about one ton each.

1563. What would the 30 cwt. taken in Jefferson's boat sell for?—Somewhere about 2*l.* 5*s.* I should say for the lot. I cannot exactly say.

1564. That was an extra day, and was beyond the average?—The boats on an average caught a ton each, and there would be about 18 or 20 boats there.

1565. That was an extra take?—Yes, but there had been capital fishing that year in the months of January and February, and even in the fore part of the spring.

1566. In 1845 (can you take your memory back to that year) what was the state of things?—It was not so good in haddock, but it was very good in ling and cod. In the month of April 1845 the boat of which I was skipper was off this coast, and we caught fourscore cod fish, nine prime ling, one large halibut, one dozen skate, and 15 stone of haddock, all of which were sold for the sum of 1*l.* 2*s.*

1567. Have you any other data with which you can supply us that will give us the average of another year?—I can give you the corresponding period 20 years afterwards.

1568. You mean the year 1861?—Yes.

1569. Well, what was the take then?—I rather agree with one of the witnesses who stated that the average take at that period would not be more than from three to 20 stone, but I think he spoke rather beyond bounds, if anything, for I do not think myself that the boats would all catch that amount.

1570. That was in 1861?—Yes, in the month of February.

1571. (*Professor Huxley.*) And you say that they would not take more than 20 stone then?—No; more than half of them would take far less than that.

1572. What do you consider would be the average fishing in the year 1861?—I should think that the whole of the boats would not realize more than a ton and a half, which was only about as much as one boat got 20 years previously.

1573. Are you sure that you are quite accurate upon that point?—Yes.

1574. You do not make the statement at random?—No, I do not. I have witnesses here who can prove the truth of what I say. Mr. John Brown can prove the truth of my statement, but I have put it down in writing, and here it is (*handing in a paper*).

1575. Is that in your handwriting?—Yes.

1576. (*Mr. Caird.*) Will you read it?—Yes (*the witness read the statement, which simply narrated the facts stated by him in his evidence*).

1577. Now you say that the average catch would be from 3 to 20 stone?—Yes.

1578. That is a very wide average, cannot you make it narrower than that?—I do not think that I can conscientiously.

1579. What may be the value of 10 stone of fish now?—At a very bad time when there has been a scarcity I have known them fetch 3*s.* a stone, but when there have been heavier catches they have fetched much less.

1580. Will the value of a boat's fishing be equal to what it was when in 1845 you sold a catch for 1*l.* 2*s.*?—About the same I should think.

1581. The average will be about the same?—Yes, about the same.

1582. Although the quantity of fish has fallen off the return of the fishermen in money is now equal to what it used to be?—In some cases it is, and in other cases it is not. If the market is bad in the south we have to sell the fish cheaper. Some days the fish are rather high, which makes up for the loss, or else the fishermen and their families would not be able to live at all.

1583. Have you any remarks to make to us as to the alleged increase of trawl-fishing?—Yes, I have.

1584. What is it you wish to say?—If this fishing is prosecuted here for five or 10 years longer such a thing as a haddock will not be known to be caught on this ground.

1585. What ground have you for saying that?—Because they disturb the spawn when it is laid upon the bottom of the deep and prevent it from coming to maturity; when once disturbed it will never congeal again, consequently it is altogether destroyed.

1586. Are you sure that the trawl disturbs the spawn?—Yes.

1587. Have you ever seen it do so?—Not myself, but a person told me that he had seen as much as a ton and a half offered for sale by the trawlers.

1588. (*Mr. Lefevre.*) Who was that?—A man named Templeman.

1589. (*Mr. Caird.*) Do you complain of the interference of the French boats in the herring fishery here?—Yes, I do.

1590. Do you think that it is injurious?—Yes, it is very injurious in every sense of the word.

1590*a*. Both because they take away the fish, and because they employ heavier boats and nets?—Yes, I will give you a case to illustrate the thing a little: About the 2nd or 3rd of the present month, as near as I can guess, such a fleet of herring boats took possession of the fishing ground that the fishermen belonging to this shore were not able to get their nets down at all; we were therefore obliged to take our boats back again to the land or else to fish inside them.

1591. Were those boats French boats?—Yes and there were about 100 in number.

1592. And they completely put you off your own fishing ground?—Yes; they did at the beginning of the night. If the weather is at all rough we are obliged to fly away from them, or else we should lose the whole of our nets. We should be sure under such circumstances to get foul of them.

1593. What distance might it be from the shore that the French fishermen were fishing?—We were in only 30 fathoms of water, rather outside the light.

1594. What distance from the shore would that be? About eight miles.

1595. Then that would be beyond the protected limit?—Yes.

1597. Then they were fishing upon ground upon which they had a right to fish?—Yes, but we wish to have a sort of fair cast for ourselves. We want a line of demarcation made between the French and English boats. Our boats are much smaller than theirs, and they are even smaller than the Scotch boats, or those that are employed down in the neighbourhood of the Fern islands. If our boats come across any of their boats we have nothing but death before our eyes, or considerable injury; we are therefore obliged to get out of their way as fast as possible. Upon the night of which we have been speaking I came half a mile inside of them, and the consequence was that I caught no fish. I took the nets up towards midnight, and I tried to find a vacancy between the French boats. Sometimes they separate by driving in the night, but when I made the attempt I found that it was useless, and I was obliged to steer to the north. In shifting across to the north I met with a gunboat. There was a little bit of shady moon that night, and I did not see it before. I determined to have a word with him. I said, "It is a fine evening, sir." He said it was a very fine evening; and then he said to me, "Have you seen any Frenchmen?" I said, "Yes; there are a hundred of them; they are only a mile south of you." He said, Have you caught any fish?" I said, "No, I have caught none." He said, "How is that?" I said, "I have not been able to get on the fishing ground in consequence of the French fishing boats having possession of the ground. I have been obliged to set my nets half a mile inside, and the consequence has been that I have caught no fish." I said, "We have had very bad protection this year, in fact we have had none, and the result and the consequence are that the French fishermen take possession of our ground, and we and our families may starve." With that he gave a laugh and we separated.

1598. How long is that ago?—It would be about the 3rd or 4th of September.

1599. Do you mean in the present month?—Yes.

1600. And that was a night when the French fishermen were fishing eight or nine miles from the land?—Yes, it was a bit later on in the year. They were within their limits.

1601. (*Professor Huxley.*) Are not the south-country boats from Lowestoft and Yarmouth as heavy as the French boats?—Yes.

1602. If they come and fish here do they not interfere with you quite as much as the French boats do?—No, I think not: their nets are not of a kind that would interfere with us as much as the French nets, and they only remain here a few nights and go straight home. They do not catch many fish. The reason I assign for that is that their nets are too thick in the mesh, and the herrings cannot get their heads far enough into the mesh to enable them to stop in.

1603. If the south-country boats were to use nets of a proper size to enable them to catch fish, and come and fish over your ground, would you not feel that a hardship?—Yes, we should; but we have an Act of Parliament which says that decked boats are not to shoot within a less distance than a mile of an undecked boat. They drive further to the sea with the wind, but if they are to the windward they must be that distance or they will come right upon us.

1604. If that regulation were enforced have you any objection to it?—Not at all to boats of our own country.

1605. Would you be satisfied if such a regulation were enforced with regard to the French fishing boats?—It ought to be enforced, but I believe we have an Act of Parliament with regard to it.

1606. Would you be satisfied with that?—I would for my own part.

1607. When, in your observation, did the fishing or the catches of fish begin to fall off?—I agree with the former witnesses; I believe that there has been a gradual diminution within the last 20 years.

1608. There has been a diminution year after year?—Yes.

1609. You have not noticed it greater in any particular year than in another, have you?—No.

1610. It has been steadily decreasing?—Yes.

1611. And does that apply to the herring as well as to the other fishing?—The herring fishing has been on the decrease, but not so far back—perhaps about ten years.

1612. Do you think that the herrings began to decrease about 10 years back?—Yes, about the year 1855. In the year 1851 there was a capital take of fish got on this coast, and in 1852 there was as much as that. The price was reduced in Cullercoats to 3*s.* 6*d.* per thousand. At that time the French fishermen generally bought them. I was fishing, and I saw a French vessel coming direct to me. I thought he wanted the herrings I had caught, and I allowed my boat to be intercepted by him. He gave me 9*s.* per 1,000 for the lot. On another day in the same week there were four of us employing a steamboat, and what we got after paying for the steamer was about 7*s.* 6*d.* per 1,000.

1613. In what year was that?—It would either be in 1852 or 1853.

1614. Has the fishing greatly fallen off since then?—Yes.

1615. Do you think that that falling off has been entirely caused by trawling?—I think it is greatly attributable to the trawling, because a great many fish used to be driven in by the south-east storms. I differ from one of the witnesses who said that more fish came by the south-east storms than by the north-east storms; for I think the south-east storms make them rather less than they used to be.

1616. What do you ascribe that to?—I attribute it to the ground being impoverished by the trawling smacks.

1617. Because the trawls in your opinion have swept the fish off the ground?—Yes.

1618. Have you ever fished with your lines over ground that the trawls have passed over?—No, I have not.

1619. Is there any noticeable diminution in the catch of fish?—We do not expect now to catch one third of what we used to catch.

1620. Is that your experience?—Yes. I think the trawlers will take two thirds of the fish away.

1621. Is that the experience of fishermen generally?—It is my idea, and I should be prepared to expect that.

1622. (*Mr. Lefevre.*) Twenty years ago were the French fishing boats off this coast as numerous as they are now?—No, not nearly so numerous. I have heard of 400 sail being cleared from Boulogne during the last year.

1623. What has been the increase during the last 20 years?—About two thirds, I should say.

1624. The number of boats is now two thirds more?—Yes.

1625. And the French fish two days a week more than you do?—They do.

1626. Then, looking at the quantity of herring caught by the Frenchmen, and the quantity you catch, do you think that the whole catch has diminished or not in this part?—I think that the whole catch is diminishing.

1627. You think it has diminished after taking into consideration what the Frenchmen catch?—Yes.

1628. How much do you think it has diminished?—I should say that it has decreased a third.

1629. Even taking into consideration what the French catch?—Yes.

1630. Then, with regard to the diminution in the white-fishing, do you mainly attribute that to the trawlers?—Yes.

1631. Do you find a greater difficulty in making a livelihood now than you did 20 years ago?—Yes;

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in fact a livelihood could not be made if the fish were sold as cheap now as they were then.

1632. Looking to the price of the fish now, and what it was then, do you make as much now a year as you did then?—To tell you the real truth, I am astonished to see the fishermen sustain themselves as well as they do during the winter months.

1633. Have you noticed any decrease in your net earnings?—The earnings have been greatly reduced, but I think that the people are more economical now than they were formerly.

1634. Do you think that your net earnings are considerably less?—Yes.

1635. How much less, can you tell me that?—I should say one fourth at least.

1636. How much did you make 20 years ago; how much per man, per week, taking the year round?—I cannot agree with the first witness. I never made as much in a year as he has done.

1637. Twenty years ago how much did you make?—20 years ago, as nearly as I can calculate, my earnings would amount to perhaps 60*l.* a year altogether.

1638. Is that including the herring season?—Yes, the herring season included.

1639. Your earnings are now one third less?—Yes.

1640. (*Mr. Caird.*) You mentioned that in 1853 you sold fish to the French boats?—Yes.

1641. Did the French boats at that time come and interfere with your fishing?—Not so much then as they do now, and the reason of that was this: Every year the French fleet comes on this coast now the Emperor accompanies them with a man-of-war, a steamship. I recollect the name of one, "L'Ecosse"; she came for several years, and she was brought up on the ground at the time the fishing boats are generally taking up their nets, lest any of the French fishing boats should begin to buy of the English fishing boats. The presence of this man-of-war deprives them of the chance, because if they did that the man-of-war would seize them immediately, according to the French law.

1642. Was there no man-of-war sent along with the fishing boats previous to the year 1853?—I do not recollect that any was sent before.

1643. Then the custom was, when there was no means of preventing the traffic, for the boats to buy rather than to fish for themselves?—Yes, I have sold many a cargo myself.

1644. But since the man-of-war has been sent over the boats have come and fished in greatly increased numbers?—Yes.

1645. What do you attribute the falling off in the herring fishery to? What reason do you assign in your own mind?—I attribute it to the same reason that I assign for the diminution of the haddock-fishing.

1646. What is that?—Because I think that when the spawn of the herring is deposited in the ocean, if it is once disturbed it will never come to life.

1647. Then you attribute the falling off to the trawling?—Yes, partly.

1648. To what else do you attribute it?—To the great number of catchers.

1649. You mean that there are a great many more boats employed in catching the fish now compared with what were employed formerly?—Yes.

1650. (*Mr. Lefevre.*) How far apart do the French boats fish?—At various distances, but they shoot their nets sometimes in the middle of the day, and that, I think, has a tendency to frighten the fish clean off the ground altogether.

1651. I want to know how far apart they shoot their nets?—When they are thick they are not further apart than 200 yards. I have seen them all with their nets alongside of each other in the morning as if they were in a tier in one of our English ports; such was the case on the 7th of September in this present month.

The witness withdrew.

J. Brown.

JOHN BROWN called and examined.

1652. (*Mr. Caird.*) Have you been a fisherman here all your life?—Yes.

1653. Have you had many years' experience of the fishing on this coast?—Yes, I have been fishing for 27 years.

1654. Do you agree with what has been said by the other witnesses with regard to the gradual diminution of the quantity of white fish and herring caught off this coast?—Yes, I do.

1655. Have you anything more to add to what they have already said on the subject?—I have nothing more to say than what they have said.

1656. Have you observed whether there is any falling off in the size of the fish as well as in the quantity?—I daresay there is, but I can say positively that there has not been near the quantity caught that used to be.

1657. Has there been a difference in the size and weight of the fish?—I do not think that there has been so much difference in the weight as in the quantity.

1658. Do you think it would be of advantage that any regulations should be adopted for preventing herring nets being shot before sunset?—Yes, I think it would be a good thing, but of course the Frenchmen would take possession of the ground. It would be a good thing if that could be stopped. Wherever we go they come and take possession of the ground. We have six or seven miles to go, and as soon as they see the English boats put off they start and shoot their nets.

The witness withdrew.

Rev. F. Ashhurst.

The Rev. FREDERICK ASHHURST called and examined.

1659. (*Mr. Caird.*) Are you the incumbent here, Mr. Ashhurst?—No, I am only the curate of the parish.

1660. How long have you been here?—Altogether about three years. I left here in the year 1860. I was here from 1857 to 1860.

1661. When did you return again?—This year, in 1863. I began in January.

1662. In your observation of the condition and the comforts of the population, can you tell us if there has been any falling off, taking this year and comparing it with the year 1857?—I do not know that there is.

1663. Do the people seem to be as comfortable and as well to do as they used to be?—From what I have seen in visiting here, the people seem to live in the same way they did before.

1664. Has there been any increase of sickness, or has there been any diminution?—I can hardly answer that; there has been a great increase in the population, and there are a great many more people fishing than there were some years ago. Those who were young men then are now fishing for themselves.

1665. I suppose it is the custom for the young men of a family to become fishermen?—Yes.

1666. They do not go away and settle in other places?—Hardly any of them leave the place; they stick very much to it.

1667. And the population has increased?—Yes, very much indeed.

1668. (*Professor Huxley.*) Are you much troubled with the typhus or other fevers here?—No, I think not.

1669. Have you any notion of the extent of the poor rates here?—I cannot answer that question.

1670. You do not happen to know?—No.

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1671. Do you imagine that they are particularly heavy ?—No, I think not ; I have no reason for saying that they are.

1672. (*Mr. Lefevre.*) Can you form any estimate of the earnings—the average earnings of the fishermen here ?—No, I cannot ; I have not sufficiently considered the question. This is a very large parish, and I am only here occasionally.

1673. Can you form any estimate as to the wages of the men compared with what the colliers and men working at other trades get ?—No, I am not sufficiently acquainted with them to make the comparison.

The witness withdrew.

(*Mr. Caird.*) We have now gone through the list of witnesses ; but if there is any fisherman present who desires to add anything to the evidence already given, or to offer any suggestions, or make any corrections, we shall be most happy to hear him.

W. Renner.

William Renner examined.

1674. (*Mr. Caird.*) What are you ?—I am a buyer of fish and I catch them too. I both buy and catch.

1675. What do you do with them when you buy them ?—I send them to different markets, some to Manchester, some to London, some to Birmingham, some to Liverpool, and also to other towns.

1676. Have you been several years engaged as a buyer ?—No, I have not been engaged in that business many years.

1677. When did you begin to buy ?—Not more than three or four years ago.

1678. Do you buy a large quantity of the fish caught here ?—Sometimes I buy a large quantity, and occasionally the great majority of the fish taken here.

1679. Have you noticed whether there has been any diminution in the quantity offered for sale here by the fishermen ?—Yes, there is a vast deal shorter take than there used to be.

1680. Can you not get as many fish when you go down to the shore after a day's fishing as you used to get ?—We do not buy so much, but there is sometimes a wonderful day's fishing. It is a very fluctuating thing. Sometimes there will not be above two or three stone of haddock in a boat, and at other times there will be 15 or 16 stone in a boat ; there is that difference in the fish we buy now, haddock and cod.

1681. Are the haddock as large in size now as they used to be ?—No, they are a great deal smaller, they are not nearly such fine fish as they used to be.

1682. Are they not as large as they were four years ago ?—There are some that are as large, but the general quantity of them are not to be compared in size to what they used to be.

1683. You are speaking only of four years ago ?—They are diminishing every year.

1684. Are the cod-fish diminishing in size, or are they about the same ?—They are diminishing; there is not near the quantity of cod that there used to be.

1685. But with regard to the size, how is that ?—They are generally smaller than they used to be ; they used to be very fine fish.

1686. Do you notice a greater diminution in the size of the haddock than of the cod ?—There are a great deal caught inferior in size compared with what they used to be in the haddocks.

1687. But there is not so much difference in the cod ?—No, not so much as in the haddock.

1688. In any of the other fish which are caught here is there any considerable diminution in the size ?—No, not so much difference; there is more difference in the haddock than in any other. The fish we take here are a great deal smaller than they used to be.

1689. What was the price of a stone of fish on the beach four years ago ?—1*s.* 6*d.*, 2*s.*, 2*s.* 6*d.*, and sometimes it was as high as 3*s.*

1690. Has that price continued about the same during the last four years ?—Yes, I have not seen much difference in the price.

1691. What is it as compared with what it was 15 years ago ?—It was not near so much, but then the takes were a good deal larger. Every year they grow scarcer and scarcer, and we attribute the falling off to the trawlers taking away the spawn and destroying the small fish.

1692. (*Professor Huxley.*) How much was the price then ?—Sometimes 1*s.* 3*d.* a stone. They are all sold in this port to the pannier men. They are all sold in that way ; they just get them at so much a pannier. They ask 30*s.* or 40*s.* sometimes, and 10*s.* or 15*s.* at others. Sometimes they ask 30*s.* or 2*l.* for a lot of fish. Occasionally we will give them what they ask, and sometimes we may offer them 20*s.* or less.

1693. (*Mr. Lefevre.*) Do you attribute the diminution of the fish to the trawlers taking the spawn ?—We attribute it to that, and nothing else.

1694. Have you been on board one of these trawlers yourself ?—I never saw one.

1695. Then on what do you ground your notion ?—I really believe that if the men go and set down all their lines they will get nothing if these trawlers happen to be there ; and if they are to continue they will destroy all the fish. If the long lines are in the water when the trawlers come all the gear will be destroyed. There is no getting in between two of them, because sometimes the lines are not 100 yards apart, and yet they shoot east and west of them and destroy all that they come across.

1696. How is it that you come to the conclusion that it is the trawlers who take the spawn ?—I was informed by a man I know who lives at Sunderland that he has seen different trawlers come in with spawn in their vessels. On one occasion he saw a ton and a half offered for sale. You know if you destroy the spawn at the bottom of the sea the fish will never come to life again.

1697. I suppose that is the story of Templeman with regard to the sale of the ton and a half ?—No; my son has been fishing here and he has seen the same thing.

The witness withdrew, and the inquiry was adjourned to Thursday, September 24, at North Sunderland.

North Sunderland, Northumberland, Thursday, 24th September 1863.

Present :

James Caird, Esq., M.P. (Chairman). | Professor Huxley, F.R.S.
G. Shaw Lefevre, Esq.

NORTH SUNDERLAND.

J. Patterson.

24 Sept. 1863.

John Patterson called and examined.

1698. (*Mr. Caird.*) Are you a native of North Sunderland ?—I am harbour-master here, and I have been in that position for four years gone February.

1699. Have you yourself been engaged in the fishery here ?—Yes ; I have been 21 years in the place myself.

NORTH SUNDERLAND.

J. Patterson.

24 Sept. 1863.

1700. You have had 21 years' experience of the state of the fishing in this harbour?—Yes; I was a fisherman at Newton previous to that.

1701. What kind of fish do they principally catch off this coast?—We have cod, ling, and turbot (but they are nearly extinct on this coast now), skate, sole, and a very few haddocks. I believe those are the principal fish caught here.

1704. In the course of the 21 years over which your experience has extended here, have you noticed any change in the quantity of fish brought on shore by the boats?—Yes, there are not so many brought now as there were in former years.

1705. Has the number of boats increased or diminished?—As regards the white-fishing the number of boats I believe has increased.

1706. Do you remember what they were 21 years ago?—I cannot recollect.

1707. Can you recollect what they were 10 years ago?—I think the white-fishing boats would be somewhat similar now.

1708. Then they have not increased or diminished?—No, except perhaps one or two boats.

1710. Are they about the same size?—Yes.

1711. And do they carry about the same quantity of lines and the same number of men?—No, they did not carry so much line formerly.

1712. Then the extent of the line carried by each boat has increased of late years?—Yes; we formerly had 400 or 500 hooks, and they have now extended from about 800 to 1,000 hooks per line.

1713. How many men are there in a boat?—There are three in some boats and four in others.

1714. Do you find that the quantity of fish brought on shore now on an average from each boat has considerably diminished within your knowledge?—Yes.

1715. What kind of fish chiefly has diminished?—Haddock, cod, and ling.

1716. Has the diminution been in the quantity alone, or in the quality and size as well?—Well, I do not think that the cod and ling have been as large as they were seven or eight years ago.

1717. Is there any marked falling off in the size?—I should not say that there is.

1718. Is the haddock as large as it used to be?—It is as large on the south part of the island, but not on the north part.

1719. Can you say whether upon the average the haddock brought on shore here is as large and fine as it used to be in former years?—No, I think not.

1720. Can you not speak positively upon that point?—Yes; they are not as large as they were a few years ago.

1721. Is there much difference in the size?—You may get an exceptional haddock now and then.

1722. But taking the whole boat's catch?—Then I should say that the haddocks are not so large as they were.

1723. And with regard to the number of the fishermen, have they increased?—Yes.

1724. I understood you to say that the turbots were not nearly so numerous as they used to be?—No. That was a fish that was very productive at one time, and very profitable to the fishermen.

1725. When did they begin to fall off in a marked manner?—There has been no turbot-fishing about here for these 16 or 18 years, but just off to the south they follow it in the latter part of the herring-fishing.

1726. That is not off this harbour?—No.

1727. None of your fishermen fish for turbot now as they did formerly?—No, they do not.

1728. Did they within your knowledge?—Yes, I have fished for turbot myself.

1729. Was there a good deal caught formerly?—Yes; I have caught 100 in a day, myself.

1730. To what do you attribute the falling off?—I cannot say what has occasioned the falling off on our grounds.

1731. Is there no cause to which you can assign it in your own mind?—It might have been occasioned by the trawlers, or it might be attributed to other things. We do not know what route the fish take when the spawn comes to life. There has been no trawling on this coast in my time.

1732. You say that the falling off took place 18 years ago?—Yes, somewhere about that time.

1733. And there has been no trawling about here during the last few years?—No.

1734. Can you state the time when the falling off in the size and quantity of the haddocks took place?—No, I do not think I can state the time.

1735. Is there any cause to which you attribute the decline in the haddock-fishing?—Well, there has been a diminution in the haddocks, that is all I know.

1736. You cannot assign any reason for it?—No, but I principally attribute it to the trawling.

1737. But I understood you to say that there has not been any trawling off your coast?—No, there has not.

1738. There has never been any?—Not in my day.

1739. Then if there has been no trawling off your coast how can you attribute the falling off in the fish to the trawling?—Why we do not know what route the fish take when they take life.

1740. Have you perceived any difference in the number of the fish brought upon the shore by any change of wind?—We like an easterly wind for bringing the fish in upon the grounds.

1741. A north-easterly wind, or a south-easterly wind, which is the most favourable?—A south-easterly wind we like best, a north-easterly wind drives all the fish off the shore.

1742. Do you speak of that from your own observation? Are you enabled to say that at the present time a south-easterly gale will bring in more fish than a north-easterly gale?—Yes, I speak from personal knowledge.

1743. And that statement applies to the present time, does it?—For the last five years I have not followed the white-fishing.

1744. Then you do not speak of what happens now?—No.

1745. Is there any difficulty in obtaining bait here for the long-line fishing?—Yes, we have great difficulty in getting bait here.

1746. What bait is used?—Mussels.

1747. And where do you get the mussels from?—From Boston Deeps, Stockton, and from Port Glasgow.

1748. Port Glasgow on the Clyde?—Yes, on the Clyde. We find that we can get them cheaper than from Port Glasgow now. There used to be a mussel bed here before my day, but the mussels were ploughed up by the farmers, and since then they have been on the decrease so that it has not been worth while to get them.

1749. You say that that occurred before your day? Then it would be more than 20 years ago?—Yes.

1750. You state that a mussel bed was ploughed up by the farmers?—Yes.

1751. And that since then the supply of mussels from that bed has greatly decreased?—Yes.

1752. Are there no mussels there now at all?—There are a few.

1753. The bed has not been ploughed again, has it?—No, not to my knowledge.

1754. There has been no repetition of that?—Not to my knowledge, but the mussels have never gathered there since then.

1755. What do the fishermen pay for the mussels?—About 30*s.* per ton.

1756. That is the expense, after paying the railway carriage, of obtaining mussels from Port Glasgow? They cost 30*s.* per ton delivered here?—Yes, from 28*s.* to 30*s.* per ton.

1757. What do you pay for them from Boston Deeps?—I am sure I do not know, but there are some fishermen here who can tell you.

1758. Is there a large quantity imported altogether

for the use of the fishermen?—Yes, they import all they use.

1759. Have you any idea what quantity in weight is used by the fishermen here?—I cannot give you an accurate statement with regard to that.

1760. Has the difficulty of obtaining bait been gradually increasing?—Yes.

1761. Has the price of bait increased?—I think it has. Small ships used to come here and sell the mussels at 1*s.* per bushel from Boston.

1762. Does there seem to be a plentiful supply from Port Glasgow, and is it likely to continue?—They seem to think that there is likely to be a falling off there. The fishermen are of opinion that they do not get such fine mussels as they used to get. The mussels are not so good as they were formerly. Of late years they have been very small.

1763. Are there any salmon or salmon trout caught on this shore?—There are a few, but it is only a very few.

1764. Are there any salmon caught?—No, salmon trout.

1765. No salmon?—No.

1766. How are the salmon trout caught?—They are caught in the net.

1767. By a drift net or by a seine net?—They shoot them with corks.

1768. Do they draw them to the shore?—No, they are taken on board the boats.

1769. (*Professor Huxley.*) They are a kind of circle net, are they not?—Yes; they shoot them out in a sort of circle.

1770. (*Mr. Caird.*) When does that fishing begin and terminate?—They start in June and they leave off in the beginning of July.

1771. Are there any mackerel caught off here?—There are a few but they do not see many. They do not use mackerel nets here. the few they get are caught in the herring nets.

1772. Do they think it would not pay to try to catch mackerel?—I suppose they think it would not.

1773. Do not large quantities of mackerel come in here?—I have seen very heavy shoals here at times.

1774. Are there any sprats off this shore?—No.

1775. Are there any shell-fish?—Yes, there are lobsters and crabs.

1776. Are they caught in considerable quantities?—They are not as abundant as they used to be. The lobsters in particular are falling off.

1777. What do you think is the cause of that?—I believe all sorts of fish destroy the lobster spawn. There are a great many lobsters taken, too, when they ought not to be taken,—'berry-hens' as we call them.

1778. You think they are fished more closely during the whole season than they ought to be?—Yes; and we have different machines now for taking the lobsters; they take them cleaner off the ground than they used to do.

1779. Do you find that you are gradually impoverishing the lobster ground?—Yes, I think we are.

1780. Do you think the time will come when you will bring the lobsters to an end altogether?—It looks very like it.

1781. Do the crabs continue equal to the former supply?—Yes, but for part of the year they are not good in quality.

1782. Then I presume they are not saleable?—Yes, they all manage to get quit of them here, but there are great cries about their not taking the market well in the fore part of the year.

1783. Are there any regulations on this coast as to the seasons for fishing the different kind of fish, and with regard to the size of the nets?—I believe there is a fixed size for the herring nets; they are not to be below an inch.

1784. Where did these regulations come from?—I believe they came from the fishery board.

1785. Do you mean the fishery board in Edinburgh?—Yes.

1786. Do you hold yourselves liable to obey those regulations?—We do obey them in point of fact. It would not do for us to have our meshes any less.

1787. Have any other regulations been enforced here?—No, not that I am aware of.

1788. With regard to the herring fishery, is that increasing in its produce or is it decreasing?—It is diminishing.

1789. Have the boats been increasing or decreasing within the last 10 years?—They have not been increasing very rapidly. We had in 1856 51 native boats and now we have 48.

1790. Do you mean boats engaged in the herring fishery?—Yes.

1791. I believe you have a different kind of boat for the line-fishing?—Yes, a line-fishing boat is quite different from a herring-fishing boat.

1792. What number of those boats had you in 1856, and what number have you now?—There will be about 12 now.

1793. What number had you in 1856?—I cannot exactly say, but I should say that there would not be a difference of more than two or three in the number of those boats then and now.

1794. Are the same men engaged in both fisheries?—We have occasionally strange men coming for the herring fishery.

1795. Do you include these strange men in the number you have given me?—The strangers have nothing to do with the boats. They come to fish in the native boats.

1796. Is the herring fishery on the whole a more productive fishery to the fishermen than the line fishery?—Yes, I think it is.

1797. And the herring fishery extends over about two months?—Yes, from two months to nine or ten weeks.

1798. How long does the line-fishing continue?—It goes on all the early part of the year.

1799. And yet there is more money received from the two months or 10 weeks' herring-fishing than from all the rest of the year?—Yes.

1800. Then the falling off in the herring fishery is a more grievous matter than the falling off in the white-fishing?—Yes. I believe it is well known that the French fishermen come and take a large portion of the fish away.

1801. Then the falling off is not attributable to the decrease in the quantity of herrings, but to the fact that strangers come upon your grounds and take a share of the fishing?—The Frenchmen are there so constantly that sometimes we cannot get upon the fishing ground at all.

1802. Can you form any idea as to what quantity of herrings the Frenchmen catch?—No, we do not know what they take away.

1803. You cannot tell what proportion of the herrings caught upon your coast now is caught by the Frenchmen?—I should say that three fifths of them are taken by Frenchmen. If a shoal of fish comes in within five or six miles from the shore the Frenchmen immediately shoot their nets there; the next morning they bring up to an anchor on the ground, gut their fish on the ground, and heave the refuse overboard. They stop the fish from coming in to the shore. As soon as our boats leave the harbour the French immediately shoot their nets and the consequence is that our boats must either keep inside of the shoal of fish or go outside of them.

1804. Do the Frenchmen watch your boats and take their coming off as a sign for shooting their nets?—Yes, I believe they do.

1805. Within what limits do the French come?—They come within a mile, although three miles is their limit; but if I had my way I would extend it to six miles, and put a very heavy fine upon them if they came within it.

1806. Within what distance of the shore are the shoals of herrings generally?—They have not been in-shore for the last five or six years; they do not come in at all as they ought to do.

1807. Then at what distance from the shore are

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they generally taken?—There are good takes of herrings five miles off.

1808. Is that where the strongest shoals are?—They begin to show themselves at that distance.

1809. Has there been any interference with the French fishermen on the part of the Government vessels?—The Government vessels have never looked at them this year at all.

1810. Have they been as numerous here this year as they have been before?—Yes, they have been quite as numerous.

1811. Has there been any collision between the French fishermen and your fishermen?—Yes.

1812. Do your men get their nets damaged?—Yes, they are sure to do that when they come in contact with the French. The French boats carry very heavy nets; their boats are much heavier fitted up than ours.

1813. Do any other English fishermen or Scotch fishermen come here?—Yes, the Yarmouth boats come here, and they are more heavily fit up than ours.

1814. Are they as heavy as the French boats?—I scarcely think they are so heavy as the French boats.

1815. Do you then attribute part of the damage done to the fishing not only to the French boats taking the fish, but to the French frightening the fish by throwing over the refuse when they gut those which they have taken?—Yes, I think it prevents the herrings coming to the shore.

1816. But would it not damage their own fishing as well?—Yes, but they do not care for that while they are on our fishing ground. For four or five miles, off and on, they will take the ground up, and they will shoot their nets in the middle of the afternoon.

1817. Do you consider yourselves bound not to shoot your nets until after sunset?—Sometimes they are shot before sunset but only to get into a berth.

1818. Do you think it of importance, to prevent the breaking of the shoals and frightening the fish, that you should not shoot your nets until after sunset?—I would not do so if I thought the ground was clear for getting a berth.

1819. Do you think the fishermen here generally adopt that plan?—That has been the plan generally adopted all my day.

1820. Do the French observe that regulation?—No. They will shoot their nets at two in the afternoon.

1821. They do not hold themselves bound to wait till after sunset?—Not at all.

1822. Do they fish upon certain nights when you do not fish?—Yes, upon Saturdays and Sundays.

1823. Do you fish on those nights at all?—No, some of the boats go out on a Sunday night.

1824. Then there is one day a week at all events that you do not fish?—Yes, there is always one day a week that we do not fish.

1825. And the French do fish on that day?—Yes.

1826. Do you think it would be of any advantage if a regulation were established applicable to all the fishermen that they should not be allowed to shoot their nets till after sunset?—I have no doubt that it would do a great deal of good; it would help us to keep the French off the ground.

1827. But that is another question?—I do not know but that it would do good.

1828. Would you desire it if the question were put to you; do you think it would be an advantage for the general fishing of this place, and for the interest of all the men engaged in it, that such a regulation should be enforced?—Well, I think so; no advantage can be gained by shooting the nets before sundown.

1829. Is there any other regulation that you think could be adopted with advantage to the general interests of the fishermen?—I cannot say.

1830. You do not desire any interference on the part of any fishery board?—I should like the fishermen to be looked more after, and for the Government to send their cruisers to keep the French off. I do not want to fine them but to impound them for 30 days during the whole of the season. A fine of 5*l.* or 6*l.* is a mere nothing. There are perhaps two fishing boats, and a cruiser goes and takes one and fines it 5*l.* or 6*l.* Why they do not care a bit for that, not at all; but if you were to impound them for the season, or for not less than 30 days, I think that would put an end to our grievances with regard to the French.

1831. Then you look to the French as doing the most serious injury to this fishing?—Yes, we do.

1832. How many boats go out at once with herring nets from this place?—Do you mean how many boats go out belonging to this place?

1833. Yes, I mean all the boats that come here, not including the French?—Well, we have had 87 or 88 boats here this year. There have been some Scotch boats that have come here for the season as well as our own native boats.

1834. What length of nets will each boat put out?—From 20 to 30 nets.

1835. And what will be the length of those nets?—40 yards; on the rope from 48 to 60 yards.

1836. Will they average 40 yards on the rope?—The least would be that length.

1837. Then the length of the whole of the nets will be about 1,200 yards to each boat?—Yes, somewhere about that.

1838. And there are about 80 of these boats, you say?—We had 80 odd this year.

1839. Are the nets set across the run of the tide?—It depends on the wind; if the wind is westerly they shoot off from the tide, if north or south they would shoot with the tide.

1840. Are they set in parallel lines?—No, they have to set them zigzag sometimes.

1841. They will cover a great space of ground, will they not?—Yes, but the nets of the Frenchmen cover far more ground.

1842. Are there any existing laws connected with the fishery that do any injury to your fishing?—I cannot say that there are.

1843. There is nothing that interferes with you in any way? No one comes here and prescribes how you are to fish?—No

1844. You have nothing of that kind to complain of?—No.

1845. Has the condition of the people here improved or fallen off during the last 10 years?—I do not think there is much improvement.

1846. Do you think that there is any decline?—I cannot say exactly.

1847. Do you think the people are as comfortable in their circumstances as they used to be?—I know of very little difference for my part.

1848. Has not the price of fish very much increased?—It has much increased, owing to the railroad coming here—that has brought the prices up.

1849. Will a man get as much now for his small boat's catch, in consequence of the increased price, as he used to have for the large boat's catch at a lower price?—Scarcely.

1850. Will the fishermen, on the average, make as much money now as they did 10 years ago?—No, I think not.

1851. Can you give me any definite idea of the difference?—They do not get as much money now as they did a few years ago.

1852. Have the fishermen any other occupation except fishing here?—No, they have not.

1853. They do not go to farming or to work in the fields?—No.

1854. (*Professor Huxley.*) You were speaking of the sunset regulation just now; what is your reason for wishing to have it; why do you think that it would be a good thing to prevent people from putting down their nets before sunset?—I think that some regulation of that kind would keep the Frenchmen off.

1855. But do you think that it injures the shoal of fish to shoot the nets before sunset?—I do not know that, but the boats at sea have a double chance to what the boats in harbour have.

1856. I am speaking of what the effect would be on

a shoal of fish. If a man were to shoot his nets before sunset among a shoal of fish do you think it would tend to disturb the shoal?—I do not think that the fish would rise as well,

1857. Have you ever seen anything of this kind take place. Have you ever seen a shoal broken up in consequence of the nets having been shot before sunset?—I have seen many times when the boats have got down that the fish have never risen at all.

1858. That will happen sometimes at night, will it not?—We sometimes think it is occasioned by the tide being too strong or the moon too bright. We think that causes them not to rise sometimes.

1859. Have you ever seen a shoal of fish disturbed in consequence of the nets having been shot before sundown?—I could not say that I have.

1860. Suppose the Yarmouth men were more abundant than they are now; suppose they came here in great numbers, with heavy boats and tackle, could your men fish among them?—They could at a distance.

1861. But could they go among them and fish?—No; their vessels are heavier than ours, and would destroy our nets.

1862. Then the Yarmouth men would be as bad for you as the Frenchmen?—Yes.

1863. Would you have any restriction put upon the Yarmouth men?—I believe that by Act of Parliament a decked boat must keep half a mile from an open boat.

1864. Do you want to have the same regulations applied to the French boats as are applied to the Yarmouth boats?—Yes.

1865. You do not want any different regulations for the French from those which you have for the English?—I think the French should be restricted from coming within six miles of the shore.

1866. You would not keep the Yarmouth men six miles out, would you?—No, we could not do that.

1867. Do you wish to do so?—Not at all; they have to make a living on the sea as well as our own fishermen.

1868. Then what would apply to the Yarmouth fishermen you do not think would apply to the French fishermen?—No, the Yarmouth men are Englishmen as well as we; but I think it would be a hard case for us that foreigners should be allowed to come in and take the fish off our ground.

1869. Have you ever seen herrings here in January or February?—I have never tried for them then.

1870. Have you ever seen any here. Have you ever seen what is called the 'appearance' of herring then?—No.

1871. You said just now that you thought other fish ate the lobster spawn?—Yes.

1872. How do they contrive to do that?—I have seen them in the fish; I have taken lobster spawn out of them.

1873. Then the lobster must have been dead?—I have seen it down about the island.

1874. Do you know that the lobster carries her spawn about with her under her belly?—She does not carry it always.

1876. When she lays them she fastens them all to her belly and carries them about as a mother does her children?—All that I know is that I have seen lobster spawn in the fish we have caught.

1877. Has that occurred frequently?—Yes, many a time.

1878. Then they must have killed the lobster first?—Yes, very likely.

1879. Can you suggest any means of improving the supply of bait?—The bait should be got and preserved on the stakes north of Bamborough Castle. If a shipload of mussels were brought there and preserved I think it would keep all our fishermen in bait.

1880. Do you mean to say that you would establish a sort of mussel park like an oyster park?—Yes.

1881. Do you think that that would supply you with enough bait?—Yes, if it were properly preserved, and strange boats were not allowed to take it away.

1882. Would it be a costly process to construct a mussel bank in that way?—No, I do not think it would.

1883. Would it be necessary to do anything for the protection of the bed? Is there a natural bay?—Yes, there is a natural bay.

1884. You would stock the bay with mussels and have them preserved, and I presume sold at a small rate, in order to pay the expense of keeping the bank up?—Yes.

1885. Then you think that such a bed would suffice for the whole of this place?—Yes.

1886. Do you happen to know the time of year at which turbot spawn?—No.

1887. Have you any notion where the turbot spawn about this coast?—No.

1888. Do you know where the white fish spawn?—I believe they go off into deep water.

1889. Have you any reason to believe that they go south or north to spawn, or where they go?—I cannot say where.

1890. You have no precise knowledge about that?—No.

1891. You have never heard it said where they spawn?—No.

1892. Is there any tradition about it among the fishermen?—No.

1893. Have you been a line-fisherman yourself?—Yes.

1894. I believe you lose a good deal occasionally by the dog-fish?—Yes.

1895. Have you made any estimate of the amount of loss that takes place in consequence of the dogfish?—I have seen one third of the fish taken away by the dog-fish.

1896. Have you ever seen the whole of the fish taken away by dog-fish?—I cannot say that I have ever seen more than one third; I have sometimes seen less.

1897. It commonly happens that it is less?—Yes.

1898. Sometimes I suppose the lines are not touched at all?—Sometimes; occasionally we have lost a third, and the last line or two we may haul in we find all the fish gone altogether; that generally takes place in the fore part of the year.

1899. If the most ever taken is one third, would one sixth or one seventh be the average loss, taking all the year round?—Yes, I should say perhaps one seventh.

1900. Do you happen to recollect what was the price of the fish brought to the shore here 10 years ago?—No.

1901. What did haddocks fetch then?—I cannot say.

1902. You do not happen to recollect?—Not accurately. I think the haddocks would fetch nearly as much then as they would now; 13*d.* or 14*d.* a stone.

1903. What would they bring 20 years ago?—About 10*d.* a score I think it would be then for haddocks.

1904. And what would that be a stone?—There would be three stone to the score; I have caught them myself and sold them at that price.

1905. Then you did not get one fifth of the price 20 years ago that you do now?—Nothing like it; but since then the railway has passed through.

1906. Then the railway by causing a greater demand for fish has increased the price?—It has equalized the price in the villages along the coast. Cullercoats for some time had always commanded a higher price, being nearer a market town.

1907. Does that increase of price apply to all white fish?—Yes, all white fish.

1908. It has not affected herrings?—I think they are rather on the decrease; this last year or two they have been about 1*l.* a barrel.

1909. But the price of white fish has increased four or five times during the last 20 years.

1910. (*Mr. Caird.*) Is the bay you mentioned where you think mussels should be planted used for any other purpose?—No; the people gather cockles about the bay.

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1911. But is there plenty of space upon which to plant a mussel bed?—Yes.

1912. Then is it nobody's interest to do that?—Nobody has done it yet.

1913. The proprietor has not thought it worth his while?—Nothing has been done. I believe that part of it belongs to Earl Grey.

1914. Is there any dispute as to whether the foreshore belongs to the proprietors of the land or to the Crown?—I never heard of any dispute.

The witness withdrew.

T. Pringle.

THOMAS PRINGLE called and examined.

1915. (*Mr. Caird.*) Are you a native of North Sunderland?—Yes.

1916. Have you been a fisherman here all your life?—Yes.

1917. Do you practise all the kinds of fishing that are practised on this coast?—Yes, I follow all the different kinds of fishing.

1918. Line-fishing, herring-fishing, and fishing for shell-fish?—Yes.

1919. Do you fish for soles?—No, we never try for soles here.

1920. There is no trawling for soles here?—No.

1921. How many years have you been familiar with the fishing here?—All my life.

1923. Did you hear the evidence of the previous witness?—Yes.

1924. Do you agree with him that there has been a gradual falling off in the quantity of fish caught off this coast?—Yes, I quite agree with him.

1925. And do you think that the quality of the fish has decreased in your time?—The fish are not so large as they were.

1926. In what kind of fish do you notice a perceptible decrease; which of them have become smaller?—Haddocks are a good deal smaller, and turbot-fishing has disappeared.

1927. Has it disappeared entirely?—Yes.

1929. Have you noticed any difference in the quantity of the fish brought here after a south-east gale, and after a north-east gale?—We like a south-east gale for fishing on this coast better than a north-east gale.

1930. There has been no deep-sea trawling off your coast yet?—Not that we have seen.

1931. You have never yet seen a trawler off your coast so far north?—No.

1932. To what do you attribute the falling off in the line-fishing?—We blame the trawlers for taking away the spawn of the haddock in the deep water; we cannot think of anything else.

1933. On what part of the coast do you think that that injury is done?—We think that the fish come from the deep sea, and that the trawlers outside trawl up the spawn and destroy it.

1934. But you said that there were no trawlers here?—But on the south side there are plenty of them off the Yorkshire coast.

1935. Yet you say that the south-east gales bring you in more fish?—Yes, the haddock comes from there.

1936. Do you find much inconvenience in consequence of the want of bait?—Yes, a great deal occasionally.

1937. Is the price of bait increasing?—It has increased during the last three years.

1938. What did you formerly pay for it?—We paid 28*s.* for it from Port Glasgow; last year we paid 32*s.*

1939. Is there a large quantity brought from port Glasgow?—Not last year, but the year before that there was. For a few years past it has been diminishing.

1940. What is the reason there has been a falling off; do you get it cheaper elsewhere?—We pay about 28*s.* for it from Boston, when the vessels call with it.

1941. How much bait will each boat use in the course of the fishing season?—Four men will use about 30*s.* worth in one boat in the course of a month.

1942. That would be about a ton?—Yes.

1943. How many months in the year do you fish?—We fish all the year, except during the time of the herring-fishing, but we do not use so much bait all the year round. When we go regularly catching haddocks we use about a ton a month.

1944. Do you think that you use about six tons a year?—Yes, I should say we do.

1945. And that would cost you between 9*l.* and 10*l.*?—Yes.

1946. How many boats are there employed in the line-fishing?—I can hardly tell; about 12, I think.

1947. Have you noticed that the herring fishery has fallen off in quantity?—Yes.

1948. How long is it since that became appreciable?—During the last five years it has been less than it was before.

1949. Does it not vary very much? Is not the herring fishery good one year, another year middling, and another year very bad?—Yes.

1950. But during the last few years it has been falling off every year?—Yes, it has been falling off every year.

1951. Have you any reason to assign for that?—I can blame nothing but the French.

1952. Do you suppose that the trawlers do any part of the damage here?—We cannot tell; we do not think they do.

1953. Do you think that there are as many herrings off the coast as there used to be?—Strong shoals come in occasionally, but we have no chance with them.

1954. Then it is not because the herring has decreased, but because the number of people to take them has increased, that you do not get so many?—Yes.

1955. And the increase has been chiefly in the number of French fishing boats?—Yes.

1956. Do you agree with the previous witness that two thirds of the herrings are taken away by the French?—Yes, I think so.

1957. Would it be advantageous to establish a regulation not to permit the nets to be shot before sunset?—Yes, I think it would.

1958. Would it be of advantage to yourself, as a fisherman, if everybody had to do that?—Yes, it would give us a chance with the French.

1960. Is there any suggestion you can make that you think would be of advantage to your fishing here?—I cannot tell, unless it is in regard to the French. I do not know that anything else would be a benefit.

1961. Is there any restriction at all that operates upon you—any legal restriction that prevents you from fishing as you would like to fish?—No.

1962. Then you are not interfered with in any way?—No, we are not interfered with.

1963. What does a boat cost, one of those full-sized herring boats?—A full-sized herring boat will cost about 80*l.*

1964. And the nets and tackle, and everything ready for fishing; how much will everything come to?—I should say it would cost about 200*l.*

1966. And how much would be required to keep that good every year?—That would depend upon the losses you might sustain. If you did not come to any loss I do not think it would take much during the first three or four years to keep the boat good.

1967. After that it would begin to cost more?—Yes, after that the boat would begin to want repairs; not the nets.

1968. Can you form any estimate as to what the cost on the average would be, taking the period which a boat might be estimated to last?—I can hardly give you any idea. Taking an average, it would

Perhaps cost 5*l.* to keep the boat up. I mean the boat alone without the nets.

1969. What do you suppose it would cost to keep the nets ?—It would not cost much if you did not lose them. You could repair them yourself.

1970. You take your chance then with regard to that. What would it cost do you think on the average ?—I cannot say, perhaps 5*s.* a net will keep the nets good.

1971. How long will the boat last on an average ?—A boat will last about 20 years here. In other places she will last much longer.

1972. Do you find that with the higher prices which the fish bring now, although you are catching fewer of them practically, you are as well off as you used to be ?—No I think we are hardly as well off.

1973. You do not think you are ?—I do not think that we make as much money as we did a few years back.

1974. (*Professor Huxley.*) Do you agree with what the previous witness said about the difference in the price of fish 20 years ago ?—Yes.

1975. The price of white fish on the average is four or five times greater now than then ?—Yes ; four or five times greater.

1976. Did you hear what we were saying about the establishment of a mussel park ?—Yes.

1977. Do you think that that would be practicable ?—Yes, I think that that would be an advantage.

1978. Would that supply you with sufficient bait if it were properly regulated ?—Yes, I think it would.

1979. You think it would supply you with 60 or 70 tons of mussels in the course of a year ?—Yes.

1980. Have you any notion where the white fish spawn ?—We think they go off into deep water and spawn there, but I cannot tell you where.

1981. Do they go north, south, or east ?—That is a mystery.

1982. You have no particular reason for thinking that they go to either the one or the other ?—No.

1983. Have you heard of or seen any herring here in January or February ?—No.

1984. What do you think of the sunset regulation—the prohibition from shooting your nets before sunset. I do not put the question in reference to keeping you free from the French, but do you think that shooting the nets before sunset damages the shoal ?—I think it would be a good plan not to shoot before sunset.

1985. Do you say that because it would give you a fair start with the French ?—Yes, perhaps it would hurt the shoal of herrings if we were to shoot our nets long before sunset.

1986. You think it would. Have you seen it take place ?—No.

The witness withdrew.

William Spears called and examined.

W. Spears.

1987. (*Mr. Caird.*) Have you been long a fisherman here ?—I have been 13 years a herring-fisherman here.

1988. Do you not follow the line-fishing also ?—Yes, I have been six years a line-fisher.

1989. In the six years you have been line-fishing, have you noticed any diminution in the quantity of the fish ?—When I started first the fish were much more plentiful than they are now : we get larger prices now, but not so many fish.

1990. Speaking of your own boat, how many would you bring ashore six years ago in one day's fishing ?—From 30 to 40 stone.

1991. Was that a good fishing, or average fishing ?—We considered it an average.

1992. What do you get now ?—From 10 to 15 or 20 stone. About 15 is as much as we can get on an average.

1993. Is there any diminution in the size of the fish as well as in the quantity ?—I think the fish are smaller than they were when I first went to the fishing.

1994. What kind of fish do you refer to ?—Halibut, haddock, cod, and ling ; there is not so much difference perhaps in the ling and cod ; it is principally in the halibut and haddock.

1995. With regard to the herring fishery you have had a longer experience of that ?—Yes.

1996. Do you notice any falling off in the quantity ?—Yes, we have been successful in some years, but this year and the last year we have been lessening yearly. I think it is the French that is the cause of the falling off.

1997. What would be the produce in money now of one boat in a successful season ?—From 100*l.* to 120*l.*

1998. That would be a boat with four men ?—Yes, four men and 25 nets ; that would remunerate us for our services if we got that.

1999. What would you get last year ?—We should not average more than 65*l.*

2000. Has the price of herrings remained the same ?—No, it has greatly fallen off. We had 1*l.* a barrel two years ago ; last year it was only 16*s.*, and this year it has not averaged more than 13*s.* That is owing to the markets being bad.

2001. With that difference in price, you must have caught as many fish as you caught two years ago ?—No, I have had 45 cran of fish this year.

2002. How many fish is there in a cran ?—It will depend on the size they run to. It will average from 600 to 800.

2005. Do you think as many herrings come off the coast here as used to do ?—I believe that the fish cannot get on to our coast for the French fishermen.

2007. Do you think that the fish have decreased, without reference to those which are taken by other people ?—Yes.

2008. Then the fish have decreased from various causes ?—Yes, but I think the French fishing boats are the greatest evil ; the fish cannot get on to our coast in consequence of their boats lying off the shore. They gut the fish that they have caught the night before and throw it overboard, and that keeps a lot of dog-fish around them, and the fish cannot get in.

2009. Do the dog-fish frighten away the herrings ?—I have no doubt that they injure the fish. They get into the nets and eat the herrings out after they have got in.

2010. Where do the herrings go when they leave your coast ?—I am of opinion that they go south, but we cannot tell.

2012. Do the same French fishermen come to you as go to Cullercoats and Newbiggin ?—Yes.

2013. Are they the same boats ?—Perhaps they are here to-night and there to-morrow night ; they follow the fish along the coast.

2014. Do you find in the fishing season that every night when you go out to shoot your nets you have the French among you ?—Yes, from the 10th of August to the 10th of September.

2015. Where do you find the fish ?—Often at about a mile from our shore, and the French boats come in there if they are sure of finding the fish.

2016. Does anybody go there to warn them off ?—We have had no protection this year at all.

2017. Has there been any difference in that respect this year as compared with former years ?—Yes. We had two gunboats last year, and the year before we had the Victoria cutter, which did her duty well. Since then we have not had any.

2018. Did you get more herrings then ?—Yes, we were very successful.

2019. Then do you attribute the falling off in quantity to the French fishing boats ?—We had better protection then.

2021. Do you say that your failure this year is owing to your not being protected by the Government against French fishing boats ?—I blame it partly to that. Most of the failure this year has

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been in consequence of the fish being unable to get in owing to the Frenchmen.

2022. Do you agree with the evidence of the previous witness, that the French fish every day in the week, and that one day you do not fish?—Yes; we fish every day except Sunday.

2023. The French fish on Sunday?—Yes.

2024. Do the French shoot their nets at all times during the day?—Yes. If we were to go out at three o'clock in the afternoon, if they saw us they would shoot their nets at once.

2025. Do you not think it important, to prevent breaking the shoal of fish, that the nets should not be shot before sunset?—Yes, I do.

2026. Do you think it would be of advantage to have a regulation that should prevent fishermen from shooting their nets until after sunset?—Yes.

2028. Is there any other regulation you think would be of advantage?—I consider that we have insufficient protection on our coast as regards the French fishermen. We want five or six gunboats or more; and we want these gunboats, when they come, to do their duty. Those which are here do not do their duty. We never see them; they lie in Berwick harbour. I would make North Sunderland the centre, and require them to do their duty.

2029. From the Tyne to the Tweed?—Yes.

2030. Have you observed the effect of a south-east gale and of a north-east gale in bringing in the fish?—Yes.

2031. Which brings in most fish?—We always get more after a south-east gale than any other.

2032. Is that occasioned by any configuration of the shore, or by the protection given by Fern Islands?—I cannot say. The fishermen consider that if the food comes in from the sea the fish will follow it. We consider that that is the means by which we get more fish after a south-east gale than after a westerly gale.

2033. Then you consider that the food comes principally from the south-east?—Yes; it is a sort of small sile that they come after.

2034. You are not restricted from fishing in any way that you may think profitable to yourself?—No, we have our own liberty.

2036. Do you know anything about trawling?—No. We do not see trawlers here. I think the reason is that our ground is too hard or they would come here. At the same time I think the trawlers have greatly increased in other places. Sometimes I can send fish to the market and get 3*s*., 4*s*., and 5*s*. a stone, but the trawlers send in their fish against them, and I cannot get that price I ought to do for them. I think they do us an injury in that way, although they do not trawl here.

2037. You think the trawlers lower the prices by bringing in a larger supply of fish?—Yes, but their fish is stale fish. Our fresh fish always fetches more money than the trawled fish.

2038. Do you waste any fish by destroying immature fish, or fish not of a proper size?—No; we fish by hooks, and the smaller fish do not take them.

2039. Then you do not practise any mode of fishing that would destroy the fish unnecessarily?—No.

2040. Do you destroy the spawn of fish by the mode of fishing which you practise?—No.

2041. I understood you to say that you do not trawl for soles here?—No, there is not such a thing as a trawl in North Sunderland.

2042. (*Professor Huxley.*) You were speaking of 'sile,' do you mean by that small young fish?—Yes.

2043. Have you any sprats here?—I never saw one to my knowledge.

2044. Do you not think that some of the sile are sprats?—That is a question which I cannot answer.

2045. Do you know the sprat when you see it?—I know the garvie from the sprat and the small herring too.

2046. Do you think they are different things?—Yes, that is my opinion.

2047. What do you think is the difference between the garvie and the sprat?—The difference is in the dorsal fin.

2048. Is the dorsal fin of the garvie further back or forward?—It is further back.

2049. So that if you hold him by the dorsal fin the head will go down?—Yes.

2050. And if you hold the sprat the same way the head will go the other way?—Yes.

2051. Do you not think that the sile are young herring?—That I cannot say.

2052. Is there not some difference in the belly of the garvie and the sprat?—Yes, it is rough.

2053. Which is the rough one?—The garvie I call the rough one.

2054. Then you get the rough-bellied one here?—Yes.

2055. That is what you call the garvie?—Yes.

2056. Well, we call it the sprat. Do you not think the smooth-bellied ones may be young herrings?—That is a question I cannot answer.

2057. What time of the year do you find garvies here?—We never have them here much. We have a young herring here from the beginning of May to our own fishing time.

2058. You do not get the garvies here?—We do not catch the garvies here.

2059. But you do the sprat?—There are no sprats here.

2060. Neither garvies nor sprats?—We do not get them, but we see them frequently from the month of May up to our fishing.

2061. Do you include young herring among the sile?—No.

2062. Do you think that the south-east gales drive the sile in?—Yes, and the fish follow the sile.

2063. What sort of fish is the sile; is it like the garvie?—No, it is a small insect; what we call the 'sile' is a food; it is not a fish.

2064. Is it like a little shrimp?—No, it is like a small insect. It is food or sile.

2065. It is not like a small shrimp?—No.

2066. Has it legs?—No, it is round; it has no legs. We never have them in our hands. I have merely seen them when I have been looking in the water.

2067. How big are they?—They are larger than a pin's end, I think.

2068. Quite a round thing?—Yes.

2069. Do they shine much at night?—No, but when the water is quite smooth you can see them.

2070. Can you see them in the daytime?—Yes.

2071. Did you ever get them out in your hand; are they firm enough to come out?—I have never had them in my hand.

2072. You heard what was said about the mussel park, do you think that a good plan?—I think it would be very beneficial to our place. I quite concur with the other witnesses upon that point.

2073. You heard the question asked about the waste in the line-fishing, in consequence of the dog-fish, and so forth; do you think that the proportion given to us is correct, namely, that they destroy about one seventh of the fish?—I quite concur with the former witness. We have a deal of loss at times.

2074. Have you ever observed that the shooting of the nets before sunset breaks the shoal?—I think it is injurious to the fish, and prevents it from rising. My opinion is that if we did not shoot our nets till near sundown the fish would rise readier towards the nets. The nets darken the water, and keep them from rising. I think it is injurious to the interests of the fishermen generally to shoot their nets before sunset.

2075. Do you think that it breaks the shoal?—Of course, when we shoot too soon at night they rise inside. I think it darkens the water, and when they begin to rise they go off.

2076. You do not think that it disperses the shoal?

—It is a means of dispersing the shoal too. They will not rise among the nets.

2077. Do you think that it breaks the shoal of fish as you would frighten a flock of sheep asunder?—I think it does. Either the outside boats or the inside boats will catch the fish, while there are none at all in the middle.

2078. Then it drives them on each side; it does not disperse them?—Yes, it drives them on one side.

The witness withdrew.

WILLIAM ROBSON called and examined.

2079. (*Mr. Caird.*) Are you a fisherman here?—Yes, I have been so for a long time.

2080. How long?—For 36 years.

2081. You have heard the evidence given by the previous witnesses?—Yes.

2082. Do you agree with them generally as to the diminution in the quantity of fish caught here?—Yes, they have very much diminished in some respects, but I think there are nearly as many herring. Indeed, I think there have been more herring this year than I have ever seen before.

2083. But you are not able to catch as many as you used to do?—No.

2084. What has been the cause of that?—The French, nothing else.

2086. Has that interference taken place within the limit of three miles?—No, about four miles.

2087. Then, is the largest fishing which the French make beyond the limit of three miles?—Yes.

2088. About four miles?—Yes, about four miles, in two and three and twenty fathoms water.

2089. Do you agree with the other witnesses that the French fishermen take about two thirds of all the fish caught here?—I cannot say that. There is a deal caught off our coast.

2090. What proportion do you yourself think they take?—Well, I should say one third.

2091. You think one third will be about the mark?—I think so. There is, however, one thing. Wherever the fish are, there they are. If they don't get them themselves, they prevent us from getting them. The boats follow them.

2092. Then do they do a deal of harm besides catching the fish?—Yes, they encourage the dog-fish.

2093. Do you think the dog-fish frighten the shoals?—Yes, they stop us from getting the herring. I have seen them take 20 barrels of fish out in half an hour. We have got 20 barrels in one haul, and afterwards, in half an hour, on hauling our nets we got none.

2094. Was that out of one net?—No, out of 25.

2095. But it was out of one boat's nets?—Yes.

2096. Then you think they encourage the dog-fish?—Yes.

2097. Do you mean in consequence of their throwing over the guts of the fish; do you regard that as a serious evil?—Yes.

2098. Do you think that if a restriction were put in force prohibiting anybody from throwing over fish-guts into the sea upon the fishing ground it would be of advantage to the fishing interest generally?—Yes, I think it would.

2099. And would it be of advantage to the French fishermen too?—I think if you were to keep them away altogether it would do more good. If we shoot our nets before the Frenchmen, then they come and shoot amongst us. The other night seven or eight of us were fishing off here. We had a good haul, and they immediately came among us. Of course, we had to take our nets up. For my part, I attribute the blame of the bad fishing to the French fishing boats.

2101. Do you concur with the other witnesses as to the less amount of protection which has been given to you during the last year against the Frenchmen compared with previous years?—We have never been protected against them at all this year. I myself have sustained some loss.

2102. What damage did you receive?—I had nine nets in one of the boats destroyed one year—lost altogether—two or three new nets were partly lost and damaged.

2103. Was that by the Frenchmen's nets coming upon yours and destroying them?—Yes.

2104. Was it in consequence of the greater strength of the French nets?—They were not clear of our nets, so they took out a knife and cut us away.

2105. Did you know the French boat that did that?—Yes.

2106. Did you not endeavour to get some recompense from him?—Yes, and here is a letter I got upon the matter. They were within our limits. I did not sound the water. I knew very well what it was. But I had no evidence that they were about two and a half miles off, because we did not swim the water. I think our people will not interfere with the Frenchmen, as far as I can see. I saw the Frenchman heave a piece of our net into his boat. He had cut it off altogether. He did not clear the nets, and therefore he cut them away.

2107. I have read the letter you say you have received, and I find that the commander of the Alert tells you that a proper representation has been sent in to the French ship off this coast of the damage you sustained?—Yes.

2108. Has any further proceeding occurred?—I have heard nothing further yet.

2109. Then you may receive some compensation?—Yes, I may get something.

2110. (*Professor Huxley.*) It has not yet been possible to seize the boat according to this letter?—It appears not. I had a Holy Island pilot on board who said the French were within the limits.

2111. (*Mr. Caird.*) Would sounding the depth of water have told you the limit?—Yes. We told them what the sounding was, but they would not take it. The limit is three miles, and they were within that.

2112. Is the herring-fishing more productive to you than the line-fishing during the whole season?—Yes, I think so.

2114. Then your experience is mostly with regard to the herring-fishing?—Yes, and fishing for lobsters and crabs.

2115. Have lobsters fallen off?—Yes; they are taken in the wrong season. A great many of them are taken.

2116. What do you complain of about that; is there any suggestion you could make that you think would remedy the evil?—The only thing would be to stop them from being taken at such times.

2117. You would have some regulation established to prevent their being fished for in an improper season?—Yes.

2118. What regulations would you propose?—I think none should be taken after May. They are quite in spawn then.

2119. During the month of May?—Yes, and after that too. They take them up to May and June, and then they lose money by them. It is only to accommodate the fishmongers that they do take them.

2120. Do you think it would be of advantage to prevent lobster-fishing from the month of May to the month of December?—They might fish them from December to March.

2121. With regard to crab-fishing, have you any observation to make upon that?—Nothing. But I think we get smaller ones than we used to do.

2123. Would you have some restriction as to the size at which crabs should be taken?—They are small ones that they take. They can tell by the eye that they are not fit for market.

2124. Do you desire to have any legislative restriction passed with regard to yourselves either with respect to one kind of fishing or another?—I think that the lobster-fishing at an improper time should be stopped. I have nothing else to suggest.

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2125. With regard to the herring or white-fishing, would you like to have any rules established that should bind the whole of the fishermen ?—No.

2126. Do you not think it advisable, for instance, that there should be some regulation with regard to shooting your nets before sunset ?—I think we ought not to shoot our nets until half an hour before sunset.

2127. Do you think it would be injurious to yourselves if you were prevented by law from shooting your nets before sunset ?—I think not; if you say half an hour before sunset, that would not do much harm, and it would be the means of enabling us to get more fish. The herring often fall with the tide before we fish.

2128. (*Professor Huxley.*) What time of the year do they catch berry fish among the lobsters ?—They come in shore about May.

2129. What time of the year do you get them in that state ?—In the beginning of December.

2130. You catch them as berry-fish in December ?—Yes, but in May and June generally. There are some, however, all the year, but not many.

2131. You have some every month ?—Yes.

2132. And when do you get most ?—In May and June. They are almost all berry-fish then.

2133. Let me ask you a question about the dog-fish. Do they not always follow the herring very largely ?—If there are late shoals they do.

2134. Do not the dog-fish hang on the outside of the shoal ?—Yes, if there is a heavy shoal they will. The gutting, however, encourages them a great deal.

2135. But do the dog-fish want any encouragement to follow the herring ?—I think they always follow some kind of fish.

2136. Do you think they ever leave the outskirts of the shoal of herring alone ?—No. In the fore part of the year they are always among them.

2137. Do you think it makes a great deal of difference whether they have the gut thrown overboard or not ?—Yes; I think it is an encouragement to the dog-fish, and I do not think that it is right to do it.

2138. Do the French gut the fish on the fishing ground ?—Yes.

2139. Do they anchor when they do so ?—If it is calm weather they do.

2140. Suppose that a shoal of herring is about here, will the Frenchmen follow them down and gut their fish eight or nine miles off ?—Most of them will gut the fish where they get them. Sometimes they lie a long time on the same spot.

2141. You heard what was said about sile. Do you agree with what was said ?—I used to catch turbot upon the coast, and I have seen this small sile.

2142. What do you call 'sile,' is it the same thing that the last witness meant ?—No. I never saw what he was talking about, but I have seen the sile that fetched the turbot round.

2143. What kind of thing is that ?—It is a long thing, red and soft. We used to find it in the nets. It is rather nice to look at. I never saw the small thing the other witness spoke about. The sile that I speak of would be all over our nets. Whenever it was in the nets you would be sure of catching turbot. But the turbot have diminished so much lately that we have not tried turbot-fishing.

2144. When this sile is swimming, does it work like closing the hand ?—It did not seem to have life in it.

2145. Does it break up into little pieces ?—Yes, into very small pieces; sometimes so small that you could hardly perceive it.

2146. Is there a reddish or brownish dot on the pieces ?—There is a red stream that goes down it. It is transparent. But of course there is always some sort of sile or other that comes in when the fish come in.

2147. Is this sile that you have been talking about on the surface ?—No, at the bottom, but I have seen it nearly at the top also.

2148. Do you agree with what was said about establishing mussel parks ?—Yes. If the one we had had been protected it would have been there now. But it was allowed to be destroyed. So many boats were allowed to take the mussels away that at last they took all away.

2149. Do you think that if it were filled up again there would be plenty for this place ?—Yes, if the proprietors would protect it, and that would be very easy.

2150. Have you ever seen the herring here in January and February ?—No. With regard to the mussel beds, I believe that those to whom the property belong were never asked to protect them.

2151. (*Mr. Caird.*) Has any bed been laid down ?—Yes, at Alnmouth.

2152. How many miles is that south of this ?—15 miles.

2153. Is it long since a mussel bed was laid down there ?—About two years ago.

2154. Has it been successful ?—I believe it has. We had some last year, I know.

2155. Do you think it is as well adapted for a mussel park as the other bed which has been spoken of ?—No, there never was a better place than the one before mentioned.

2156. Do you attribute the falling off to the ploughing-up of the mussel bed in old times ?—I have heard my father talk of its having been ploughed up, but there were plenty of mussels on it in my time. There were acres.

2157. Since it was ploughed up ?—Yes.

2158. Then do you think that the damage was caused by taking too many away ?—Yes, they took all of them bodily away.

2159. (*Professor Huxley.*) Do they throw the little ones into the sea ?—They took all of them away.

2160. (*Mr. Caird.*) If there had been protection to that bed you think it would have been advantageous to you ?—Yes, or if they had picked the mussels there would have been plenty left yet.

2161. And you think it might be restored by careful regulations ?—Yes.

2162. (*Mr. Lefevre.*) Did these mussel beds belong to private individuals ?—Yes.

2163. Did they make you pay for getting mussels from them ?—Yes, we used to pay a penny in our time.

2164. Was that just as an acknowledgment ?—Yes.

2165. (*Professor Huxley.*) You would not object to pay a fair price, would you ?—Well, I don't need any myself.

2166. Do you recollect the price of white fish 20 years ago ?—Yes.

2167. What did the haddock sell for then ?—There are 20 in a score now; there were 25 in a score then, and we found it hard work to get a shilling a score.

2168. What do you get now ?—We get 15*d.* a stone now.

2169. How many stone will go to a score now ?—From 3 to 3½.

2170. So that you now get 5*s.* for a score ?—Yes.

2171. Then 20 years ago you got a shilling for what you now get more than 4*s.* ?—Yes.

2172. Have the other kinds of white-fish improved in price in the same way; do you get the same increase in price in comparison with what you got 20 years ago ?—Yes, about the same.

2173. And how is it with regard to the herring ?—They are down now to a very little price.

2174. Is the price the same as it was 20 years ago ?—No, it is about as much again; 20 years ago I was fishing for 8*s.* a cran. They have risen since the railway was made.

2175. As a general rule, has the price risen since the railway was made ?—Yes.

2176. (*Mr. Caird.*) The railways have improved the price ?—Yes.

2177. (*Professor Huxley.*) Then the railway has done you good ?—Yes.

The witness withdrew.

BENJAMIN MORTON called and examined.

2178. (*Mr. Caird.*) Are you a fisherman here?—No, I am a herring-curer.

2179. Do you purchase a large proportion of the herrings that are caught here?—We buy our share. During the last year we have purchased between 1,100 and 1,200 crans at this place.

2180. How many years have you been engaged in this business?—The firm to which I belong has been engaged in it for about 23 years.

2181. Can you give us any particulars as to the quantities you have bought in any given year during that period?—It has ranged to from 800 up to 1,600 and 1,700 crans.

2182. Has it varied from year to year, or has there been a gradual diminution?—It fluctuates very much. Taking the average of the boats, it has been much less within the last six or seven years than in previous years. Since 1852 there has been a gradual decrease in the average takes of the boats.

2183. Has the total quantity that is cured here been decreasing?—It is difficult to ascertain that. I think it is much about the same. But the fish are divided amongst a greater number of boats. It is much less than the average for each boat.

2184. But you think the total quantity is about the same?—The total quantity caught is, I think, about the same. A good deal goes away fresh.

2185. Then there are fluctuations from year to year, but no decline in the total quantity?—Yes, but it is much less as an average for each boat; and as it is at present, and as it has been for the last two or three years, it is neither paying curer nor catcher.

2186. To what do you attribute that?—We attribute it entirely to the encroachments of the foreign fishermen, and we think that if the treaty between France and England were properly carried out it would afford ample protection for our fishermen, and the trade would thrive as it did in former years.

2187. In what respect do you think the treaty would afford ample protection?—I have the treaty here, and I will point out some of its articles where I think the treaty is openly violated. For instance, take article 30. That article of the treaty says:—"The decked boats on their part shall shoot their "nets to leeward of the undecked boats, unless they "prefer going to windward, to a distance of at least "half a mile, to shoot their nets."

2188. Is that the treaty between France and England?—Yes. I think it is very proper that that article should be enforced, because the decked boats are much heavier and their gear is much stronger. They drive faster than our boats, and if they do not keep that distance off in a very short time they become foul.

2189. Is that not a regulation that applies to decked boats of our own as well as to those of France?—Yes, but there are very few decked boats of ours that fish on this coast.

2190. Is that article not observed by the French fishermen?—No, it is most openly violated.

2191. Is there nobody on the part of the British Government who interferes with the decked boats, in order to protect the undecked boats?—No; I am sorry to say that our Government have been very lax in the protection they have afforded to our fisheries for the last few years, and they send down very unsuitable vessels. We have a large steam corvette here of about 26 guns, and it would be a great expense to keep that ship running among our fisheries. The duty should be distributed among small light-handed gunboats.

2192. (*Professor Huxley.*) I presume that you are now speaking of the Alert?—Yes, she is much too large. What we require is light small-handed gunboats, and we want a sufficient number of them on the coast. In my opinion it would take at least six of them to protect the fisheries between the Tweed and the Tyne. The French fishermen are now getting so daring that they cannot be kept off.

2193. (*Mr Caird.*) What is the length of the coast between the Tweed and the Tyne?—Between 50 and 60 miles.

2194. What is the next article in the treaty which you say is violated?—I will refer you to article 33. That article says:—"If, however, it should "happen that the spot where fishing is going on, and "consequently where the herrings are, should be so "near to the fishery limits of one of the two countries "that the boats of the other country would, by "observing the above-mentioned regulations, be prevented from taking part in the fishery, the said "boats of the other country shall be at liberty to shoot "their nets at a less distance than that prescribed in "the preceding articles for decked and undecked "boats, but such fishermen as may take advantage of "this permission shall be responsible for any damage "or losses which their drifting may cause to the other "boats." Now the damage is always done to our boats, but they cannot get sufficient compensation from the French fishermen for the damage done to their nets.

2195. Is there anything else in the treaty to which you wish to refer?—Yes, article 49; that is an article which has reference to the French fisheries. It applies to oyster beds, but its principle is equally applicable to our fisheries. The article says: "It is forbidden to throw into the sea on oyster fishing "grounds the ballast of boats, or any other thing "whatsoever which might be detrimental to the "oyster fishery." By throwing over the refuse the French make in cleaning their fish, they encourage on the fishing ground immense quantities of dog-fish which prey on the herring and prevent them from coming on the ground.

2196. That, then, is a suggestion for an amendment of the treaty?—Yes.

2197. (*Mr. Lefevre.*) You think that that article should be extended generally, instead of being confined to the oyster beds?—Yes; the principle is very good, and it ought to be adopted generally.

2198. (*Mr. Caird.*) Is there anything else to which you would refer?—Yes, I would refer you to article 52, which says: "It is forbidden to all boats to anchor "between sunset and sunrise on grounds where "herring or mackerel drift-net fishing is going on." Now in calm weather the French fishermen never leave the fishing ground; they have nothing but their sails to depend upon, and they might be prevented from going back to the fishing ground.

2199. Is that clause of the treaty constantly violated?—Yes, they violate it in order that they may get sooner upon the fishing ground.

2200. Is there any other point?—Yes, article 87. That article says: "It is forbidden to herring drift-"net fishing boats to shoot their nets earlier in the "day than half an hour before sunset, except in "places where it is customary to carry on the drift-"net fishing by daylight." Now, whatever time our boats go off, the French fishermen go off earlier, being at sea, and they shoot their nets on the fishing ground in order that they may have what they consider to be the best berth on the ground; the consequence is that our men must take the off side, and they have the chance of getting worse fish, or none at all.

2201. Then do you think it would be of advantage to enforce compliance with that clause of the treaty?—Yes.

2202. Are the French in the habit of violating it?—Yes.

2203. Is there anything else?—I think there is nothing more in the treaty that I wish to call your attention to.

2204. The only suggestion you make is an addition to the clauses of the treaty, namely, that the clause which applies to throwing the refuse on oyster beds should be generally applied to all fishing grounds?—Yes; I may state too that the French have induce-

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ments to fish on this coast more than any others from the shelter afforded them by Holy Island, the Fern Islands, and Coquet Island, where they are sure of finding safe anchorage.

2205. For these reasons do you think that they congregate more upon this coast than upon the Scotch coast?—I have asked several fishermen and they say that the Northumberland coast is more infested with Frenchmen than any other, and in their opinion the reason why no other part of the coast is so much annoyed as this, is, that they can get such capital shelter among the islands here. In other places they would have no shelter, and would have to remain out at sea exposed to all weather.

2206. In that treaty is there any definition of the line of limit within which the English fishermen are not to fish on the French coast, and within which the French fishermen are not to fish on the English coast?—Yes, three miles.

2207. Is there any place on the French coast that the English fishermen are not allowed to fish upon at all?—No, I think not.

2208. Then the three-mile limit is applicable to both countries?—Yes; one nation has the right to fish up to three miles of the coast of another nation. All the sea outside that is quite open to both countries.

2209. Is there any other remark you wish to make?—No, I think not.

2210. (*Mr. Lefevre.*) Have the French boats increased in number lately?—It has always been the law that they should not buy herrings cured or caught by English fishermen. Since 1852 the French Emperor has rigidly enforced that law, and the result has been that since that year the French fishing vessels have very greatly increased.

2211. Since 1852?—Yes, and year by year they are increasing. Unless something is done in the matter the business will not be worth following, either by the curers or the catchers.

2212. But previous to 1852 they caught fish, did they not?—Yes, but now they are not allowed to buy fish from our fishermen. There is a high duty on the fish caught by the foreign fishermen.

2213. You mean a bounty?—Yes.

2214. I suppose that previous to 1852 instead of fishing off the coast their fishermen bought fish, and went off with it?—Yes.

2215. And since 1852 they have been obliged to fish the ground themselves?—Yes.

2216. Can you tell what number of French boats fish this ground?—I have seen close upon 100 vessels lying under the island and Dunstanborough Castle.

2217. Were these boats collected there in consequence of rough weather, or were they the ordinary boats fishing off the coast?—They were all French fishing boats fishing off the coast.

2218. At what distance?—Wherever the fish were lying.

2219. I suppose they follow the fish?—Yes, wherever the fish are the Frenchmen are always sure to be.

2220. (*Professor Huxley.*) Do you happen to know what is the average distance at which the fishermen fish off this coast; how far do they go commonly to get their herring?—It varies considerably. In the earlier or later part of the year they go nine or 10 miles; in the middle of the season five or six miles to within two miles.

2221. These regulations would seem to apply, strictly speaking, only to the three-mile limit?—Yes.

2222. Outside the three-mile limit, if the French boats shoot first, the English boats that come out are bound to shoot either to windward or leeward of them?—Yes.

2223. Then the enforcement of this Convention would not remedy the evil?—I know it is a delicate matter, but the French vessels do shoot on the weather side of our boats.

2224. But they may do that if they shoot at a distance of half a mile?—Yes, but they often shoot within a much less distance, and our men know perfectly well that they must haul in their nets, because their boats will not drift with the French boats.

2225. I am speaking of the possibility of remedying the evil by enforcing the articles of the Convention?—Yes.

2226. But it does not appear that the articles of the Convention would remedy the evil, because if the Frenchmen shoot their nets first the English fishermen are bound to go outside or inside of them, and not in the middle of them?—Yes.

2227. So that enforcing the conditions of the Convention would not remedy the evil?—No it would not.

2228. To remedy the evil, the Convention itself must be altered?—Yes.

2229. (*Mr. Lefevre.*) Do the French boats make more than one voyage from here?—It is difficult to ascertain that, but I have heard the fishermen say they have known them come back for two cargoes in one season.

2230. But that is not the case generally?—I think not. The French fishermen fishing off here carry from 100 to 140 nets in a boat, equal to two or three of our boats, and the number of French nets fished off the Northumberland coast far outnumber those fished by Englishmen.

2231. What is the proportion of fish caught by the Frenchmen?—I think they catch a far greater proportion than the English, but I cannot state what the proportion is.

2232. We were told at Newbiggin that their nets are not so well adapted for catching the fish as the English fishermen's are?—No, they are not, but still they contrive to get among the fish, and they make very great hauls.

2233. Do you think that the fishermen here are generally acquainted with the regulations and clauses of the Act of Parliament?—Some are acquainted with them, but some are not.

The witness withdrew.

A. Ewing.

ALEXANDER EWING called and examined.

2234. (*Mr. Caird.*) Are you a fish curer here?—No, I am a fish curer at Beadnell, two miles south of this place.

2235. Are there more fish caught there than here?—We have 22 boats belonging to the place, and we catch about 2,000 and a half barrels a season.

2236. Do you mean 2,500?—Yes.

2237. Have you observed in your experience any diminution in the average take of herrings, or does it continue pretty stationary?—There is a great diminution in the catch this year, but it may arise from the fact that there have been more English boats engaged this year than in years gone by.

2238. Has there been any diminution in the total quantity that has been brought ashore?—It has diminished during the last three years, even with the overplus of boats.

2239. Has the diminution been considerable?—Yes, the quantity has been considerably less, and we attribute it to the French invasion of which we have so much reason to complain.

2240. Do you attribute it to the interference of the French fishing-boats?—Yes.

2241. Is there any other cause than that?—I think not. We are not in the habit of getting many spent fish on this coast. From Staples to the Coquet Island I have seen not less than 200 French fishing-boats. The fish could not get in to spawn, and the consequence was that the French boats got all the best fish. The other day 3,000 crans of fish came in, which if it had not been for the French boats would have been caught here.

2242. Do the French cure their own herrings?—Yes, they cure their own herrings, and they put the filth over the side of the vessel.

2243. Is a French boat sufficiently large to enable her to carry the whole of her cargo before she returns home?—Yes, some of them are 80 tons burden, and they carry 400 barrels.

2244. How many years have you been a fish curer at Beadnell?—About 28 years.

2245. Can you give us any figures to show the average catch of herrings during those 28 years?—Yes; in round numbers I have cured 2,500 crans myself at Beadnell.

2246. Are you speaking now of 28 years ago?—I should say that 15 years ago I cured that quantity.

2247. How many would you cure 10 years ago?—From 1,200 to 1,400 crans, but during these three years I have not cured 1,000 crans.

2248. Then it has diminished more than one half?—Yes, it has.

2249. Has the total catch diminished one half?—No, I do not suppose that the total catch has diminished so much.

2250. Is it not the fact that a greater quantity is now sent away fresh?—Yes, I should say that a tithe is sent in that way.

2251. Between the fresh and the cured are there as many caught now as there used to be?—I do not think so.

2252. But that is a matter of opinion, can you give it to us as a matter of fact?—No, not as a matter of fact.

2253. What was the price of a barrel of herrings about 15 years ago?—It would run from 10*s.* to 11*s.* a barrel.

2254. What was the price five years ago?—From 14*s.* to 15*s.*

2255. What was it last year?—17*s.*

2256. Then there has been an increase in the price ever since?—Yes, but I have taken 800 crans six years ago at 5*s.* a cran. This year I have paid as much as 20*s.* a cran.

2257. Then the price has increased during the last 20 years from 5*s.* to 20*s.*?—Yes, that arises in consequence of the fresh fish going by railway.

2258. Do you think that the British fisherman can make as much money in his boat now as he did 18 years ago?—It paid him better when he got 8*s.* or 10*s.* a cran than it does now when he can get 20*s.* It is quite an impossibility for any fisherman to catch fish now or to cure it; in point of fact we are unable to follow the business on account of the French.

2259. Have you any suggestion to offer by which the interference of the French could be modified?—Yes, I think I could make a suggestion; but first perhaps you will tell me whether the convention itself could be altered in any shape.

2260. What alteration would you recommend?—I would recommend that we should have an equal standing with them on our own shores.

2261. But the convention does give that?—It gives that, but the law is so made that they can go through it.

2262. But an alteration in the convention would not improve that, inasmuch as it does at present give equal rights?—There is one thing that I think ought to be done: they are constantly putting their filth where the shoal of herrings lies; the result is that the fish fly from it directly.

2263. Then do you agree with the previous witness that it is advisable to apply to the fishing grounds generally the article in reference to oyster beds?—Yes.

2264. Is there any other suggestion you could make with regard to the convention?—No, I have not studied it sufficiently.

2265. (*Professor Huxley.*) Do you mean that 18*s.* or 20*s.* a cran has been the constant price of late years?—Yes, during the last three years.

2266. What was the average per cran 10 or 15 years ago?—From 10*s.* to 12*s.*

2267. What was it last year?—10*s.*

2268. And the year before?—It would be nearly 11*l.*, perhaps 18*s.*

2269. What was it the year before that?—14*s.* or 15*s.* perhaps.

2270. So that there has been a variation from 12*s.* to 20*s.*?—The price depends very much upon the quantity caught.

2271. Do you take all the herrings at a fixed price during the season?—I take a certain number of barrels.

2272. But before the fishing season commences is any agreement made between the fisherman and the curer?—Very often there is; eight or 10 years ago they were all engagements, but that is not so now in consequence of the railroad taking a great part of the fish.

2273. Then eight or 10 years ago it was customary for the fishermen to agree with the curer at the beginning of the season as to what price should be given per cran?—Yes.

2274. But now the fishermen like to have their own hands free, and they sell the fish in the best market?—Yes.

2275. Then there is no agreement now as to a particular price?—No, a man may get 25 cran a day sometimes, and if he were to engage with the curer it is very likely that the price he would get would be very different from what he would think he should get.

2276. You say that the price has altered in consequence of the construction of the railroad?—Yes; there is one thing which shows the interest taken by the Government in the cure of herrings. My father was a herring curer before me, and he got 4*s.* a barrel bounty. That was knocked off in 1834, but I think the fact that it was paid at all shows that the Government took great interest in the curing of herrings. I should like them to understand that we shall be annihilated altogether as regards our own business if something is not done to improve the fishery.

2277. Would you revive the bounty?—No, we don't want that.

2278. Then why do you refer to it?—I only refer to it to show the interest the Government took in the fisheries. I hope the Government will continue to take an interest in them, and that they will protect the fishery without granting any bounty.

2279. Then the form of interest which you wish the Government to take is simply that of protection?—Yes.

2280. Do you mean by the means of gunboats?—Yes, and otherwise so that they may keep the French boats at a respectable distance.

2281. What do you call a respectable distance? A fisherman told us the other day that 12 miles outside the Dogger Bank was a respectable distance; do you agree with that?—Yes, that would do very well.

2282. Would anything short of that do? What do you mean by a respectable distance?—I want the Frenchman to shoot his net at a distance from the English boats. He ought to keep at a respectable distance from them according to the convention. As it is at present, an Englishman puts his nets down, and the French boats will then come within 100 yards and put their nets down. There is nothing at present to protect the Englishman.

2283. But the French fisherman, if in a decked boat, is bound to keep half a mile outside an English undecked boat; would it be sufficient if the convention were carried out? You say that you think it would be enough if the Frenchmen were obliged to keep a good distance. Now by the existing convention they are required to shoot their nets half a mile outside; if that article of the convention were enforced do you think it would be sufficient?—It would be the means of keeping us in a better state than we are in now.

2284. Would the enforcement of that article be enough?—It allows the three-mile limit to remain as it is.

2285. Exactly; but at present if the English boat

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shoots first, the French boat being a heavier boat must not shoot within half a mile either way. Would that meet your view?—Yes.

2286. But there is one other point. If, on the other hand, the Frenchman has shot his net first, then by the existing convention the Englishman shall not go near him?—I see.

2287. That does not quite suit your views, does it?—Not exactly. I went down some time as part of a deputation to the captain of the Alert; he received us very well, and was very courteous to us, but he knew no more about the herring-fishing than a man in the country.

2288. There are two gunboats now, are there not?—Yes.

2289. Do you think that is a sufficient number to protect the fisheries between the Tyne and the Tweed?—No; it would take three times to do it properly.

2290. Do the present boats do anything to protect the fisheries?—I cannot answer that. I am not a fisherman; but a friend of mine wrote to Mr. Primrose, and we made a complaint to the captain of the Alert about not having sufficient protection. Mr. Primrose wrote a letter stating that he had written to Holy Island desiring that protection should be sent.

2291. (*Mr. Caird.*) In answer to your friend Mr. Primrose said he had written to the captain of the Alert?—He sent a boat with 12 oars, and said he could not command a gunboat.

2292. Then what was the advantage; did the boat with 12 men do any good to you?—No; it was a piece of mockery.

2293. Did the boat go out?—Yes.

2294. (*Professor Huxley.*) Did she do any good by lying in here?—They went away next day; they only laid here one night.

2295. (*Mr. Lefevre.*) Do you think that the Frenchmen ought to be prohibited from throwing their offal overboard?—Yes, I think that is very essential.

2296. Under the present regulations they are not allowed to come on shore and carry their fish on shore?—No, not on shore. But when he hauls in his net he could go to some place where the herring fishery is not being carried on. A herring will fly from a herring net, let alone the gut of a herring.

2297. Would it be sufficient to prohibit the Frenchmen from throwing the offal overboard in any part of the sea where the herring-fishing is going on?—Yes; the same as we do with the refuse from our farmyards. We take it to the dunghill.

2298. Do you take the offal on shore?—Yes; it is a very desirable thing for the farmers to get.

2299. Would you allow the Frenchman to do that?—I don't know.

2300. Do you think that they should have leave to bring their herrings on shore and cure them there?—They might do so if they liked. They would not injure the carriers by doing so.

2301. Do you send all the herrings you cure by train?—No; I loaded a vessel for Newcastle on Monday, and I sent another to Glasgow.

2302. Is a considerable quantity of the herring sent by sea now?—No, it mostly goes by train.

2303. Is it the same for this place as Beadnell?—Yes.

The witness withdrew.

J. Archbold.

JOSEPH ARCHBOLD called and examined.

2304. (*Mr. Caird.*) What is the name of the place at which you are a fisherman?—Craster.

2305. Are there many fishing boats there?—There are 33 herring boats.

2306. Are there many boats engaged in the line-fishing?—There are 17 in the winter time.

2307. Have you been long engaged as a fisherman there yourself?—Yes, for 28 years.

2308. Have you noticed any diminution in the quantity of fish caught there during those 28 years?—Yes, in the haddock fishery there has been a great decrease.

2309. Are there more boats now than there were 28 years ago?—Yes, seven or eight more.

2310. Has the falling off in the quantity of fish caught during the 28 years of which you speak not been compensated by the additional number of boats?—Not by a long way since I first went to sea.

2311. What do you suppose would be the total falling off in the fishery for each boat?—There are not one third caught now to what there used to be, according to the lines thrown in.

2312. Not one third?—No, I think not since I went to sea.

2313. But more boats are employed?—Yes.

2314. You think the additional number don't make up the total quantity to what it was 28 years since?—I think not.

2315. What kind of fish has diminished most?—Haddocks.

2316. Have they diminished in size as well as in quantity?—Yes, in both I think.

2317. Have you noticed that very perceptibly?—Yes.

2318. Is that the common opinion of your people?—Yes.

2319. Are the cod as good as they used to be?—They are as good, but they are very scarce.

2320. Are they as large now?—We have got good ones, but not so large as they ought to be.

2321. Has that arisen from the closer fishing in consequence of there being more boats?—It may have arisen from that.

2322. Is there any trawling carried on near your place?—No, but it has got pretty near hand. It is now as far as Coquet Island.

2323. Has any injury been done to the deep-sea fishery by the trawlers?—I cannot say.

2324. With regard to the herring fishery, has that fallen off?—It is more divided among the boats.

2325. Do as many herrings come now as there did formerly?—I believe so.

2326. Do many herrings come in now?—Yes, many herrings come in which we should get if it were not for the French fishermen.

2327. Do you agree with the other witnesses on that point?—I agree that the French boats are a nuisance to us.

2328. Do they take the fish within the three-mile limit?—Yes; I have seen them within one mile.

2329. Do they take most of the fish they get within the three-mile limit?—Not for these few years past. The fish lie a little further out.

2330. Then they have not exceeded their limits within the last few years?—No; last year they did more than this year and the year before too.

2331. (*Professor Huxley.*) Was it at your place that the mussel bed had been set up?—There is none at our place. There used to be a supply at Holy Island, and when that fell off we went to Stockton with our boats, while small vessels came here from Boston.

2332. Do you know of any place where an artificial mussel bed has been made?—Yes, at Alnmouth, seven miles from our place.

2333. How many years is it since that was set up?—It is two years gone; this is the third year.

2334. Were mussels put there?—Yes, and the fresh-water runs down.

2335. Does the river run down over the mussel-bed?—Yes; the bed was laid down on each side of the water.

2336. Are the mussels washed by the fresh-water?—Yes; the two waters meet and cover them at high water.

2337. What is it at low water?—At low water all the fresh-water runs down.

2338. Is that a suitable place to put a mussel bed?—Scarcely, and it has not succeeded.

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2339. There is no water at all when the tide is back ?—No.

2340. Do you mean to say that at the ebb tide the water runs down and has made a channel between the two beds ?—Yes.

2341. Then even at the best of times, at high water, they only get a mixture of brackish water ?—Yes.

2342. Did you ever see mussels growing well in brackish water ?—No, they are all in salt water.

2343. Who laid the bed down there ?—The Duke of Northumberland. He put oysters down also.

2344. How are the mussels doing there ?—They are doing nothing at all.

2345. Are they wasting away ?—Yes.

2346. How are the oysters ?—The duke has been at a great deal of expense with them, but they do not succeed.

2347. Has there been any other bed made ?—Do you mean an artificial bed ?

2348. Yes.—I don't think there has.

2349. Is there any fresh-water on the mussel bed at Holy Island ?—No.

2350. Have you ever seen a good mussel bed where it has been washed by brackish water ?—No, nothing particular.

2351. Nor have I.—I don't think they do well there.

2352. (*Mr. Caird.*) Then you think the other bed is much more favourable for breeding mussels ?—There were no such mussels as there were once on the coast of Northumberland.

2353. You think they would succeed if they were taken care of ?—If they were taken care of all the fisheries would be supplied with bait.

2354. (*Professor Huxley.*) But you do not think it wonderful that they did not answer when the water was brackish ?—No.

2355. You have heard what has been said by the previous witnesses. Has there been the same rise in the price of fish in your neighbourhood during the last 20 years ?—There has been very little difference, I think.

2356. (*Mr. Lefevre.*) How far is Craster from here ?—Nearly 10 miles.

2357. Is it north or south ?—South.

2358. How do you sell your fish ?—All by the stone.

2359. Do the curers come and buy them ?—We send the fresh fish—the white fish, away ourselves.

2360. How do you send them, by rail ?—Yes.

2361. Does all the fish go by rail ?—Mostly, except a few that we cart.

2362. What proportion of your fish goes by rail ?—Sometimes we send from three to four tons in a day.

2363. What proportion of the whole quantity you catch goes by rail ; is it one fourth, one half, or two thirds ?—I should say about three fourths. With regard to the salmon trout fishery, I think the fishermen have little privilege in reference to that since the new Act came into force.

2364. (*Mr. Caird.*) Has it injured the fishermen ?—Yes, I think it has done them a great deal of harm.

2365. In what way ?—We used to start in the month of June, and fish until October and sometimes December.

2366. With what kind of nets ?—They were just a circle ; and now we are not allowed to fish longer than the 2d of September.

2367. By that means you have been deprived of the power of catching fish ?—Yes ; that is the only time the fish come on the seashore.

2368. Were they in good condition then ?—Yes.

2369. (*Professor Huxley.*) If you catch a salmon in the net do you put him out ?—No.

2370. Do you sometimes catch salmon not in condition ?—I have fished for a long time, and I do not think I ever caught more than two real salmon in my life.

2371. (*Mr. Caird.*) Did you formerly catch a large quantity of salmon trout ?—Yes, sometimes a good many.

2372. Then has the operation of the Act occasioned considerable loss to the fishermen here ?—Yes.

2373. What proportion in value would that salmon trout fishing be to the other fishing on your shore ?—We fish for them all the latter part of September, during the month of October, and even in November. I have seen the boats go out and get pretty good shots of them.

2374. How much money do you make by it in the season ?—We never depended entirely upon it.

2375. Cannot you give us a figure ?—Sometimes a boat would get as much as 2*l.* for their share when they came on shore.

2376. And how much for the fish caught during the season ?—It would all depend on the weather. If the sea was not smooth we should not get many.

2377. Cannot you give us some idea in figures ?—No, there is no use making a talk about it.

2378. (*Professor Huxley.*) Did you fish 10 nights ?—Yes, more than that.

2379. Twenty nights ?—More than that.

2380. Thirty nights ?—I should think so.

2381. (*Mr. Caird.*) Do you make as much from the salmon trout fishery as from the herring fishery ?—No.

2382. Did you make one fourth ?—No ; at another place on the coast they depend far more on salmon-trout fishing than on the herring.

2383. What would be the average weight of the salmon trout you catch ?—I have caught a salmon trout very heavy, 25 lbs.

2384. But what would be the average weight ?—About 5 lbs.

The witness withdrew.

ROBERT FAWCUS called and examined.

R. Fawcus.

2385. (*Mr. Caird.*) Where are you a fisherman ?—At Beadnell.

2386. Are there many boats there ?—There are 20 keel-boats there—herring boats.

2387. How many are there employed in the line fishing ?—I think there are five.

2388. Have you heard the evidence given by the other witnesses to-day ?—No, I have not been long in the room, but I have heard part of it.

2389. How many years have you been engaged in fishing ?—20 years.

2390. Has the herring fishery fallen off, or does it continue as it was upon the average ?—It has fallen off a great deal.

2391. Are there not as many herrings now as there used to be ?—The shoals would be plentiful if it were not for the French fishing boats.

2392. What interferes with you in your fishing ?—We cannot get our nets shot now. I could get 100*l.* more a year if I could get my nets shot.

2393. What prevents you from shooting your nets ?—The French boats come so close in—they are very thick upon us.

2394. Do they come within the three-mile limit ?—Sometimes they do, and sometimes they do not.

2395. Have you ever had any dispute with them ?—Once I did. At last I got clear of the vessel and one of the Frenchmen took this piece of wood (*holding it up*) and laid it over my head.

2396. Were you saying anything to him ?—No, I was quite quiet. They had one of my nets and another man's twined together like a warp.

2397. How did they get hold of them ?—There were five of them that drove our two boats.

2398. Were they within the three-mile limit ?—

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They would be about three miles off. They were in 18 fathoms of water. That would be just about three miles off; but I think they were within the limit a little.

2399. (*Professor Huxley.*) Were you to windward of them?—No, to leeward.

2400. Did they throw that piece of wood at your head because you did not get out of the way?—Yes; they drifted down upon us. At another time, off Holy Island, we shot our nets, when they shot close to us, and we had to haul our nets in directly

2401. Was that because you were afraid of having your nets destroyed?—Yes, and the gunboat was lying at the time in the harbour, but it never sent a boat off, and yet the French vessel was only two miles off.

2402. Do you think the French fishermen take more herrings than are caught by the English fishermen?—Yes, that is my opinion.

2403. Do you think that they do any harm to the shoals of herrings by any practice they adopt other than by their mode of fishing?—Yes, by letting go their anchor and gutting their fish.

2404. What harm does that do?—Why, if you let anything go among the herrings the herrings will fly from it. I have seen them fly. On summer nights I have gone on the top of the boat's gunwale and I have seen them fly away down.

The witness withdrew.

(*Mr. Caird.*) Is there any other fisherman here who desires to add anything to what has been stated by the witnesses? If there is we should be glad to hear him if he desires to offer any suggestion or make any complaint. Has anything been omitted that you would like to have supplied?

There was no response, and the inquiry was then adjourned to Friday, September 25, at Holy Island.

Holy Island, Northumberland, Friday, 25th September 1863.

HOLY ISLAND.

J. Smith.

25 Sept. 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

JOHN SMITH called and examined.

2405. (*Mr. Caird.*) Are you a fisherman here?—Yes.

2406. Have you been long engaged in the fishing off this coast?—I have been engaged in the fishing here going on for 40 years.

2407. Do you practise all the different kinds of fishing that are practised along this shore?—Mostly, but we do not follow the turbot-fishing. We follow the halibut, cod, ling, lobster, skate, and haddock-fishing.

2408. Do you also follow the herring-fishing?—Yes; we go fishing for herring during the herring season.

2409. Is your herring-fishing the most valuable source of your fishing?—Yes, we get most by that while it lasts.

2410. In the course of the 40 years during which you have been engaged in fishing off this coast, have you observed any marked change in the supply of fish caught here?—Yes, there has been a very great deal of change especially within the last 20 years.

2411. Has there been about the same number of fishermen and boats employed during the last 20 years?—I think they have increased a little, but not a great deal.

2412. How many were there 20 years ago?—They would be well up for 60, I should think.

2413. Do you mean that 20 years ago you had 60 boats?—No, not boats, I mean 60 fishermen.

2414. And how many boats would you have 20 years ago?—In the white-fishing we should have about 16 engaged.

2415. And how many in the herring-fishing?—About 12.

2416. Twelve only in the herring-fishing?—Yes, only 12.

2417. How many have you now? In the first place tell me how many boats you have now engaged in the white-fishing?—I think we have 17 now.

2418. And how many in the herring-fishing?—I believe that we had 37 at the herring-fishing this year.

2419. Are they manned by the same number of men now that they were manned by 20 years ago?—No, there are more men now in some of them. In former years they used all of them to have four hands.

2420. What number of men is in each boat now?—Some of them have five, some have four, and some only three. I belive that two small boats went to the fishing this year with only three hands.

2421. Are the boats that you employ about the same size now that they were 20 years ago?—No, they are not the same size now.

2422. Are they smaller or larger?—They are a great deal larger now than they used to be.

2423. Do they carry longer lines and a greater number of nets?—Yes, they carry more nets now than they carried 20 years ago, and a greater length of lines.

2424. When did you distinctly observe the falling off in the quantity of fish caught here? About what time? Was it 20 years ago, or 10 years, or still more recently?—I should think it would be about 14 or 15 years ago.

2425. And has the quantity of fish caught been regularly declining ever since that period?—Yes, it has been regularly declining since then. We catch a much less number of fish now than we did 14 or 15 years ago.

2426. Have you had, within the period to which you refer, any exceptional years in which there was good fishing?—We may have had an exceptional year with regard to the herring-fishing. Sometimes we have had a good year and sometimes a very bad one.

2427. I am not speaking of the herring-fishing now. I wish to know if there have been exceptional years in regard to the white-fishing?—No; there has been very little difference. It has been always on the decrease.

2428. Have you noticed if that applies to the size of the fish as well as to the quantity?—Some years they run larger and some years they are smaller. In some years we have caught haddock very small, and in others they have been much larger.

2429. Upon the whole, have you observed that the haddocks run smaller now on the average than they did 12 or 15 years ago?—Yes, they are a great deal smaller.

2430. And as to the cod-fish, is there the same difference or not?—There is not the tenth part there used to be.

2431. You mean in quantity?—Yes, in quantity.

2432. And are they smaller in size?—They are not so large now as they were formerly. We occasionally get nearly as large fish in some seasons, but in a general way they were far larger formerly than they are now.

2433. At any time within your experience were turbot caught here?—Sometimes we have caught

turbot. Occasionally there may be one on the hook, but we have never fished expressly for them.

2434. You have never had a fishery for turbot here?—No, not with nets in my day, but we have got one or two occasionally by chance.

2435. Have you ever fished for soles here?—Not in my day.

2436. They do not practise trawling for soles here?—No, not upon the island.

2437. Do you get any salmon trout here?—No.

2438. Are there no salmon trout here?—Very few. Some persons, generally people who can do without fishing, will put in nets as a pastime, but I believe there are not many caught.

2439. It is not made an object of the fishing here?—No; there is a fishery out off the coast, but it is let at Berwick-on-Tweed; a company has taken the shares.

2440. With regard to the price of the fish, has there been a great increase in the price within the last 10 or 12 years?—Yes, there has.

2441. Can you tell me what you would get for a boat's fishing 12 or 14 years ago?—That would depend upon how they were sold. They would not be sold by weight, but by the score. Full-sized haddock used to sell for 1*s.* per score. When they ran small they used to be sold for 6*d.* and 8*d.* a score.

2442. What would you get for a score of the same kind of haddocks now?—They are all sold by weight now.

2443. How much would a score weigh now?—I can hardly say, to take them in a general way. It depends so much upon the size of the fish. In some parts of the ground we fish, some will run four stone to the score occasionally, and taking it upon the average, I think they will run about two stone to the score.

2444. Two stone to the score?—Yes, about that.

2445. What do you get per stone?—In the summer time we get 1*s.* 3*d.* per stone.

2446. That would be about 2*s.* 6*d.* for a score now-a-days, as against 1*s.* for a score 12 years ago?—Yes.

2447. With regard to the herring fishery, do you find that it has fallen off very much?—Yes, a very great deal.

2448. Do as many herrings come off the coast as used to come?—They are a long way short this year, and last year too.

2449. Do you think that the herring are not there now?—That is my opinion. I do not think they are there; for a good few years back they have been on the decrease.

2450. Do you think that the shoals are smaller, or that there are not so many of them?—I do not know; we have the French lying off the coast, and whether they pick them up, or no, I cannot say. I know that the French fishing boats are not allowed to come within the three-mile limit, but we have been very badly protected. The French boats lie out fishing all along the Northumberland coast, and as far as Berwick, and the consequence is that not near as much fish comes in as there used to do.

2451. Do the French fishing boats come within the three-mile limit here?—Yes, we cannot keep them off, and the gun boats which ought to protect us never try to keep them off. The French fishermen's nets are not half as deep as ours. I do not think that they will draw above three or three and a half fathoms of water, or at any rate four; and many times we cannot put our nets out, the herring are that near the shore.

2452. Your nets, I presume, would go to the bottom?—Yes, and we should lose the whole of them. We are unprotected altogether here.

2453. Is it of advantage that the nets should be as deep as you have them?—It is an advantage in some cases, because in deep water the deeper the net the more fish we get. But the French fishing boats have a greater length of nets; what they want in depth they have in length.

2454. Do you think they get more fish than you with the extra depth?—I cannot answer that question.

2455. But if they possess any advantage over you in reference to the size of their nets, it is an advantage which it is in your own power to alter if you like?—Perhaps so; but in some cases it depends upon how the shoal of fish are followed.

2456. I understand you to say that the French fishermen interfere with your fishing within the three-mile limit; is that interference greater now than it was a few years ago?—A few years back they never came here at all. It will be 20 years or a little more since they first came. But I know now that they have just taken the coast from us, and have spoilt and ruined our fishing, while we remain unprotected, to a great extent.

2457. Have you ever found, since the French fishing boats came off here, that the Frenchmen shoot their nets before sunset?—They are lying upon the ground wherever the fish are, and wherever they can let go their anchor they do so and they lie among the fish. When they take the nets in they throw the fish upon deck and commence gutting them. Perhaps there will be 100 ships engaged in this way at a time, all of them taking the gut out and throwing the offal overboard into the sea among the body of the fish. I consider that that does a great deal of injury to the fishing. It spoils the whole of the fish and they fly away.

2458. Have you any prescribed time at which you are to shoot your herring nets?—We never shoot them before sunset.

2459. Half an hour before sunset?—Sometimes it may be a little before that.

2460. Do you think it would be of advantage to the fishermen and likely to increase the catch of herring, that regulations should be made for the purpose of preventing anybody from shooting nets till within half an hour of sunset?—I do not think it would.

2461. You think it would be of no advantage?—Whenever they are lying on the fishing ground in fine weather they can see our boats leave the shore, and directly they see us go out they shoot their nets and the consequence is that when we get there we cannot get our nets in at all. We have therefore to rush off sooner than we should otherwise do for the purpose of taking a berth.

2462. But the rule is, that neither you nor the French shall shoot your nets until half an hour before sunset. Do you think if that rule were properly carried out that it would be of advantage to the fishing generally?—No. It is very little the nets will take before it begins to get dusk.

2463. Do you not think that it would be of advantage to the general fishing that neither you nor the Frenchmen should be allowed to shoot your nets until that time, namely, half an hour before sunset?—We should have a chance then of getting our boats in and getting a berth.

2464. Do you not think that that is a matter of some consequence?—It may be.

2465. Are there any days during which you are prohibited from shooting your nets at all. Is it usual for you to refrain entirely from shooting your nets on Sunday?—Yes. On that day there is no market for the fish, or I do not know what might be done. For my own part I do not go out on the Saturday night, nor on the Sunday night.

2466. I presume that none of our fishermen go out then?—Yes, some of them go out on the Sunday night, but none on the Saturday night.

2467. Do the French fishermen abstain from shooting their nets on Sunday?—No, they shoot them both on Saturday night and Sunday night.

2468. But you do abstain during one night in the week?—Yes, always for one day and night. There is always one night when we do not shoot our nets. But the Frenchmen fish all the week round and never cease. They never lose either Saturday or Sunday, and I consider that that is a great injury to the fish,

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because, if there were no fishing during one day in the week, the fish might have an opportunity of getting together again and uniting in a body after the week's fishing. The nets of the Frenchmen lying continuously among them break up the body of fish, and they have no chance of getting together again, which is very much to our disadvantage.

2469. Do you know what the quantity of herring caught here this year will amount to altogether?—No, I do not.

2470. Are there any means by which we can ascertain that?—The merchants' books would tell.

2471. Have you any trawling off this shore?—No, there is no trawling.

2472. Do no deep-sea trawlers come up this length?—I believe that one came off Berwick bank last year; at any rate the papers stated so. He dredged for about an hour and a half, and it was stated that he took 5 tons of fish, which he sold at Granton Pier.

2473. Was that last year?—Yes.

2474. And there have been no trawlers off your shore?—Not that we have seen.

2475. They do not practise trawling off this coast?—No.

2476. Can you attribute to any cause whatever the falling off in your take of white fish?—In my opinion after the fish leave our common ground, where we fish here both winter and summer, I think they go to Berwick banks. Boats go out there and catch them at the time they are spawning, and they catch a good many both old and young, when they are of no use to anybody. That, in my opinion, is the principal cause of the falling off in the take of white fish; but other people may have other opinions. I think also that they are caught in the breeding season, when they ought not to be caught.

2477. Who is it that catches them in the breeding season?—The boats from Scotland, from Eyemouth, Burnmouth, and a place they call Colgin.

2478. But they are not trawl-boats?—No, the fishermen catch them with the long line, but we attribute to that the decrease of haddock.

2479. When are they caught?—They catch them in February and April.

2480. I gather from the remarks you have made that you do not think it right to catch them in those months?—No, I do not.

2481. Do you not fish in those months?—No; we put in our creels and catch crabs and lobsters.

2482. During the months of February and March?—Yes.

2483. You abstain from fishing for white fish during those months?—No, we catch them for bait to put in our lobster creels, but we cannot get many of them because the haddock leaves our common ground and goes 30 or 40 miles off these banks to spawn. At that season I do not think we should get a score a boat apiece.

2484. And at that time do the boats come from Scotland and fish the outside banks?—Yes, at the time they are spawning; they take all the breeding fish and also those which are beginning to quicken. They pick up all kinds.

2485. That is the cause of the decrease of the haddocks on your ground, you think?—Yes, in my opinion.

2486. (*Professor Huxley.*) What is the depth of your herring nets here? How many fathoms?—About eight fathoms.

2487. That is very deep, is it not?—Yes.

2488. I am speaking of the net without the headlines?—There is a difference in the end of the nets. In putting the nets in I generally set mine on the end about five and a half fathoms; the net stretches from the mesh. We take the strain off the net and at the middle of the net it will draw a fathom or two more.

2489. About eight fathoms?—I think so in the middle.

2490. What is the size of your mesh?—We have different sizes, 30, 31 and 32 to the yard, when they are first made up, but we tan them, and they will then run into 33 34, and 35 to the yard.

2491. Do you never have them more than 36?—No, that would be against the Act of Parliament.

2492. You know, then, that the size is regulated by the Act of Parliament?—Yes.

2493. Is there any law to prevent you casting your nets before half an hour previous to sunset?—No. I never heard of that.

2494. Have you heard of any law requiring you to have a certain coloured vane at your mast-heads?—No.

2495. Or of any law requiring you to keep outside the decked French fishing boats if they cast first?—No.

2496. Do you know that there is a law requiring the French fishermen to keep outside if you shall have shot your nets first?—I have heard that there was such a law, but it has never been put in force. I have heard it said that the French boats ought to keep at a certain distance from us, but it has never been put into execution.

2497. But have you ever heard that there was a law which required the French boats to keep outside of your nets if you had shot them first?—No.

2498. Do the gunboats here exercise any supervision in the fisheries between you and the French fishermen?—Very little indeed; I believe there have been two at Berwick, and once or twice at the most I have seen them.

2499. You spoke just now of desiring better protection from the French?—Yes.

2500. What kind of protection would you wish to have?—I think that a gunboat at every fishing place would afford the best protection.

2501. What would they do?—They would be able to go out very frequently and keep the French within their limits.

2502. You mean without the three-mile limit?—Yes. Is there any law to keep them further out?

2503. No. They have no business to come nearer to the coast than three miles, and they are not allowed to fish on Sunday. If that law were enforced, would it be sufficient for you?—For my part, I think the limit is not far enough.

2504. What is the usual distance at which you fish for herring from the shore?—I cannot say.

2505. On a rough average, can you say whether the fish you want to catch are commonly inside the three-mile limit or beyond it?—We get far more fish without the three-mile limit than we do within it.

2506. So that, in fact, the great majority of the fish are outside the three-mile limit?—Yes.

2507. The French always keep the sea, do they not?—No, they come into the harbour.

2508. But generally they keep the sea?—Yes, they generally keep the sea, and in fine fishing weather they let go their anchor and there they lie.

2509. Have you ever heard of a law which makes it illegal to cast anchor on the fishing ground when fishing is going on?—No.

2510. Is there anyone here who can give you instructions as to the law relating to the fisheries?—No.

2511. Is there any fishery officer here?—No. There is one stationed at Eyemouth, I believe, and he comes up the coast.

2512. Does he come here?—He was here the other day.

2513. What was he doing here?—He was up looking at the herrings.

2514. Looking after the herring fishery?—Yes.

2515. Do you mean that he was here in order to ascertain the quantity?—I do not know; I suppose he was seeing what quantity there was. He was examining the fish—seeing what was cured and what wanted the Crown brand.

2516. Do the curers get the Crown brand?—Yes; if their fish will pass.

2517. Did the fishery officer ever come to see if the mesh was of the right size?—Sometimes he has done so at North Sunderland.

2518. Did you ever hear of a man having been fined because the mesh he used was too small?—No. A shilling is about the gauge we measure the mesh with. I have never seen one smaller.

2519. You were speaking of offal being thrown overboard and doing harm to the fishing grounds; why do you think that does harm?—Because I think it lies there and gathers other things about it which feed upon it. If there is any spawn there they will feed upon that; I believe also that the offal thrown over poisons the ground.

2520. Do you think that the fish will not lie where it is?—No, I do not.

2521. But is it not against the French fishermen's interest to do that?—Yes; but they do not care for that if they can get a good catch of fish.

2522. Can you form any judgment as to the quantity of fish the French fishing boats catch? Do they catch more than you off your shore?—I cannot answer that question; but I know that they fling the gut and other things into the sea. I know also that in some cases when they have been fishing upon our ground so many have got into their nets that they could not get them out. For years there have been no others in the place.

2523. What amount of protection from the gunboats do you think would be sufficient to protect your interests?—I think there ought to be a gunboat at Berwick and another on the Northumberland coast.

2524. You do not think that the three-mile limit is enough?—No.

2525. How far would you like it to be?—We would like them to be off the coast altogether. We don't like their company at all. If I had my way I would keep them at home.

2526. But suppose the Yarmouth men come here and fish with their heavy boats, what would you do with them?—Why, we must make the best of them we can. There is no law to protect us against them.

2527. Then you do not object to your own countrymen coming and cutting you out?—I like my own countrymen better than the Frenchmen; but if their gear and their boats were the same as ours (I mean our own countrymen) it would be much better. As it is, I think a great deal of injury would be done by the Yarmouth men and their boats. It would be just the same as the French luggers with us. Our nets would never be able to hold their own against theirs.

2528. They would cut you out in just the same way as the French?—We should not be much better off.

2529. Do you propose that any law should be passed to keep them off the coast?—No; that would be very selfish.

2530. Have you ever been engaged in long-line fishing?—Yes.

2531. Do you lose much of your fish by the dog-fish?—Sometimes we do.

2532. What proportion of your fish do you commonly lose by dog-fish?—I cannot give you an idea. Sometimes they eat them very much, but we have not been much disturbed by them for some years past.

2533. Are suckers common here?—I do not know them by that name.

2534. Do you know them as 'hags'?—There have been a great many things following the herring.

2535. I mean a fish, round, like a worm and with no eyes?—That is what we call the 'rapper eel.' They will go into the fish and suck every bit out, leaving nothing but the skin.

2536. What do you call it?—The 'rapper eel'; but what the proper name is I cannot say.

2537. Are they common here?—Yes; there are thousands of them.

2538. Do they destroy your long-line fishing much?—Yes, occasionally. I have known them go into a halibut and leave nothing but the skin.

2539. How many will you find in a halibut when it has been cleaned out?—I hardly know; I have seen a codfish packed tight with them.

2540. They are so abundant as that?—Yes, we have thousands of them.

2541. Is that every winter?—No, principally in summer, but we have a good many of them in the winter.

2542. Have you any here now?—Yes.

2543. Have you caught any here lately?—When we take the long lines out we are rid of them.

2544. I suppose you destroy them when they come on board your boat?—There is no doubt of that.

2545. Do you think the quantity of fish taken—the total quantity—has fallen off? You know that your boats have increased in number. What I want to know is, whether the fishermen, in consequence of the increase in the number of boats, do not earn as much money now as they used to do?—I do not think they do.

2546. (*Mr. Caird.*) Do the French fishing-boats fish within the three-mile limit on Sundays?—Yes, at all times, Saturday and Sunday too, close on to the very shore.

2547. Is the lobster-fishing here good?—No.

2548. Is it declining?—Yes, a great deal.

2549. What do you think is the cause of that?—I think they have been over caught.

2550. Fished too close?—Yes.

2551. Does the crab-fishing continue good?—No, there have not been so many this last year.

2552. Was it pretty good before?—We had them very good some years past, but there have not been many caught during the last few years.

2553. Has there been the same decline in the crab-fishing that you have noticed in the lobsters?—No.

2554. How are you supplied with bait here?—Pretty well.

2555. Where do you get it?—We hook the worm in the summer time.

2556. Do you use the worm chiefly for bait?—Yes, and limpets. The Earl of Tankerville has an oyster scarp and a mussel bed, and we have the privilege of bringing them off. There is some slack there, and we lay them on the Earl of Tankerville's bed.

2557. And there they breed?—Yes.

2558. And you generally get your bait there?—Yes.

2559. You have no need to import bait then?—Yes, we have bought it occasionally. We have had two or three shiploads when the boats have come down.

2560. Then what with what you can obtain yourselves, and what you can import, you have plenty of bait?—We have no cause for complaint on that head at all. We have been in the habit of getting limpets from the rocks, but they are going to try and prevent us from taking them.

2561. Is there any restriction enforced that operates injuriously against your fishing?—I do not know. I don't think there is.

2562. Nobody does interfere with you in any way except the Frenchmen when they come upon your fishing grounds?—No.

2563. No English official interrupts you or interferes with you, or regulates your fishing or mode of fishing?—No.

2564. No fishery officer comes to you?—No.

The witness withdrew.

JAMES MORTON called and examined.

2565. (*Mr. Caird.*) Have you long been a fisherman here?—I have been 44 years a fisherman here.

2566. Do you agree with the last witness that the supply of fish obtained off the coast here is decreasing?—Yes.

2567. In what kind of fish have you principally

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observed that decrease?—In cod, haddock, and turbot. All kinds of fish are less now than they were when I started fishing.

2568. Are there many turbots now?—We have no nets for turbot, but I suppose the halibut is a kind of turbot.

2569. Has the size of the fish decreased in your opinion as well as the quantity of fish caught?—Yes, a good deal. They are not "nigh hand" the size they used to be in former times.

2570. Is it very marked?—Yes; we used to get very large fish. No place got larger.

2571. Can you tell us the difference in the average weight of the fish now compared with what it was 20 years ago? Take a cod, for instance; what was the average weight of a cod brought ashore 20 years ago?—I never saw any of them weighed, and I cannot say.

2572. Can you give me any idea of the difference in the size of the haddock?—Yes, I have had some which would weigh 6 or 7 lbs.

2573. Twenty years ago what would be the average weight?—About 20 or 30 years ago they would weigh 6 or 7 lbs.

2574. What is the average weight now?—They are not "nigh hand" that weight. They are not half that weight. There might be some particular one which might weigh pretty well, but not the general run of them. I have seen one haddock weigh 9 lbs., but that was a very exceptional case.

2575. Do any mackerel come off this shore?—We catch some among the herring during the herring season.

2576. But you do not fish for them especially?—No.

2577. Has the herring-fishing within your experience declined?—Yes, greatly.

2578. Do you agree with the last witness that so many herring do not now come off this coast as did formerly, or do you think that there are as many, but that you do not catch so large a proportion of them?—We don't see so many.

2579. Do you think the shoals that come off the shore are not so large as they used to be?—They are certainly not so large as they used to be, nor do they last any time on the shore when they do come in. The French boats are constantly shooting among them, even on Sabbath days, and they won't let them have any rest.

2580. Do you agree with what the last witness said about the French fishermen?—Yes.

2581. Is there any particular cause of complaint on that head which he did not mention?—No, I think he spoke very fairly.

2582. Do you agree with him that the principal catch of herring is outside the three-mile limit?—Sometimes they come within the three-mile limit.

2583. But the greatest quantity of fish is caught outside the three-mile limit?—Yes.

2584. You know that the French fishing boats have a right to fish outside the three-mile limit?—I suppose they have, but they don't stand upon the three miles if the herring are there. If the herring are there they will be in among them.

2585. Has this been the case for some years past, or have you been better protected by the assistance of the gunboats during last year?—It has been the case for some years past. They have been mostly there at night.

2586. Did the gunboats when they were out keep the Frenchmen to their own side?—Yes; they would fire a gun and get them all to the off side. But if they went away at night, then the French boats were in upon us again, and they would remain among us during the night.

2587. When the gunboats did attend and do their duty, did you get better fishing?—Yes, I think we should get better fishing. At all events we got this advantage, that we had our gear kept all right. Their boats will not drive with ours. They have kegs and other things for buoys, which go all over our nets and destroy them.

2588. Then not only do they take the fish but they destroy your nets?—Certainly. Every year nets are destroyed, and the boats dare not go "nigh hand" them in consequence.

2589. Would it be of advantage to you if the gunboats stationed here kept the French fishing vessels strictly within their own limits?—Yes, I think it would.

2590. As a line-fisher have you noticed any greater quantity of fish coming in after a south-east gale than after a north-east gale. I speak of the white-fishing?—Sometimes they have been thicker after a gale. They have been driven in off the banks. We have three winds—a northerly wind, a north-east wind, and an easterly wind. They are always on our shore after those winds.

2591. Have you ever noticed a distinction between a north-east and a south-east wind?—We are never particular about that.

2592. (*Professor Huxley.*) You heard what was said about the harm done by the offal being thrown over?—Yes.

2593. Do you agree with that?—Yes, I think it must poison all the ground together.

2594. Is that the reason why you object to it?—Yes, the fish will not lie among it. There have been as many as 100 sail here at a time heaving all the filth over. It is like to lie all over the place, and no fish will stay there. They shift away altogether.

2595. You heard what the last witness said about the quantity of bait—about there being sufficient bait?—Yes.

2596. Do you agree with that?—Yes, we should have had plenty of mussels here if it had not been for the Scotch boats coming down here and sweeping our beds and carrying the mussels away from us.

2597. Is there any regulation about improperly clearing the mussel beds?—No, nobody looks after them.

2598. Does anybody come and sweep them away? Yes, but that is not the case with the scarp which belongs to the Earl of Tankerville. They dare not take them away from there. They breed up there and the spawn comes down on the scarp here and keeps that good. But since they took them from the high land there is no spawn coming down, and we have had to carry them from other places and lay them down on the scarp.

2599. Have you any means of protecting them on the scarp?—Yes.

2600. Who protects them?—Our man; but if he is overpowered by the boats which come down, we turn out and assist him.

2601. Then you have to fight for it, I suppose?—Yes, we turn them out either by foul or fair means; we take their names and the name of their boat.

2602. Do you think that if the mussel grounds about here were all of them properly cared for and protected that you would not be obliged to import bait at all? Would there be enough for you here?—Yes, plenty.

2603. Without importing any?—Yes, and we need not then buy any.

2604. If the mussel beds were properly looked after only the old ones would be taken. If the young ones were left would that be sufficient for you?—Certainly, we take them a certain size. We leave the young ones to breed.

2605. Your complaint of the Scotch people is that they sweep them away young and old?—Yes.

2606. You would not object to their taking the old ones?—They would not take that trouble. They take them altogether; they scrape them up altogether, and fill their boats. Sometimes they have 50 large keel boats with them; one boat will take 20 tons of mussels. They come from Eyemouth and Burnmouth, and they take all our bait away.

2607. Do you think that if the natural mussel banks were properly protected there would be enough for all of you?—Yes.

2608. Have you been a fisherman for a long time?—Yes, for 44 years.

2609. Did you ever hear of any regulation about your not shooting your nets before sunset?—No.

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2610. Did you ever hear of any law in reference to the herring boats which requires them to carry any particular vane at their masthead, and which requires line-boats to carry a vane of another colour?—No, I have heard of the French boats being obliged to have a particular blue flag, but I never saw it used.

2611. Do you know anything about having to go outside where the nets are shot?—No, I thought that the French fishing boats had to go outside of us.

2612. But if the French boats have shot their nets first, ought you not to go outside of them?—No, I think not.

2613. Do you not know that you are liable to be fined for not doing so?—I never heard anything of there being any fine for that.

2614. Do you know at what time of the year the haddocks spawn?—About February, I think. They go off from our grounds about then.

2615. About February and March?—They go away to the banks about that time and leave us. I have heard an old fisherman say that on the 16th of February he had plenty of haddocks and the next day he did not get one at all. They were all clean gone.

2616. Where did they go?—To the banks, I suppose. We can scarcely get any haddocks after they go away, except little small ones.

2617. Did you hear what the last witness said about the Scotch boats?—Yes.

2618. Do you agree with him?—Yes, I believe the fish have fallen off ever since they went off to these banks to fish them. We used to have plenty of haddocks close in, but since they took off there we can get none to pay us. At that time we took the outer fishing in the offing and now it is not worth our while to go. I have got plenty of haddock there in my time, 40 or 50 score in a day. Now we can get none. That is a sign that they have destroyed the fish, by fishing on those banks, and catching both young and old. They get plenty that are not worth eating.

2619. Then do you think that the Scotch fishermen have done you all the mischief in your fishing, and not the trawlers?—We have had no trawlers down here.

2620. Then you cannot say that the trawlers have done you any harm?—I don't know whether they have or not; if they come down here they will do us far more harm.

2621. You do not think that the trawlers fishing down below North Sunderland will do you much harm here?—Yes, if they were at North Sunderland, I think they would.

2622. How would they injure you?—They would take the fish. The fish do not bide always in one place. In the summer time and in the winter time we get very few codfish. Now they are falling in after the herring. When the herring go away they will go where the herring are. They may go away far north. We get very few cod all the winter through.

2623. You heard what the last witness said about protection from the French?—Yes.

2624. Do you think he is right in the opinion he expressed?—Yes.

2625. What do you think is the protection requisite?—I think the gunboats should be here.

2626. How far off would you keep the French?—I don't know how far off. Sometimes we have to go further off ourselves, and we think the Frenchman should not be there where we are.

2627. You would keep him out of your ground altogether?—Yes, clear of us altogether.

2628. So that wherever you went you would have the Frenchman well outside?—Yes.

2629. And you wish to have a gunboat to go after you and see that he did so?—Yes.

2630. Have you ever heard of herring being caught here in January?—No, we never catch any at that time.

2631. Do you see an 'appearance' of herring at that time?—At one time they were seen, but none were caught. The spawn was there, and we caught the haddocks feeding on the spawn.

2632. In what month was that?—It was in the winter time.

2633. In what year was it?—17 or 18 years ago. It is a good time since.

2634. And at that time the herring were spawning?—Yes, it was the same kind of herring that they were getting at the Firth of Forth.

2635. You found the haddocks full of their spawn?—Yes.

The witness withdrew.

B. Kyle.

Benjamin Kyle called and examined.

2636. (*Mr. Caird.*) Have you long been engaged in the fishing here?—About 20 years.

2637. Have you heard the evidence of the witnesses who have already been examined?—Yes.

2638. Do you agree generally with them that there has been a falling off in the white fish and in the herring?—Yes.

2639. In your experience has the size of the white fish decreased as well as the quantity?—The haddocks are much smaller. There is not so great a difference in the herring, but the haddocks are a great deal smaller.

2640. Have you any observations to make with regard to the interference of the French fishing boats?—I think that the greatest damage is done to us within the three-mile limit.

2641. Within the three-mile limit?—Yes, I think we sustain less injury when we fish about five miles off. The principal damage is done when the shoals come in shore.

2642. If the French boats were kept strictly without the three-mile limit, do you think that your fishing would be better?—Yes, I think so.

2643. Then, it would be a matter of importance to you that the convention should be carried out?—Yes.

2644. Would that remove much of the objection which is made now with regard to the injury done by the French?—Yes, I think it would.

2645. Do you find that the shoals of fish are broken in any way by the French throwing over the offal from the boats?—Yes, a great deal of injury is done in that way.

2646. Has it any effect in attracting the dog-fish?—Yes, the dog-fish will follow everything.

2647. And if the dog-fish are attracted, do they frighten the herring?—Yes, and they do a great deal of damage.

2648. Have you observed that with your own eye?—Yes.

2649. (*Professor Huxley.*) Where is most of your herring-fishing done; how far from the shore?—It is generally within the three-mile limit. When we have any shoals to do us any good they are generally within the three-mile limit.

H. Macdonald.

Henry Macdonald examined.

2650. (*Mr. Caird.*) Are you a native of this place?—Yes.

2651. Have you been long engaged in the herring-fishing?—I have been 13 years at the herring-fishing, and I have gone to the white-fishing for a season or two.

2652. What observations have you to make with regard to the herring-fishing?—With regard to the herring-fishing, what has been stated by the other witnesses is correct. After we have shot our nets the Frenchmen will come and shoot their kegs alongside of us, and if we say "Oh don't shoot there," they

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will say "We don't care for you, John Bull." At night, after dark, their boats are sent out to protect their kegs at the trail, and they will come to our trail and haul us up. They will take up half of our nets in their boats and go off with them.

2653. That is plunder, then ?—Yes.

2654. Is that done within the three-mile limit ?—Yes, and without it too.

2655. (*Professor Huxley.*) But surely you know that that is against the law ?—Of course it is.

2656. Why did you not take their number ?—You cannot get it. You only see them fishing and you cannot leave your nets.

2657. (*Mr. Caird.*) Have you no gunboats going backward and forward ?—Yes; but suppose there is a large shoal of fish off Holy Island, you will have Sunderland boats, Holy Island boats, Craster boats, Berwick boats, and other boats all running from Sunderland to Emmanuel Head. But the gunboats are at Berwick. The Frenchmen come in at the Sunderland end, and they will shoot away, and all the damage will be done before the gunboats can get there.

2658. Then how would you remedy that difficulty ?—I would have two or three guard-boats to row about.

2659. Guard-boats attached to the gunboats ?—Yes.

2660. If that were done with greater vigour, would it give you much greater protection ?—Yes.

2661. Is there any other observation you desire to make ?—I quite agree with what has been stated in reference to throwing the offal—the herring guts—overboard. I have no doubt that it gathers dogs, because if you only shoot your nets, and want to try your line, if you will send a herring down you will see the dogs take it. There are a great many heads of herring among the offal, and when they are thrown overboard they collect all the dogs together. When they come they don't go among the body of the herring, but they keep to the outside or the inside, and they will start them off the ground. The Frenchmen will come down here and before the fish can get gathered into a large body they are off 10 or 12 miles away. As the Frenchmen sail about backward and forward it does not matter very much to them, but it makes a great difference to us. The Frenchmen shoot among them, but they are allowed to do so because it is beyond the three-mile limit. They shoot with all their boats, perhaps 100 or 120 sail among them, and the consequence is that the herring never get a chance of gathering into a body and coming in to our shores. Nearly all of them are caught before they can do so, and they get entirely broken up.

2662. But if that is outside the three-mile limit the gunboats could give you no assistance ?—The Frenchmen are a parcel of thieves, Sir; not one of them, but the whole lot; and if you say anything to them, and there are plenty of them speak very good English, they will tell you, "No care for you, John. Take it out of that" (*making a derisive movement*). I remember when one of the French vessels came down upon us I pretended to take a piece of paper out of my pocket and looked for his number in order to take it down, when he called out, "Oh John, me no care for that." Upon that occasion we had to haul in our nets, or they would have been destroyed.

2663. Was his number quite plain ?—Yes.

2664. Then you could have taken his number ?—Yes, but we thought it better to haul in our nets. He knew quite well before he got his nets in that he could not get clear of us; we knew so too.

2665. So you got out of the road ?—Yes, we got from 15 to 20 barrels of herring before we did take out, and if we had not been interfered with we might have got 40 or 50.

2666. Do you agree with the previous witnesse, that if the Frenchmen were kept without the three-mile limit it would be of advantage to you ?—The biggest shoals of herring come in within the three-mile limit. When they come within three miles all the boats get good fishing. Occasionally, since I have been at sea, all the boats would average 30 barrels for a night's fishing.

2667. What will they average now ?—Average! why not five.

2668. What did they average this year ?—Why, I should say, that the best fishing night we have had this year would not average 10 barrels.

2669. You mean the best fishing night this season ?—Yes, this season; the best shot of herring was 11½ barrels, and I have had 35 and 36 for a night's fishing. But that has been when we had a clear berth and had none of these Frenchmen driving.

2670. Then you think it is the want of protection that spoils your fishing ?—Yes, that causes us to lose our fishing. The Frenchmen take our herring away and they take our money away as well.

2671. Do you think that you would derive great advantage from having the Frenchmen kept outside your limits ?—Most undoubtedly we should.

2672. Would you keep them further out than that ?—I would keep them away on their own coast altogether.

2673. But still if you had protection for the prescribed limit, it would be of great advantage to you ?—They must be kept either on the off side or on the inside of us. If they are within our fishing they would injure us.

2674. Do you agree with what the previous witnesses have said about the French boats shooting their nets without any regulation ?—Do you mean before sunset ?

2675. Yes.—I do not suppose that any of our boats do shoot until after sunset. We shoot our nets just as the sun is going down.

2676. But with regard to the French fishermen, how do they do ?—Why, as soon as they see us coming off, if the herrings are three or four miles off, they are on the ground before us, and down go their nets. They had capital shots the night before last, the night before that, on Saturday night, and on Sunday night. When we went off they were all anchored and we had to go round them. As soon as we got to the other side it was up with the anchor and shoot away. They were hauling plenty of herring and we got none.

2677. Was that outside the limits ?—No, it was within the limits.

2678. Then why, when you took their number, did you not make a complaint ?—I had no paper or pencil, I only made a pretence of taking their number.

2679. Could you not recollect the number ?—No, it would have been a matter of difficulty.

2680. Are you aware that the state of the law is exactly what you wish it to be ? If you shoot your nets first the French fishermen have no right to shoot within half a mile of you ?—Then what is the reason they do it ?

2681. If a Frenchman comes within half a mile, either to windward or leeward, you can take his number, and if you lodge a complaint against him he will be punished. Are you not aware of that ?—Yes.

2682. That is the law now ?—Yes.

2683. Do you think you would have sufficient protection if the existing law were enforced ?—Provided the gunboats would do their duty I think we should.

The witness withdrew.

J. R. R. Lilburne.

JAMES ROBERT RODDAM LILBURNE examined.

2684. (*Mr. Caird.*) You are a retired officer of the navy, I believe ?—Yes, on the reserve list.

2685. Have you been long resident here ?—Not very long; I only came here lately, and have been here about three years.

2686. Do your experience and knowledge enable you to speak of the fishing here ?—I have nothing to say with regard to the fishing, but I wished to make a statement in reference to the Convention which I have had to put in force both off this coast

and Yarmouth, as well as in reference to trawling all over the North Sea.

2687. Had you occasion to study the articles of the Convention continually?—Yes; one of the articles of the Convention says that decked boats shall shoot half a mile to leeward or windward of undecked boats. I think it is perfectly impossible to do that. The herring is a fish that lies close, in shoals, and you have all the boats lying within yards of each other instead of half a mile.

2688. Then do you think that that article of the Convention is a dead letter?—Yes, quite a dead letter.

2689. (*Professor Huxley.*) Why is it impossible to carry it out?—The fish are there in such numbers that it would be impossible to make a distinction. There would be none of the boats there to carry on the fishing if that article were strictly carried out.

2690. (*Mr. Caird.*) Then do you think that that is an article that ought to be amended as being impracticable?—Yes, I do not think it possible to carry it out.

2691. Is there any other article that you consider impracticable?—I do not think that the French boats ought to be allowed to carry on their fishing operations within the limits laid down in the Convention, nor ought they to be allowed to remain within the limits if they get within them.

2692. But the Convention provides that they shall not do so?—But they do so constantly.

2693. That is because our police are not sufficient?—Yes. They not only do this, but they remain inside not awaiting a favourable opportunity to go to the fishing ground outside, but they remain watching our boats instead of going outside the limits.

2694. Are they not prohibited by the Convention from doing that?—Yes, but there is no protection. I have seen them carrying on their fishing in the harbour within 100 yards of the Alert.

2695. When you were in the command of a cruiser what did you do?—I did prevent them as far as I could.

2696. Do you think that a large ship like the Alert is an improper ship to send down here to protect the interests of the fishermen?—Not at all, if she made use of her boats. She has three good boats, and she might have them out every night, and gunboats might go round the coast every morning and bring in the rowboats. I believe that up to the 31st of August the pinnace was only out one night. The French fishermen were here on the 29th of August, on a Saturday, they shot their nets on the Sunday, and went to France loaded with fish on the Monday. That was told to me by the lieutenant of the Cuvier.

2697. Do you think that the sending out of rowboats would be a better protection for the fishing than sending out gunboats?—Yes, because rowboats can go in among the fishing boats better than gunboats.

2698. Would they receive as much attention as the gunboats?—They could take the numbers of the fishing boats and report them to the gunboat, who would take them in tow.

2699. What suggestion would you offer as to the best vessels for service in protecting our fishermen from the Frenchmen?—The vessels employed should be gunboats with more men and boats attached to them.

2700. How many boats would be necessary to protect the coast of Northumberland?—I should say that three would be ample.

2701. They would be sufficient from the Tyne to the Tweed?—Yes. The herring are never always in one place. They move about. The gunboats could go about and ascertain where the herring are.

2702. Do you think that three gunboats would be better than the Alert?—Yes; she has done nothing to protect the fishermen.

2703. Is there any other article of the Convention to which you wish to call attention?—With regard to the pennant they are to wear when on the coast of France, is that only to be displayed here when they are within the limits of the fishing grounds?

2704. (*Professor Huxley.*) It applies to all cases. Have you anything to say with respect to the trawlers?—With regard to the trawlers I think they do a great deal of damage in consequence of the meshes of their nets being so small. I have watched them close to the Texel, and have seen them take on board an enormous quantity of offal, especially red gurnet. All this had to be thrown overboard whenever they hauled their nets up.

2705. (*Mr. Caird.*) Were the fish dead?—Yes; they were not marketable fish.

2706. Have you observed the deep-sea trawl-boats?—Yes.

2707. Do they bring up a large quantity of immature fish?—Yes, and that is because the meshes of the net are too small.

2708. What do they do with the small fish?—They throw it overboard.

2709. They are thrown overboard?—Yes.

2710. (*Professor Huxley.*) Allow me to ask you a question with regard to the state of the law. The first article of the Convention is that "British and "French subjects fishing in the seas lying between "the coasts of the United Kingdom of Great Britain "and Ireland and those of the kingdom of France, "shall conform to the following regulations." Therefore the whole of the regulations apply to British and French subjects fishing in the seas lying between the coasts of France and Great Britain?—Yes.

2711. They apply as much to the French fishermen as to those of this country?—Yes; then they may fish from John o'Groat's to Dunkirk.

2712. Yes. The regulations are as binding upon Englishmen going out from their own ports as upon the French fishermen coming here. The 50th article says: "For the purpose of distinguishing by day drift-"net fishing boats from trawl-boats, both shall carry "at the masthead vanes, which shall be at least 8 "inches in height, and 2 feet in length. The colours "of these vanes shall be for British trawl-boats, red; "French trawl-boats, blue; British drift boats white "and red; French drift-boats, white and blue. It is "understood that the vanes of drift-boats shall be "divided vertically into two equal parts of which the "white shall be nearest to the mast." You see the law is absolute?—Yes, between the two seas.

2713. The 51st article says:—"It is forbidden to all other fishing boats to carry vanes similar to those mentioned in the preceding article." So that the Act clearly contemplates that all drift-net boats and all trawling boats shall have vanes. It is however a nice legal point whether it should be inside or outside of the limits?—Drift-net boats have no standing masts, therefore I cannot see how the Act is to be carried into operation. They could not work their nets if they had masts.

2714. Surely they have a mast for their sail?—Yes, but they are obliged to lower the mast down into the boat.

2715. But the mast might carry a vane at the end of it whether it was lying down or not?—Yes, but it would be undistinguishable. With regard to the practice of throwing offal overboard, I believe that it accumulates dog-fish. Crabs have also accumulated very much during the last 25 or 30 years, and they pick up the spawn lying on the ground.

2716. Do you think there is a possibility of enforcing the regulation with regard to the French boats not shooting their nets inside the English nets, and *vice versâ?* I understood you to say that that is impracticable, on account of the number of fish?—Yes.

2717. But suppose that the English fishermen shoot their nets in a shoal of fish, the law is that the French shall only shoot half a mile to windward of leeward of them?—Yes.

2718. What is there to prevent that regulation from being carried out?—Because they all shoot together.

2719. But they are forbidden to do that.—Then if the decked boats shoot among the fish the undecked

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boats may not come within half a mile of them. Say for instance that the Yarmouth boats are there and have shot their nets, must our boats wait until they get half a mile to the windward? I think it would be impossible to carry that out.

2720. How so?—Because they cannot do it.

2721. But that is what the law contemplates, because it says if the undecked boats have shot their nets first then the decked boats shall not shoot within half a mile of them?—If you were to carry that out you would prevent the decked boats from fishing at all.

2722. That is clearly what it contemplates. On the other hand it operates equally hardly upon the English fisherman, because if the decked boats shoot their nets first, then the undecked boats must only shoot half a mile off. That is the state of the law, and you cannot doubt that it is possible to carry it out. It would be perfectly easy to carry it out, would it not?—Perhaps so, but you would prevent one party from fishing at all.

2723. (*Mr. Caird.*) And by that means you would lose a good deal of fish?—Yes, I think so. The consequence of enforcing the law would be this: Some 50 or 60 decked boats would shoot their nets, and they would keep 50 or 60 boats outside of them. They would fish on a small spot of ground, and would occupy the whole of it. The fishermen with the undecked boats could not shoot their nets at all and they would be compelled to go half a mile to leeward or windward, clear of the fish.

2724. (*Professor Huxley.*) That is what I wanted to get your opinion upon, namely, if it is possible to carry this law out?—It is possible, but I think it would work most disadvantageously to our own men.

2725. If it were carried out, and the French fishermen minded what they were about, they would exclude all the English from the fishing?—Exactly so.

2726. So that the strict enforcement of the terms of the Convention would positively restrict any Englishman from catching fish outside the limits?—Yes. Inside the limits they might fish.

2727. But at the same time it is perfectly practicable to carry the law out?—Yes, but I never looked at the law in that light.

2728. You were always looking at the limits of the shoal?—Yes.

2729. But the Act says nothing about that, and the effect of enforcing a compliance with the provisions of the Act would be to cut our own fishermen out completely?—Precisely.

2730. That is not what you imagine could have been meant by the Convention?—No.

2731. (*Mr. Caird.*) Have you any other remarks to make with regard to the Convention?—No.

2732. Nor as to the fishing?—I only know from my own knowledge that there is not the same quantity of fish caught as was caught formerly.

Adjourned until Monday, September 28th, at Sunderland.

Sunderland, Durham, 28th September 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

JOHN PURVIS called and examined.

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2733. (*Mr. Caird.*) Are you a fisherman?—Yes.

2734. Where are you a fisherman?—At Whitburn.

2735. How many years back does your recollection of the state of fishing there extend?—I have been fishing there for upwards of 48 years.

2736. Have you observed in the course of those 48 years any considerable change in the number of fish caught and brought ashore there?—Yes, there has been a very great change within these last four years.

2737. The change you have observed has been chiefly within the last four years?—Yes.

2738. Has there been any increase in the number of fishermen on that station within the last 48 years?—Yes, there are now three boats more than when I went to sea.

2739. Has there been any increase in the number of boats during the last four years to which you have just referred?—No.

2740. With regard to the diminution in the quantity of fish, has that been most striking within the last four years?—Yes, it has.

2741. Has there been any perceptible change in the quality of the fish as well as in the quantity?—Yes, I think there has, as well as in the quantity; the fish are not so large now as they were some years ago.

2742. In what kind of fish generally have you noticed a diminution in the supply?—Our haddocks particularly are less in size.

2743. The haddocks?—Yes, the haddocks have fallen off in size a great deal; I consider that the size of the haddocks now is nothing to what it was four or five years back. What we now call a large haddock is not as large by one-third as they were some years ago.

2744. And in regard to the quantity of the haddocks, I understood you to say that the diminution has been also very great?—Yes, very great indeed.

2745. Can you put a figure upon it; take a boat's catch now, and compare it with a boat's catch within your experience some years ago. It is not necessary that you should go so far back as 48 years, but compare it with what a boat's catch would be 10 years ago?—Well, 10 years ago we should average 30 or 40 and even 50 stone in a boat.

2746. And what will a boat's catch average now?—It is considered a very good take of fish to get now in the winter time 20 stone, but I should say that the average would not be more than 10 or 12 stone.

2747. Then, the average has fallen off until it is only about one-fourth of what it used to be?—Yes, something like that.

2748. And what is the difference in the price now as compared with what it was 10 years ago?—The price of fish formerly was a great deal cheaper than what it is now. I should think that a fisherman's earnings in a boat employed in fishing now is only about one-third of what it used to be.

2749. Taking into account the increased price and the diminished quantity caught, are the earnings of the fishermen equal to what they were 10 years ago?—They are certainly not equal to what they were 10 years ago.

2750. Does not the difference in price compensate the fishermen for the falling off in the quantity of fish taken?—No, it does not.

2751. Then, the fishermen are not so well off now as they were formerly?—They are not so well off by far. For my own part, I could not have maintained myself and brought up a family as things are now if they had been no better in my day. I have brought up 10 children.

2752. What mode of fishing do you adopt in line fishing?—Do you mean what do we catch?

2753. No, how do you catch your fish?—We catch cod, ling, skate, and other fish with a hook.

2754. Do you use the same bait for all those fish?—Yes.

2755. What bait is it that you use?—Limpets and mussels. That is the bait we generally use on that shore.

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2756. Where do you get your bait?—There is a very good supply on our own shore near to Stockton-on-Tees.

2757. Have you had any difficulty with regard to obtaining bait?—We sometimes had a poor supply of mussels, but we could always get limpets—'flitters' I think you call them in the South—things with a round shell.

2758. Does the difficulty you experience in getting bait at all impede your power of fishing?—I do not understand your question.

2759. Is there any such difficulty in getting bait as to prevent your fishing with your former success?—No, we can get plenty of bait to catch the fish with if there were fish to be caught. We generally carry out now more line than we used to take, and yet we get less fish. The same boat that was employed years ago would use much more line now.

2760. How much more line would it use?—From 400 to 500 hooks. We have that number of hooks on a line, and we take seven and sometimes eight of them to sea in a morning.

2761. How many did you take when you first began to fish?—Sometimes six or seven in a boat, but not regularly.

2762. And did they have the same number of hooks?—Yes, about the same number of hooks.

2763. Have you in any way altered your mode of fishing in that time?—No, we have not.

2764. Do you fish now exactly in the same way that you used to do?—Yes, we fish now in the same way as when I first went to sea at 10 years of age.

2765. Then you have not observed any necessity for improving or altering your mode of fishing?—We might observe that there might be a necessity to try an improvement if it could be made, but we cannot see how we can introduce much improvement with regard to fishing with lines. We have tried many schemes, such as making our lines smaller in the winter season, so that we might be enabled to catch more fish, but, notwithstanding, we find the fish growing less and less in quantity every year.

2766. How has it been with regard to the quantity of cod?—There has been a great decrease in regard to cod likewise.

2767. Has there been a decrease in the size and quality of the cod?—There has not been so much difference in the size of the cod, but there has been a great difference with regard to the skate. When I first went to sea, up to five years back, I have seen the boats bring from 50 to 100 large skate ashore in the summer season, and now you scarcely see a boat bring one or two ashore in the course of a day.

2768. Is there any other kind of fish that has very much fallen off besides the skate?—No, I think not; there has been very little falling off in any other kind of fish caught with the hook.

2769. Is the hook the only mode of white-fishing you practise here?—Yes; along this coast we use nothing else.

2770. Do you get any turbot here?—Yes, I have been catching it almost all my lifetime, ever since I went to sea. I suppose you mean what we call 'bratt'.

2771. Do you find any diminution in the quantity of turbot caught now as compared with what was caught in former years?—There has not been a very great amount of turbot, but we don't fish for it now as we used to do. The smacks have completely put an end to our trying for turbot. The trawlers are always oversetting our nets.

2772. In what way?—During the last six years I have had them set six different times and they have always been taken away by the trawlers. I have had them caught by the trawlers and carried away by the trawlers, and once I had them dredged in a heap altogether.

2773. Do you mean by the trawl-boats passing over your nets?—Yes. I remember in one shot I got upwards of 30 fish, good-sized fish; the trawlers came then, and that is the only shot I got out of them. Even this year I durst not put my nets into the sea on account of the trawlers. If I had done so I should have lost them altogether, and they would have been taken quite out to sea.

2774. Then you cannot fish because of the trawlers?—No.

2775. I understand you to say that you do not think the fish has diminished in quantity, but that your power of catching them has diminished?—Yes, we could get plenty if we were only allowed to put our nets into the sea without running the risk of having them taken away by the trawlers.

2776. When did that difficulty first arise?—I should say about four years since.

2777. Did you fish for soles then?—Yes.

2778. Did you trawl for soles?—We formerly trawled for soles, but now we fish for them with the line.

2779. Has the quantity of soles caught here increased or diminished?—It has diminished a great deal within the last 10 or 12 years, and lately it has decreased more than ever.

2780. Has there been a gradual diminution within the last 10 years?—Yes, a very great diminution indeed, with regard to in-shore fishing. We always trawled close in-shore.

2781. Have you discontinued trawl-fishing altogether?—Yes, many of us have done so. We go now herring-fishing.

2782. Do you attribute the falling off to the fact that you discontinued trawl-fishing?—No, I judge that the falling off has been in consequence of the spawn having been taken away or destroyed.

2783. I understand you to say that you do not take the same means of catching them that you formerly did?—No; we use lines now and formerly we used nets.

2784. Do you think you get as many with the lines that you use now as you did formerly with the nets?—Yes, I think so, and we get better fish.

2785. Then it is not the line-fishing that has occasioned the diminution in the number caught?—No.

2786. Do you believe that the number of soles has in reality diminished?—I think they have in-shore; but not in the offing, if the trawlers would only let them alone.

2787. How are you able to say that the number of soles caught has not diminished in the offing, whilst they have diminished in-shore?—Well, I believe that they breed in the offing, and I think they come from there in-shore.

2788. Then how is it you arrive at the conclusion that they have not diminished there?—I come to the conclusion for this reason: if it were not for the supply of soles that we get from the offing we should never have them in-shore at all.

2789. You believe they have not diminished in the offing; now what means have you of ascertaining that?—I don't believe that they have diminished except it has been in consequence of the trawlers. They will not leave anything on the ground if they are allowed to trawl over it.

2790. Did you ever fish for soles in the offing yourself?—No, I never trawled at all in the offing for soles.

2791. Where do you fish for soles now?—I fish for soles very close in-shore.

2792. With a hook and line?—Yes, I use a line if I fish at all, but I don't often go. There is only one boat that goes out of this place trawling with a trawl net.

2793. Do you get any salmon or salmon trout on this shore?—No we do not.

2794. You get no salmon trout?—We may get one or two occasionally, but we are well aware that we are not allowed to catch them. I believe there was an Act passed a short time ago to regulate the salmon fisheries. Perhaps you will remember it.

2795. Have any restrictions been placed upon you on account of the mode which you have adopted for fishing salmon?—Yes, I believe so.

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2796. What mode was it then that you adopted?—Well, there is a gentleman here present much more accustomed to this sort of thing than I am, and perhaps he will explain it to you.

2797. You have not practised fishing for salmon trout much yourself?—No.

2798. Are there any mackerel off this shore?—Yes, plenty.

2799. Do you fish for them?—No, I do not.

2800. Do you not consider it worth your while?—No; we are generally engaged in the herring fishery at the time the mackerel appears here. The mackerel generally comes astern of the herring, and we catch part mackerel with the herring. But so far as fishing for mackerel itself is concerned we have not fished with mackerel nets now for a good while.

2801. You think the mackerel come in here with the herring?—They generally come after the herring.

2802. And can they be fished at the same time?—Yes.

2803. You find the herring fishery a profitable business?—Yes, until within the last few years, when we found that the herring was falling off.

2804. Have you ever seen the mackerel off this coast when there was no herring?—Yes, we have sometimes.

2805. And have you never fished for them then?—Yes, occasionally.

2806. But you do not practise mackerel-fishing as a general trade?—No, not so much as we did formerly.

2807. Did you find that it paid well, formerly, when you did practise it?—Not very well, we never got any great take of it.

2808. What was the cause of that? Why did you not catch them here as well as at other places?—I think the reason was that we had not enough nets for shooting around the shoals.

2809. You had not enough nets?—No.

2810. Would it not answer your purpose to get new ones?—Yes, I believe it would if we could afford to get them.

2811. Do you get any oysters off this shore?—No, none.

2812. Do you get any crabs or lobsters?—Yes, plenty; we used to get plenty formerly.

2813. Have you noticed any diminution in them lately?—I have.

2814. In which of them have you particularly noticed a diminution?—In lobsters particularly, but we attribute that to the ballast a good deal.

2815. What do you mean by that?—I mean that they have greatly decreased in consequence of a practice that prevails of taking the ballast out of the harbour and heaving it out at sea on the ground where the lobsters generally breed.

2816. What is the practice with regard to depositing ballast at sea here?—All I know is that they take it out of the harbours in large vessels, and they cast it into the sea and it washes about until it fills all the lobster holes up.

2817. Is there any rule with regard to depositing ballast to this effect, that the ship which takes it out to sea shall carry it a certain distance?—Yes, I think there is.

2818. Can you speak upon that point precisely?—No, I cannot.

2819. But you know that injury has been done to the shell-fishing in consequence of the ballast having been deposited upon the places where you have been in the habit of fishing?—Yes, I am quite certain that very great injury has been done.

2820. Will you explain in more precise terms what the injury is which has been sustained?—The ballast washes ashore on our beach and also into our mussel beds. Formerly we put our mussels down close in shore and we had no ballast to interfere with them. Now, since they began to deposit the ballast out there, I have seen many a time in the winter all the beds covered with ballast.

2821. Do you mean that the ballast has been driven ashore by the waves?—Yes.

2822. And the ballast washes into the holes where the lobsters and crabs take shelter?—Yes; there are some holes from which we have been in the habit of getting three or six lobsters at a time, and these holes are now totally filled up with ballast.

2823. At what distance is that from the shore?—I believe the buoy stream is in about 10 fathoms of water.

2824. Could any regulations be adopted to render it compulsory for the ballast to be taken further out to sea, so that it would do you no injury?—I don't think it would be any advantage to us even taking it further out to sea.

2825. Then do you object to its being taken to sea at all?—Yes, I do.

2826. Are you of opinion that if it is deposited at all in the sea it must injure the fishing?—Yes.

2827. How long is it since you observed any injury to the fishing in consequence of the deposit of ballast?—It has been injuring us for the last 20 years or more.

2828. Has the injury increased lately, or has it diminished?—It has increased.

2829. Do you mean that you have observed a diminution in your supply of shell-fish during the last 20 years?—Yes.

2830. Do you find that there is a diminution in the lobsters particularly, or both in lobsters and crabs?—There has not been so much diminution in the crabs as in the lobsters.

2831. Can you give us any reason for that?—No, I don't know what the reason can be. A lobster will take his hole more than a crab. A crab takes his seat anywhere, whilst a lobster is a thing that must seek shelter under the ledge of some rock.

2832. Do you fish lobsters more closely than crabs?—We fish for both but we cannot get crabs so frequently as lobsters. We get more lobsters in the winter time than in the summer, until the month of May when the crabs come in plenty. That has not been the case, however, for a few years past. They have not been so plentiful as they used to be.

2833. With regard to the herring-fishing, have you observed whether it has been increasing or diminishing on this coast?—It is greatly diminishing.

2834. Can you state whether the herring-fishing or the other sea fishing was most remunerative to the fishermen here in former times?—I think we should get most from the white-fishing, because that lasts all the year round or nearly so. We only go for about eight or 10 weeks to the herring-fishing, but the white-fishing is all the year round, and turbot-fishing is carried on during the summer season.

2835. When does the herring-fishing usually begin here?—About the month of July.

2836. And within the last 10 years have you noticed any decided diminution in the catch of herrings?—Yes; there has been a little diminution every year within the last 10 years, but within the last three or four years there has been a great diminution in the take of herrings.

2837. The diminution has been chiefly within the last three or four years?—Yes.

2838. How many boats are employed by you in the herring-fishing?—About 14 or 15.

2839. Has the number increased during the last 10 years?—I think within the last 20 or 25 years we have increased about three boats.

2840. And that increase has continued up to this time?—We have not had a great many more up to the present time.

2841. Has the quantity of herrings caught by each boat fallen off considerably?—Yes.

2842. Are you enabled to state what a boat could catch in a season a few years ago?—Perhaps our take might be somewhere about 100*l.*

2843. 100*l.* worth of fish?—Yes; some seasons from 80*l.* to 100*l.*

2844. Is that 10 years ago?—Yes.

2845. And what may be the value of your take now?—From 20*l.* to 30*l.*, and from that to 40*l.* But

I think there are very few boats in our place that have averaged 40*l.* this year.

2846. Will you have the goodness to state what was the price of a barrel of herrings 10 years ago?—I can hardly give you that correctly, but I daresay it would be from 16*s.* to 18*s.*

2847. And what is the average price now?—About 11*s.* or 12*s.*

2848. Is that all you get now?—Yes. But we don't sell the herrings by the barrel. We sell them by the thousand.

2849. But you know the price of a barrel of herrings?—Yes, I have heard the price very frequently named in the North.

2850. Would it be more convenient for you to give the price in a different way?—Yes, I can give it per thousand.

2851. Then what was the price of 1,000 herrings 10 years ago?—It would be somewhere about 2*l.*; it would range from 30*s.* to 2*l.*

2852. What is the price now?—We sold them this last year at the same price. Sometimes we get less and sometimes we get more.

2853. Has there been very little difference in the price of herrings during the last few years?—I don't think there has been much difference in the price, but there has been a great decrease in the quantity taken.

2854. Then the price of herrings has not increased during the last 10 years in the same way that the price of all other fish has increased?—I cannot say that it has. I don't know very much of the subject. I am very little acquainted with the price. But I know that the quantity has very much diminished.

2855. Has your mode of fishing herrings changed in any way in the course of your experience?—No, but the boats are a little larger than they were.

2856. What do you think is the cause of the decrease in the quantity of white fish?—I believe it is owing entirely to the destruction of fish occasioned by trawling.

2857. Do you mean by the deep-sea trawlers?—Yes.

2858. Are there any deep-sea trawlers in your port?—Yes, last year we had as many as 15 here.

2859. Do any of them hail from your port?—No, none of them.

2860. Do any of the deep-sea trawlers come fishing near your shore?—Yes, they are very near our shore sometimes.

2861. How near do they come?—Well, I should say that they come within three miles very often.

2862. Have you ever been alongside of a trawler when she was fishing?—Yes.

2863. Have you seen the trawl drawn up?—Yes; I have seen it drawn up at a distance, and I have seen our gear taken up by them. We have often had our nets taken up and our lines destroyed.

2864. When you sustained an injury of that nature did you not make a complaint?—Yes, I have made a complaint, but I got no redress.

2865. Were you not able to ascertain the number of the boat that did you the injury?—No, it was very difficult to do that. The boat that took away my gear had neither number nor name that I could discern.

2866. Is that frequently the case with the trawlers?—I think it has been with regard to the trawlers off this coast. I believe that many of them have neither had name nor number.

2867. Have you ever yourself seen a trawl taken up?—No, I have not seen it close at hand.

2868. With regard to the herring fishery, have you any reason to give as to the falling off in the take of herrings?—I have no reason to give in particular, but I think that the French fishermen impede our business a great deal.

2869. Do they fish off your shore?—Yes, they shoot their nets close among ours, and they plague us very much, especially if they get to windward of us. In that case they drive down upon us and we are obliged to haul in. If we did not we should lose our gear.

2870. I believe that your boats and gear are much lighter than those of the French fishing boats?—Yes, and we are shorter handed than they are.

2871. Do they come within the three-mile limit to fish?—Yes; they are not at all particular about that. I have seen them fishing not above a mile from the shore.

2872. Do they observe any regulation as to the time they shoot their herring nets?—No; they generally take an advantage of us, and they shoot an hour or two before us. Whenever they see our boats coming out they shoot their nets at once; the consequence is that when we get out we find it impossible to get our nets down among them. In point of fact, we dare not go among them for fear of losing our gear, particularly in heavy weather.

2873. Have you noticed, within your experience, whether the herrings are chiefly found within the three-mile limit or outside of it?—I have found herrings both within and without.

2874. In which are they chiefly found?—At the back end of the season they are generally found within the limit and before that period they are a long way without it.

2875. Do you go beyond the three-mile limit with your boats to fish?—Yes.

2876. How far do you go?—Sometimes we go as far as 15 miles off.

2877. Do you follow the shoals?—Yes.

2878. Do you meet with any annoyance outside from the French boats?—There is not so much annoyance outside as there is closer in shore. There is more space for us outside and the French boats are more scattered.

2879. Is there any protection given to you by the Government?—None at all.

2880. Is there any gunboat down here?—We had one down here two years ago, but during the last two years I have not seen a gunboat here at all.

2881. Have you any boat rowing amongst you to keep the fishermen in their proper places?—No, we never see such a thing. We have had a French gunboat this year and for some years past.

2882. Does she interfere with you at all?—No.

2883. Have you ever had an opportunity of complaining that the French came within the three-mile limit to fish?—Yes.

2884. Who did you complain to?—I complained to the people on the shore, and I saw several gentlemen belonging to the Customs.

2885. Did anything follow from your complaining?—No.

2886. Do you think it would be of advantage to you if the French were kept strictly within the three-mile limit?—Yes, I think it would be a very great advantage to us.

2887. Can you suggest any mode by which the supply of herrings could be increased?—No, I cannot suggest any mode, except it would be to keep the boats from going off on the Saturday night and the Sunday night. I think that would be a good thing. It would enable the shoals to draw together, and in that way would be of great benefit to the fishermen.

2888. You are of opinion that both the French and the English should abstain from fishing on the Saturday and Sunday nights?—Yes, and I believe if that were done good takes of fish would then be caught.

2889. Do you think it would be of any advantage to you to adopt a regulation preventing you from shooting your nets until about half an hour before sunset?—We don't often shoot before sunset now. If we shoot before sunset the fish will see the net and they will generally go away from that part.

2890. Do you think it would be of advantage to establish a regulation to that effect?—Yes, I think it would be a very good thing.

2891. Do you think that all the fishermen would be glad if such a regulation were established?—Yes, I think they would.

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2892. And they would like to have it enforced?—Yes, I have heard several fishermen complain, and express a wish that a regulation of that nature should be established.

2893. Is there any mode in which you fish on this coast which in your opinion is at all wasteful, either in taking fish that are not in a marketable condition or in destroying the spawn?—No, not that I know of.

2894. Are there any existing laws that interfere with the mode of fishing at all?—No, I think not.

2895. Then no authority interferes with you to prescribe regulations as to the size of your nets or the times at which you shall fish?—No, nobody at all.

2896. Could any fence months be adopted with advantage to the fisheries?—No, I don't think there could, but I think that what you have spoken about would be a very good thing if it could be done. I cannot see anything better. Perhaps some one in the room may think it of advantage to do something else, and if so they will tell you in the course of the inquiry. There is one thing that occurs to me now, and that is that the trawlers might be kept away from this part altogether while line-fishing is going on. I would keep them south of the Humber, and not let them go north at all.

2897. You think they injure your fishing?—Yes.

2898. Has the injury they have been doing you increased in recent years?—Yes, greatly.

2899. Do you find that trawl-fishing is gradually coming further north?—Yes.

2900. Within recent years was there a time when the trawlers did not come opposite your shore at all?—Yes; they have only been here during the last six or seven years. Before then we had no trawlers to interfere with us at all.

2901. When did they first come here in any great numbers?—Within the last two years. Prior to that we had only two trawlers, and they have now increased to four or five.

2902. How far north do they go?—I cannot say how far north they go, but I know they have been at Newbiggen. They have been four or five at a time there.

2903. We were told at Holy Island that they don't come there?—No, but they have gone further north.

2904. Do they go further north than Holy Island?—Yes, I believe so.

2905. They go further north than that?—Yes, I read in the papers that they were in the Forth, and that they were driven away by the people who would not let them go there to sell their fish.

2906. Have you noticed whether any particular gale of wind has a tendency to increase the supply of fish?—Yes; a north-east wind used formerly to do us a very great deal of good in our fishing.

2907. Does it not do so now?—No, we have not found that it has had that effect lately. For the last few years we have not noticed any great difference.

2908. A north-east wind does not improve your supply of fish now?—No.

2909. Did a south-east wind have as much effect?—No, not so much effect as a north-east wind.

2910. Then were you able to make any marked distinction between a north-east wind and a south-east wind; do you find that a less supply of fish follows a north-east wind now than formerly?—Yes, the distinction used to be very great at one time, but it is not so now.

2911. (*Professor Huxley.*) I understood you to say that there has been a general diminution in all kinds of fish of late years. When was that diminution first observed?—About four years ago.

2912. Then up to four years ago the quantity of fish taken in any one year would be about the same so far as your recollection goes?—Yes, I think so.

2913. It would be the same as it is now?—Yes.

2914. You wish us to understand that, in your opinion, the quantity of fish from the time you first begun fishing remained the same up to four years ago?—Yes, but there might be seasons when they were not so plentiful.

2915. You have been acquainted with the long-line fishing, I believe?—Yes.

2916. Have you been in the habit of losing much by dog-fish?—Yes, we have lost a great deal of our hooks and snoods.

2917. Do you know a fish that they call the 'sucker'?—Yes.

2918. Do you lose much by the sucker?—When we have our gear lying in the sea,—our big lines,—we shoot them to-day and we don't go near them until to-morrow, and if in the mean time these suckers get at the fish they kill them all.

2919. Can you give me any notion of the average proportion of fish destroyed by the dog-fish and by the suckers; do you lose one tenth, or one twentieth, or one fourth of your catch, or what do you lose?—They are only there at one season of the year, perhaps three or four months.

2920. Can you give me an estimate of the quantity you lose by the dog-fish and the suckers?—Well, taking the average of a number of years, perhaps we might lose one thirtieth part.

2921. You were speaking just now of catching turbot by net. What kind of net do you use for catching turbot with?—We use a net 7 meshes deep and perhaps a 4-inch mesh from knot to knot. We catch no small fish at all.

2922. How long is your turbot net?—About 220 yards long.

2923. Is it a straight net without a pocket?—We have no pockets. The net is hung the same at the top as at the bottom. We have 10 or 12 of these nets all shot on an end.

2924. In what depth of water do you shoot them?—From 24 to 26, and up to 30 fathoms and upwards; just as we find the fish.

2925. Then if you have 14 meshes the net will hang 10 feet deep or a couple of fathoms?—No, not a couple of fathoms. We gather them in at the end and at the sides. Perhaps they will hang about eight feet.

2926. Do they hang from a head-rope?—We have a thickish cord at the head, perhaps the thickness of my finger. It goes along the top. We have also cork at the top, and stones or lead at the bottom. We put the nets overboard and we keep them going before the tide. The corks ride up when the nets are shot.

2927. So that it acts like a herring net in fact?—Yes.

2928. Are the nets made fast at each end?—Yes; we have an anchor at one end and a line attached to the net from the net to the anchor.

2929. So that the nets do not drift?—Yes.

2930. Then they are fixed nets?—Yes, we have a buoy so that we can find them in any weather.

2931. Can you shoot those nets where you like?—Yes, and we shoot them to the best of our opinion where we can get most fish.

2932. How long do you let them remain down?—We generally let them bide for about two days. We used to do that when we were fishing for the Barking smacks. They could come here and take the fish from us and convey it by sea to London.

2933. Are they 'bratt nets' that you mean?—Yes.

2934. Did you ever see such a regulation as this, "Such bratt nets, trammels, or other set of anchored "nets shall not, except in unavoidable cases, remain "more than 24 hours in the sea without being taken "up"?—We cannot take up our nets every 24 hours.

2935. Did you ever hear that such a law was in existence?—No, I cannot say that I ever did.

2936. Then you are not aware that that is part of the Convention between England and France with regard to the fisheries?—No.

2937. Then you would have been somewhat astonished if anybody had summoned you for a breach of the law?—Yes, I should; I never heard of it before.

2938. But it is the law. Do you think there are plenty of turbot still; I speak of bratt?—Yes.

2939. Do you think that the trawlers disturb the spawn of the turbot?—Yes, I do think they disturb

the spawn of the turbot. I think there would be plenty of turbot if the trawlers were put outside of this ground. The turbot we get comes from the deep waters, or we should never have any supply at all.

2940. Do you think that the quantity of soles caught off this coast has not diminished?—I should say it has not diminished much in our part of the coast, but at other places I believe it has. There are some parts in which it has fallen off much more than it has here.

2941. But surely if the trawlers have destroyed the spawn of the soles would not that have affected the quantity?—No doubt of it, but we only fish in-shore for soles, so that I cannot give you a good idea of that sort of fish. We fish for soles with a line in two or three fathoms of water, and from that as close in-shore as one fathom.

2942. Do you think that the quantity of flat-fish that can be caught by the hook and line is as great as that which can be taken by the trawlers? What I mean is, can you destroy as much fish by the hook and line?—I can hardly tell you that, but I think that if the lines were properly baited they would take as many fish.

2943. Do you think that you could bring as many fish into the market by the hook and line as is brought by the trawlers?—Yes, and a long way more if the ground is not disturbed; a very long way more than they bring in now. I don't mean flat-fish exactly, but other kinds of fish as well.

2944. But my question applies more particularly to flat-fish?—I don't suppose that we could bring as many flat-fish on shore with the hook and line as we did formerly.

2945. So that if there was a great demand for flat-fish, the result of catching it by hook and line would be to raise the price of the fish?—Yes, I think it would; I have no doubt it would.

2946. Then supposing all the trawlers were put down you think you could get as many fish as you do now?—Yes, I think so.

2947. I suppose you wish to see the trawlers put down?—No, I never wished them to be put down. We only want them to be clear of our coast. If they want to trawl, and they are fond of it in the South, why don't they trawl off their own coast? We don't want them here. We don't want to be bothered with them. Their nets catch our hooks and lines, and do us great injury.

2948. But if you could make sure that they would not destroy your lines and bratt nets, would you object to them?—Yes, we don't want them here at all. They have been here all the summer, and I should say that in consequence of their being here I have not lost less, during the last four years, than from 300*l.* to 400*l.*

2949. That is a great hardship, no doubt, but supposing it were possible to establish any kind of police regulations by which you could prevent the trawlers from taking your nets and your long-lines, would you have any objection to their trawling on this coast?—Yes, I should. My own opinion is that they cannot trawl without interfering with our lines and nets.

2950. But surely if they were fishing 15 miles out at sea they would hardly interfere with you?—Yes, they might. We go all that distance to fish ourselves.

2951. Would the same objection apply if they were confined to fishing off the Dogger Bank?—No, they would not do us any harm there, and I believe they have been trawling there.

2952. Do they trawl now?—Yes, I believe so, and they would not do us any harm if they confined their trawling to the Dogger Bank. They can trawl along there as long as they like for all I care about it.

2953. Then I understand from what you say that if the trawlers kept off your ground so as not to destroy your property, you would not care about them?—I don't know that. We don't want them on this coast at all.

2954. Do you think the operations of the trawlers have had a tendency to cheapen the price of fish in the market?—They may have done so. They have been so cheap, some of the fish, that they have been given away. They have sent an enormous quantity of stuff into the market which has not been fit to sell.

2955. Have you ever been undersold by them?—Yes, I think we have occasionally. We might have got a higher price for our fish if they had not been here, and in addition to that I think we should have caught more fish.

2956. Is that one of the grounds why you don't like them?—Yes, but perhaps you will let me explain. The fish we catch is good fish. Our fish is very different from theirs. It is a very different article indeed from what they take in their trawl nets.

2957. But I want to know if you think that the fish thrown into the market by the trawlers has had a tendency to lower the price of fish generally, so that you get less for your fish in consequence of theirs competing with yours?—I don't know whether that is the case or not. The price has been much higher of late years than it used to be. We used to have fish a good deal cheaper when there was plenty of it. I have sold haddocks at 1*s.* a score, and at the Ferry-boat landing here I have sold cod at 2*d.* apiece.

2958. Then you do not believe that you would get more for your fish if the trawlers were all put down?—No, but we should get very much more fish in quantity in the course of a few years.

2959. Have you ever had your attention called to the articles of the Convention between England and France with regard to the fisheries? There is a particular article in the law to which I should like to call your attention. Have you seen a great many trawlers fishing about here?—I have seen as many as 15 trawlers here in the course of a day.

2960. Do you know whether these trawlers carry any particular coloured vanes at their mast heads?—Yes, I think I have noticed one or two of them with a bit of small vane up.

2961. Were they red or blue?—The vanes I have seen have been blue.

2962. Have you ever heard of this article: "For "the purpose of distinguishing by day drift-net "fishing boats from trawl-boats, both shall carry "at the mast-head vanes which shall be at least "eight inches in height and two feet in length. "The colours of these vanes shall be, for British "trawl-boats, red; French trawl-boats, blue. British "drift-boats, white and red; French drift-boats, "white and blue." Did you ever hear of that before?—No, I think not.

2963. You see that one of the articles of the Convention is that the British trawl-boats shall carry a red vane. You say that you never saw a vane of that description used?—No, I never did.

2964. Do you think that trawling and line-fishing can go on together; is there room for you in the same water?—No, I think not.

2965. Then you are of opinion that one must go to the wall?—Yes, one must go to the wall, and we, being the weakest, are that one. If they knock us down we know where we must go to.

2966. And where is that?—Why, to 'Davy Jones's locker', I suppose.

2967. If the trawler destroys your nets, or your hooks and lines, I presume you know that he is open to the law?—Yes, but when they have destroyed our nets and lines, and we have sought protection, we have found it impossible to get any magistrate here to assist us in bringing the law into operation. Their belief is that there is no law in existence upon which they can act.

2968. But allow me to tell you that there is a very definite law. You stated just now that the trawler who destroyed your lines was not numbered?—No, he was not.

2969. Are you not aware that there is a very definite law upon that point?—I believe that all trawl-boats ought to be numbered.

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2970. The 14th article of the Convention says: "The name of each fishing boat, and that of the port "to which she belongs, shall be painted in white oil "colour on a black ground, on the stern of the said "boat, in letters which shall be at least 3 inches in "height, and half an inch in breadth." Did you ever hear of that article before?—Oh yes, I know that the number should be painted.

2971. And article 15 says: "It is forbidden to "efface, cover, or conceal, in any manner whatsoever, "the letters, numbers, and names placed on the boats, "and on their sails." Article 8 says: "The letters "and numbers shall be placed on each bow of the "boat, 3 or 4 inches below the gunnel, and they shall "be painted in white oil colour on a black ground. "For boats of 15 tons burthen and upwards the "dimensions of these letters and numbers shall be 18 "inches in height, and $2\frac{1}{2}$ inches in breadth. For boats "of less than 15 tons burthen the dimensions shall be "10 inches in height, and $1\frac{3}{4}$ inches in breadth. The "same letters and numbers shall also be painted on "each side of the main sail of the boat, in black oil "colour on white sails, and in white oil colour on "tanned or black sail. These letters and numbers on "the sails shall be one-third larger, in every way, than "those placed on the bows of the boat." Now do you mean to say that the trawlers have not got these numbers?—There have been two or three of them down here this summer that had no number.

2972. Is that the habit and practice of the trawlers off this coast?—No; some of them were numbered, but there certainly were two or three which had no numbers at all.

2973. As I understand you, your opinion is that no kind of police regulation would be of any practical service to you, but that the trawlers must be kept away from your fishing ground altogether?—Yes, that is my opinion.

2974. I understood you to say just now, that there were holes in which the lobsters are caught?—No; you misunderstood me then.

2975. Do you mean that there are holes in the rocks where the lobsters, in coarse weather, go for shelter?—Yes.

2976. In what depth of water?—In five, six, or seven fathoms, and from that to three fathoms, and from that to close to the shore.

2977. You do not catch the lobsters in these holes, but you set traps for them; is that so?—Yes.

2978. Did I understand you to say that persons were in the habit of discharging ballast on the places where these holes are?—Yes.

2979. And that when they discharge it out at sea the sea drifts it in?—Yes, and causes it to fill up the holes.

2980. Just so. Have you ever seen herrings here in January and February?—I have never been catching them in January or February, but I have in November and December.

2981. In what condition were they then; were they full?—Yes.

2982. Were they full of spawn?—Yes.

2983. They were what you call 'full fish'?—Yes, pretty full.

2984. Do you often see the 'appearance' of herrings in January and February?—Not very regularly, but sometimes we do. At this time of the year you frequently see them.

2985. In your herring nets, how many meshes have you to the yard?—About 32 to the yard.

2986. Do they never run to 35 or 40?—No.

2987. Why don't they?—Because we should catch herrings that would be much too small, and I believe there is an Act of Parliament against it.

2988. You have heard of that?—Yes.

2989. Does anybody come to see that your herring nets are of the right size?—No.

2990. Then do you have them of that size because you don't care to have them smaller?—Yes, we don't think it would do us any good to have them smaller.

2991. But whether you have the meshes big or small, nobody is the wiser in the matter?—No, nobody but ourselves.

2992. I understood you to say that the French interfere a good deal with your herring fishery?—Yes.

2993. How do they interfere with you?—They sometimes shoot as many as 50 or 60 nets in a night. We only shoot 12, 14, or 16 nets. The consequence is that they can overshoot us. It often happens that when we have them shot the French fisherman will come and shoot his nets close to ours. Now ours are only supported by bladders, but the French nets are made of thick rope, and have kegs attached to them. The consequence is that if they come over our nets they destroy them, and we have to haul in and get out of the Frenchman's way, or else we should lose one-half our nets. If our boats ever come into collision with the French boats we have no choice in the matter, but are obliged to get out of the way as soon as possible.

2994. If you were to shoot your nets in the midst of a shoal of herrings—I mean you Sunderland fishermen—and a Frenchman happened to be near you, would he come and shoot his nets among you?—Yes, he has shot right across us many a time.

2995. But are you not aware that that is against the law?—Yes, I know that.

2996. Then why are they allowed to do so?—Why they do it because they are never interfered with. They never come to the land. They never come to any harm by it.

2997. The French boats are numbered, are they not?—Yes.

2998. Very well. Then if a Frenchman shoots his nets across yours in that illegal way, why do you not take his number, and summon him?—That would be extremely difficult. For instance, upon a dark night he may be two miles away from us and still his nets will be foul of ours. Of course in such a case as that we cannot take his number.

2999. What is the size of your boat?—It is about 23 feet long.

3000. You call it a 'coble', do you not?—Yes.

3001. And you say that you cannot leave your nets?—No.

3002. Do the gunboats ever come among you?—We have occasionally had some of our gunboats here, but for the last two years I have not seen an English gunboat among us.

3003. Do you ever hear of a man-of-war's boat rowing guard amongst you?—No, never; but one night I saw a boat from one of the French steamboats amongst us. He brought-to close inside of us.

3004. Did the French officer interfere at all with the fishermen?—Yes, he hauled some of them up and moored them aside Hartley. He made them anchor there till daylight, and then took them to Shields.

3005. Was that done by way of punishment?—Yes, and I believe they were subsequently fined.

3006. Did you ever know any of our cruisers do that?—No.

3007. Then the only instance in which you recollect the English boats being protected on this coast was by a French cruiser?—Yes, that is all.

3008. Do the French ever come and fish inside the limits, three miles from the shore here?—Yes, many a time. I have frequently seen them only one mile from the shore.

3009. Does anyone interfere with them to prevent them from fishing within the limits?—No, unless it is their own boat which is up there among them,—the frigate.

3010. Then I understand you to say that you have had no efficient protection from the gunboats here?—No.

3011. What kind of protection do you think would be sufficient for this part of the coast?—I think it would take a gunboat or two.

3012. But you would not like a gunboat coming among your nets, would you?—If they were to keep clear of us it would not do us any harm.

3013. Your nets stretch for 10 or 12 miles, do they

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not?—Yes, but they are so thick generally that a boat would not like to come among them; it would keep away for its own sake.

3014. But if the gunboat was at one end while you were fishing, and the French fishermen were among you at the other end, who is to help you then?—Why nobody.

3015. If a man-of-war's boat were to pull among you would that hurt your nets?—No, they could be there very well on a fine night, but of course it would be impossible for them to afford us much protection in coarse weather.

3016. Surely a man-of-war's boat would keep the sea as well as yours?—Yes, their cutters would.

3017. I presume that wherever a herring boat would live, a man-of-war's boat would live also?—Yes.

3018. Then would that afford you the protection you desire?—Yes, to some extent.

3019. Are you aware that it is illegal to shoot your nets before half an hour before sunset?—I am aware that it is an evil.

3020. I am not speaking of it as an evil; but I want to ascertain from you whether you are not aware that it is illegal to do so. Are you aware that there is any law against doing it?—I was not aware of it until you told me so. I have heard that it was the law formerly that nets should not be shot before sunset, but that has not been followed out. I was not aware that it was the law now.

3021. Well, then, you may take it from me that it is the law. Article 87 says:—"It is forbidden to "herring drift-net fishing boats to shoot their nets "earlier in the day than half-an-hour before sunset, "except in places where it is customary to carry on "this drift-net fishing by daylight"?—But it has never been the custom to carry on drift-net fishing by daylight.

3022. The fish do not rise until night?—No.

3023. Do you think it would be right to enforce that article which I have read to you?—Yes, I think it would be quite right.

3024. Do you think that the fishermen here would like it?—Yes.

3025. Can you tell me what harm is done in consequence of shooting the nets before sunset?—Yes; perhaps there may be a shoal of fish off the coast, and there would probably be 200, or 300, or 500 boats ready to shoot their nets. If they shoot them too early the fish will fly away; they will not bide there. They swim up to the surface of the water about sunset, and they will fly away if they can see the nets being shot among them.

3026. Do they fly away in a body?—Perhaps, not always; sometimes a shoal may be broken.

3027. In that case some would go one way and some another?—Yes.

3028. Have you ever seen a shoal dispersed in that way?—Yes.

3029. Can you tell me when?—Yes, I have known it occur this season.

3030. Who were shooting their nets at the time?—All the boats were shooting their nets that could get round the shoal.

3031. Then you were all breaking the law together?—Yes, all of us.

3032. Do the French fishermen fish on any nights on which you do not. For instance, do they fish upon the Sunday?—I cannot say whether they fish upon the Sunday, but they fish on the Sunday night; that I know.

3033. And do you not fish then?—No.

3034. What time of the year does the turbot-fishing begin?—In April.

3035. And what time of the year does it end?—At the latter end of August.

3036. Why do you not go in to fish for turbot after August?—We might fish later than that if we could get a sale for the fish; but the fish very frequently turn much thinner at that time of the year.

3037. What time do they spawn?—I cannot say. When the herrings come on to the water we give over using our turbot nets. We are obliged to bring them ashore or sink them, or the herrings would take the buoys away.

3038. Then does the beginning of the herring-fishing put an end to the turbot-fishing?—Yes, it will do so, unless we take the buoys off our nets, or unless the herrings get off further in the sea. Sometimes they get into 30 or 40 fathoms of water before they come near the shore, and there are some men here who never go to the herring fishery at all during the season.

3039. (*Mr. Caird.*) Have you any harbours to which you can run in bad weather?—We are not very well situated when we have a dark night and no lights. We have a good harbour if we can only get to it; but having no lights, on a dark night it is sometimes difficult.

3040. Then if there were lights, do you think you could run in in safety?—I think that lights would be very useful to us. We have nothing but the lights of Sunderland to guide us. Very frequently we find it impossible to get in. We are very often bothered when we have an easterly wind and a good sea.

3041. Then it is not the want of a harbour you complain of, but the want of a harbour properly lighted?—Yes, and we ought to have some regulation to make it better than it is. It wants a good light to improve it.

3042. Is there a quay at your place to which you can run up at low water?—No, we have no quay; it is a dry harbour. If you saw it at low water, you would scarcely think it was a harbour at all.

3043. Then you cannot run in at low water?—Yes, we can, but we have to run to the south side of the rocks.

3044. Then you can run in at low water?—Yes, but it is an awkward place, and we are apt to injure our boats. If we could get up to the entrance here we could come in.

The witness withdrew.

WILLIAM HUTCHINSON called and examined.

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3045. (*Mr. Caird.*) Are you a fisherman?—Yes, at Whitburn.

3046. At the same place as the last witness?—Yes.

3047. Have you been there long?—I have lived there about 45 years.

3048. Does your experience agree very much with what the last witness has stated?—Yes.

3049. Do you find that the catch of fish has decreased?—Yes.

3050. And has that decrease taken place within recent years?—Yes.

3051. What kind of fish has specially decreased?—Almost all kinds that we catch.

3052. Has the cod decreased as much as the herring?—Yes.

3053. Has the quality or size of the fish decreased as well as the quantity caught?—There is not so much complaint to make as to size, but they have very much decreased in number.

3054. Are the haddocks as good as they used to be?—Well, I don't see much difference that way.

3055. With regard to the shell-fish, do you find that they are decreasing?—Yes, there is a great deal of decrease in them.

3056. And what do you suppose is the cause of that?—Well, I think it is because so much ballast is thrown into the water. I think that is one great reason.

3057. Is there anything that is injurious to the life of the fish in the ballast that is thrown over?—No; but it washes into the holes and blocks them up.

3058. Is there anything injurious in it?—Well, I think there is a great deal of poisonous stuff taken

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from Shields Harbour, from the factories, and that is all thrown over.

3059. As well as the ballast?—Yes.

3060. Don't you think that is also injurious to the fish?—Yes, I think it must be.

3061. Do you object to the ballast being put into the sea at all?—Yes, I do.

3062. Does your experience with regard to the herring fishery agree with that of the last witness? Do you think that it has diminished?—Yes.

3063. To what do you attribute the diminution of white fish—I am speaking of white fish now, and not of herrings?—I think it is owing to so much spawn being taken away by the trawl-smacks.

3064. Are you aware of that of your own knowledge?—Yes.

3065. Have you ever seen the trawlers fishing?—No.

3066. Then how do you know?—I have heard others say so who have been in them.

3067. But you cannot speak from any personal knowledge of your own?—No.

3068. When did you first find that an injury was taking place?—About four or five years ago.

3069. Not before four or five years back?—Well, it had occurred slightly before that, but not so much as lately.

3070. Is it four or five years since the trawlers made their appearance upon your coast?—There had been one or two before, but not so many as within the last four or five years.

3071. Has the diminution of fish gone on in the same proportion as the increase in the number of trawl boats?—Yes, I think so.

3072. Have you noticed that particularly?—Yes.

3073. What do you suppose has injured the herring fishing?—Well, there are a great many smacks fishing together, and they must take a good deal of spawn. That I think must be very injurious. We have heard from some of the smack men that they have taken as much as three tons of spawn in a haul.

3074. But what has injured the herring fishing?—I cannot say.

3075. I understood you to say that you do not get such good catches now as you used to get?—No.

3076. Do you think that there are not as many herrings on the coast as there used to be?—No, I don't think there are.

3077. Does anybody interfere with you here when you are fishing for herring?—Yes, the French trouble us sore.

3078. Do they take any large proportion of the fish caught off this coast?—Sometimes they get their cargoes badly, but sometimes they get them very quick.

3079. Can you give me any idea what proportion of the herrings caught on your shore are taken away by the French fishing boats?—No, I cannot say.

3080. Do the French fishing boats fish within the three-mile limit?—Yes, frequently.

3081. Then do they pay no regard to the law upon that point?—Not the slightest.

3082. Do they follow the fish wherever they go?—Yes, wherever the fish are, there they shoot their nets.

3083. Do you agree with the previous witness that our gunboats afford you no protection?—Yes, I quite agree with him. They give us very little protection here.

3084. They don't come in among you?—I believe they do sometimes, but we very seldom see them.

3085. What I mean is, do they come among your boats and give you any aid and protection against the French fishing boats?—No.

3086. Would it be a matter of much importance to you if they did?—Yes, I think the French ought to be kept out where they are allowed to fish, and not be allowed to come amongst us.

3087. Then do you think that if the French were kept out beyond the three-mile limit it would be of advantage to you?—Yes, it would be of very great advantage to us.

3088. Is there any wasteful mode of fishing adopted by you here at all?—I don't think there is.

3089. You do not bring up any spawn or destroy it?—No, never.

3090. Do you trawl for soles here?—Very seldom.

3091. When you do, do you ever get spawn?—No; we trawl near the shore where no spawn would lie.

3092. Do you agree with the previous witness as to the advantage of having some regulation with regard to the time of shooting your herring nets?—Yes, I think it would be of very great advantage.

3093. What sort of regulation do you think ought to be established?—I think no nets ought to be allowed to be put into the sea before half an hour before sunset.

3094. And if such a regulation could be strictly enforced upon all the fishermen you think it would be of advantage?—Yes.

3095. Is there any other regulation that you would like to see enforced?—Yes.

3096. What?—I would not allow any fishing to be carried on on the Saturday night or the Sunday night.

3097. You think there should be two days in the week on which there should be no herring-fishing?—Yes, I think that would be much better for us. It would enable the fish to get together.

3098. Why would it be better for you?—It would be much better for those who have to buy the fish, and those who have to catch them.

3099. But can you give us any reason?—Sometimes we catch so much that they become a drug for the day, and settle the market during the whole of the week. Many a time the trawlers will catch fish on the Saturday and sell them for 14*s.* or 15*s.* per 1,000, while they have been selling them for as much more the day before. For instance, the price may have been 25*s.* or 30*s.* per 1,000 on the Saturday, and that might regulate the price for the whole week if it were not for the steps taken by the trawlers.

3100. (*Professor Huxley.*) Do you agree with the last witness as to the injury done to your nets by the heavier tackle of the French boats?—Yes.

3101. Do you know of any other injury having been done by them in addition to destroying your tackle?—No.

3102. Have you heard of any injury having been done in consequence of anything having been thrown overboard by the French fishermen?—No.

3103. You never heard of such a thing?—No.

3104. Did you hear me read some of the regulations contained in the Act of Parliament?—Yes.

3105. Had you ever heard of them before?—No.

3106. How long have you been a fisherman?—All my life; for the last 45 years.

3107. Do you think it would be of any advantage to you if some of these regulations were enforced?—Yes, I think it would be of advantage.

3108. Do you happen to know when the turbot spawn?—No, I don't know that.

3109. You heard what the last witness stated as to the method of catching turbot?—Yes.

3110. Do you agree with that?—Yes.

3111. You state that turbot get into meshes like the herring?—Yes.

3112. Do you think that as much fish can be caught by the long-line fishermen as is caught now, supposing that there were no other mode of fishing practised?—Well, we always did catch plenty to supply the market before the trawlers came, and we could sell it for a deal less money and make a deal better living out of it.

3113. When was the diminution in the supply of fish first observed?—It has begun to fall off within the last few years.

3114. How many years?—Three or four years.

3115. Not more than that?—No.

The witness withdrew.

DAVID ARCHBOLD called and examined.

3116. (*Mr. Caird.*) Are you a fisherman here?—Yes, I have been three years here the 16th of this month.

3117. Where is the station from which you fish?—I am a fisherman of Craster.

3118. Where is that?—Between Coquet Island and the Fern Islands.

3119. But you do not fish in this neighbourhood?—Yes, I have been here for more than three years past.

3120. You have been here at Sunderland?—Yes.

3121. Have you heard the evidence which has been given by the previous witnesses?—Yes.

3122. Do you agree generally with what they have stated?—Yes, I agree with them on most points.

3123. What is it that you do not agree with them in?—I cannot call to recollection now, but if you will ask me questions I will answer as well as I can.

3124. Does your experience enable you to say whether the catch of white fish and of herrings has diminished of late years?—Yes, it has diminished very greatly since I came here.

3125. Within the last three years?—Yes.

3126. What fish in particular has decreased?—Haddock, cod, ling, skate, and flat-fish.

3127. Can you tell us what an average catch would be?—When I first came I was in the habit of catching 50 or 60 stone. Some days we might not catch more than 20 or 25 stone; all days, you know, are not alike, but the catch is according to the season of the year.

3128. You are speaking now of three years ago?—Yes, the first year I came here.

3129. What is the average catch now?—I do not think I ever got more than 25 stone throughout the whole of last winter.

3130. What do you think was the cause of that decline?—In my opinion it is entirely owing to the trawl-fishing.

3131. Do you refer particularly to the trawlers that come off your shore here?—I don't refer to any particular trawlers, but I think the injury has arisen from the mode they have of fishing. You have perhaps some idea of what a trawl net is like.

3132. Yes?—They trawl all over the ground, and if there happens to be any spawn upon it or any small fish they destroy it and take it up entirely.

3133. Have you ever seen the trawlers do that?—I have frequently bought from them for bait small fish not fit to be eaten.

3134. Have you ever seen the trawl lifted?—No, I never did.

3135. What was the size of the fish you bought for bait?—I had a small bushel basket, such as is used for onions, and I had between 7 and 8 score of fish in it; I counted them myself.

3136. Of what size were the fish?—They were very small indeed; some of them were only the size of that inkstand (*pointing to one*). The fish were so small that a great portion of them were not taken to the shore at all, but left on the deck of the boat.

3137. Then did you buy the fish at sea?—Yes, they were not presented upon the shore at all as the other fish are.

3138. Do you think that if the trawlers were confined to the Dogger Bank, or more distant parts, they would do you any damage?—I cannot say that. There is a great deal of spawn laid off there for breeding, and of course it would injure that if any trawling was to take place when the spawn was there. If the spawn is destroyed, you know we cannot have any fish.

3139. Then you think that the mode of fishing by using the trawl net will injure you wherever it is practised?—Yes, it is my opinion that it will injure any part where it is practised.

3140. With regard to the quantity of herrings caught here, have you noticed any diminution of late years?—Yes, and I can give you a proof of that. This time two years I made 250*l.* by the herring fishery, and last year I only made 180*l.*

3141. Do you mean that you made that with one boat?—Yes.

3142. What have you made this season?—This season I have made 70*l.* or 80*l.*, and I have been a fortnight later fishing. I think that is a very good proof that the fish here are not so plentiful as they used to be.

3143. What was the price of the fish you caught two years ago; was it the same as it has been this season?—I cannot exactly answer that question. I had been down on the north coast fishing, and the price of fish was hardly ruled by the catch. The merchants take the fish as a matter of speculation. If they lose one year they cannot afford to give the same price for the herrings the next.

3144. But you say that you got 250*l.* in one year and only 80*l.* this year. How is that?—That was owing to the greater catch.

3145. Was it solely in consequence of having caught more fish?—Yes.

3146. And the price of the herring remained the same?—Yes. I took two or three different shots, and I got upwards of 40 barrels, 700 fish in each barrel. This season now past I think the greatest catch I had has been 22 barrels; 12,000 fish was the next best catch I had.

3147. Then is it your opinion that the shoals of herring have fallen off?—Yes, they have fallen off very greatly.

3148. Have the French fishermen been on the coast before?—Yes, they have been here ever since I was a boy.

3149. Then, notwithstanding the fact that the French have been here fishing, you have had good catches while they were on the coast?—Yes.

3150. Do they come within the three-mile limit?—Yes, they came wherever the fish were. We had the same gunboats that we had before, but we had different captains in them. Last year we had a captain who used to come in the fore part of the night, before any boats shot their nets at all, and he made a practice of driving all the French boats beyond their limit.

3151. That was last year, was it?—Yes.

3152. And it was the year before that that you made your great catch of fish?—Yes; but I made a very good catch last year also.

3153. And I understand that you had good protection then?—Yes. With regard to the season, I may say that I only came from Yorkshire on Saturday morning, and during the whole of the season I have only seen a gunboat once on the coast, and then it was in the middle of the day.

3154. Then do you think that the protection you have had from the gunboats has been a great benefit to you?—Yes.

3155. Have you caught more herrings in consequence of the protection given to you by the gunboats?—Undoubtedly.

3156. Then if you had had the gunboats here this year, do you think you would have made better fishing?—Yes, I am certain of it. There are plenty of fish here, but the difficulty is where to put your nets. We desire to put our nets where the fish are, but theirs are in also, and as we cannot drive with them on account of their nets being larger and stronger, we are obliged to fish outside. One night we shot our nets, when they came to us and shot beside us. One of the biggest luggers came foul of my nets and tore them, and when we went alongside of her they covered the number of the boat so that we could not see it.

3157. What did they cover it with?—A tarpaulin.

3158. Then they must have seen that they were destroying your nets?—Yes, they saw that plain enough.

3159. Then if there had been a gunboat on the station would that have protected you?—Yes; I could then have given information, and the gunboat would have gone at once and taken his number; but we had no place to apply to, and by the time we had

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hauled our nets in the French boat had gone away and left us. My brother was alongside of me at the time with the same quantity of nets, and the same sized boat. His nets were not interfered with, and he got 38 barrels of fish while we only got 22.

3160. Then I gather from what you have stated that you do not come to the conclusion that there is the same falling off in the supply of herrings that there is in the supply of white fish. You seem to be of opinion that there is the same quantity of herrings, but there are not the same opportunities for catching them?—The herring-fishing is nothing like the white-fishing at all. The white-fishing we look to as a general thing. Some seasons the herrings put in here in large numbers, and some seasons there are comparatively none at all. Sometimes the herrings set in in stormy weather when we cannot catch them, we cannot get after the fish then at all. But the white fish is a certain case of fishing. They are always on the ground at certain seasons, and what we object to is the interference we have to put up with. If these larger boats get in fishing before us we have no opportunity of catching fish at all.

3161. (*Professor Huxley.*) Did you ever hear of any other injury being done to you by the French fishermen?—Yes.

3162. In what way?—In gutting the herrings. They gut the herrings when they want to cure them for salt-fish. They haul their nets in then, and some of the vessels bring up on the ground. As fast as they get the guts out they heave them overboard, and, so far as my calculation goes, that does a great deal of harm among the live fish.

3163. Why do you think so?—It must fall down among them if they are there, and must make them shift their quarters.

3164. Do you think that it is merely the throwing of the offal on the fishing ground that makes the fish move away?—Yes, that is our opinion on our coast.

3165. Do you think that the herrings are frightened by the offal being thrown among them?—Undoubtedly.

3166. Is there any other cause that may account for the dispersion of the herring?—Yes; I think that they are frightened frequently in consequence of putting the nets overboard too soon. I have seen that done very frequently. I have seen 400 or 500 boats—French boats, Yorkshire boats, and even Penzance boats, and others, all shooting their nets at the same time, and yet they would not get a fish. Even if the fish were there we should be obliged to go outside. Sometimes they break the shoal in two, and entirely divide them. They separate. Part take one side, and part will take the other.

3167. Are you aware that that is against the law?—Yes, I am very well aware of that.

3168. Then if anyone had given information they would have been fined, would they not?—It would have taken some time to fine us all.

3169. Still that is the state of the law?—Yes; I have done it myself, and there is no use in saying I have not. Everybody does it when he has the opportunity. If he thinks the fish are there he will shoot among them.

3170. If a gunboat had been upon the coast would it not have looked after you?—I have seen the nets shot at improper times even when the gunboat was there.

3171. You heard what I read just now about decked and undecked boats, did you not: The 29th article says that: "Whenever decked herring boats "and undecked herring boats shall commence shooting "their nets at the same time, the undecked boats "shall shoot their nets to windward of the decked "boats, except they should prefer going to leeward, "to a distance of at least half-a-mile, to shoot their "nets"?—Yes, I know that very well.

3172. Do you think that that regulation has been enforced?—No; not to my knowledge.

3173. Do you think it would be of any service to you if it were enforced?—Well, all good laws should, I think, be put in force.

3174. That is not exactly the point. Is that a good law? Do you think it would be of use to you to put it in force?—What do you refer to.

3175. The law I speak of is this: "Whenever "decked herring boats and undecked herring boats "shall commence shooting their nets at the same time "the undecked boats shall shoot their nets to wind-"ward of the decked boats, except they should prefer "going to leeward, to a distance of at least half-a-mile, "to shoot their nets." On the other hand, the next article says: "The decked boats on their part shall "shoot their nets to leeward of the undecked boats, "unless they prefer going to windward, to a distance "of at least half-a-mile, to shoot their nets." Do you think that these regulations ought to be put in force?—Yes, I think they ought to be.

3176. Do you think it would be a good law to put in force?—Yes, if it were properly put in force, and we had sufficient protection to insure its being carried out.

3177. Do you think that would prevent the heavy-tackled French boats from over shooting you?—Yes, it would keep them a certain distance from us, so that they would not be able to meddle with us.

3178. Do you think it would be beneficial to put that law in force?—Yes, I do.

3179. All that the law compels the French boat or any decked boat to do is to go half-a-mile outside or inside of you?—Yes, I perfectly understand.

3180. Now suppose the undecked boats have shot among a shoal of herrings and the heavy decked boats, whether French or English, go half-a-mile outside of you, which is all they are obliged to do by this law, and suppose they then shoot their nets, do you think that the distance of half-a-mile will prevent their running amongst you?—Yes, I think it is quite enough, we don't want all the sea to ourselves.

3181. You think they would never catch you?—No.

3182. Now we have been informed in the course of this inquiry that the heavy boats and the boats with heavy buoys would drift down with the wind faster than light boats?—Yes, but if they were to the leeward they would go away from us.

3183. But you observe that these articles enable a boat to shoot to windward also?—Then in that case it would depend, perhaps he might get amongst us.

3184. If he were to leeward he would get away?—Yes.

3185. But if he were to windward would he not drift upon you?—He might do so. But we object to his coming upon the ground at all. What we object to is this—that he should come upon the ground and take a berth before we have the opportunity of doing so.

3186. Now suppose you have a moderate breeze and he shoots to windward of you, would he not foul your nets?—Perhaps he might. I think it ought to be a mile instead of half-a-mile.

3187. And the law will not protect you in that case?—We don't want all our own way. Other people want bread as well as we do.

3188. But the law says this, that supposing decked boats are upon the ground already, and have shot their nets, then if the undecked boats come they are either to go to leeward or to windward. I will read you the article; it says, "When decked boats shall arrive "on ground where fishing is already begun by other "boats, amongst which shall be undecked boats, the "decked boats so arriving shall shoot their nets to "leeward of undecked boats, except they should "prefer going to windward, to a distance of at least "half-a-mile to shoot their nets.' What do you think of that regulation?—We shoot wherever the fish are; we are obliged to go among them. It would be of no use to us to be obliged to be outside. What I understand from what you have read is, that the law as it stands at the present moment, if enforced, would be just as likely to do us harm as good.

3189. Quite so, because the French keep to sea always, and having the first chance of shooting their

nets if you go and try to get fish after they have cast their nets you are then obliged to shoot half-a-mile either inside or outside of them?—I do not see how that would work; but if they were prevented from shooting their nets before half-an-hour before sunset, we could shoot as soon as they. The evil now is that as soon as they see us come out they weigh their anchor and shoot all their nets together, so that when we get to where the fish are we are unable to get amongst them at all.

3190. Then if the sunset regulation were enforced so that all could start fair, it would give you a sufficient protection; is that your opinion?—Yes. if there was anybody to enforce the law.

3191. Then I understand that if you all start fair, by having these sunset regulations, the other regulation would be sufficient to keep the French from meddling with you?—Yes; that is my opinion.

3192. I believe that you heard the questions which I put to the last witness as to the mode of protecting the fisheries?—Yes.

3193. You heard what was said about the gunboats and rowboats, and so forth. What do you think of them?—I think they are hardly sufficient. A vessel cannot always be where she wants to be, and a gunboat would be very useful at times to tow the fishing boats down and set them at the fisheries. That would be much better than having only a sailing vessel. A sailing vessel cannot always be there, and the protection we want is that there should be a Government vessel always on the ground to see that the Frenchmen shoot outside the limits. Now they have only been once on this coast this season to my knowledge, and then they were off Dunstanborough Castle.

3194. Do you think it would afford sufficient protection in carrying out these regulations that there should be a gunboat stationed here, and a man-of-war's boat to row guard?—Yes, I think so.

3195. You think that would be sufficient?—Yes.

3196. Do you think the three-mile limit is far enough?—No, I would give them 20 if I had my way. That is plenty nigh enough; they do so much injury to our gear. Two years ago they took 22 nets of my brother's aboard; they took them to Berwick, and they were quite destroyed. It cost my brother 60*l.* or 70*l.* to make them good, and all that he got for his nets and expenses and everything else was 10*l.*

3197. Supposing all these regulations were carried out thoroughly and that you had a sufficient police protection, so that you could punish a man for interfering with you, then do you think that the three-mile limit would be enough?—Yes; provided that the Frenchmen when they broke the law got the punishment they deserved. But to fine a Frenchman 3*l.* for coming within the limits is only like the snuff of a candle. He may be taken to Berwick and fined 3*l.*, but he cares nothing at all for that. If a man summons him, he has in the first place to find out his number, and he loses all his time and fishing as well, so that as a general rule it is not worth his while to take any steps at all. Many a time we should take these boats before the proper authorities, but we don't care to meddle with them, because we know we shall be losing our time and our money.

3198. Then you do not think that the penalties imposed are sufficient?—No, certainly not.

3199. What would you suggest?—Why I think they ought to be taken into the harbour and kept there during the remainder of the herring fishery.

3200. But the law as it stands at present seems to give a magistrate the power of doing something of that kind, I think. It says, "All persons shall be condemned "to a fine of from 8*s.* to 5*l.* sterling, or to imprisonment "from 5 to 15 days, who either by night or by day, "conjointly or separately, shall offend against the measures established for the preservation of peace and "good order." You see from that that the magistrates would appear to have the power at present of imprisoning all parties who infringe the law for a period of from five to 15 days. Do you think that is sufficient?—All I can say is that that has never been done, to my knowledge.

3201. Has the offending party always been let off with a fine?—Yes.

3202. But suppose that a man was sentenced to imprisonment, do you think that would have a good effect?—Yes; but if they would take the boat into the harbour and not let it out again for the rest of the season, I think it would do a great deal more good.

3203. If these regulations were carried out strictly, and the penalty was imprisonment instead of a fine, do you think that would be sufficient?—Yes, but if we could get a six-mile limit instead of three miles, I think it would be much better. Three miles is no distance from the land at all. Most of the fish lie above three miles from the shore. If we had a six-mile limit instead of a three-mile limit, it would be much better for us. If that could be done I think it would be of very great advantage.

3204. (*Mr. Caird.*) Do any other boats interfere with your herring-fishing except the French?—Sometimes we have what we call the 'half-and-halfers'; they shoot among us sometimes, but they do not do us much harm.

3205. Are they English boats from other parts of the coasts?—Yes; their tackle is heavier than ours; that is the only way they could do us damage; but there are not many of them. I have not seen more than 18 or 20 all this season.

3206. How do they injure you?—They are rigged up the same as the French, and they have casks instead of bladders for buoys. They are much heavier boats, and if they get among our tackle they do us considerable damage.

3207. They are heavier boats and have heavier gear?—Yes; and they drift as fast as a French fishing boat.

3208. Do you suffer much injury from the English boats in that way?—No, not much. Not near so much as from the French.

3209. Do you object to their coming among you?—I object to all decked boats coming among open boats. No open boat can drift with a decked boat.

3210. Are they all decked boats?—Yes.

3211. And you object that decked boats should be allowed to come among undecked boats at all?—Yes.

3212. Do you think that any alteration could be made in the regulations whereby the two might be enabled to fish together without injury?—I think not, unless they were obliged to have their gear like ours.

3213. How is it that you have never thought of trying decked boats yourselves?—Why, a poor man cannot afford to get a decked boat, and we can get a small one when we cannot get a big one. There are plenty of men engaged in fishing who can get a small boat but who would find it altogether impossible to get a large one.

The witness withdrew.

CHARLES VINCENT called and examined.

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3214. (*Mr. Caird.*) You are a fisherman here?—Yes, I am fishing from this town at present.

3215. What kind of fishing do you follow?—The beam-trawl fishing.

3216. Have you been long engaged in that kind of fishing?—Yes; for the last 26 years.

3217. Have you been fishing from this town?—No, I come from Torbay.

3218. When did you come upon this coast?—About eight weeks ago.

3219. Is that the first time you were here?—It is the first time I was ever here.

3220. Then you are a Torbay fisherman?—Yes; but we are like the wandering Jews; we are all over the world, sir.

3221. How many years have you been engaged in

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trawl-fishing?—26 years altogether. I served an apprenticeship of nine years to it first.

3222. Have you ever been as far north as this before?—Yes, and further; I have been at the Firth of Forth.

3223. Trawling off this coast?—Yes.

3224. What is the ground upon which you generally trawl?—I have been as far as the Firth of Forth but it was in a pleasure yacht. I never went there in my own smacks. I have fished generally between here and Coquet Light.

3225. What induced you to come as far as this?—We fancy we catch better fish here for a few months than we can at other places.

3226. But are there no fish off your own shore?—Yes.

3227. But you catch more here than there?—Yes, and we like to get into harbour on the Sundays; we therefore fish off this port so that we can get in on Sunday, and go out again on the Monday morning.

3228. But cannot you do that upon your own coast?—Yes, if we liked.

3229. Then, how is it more handy here in that respect?—We can get into the port we belong to very well, but we cannot get in when fishing off the coast at Hull. We are generally engaged for six or eight weeks upon that ground, and don't go to port at all.

3230. How far off do you trawl from your own coast?—Perhaps 100 miles; perhaps 60 or 70; it will be according to the season of the year.

3231. In the course of your experience in trawling on this coast, do you find that you get fewer fish than you used to do?—No; I think that we have been increasing very much instead of diminishing.

3232. When did you begin to come north here?—About eight weeks ago.

3233. In what year was it that you began to leave your own ground and come further north?—Do you mean the Torbay ground?

3234. Yes.—About two years ago.

3235. Do you not fish at Torbay at all now?—No, not at present. I reside at Hull; that is my residence.

3236. Do you find one season more favourable for fishing than another, and would the same state of seasons be also applicable to Torbay?—I don't find much difference; there is a good living to be got at Torbay as well as here, but of the two perhaps this is rather the best.

3237. When did you discover that?—During this summer.

3238. Then, did you find that you were more successful in fishing with the trawl off here than at Torbay?—Yes.

3239. Do you catch the same kind of fish here?—Very much the same; we don't get herring there.

3240. When do you draw up your trawl?—At all hours of the day, from Monday morning until Saturday night.

3241. How long is it down?—It is sometimes down for six or eight hours.

3242. At what speed is it dragged along the ground?—Two and a half or three miles an hour; it all depends upon the wind.

3243. When you bring up your trawl, have you any means of ascertaining whether it is time to haul it up, or do you do it by chance?—We haul it up to see. We allow a tide; that is, about six hours between putting down the trawl and taking it up again. I consider that that is the time at which any fisherman should see his nets. It is necessary also for fear that you catch too many fish.

3244. Too many fish in the trawl?—Yes.

3245. When you got the trawl aboard, have you ever observed whether there was spawn in it?—No.

3246. You have never observed spawn in your nets?—No.

3247. Have you never seen such a thing?—No. I have been 26 years fishing, and I never observed such a thing, unless we got fish that had spawn in its belly.

3248. What is the size of the small fish that you get in the trawl?—Some of them are as long as your finger, and some as broad as your hand.

3249. Is there any large proportion of the fish you get small fish?—Perhaps we may catch a gallon or a basketfull of small fish; we may get two or three basketsfull in three trawls.

3250. Are they living or dead when you bring them up?—They are generally dead, but there may be a few living.

3251. What do you do with them?—It is generally the privilege of the boy on board to bring them on shore, and make a shilling or two out of them for spending money for himself.

3252. Then, you do not throw them into the sea?—Sometimes we do.

3253. What weight do you get in the trawl net in a draw?—I have caught as much as two tons in a draw.

3254. What proportion of that would be small fish unfitted for the market?—At times there might be a few hundredweight; sometimes we will not have one at all.

3255. In what state are the fish when you bring them up in the trawl?—They are generally living, but there may be a few dead ones amongst them.

3256. Are many of them much damaged by the action of the trawl?—No, none at all.

3257. What do you chiefly catch?—Turbot, soles, flat-fish, hake, haddock, and all kinds of fish.

3258. Do you catch codfish?—Yes, codfish, ling, halibut, and every kind of fish.

3259. Do the cod look as well as if they were caught by the line?—Yes, equally as well.

3260. Are they not in any way damaged or injured?—No, not at all.

3261. Are they mostly living and good marketable fish?—They are quite living when we are bringing them on deck, but they are not very long before they are dead; we see them jumping about the deck after we have taken them in the trawl.

3262. What do you do with them when you get them on deck?—We pack them up.

3263. Have you a well on board?—No.

3264. How often do you come ashore?—Every morning when we can get ashore.

3265. During what months do you follow this business?—All the year round; we are continually at it.

3266. Do you shift your ground?—Yes; if we cannot get fish here we go further south, and if there are none there we go further still. We should go right on until we found them.

3267. Have you ever disturbed the long-lines or turbot nets of the fishermen?—I never did so myself, that I am aware of.

3268. Did you ever go through their fishing ground?—I don't know what they call their fishing ground.

3269. Did you ever go among their long-lines?—No.

3270. Do you sometimes get among their boats?—Yes, we get among them sometimes, and we see them shoot their long-lines.

3271. But you don't get foul of their lines or nets?—I don't doubt but some smacks will get foul of them sometimes; of course they will. It can't be avoided when we can't see them.

3272. What is the value of a trawl-boat?—They are of different sizes. Some would be worth about 900*l.* and some 700*l.*; perhaps 700*l.* would be about the average price.

3273. Is that for a vessel fitted with a trawl?—Yes, all ready for sea.

3274. I understand you to say, that your experience of fishing extends over 25 years?—26 years.

3275. Do you find that the catch of fish by your trawl-boat is increasing or diminishing?—Do I find it what?

3276. Do you find it increasing or diminishing?—It is increasing. I remember when I went trawling first, if we made 7*l.* or 8*l.* a week we considered it

a very good wage. My master was always pleased if we made 8*l.* Now we are not satisfied if we don't make 15*l.* or 20*l.* Certainly there are a great deal more catchers of fish, and the fish themselves are more plentiful than they used to be.

3277. Is there not a great difference in the price of fish compared with what it was 25 years ago?—Yes.

3278. Is there not as great a difference as there is between the 7*l.* or 8*l.* you used to get, and the 15*l.* or 20*l.* you get now?—No; we catch far more; fish were scarce in my younger days. I have been in the habit of making 5*s.* or 6*s.* by a pair of soles, but now we only make 1*s.*, 6*d.*, or 8*d.*

3279. Do you get soles in your trawl nets?—Yes.

3280. Do you get a large proportion of soles?—Yes. I never heard of soles being caught on lines in my life.

3281. Have you observed, in your experience, whether the size of the fish is as large as it used to be?—I don't see any difference in that respect. There are big and small now, and there used to be big and small formerly.

3282. Then there is no marked difference?—There has been no great alteration during the last 25 years?—Not a bit; the fish are continually breeding and they spawn as they used to do formerly.

3283. Has the number of trawl-boats increased much in recent years?—Yes, it has increased very much.

3284. Speaking of Torbay, how many boats were there there 25 years ago?—There were about 50 sail when I first went to sea; now they have scattered about all over the country. There are some of them at Ireland, some here, some at Hull; but I should say there are about 300 at Torbay itself.

3285. You go now much further about than you used to do for fish?—Yes; very much further. I fancy that if we went to Brixham we might make 10*l.* or so; but at Sunderland I think we could get 25*l.*, and we are all of us covetous; therefore we come here. As there is no use in starving ourselves we travel about.

3286. Has the size of your boats during that time increased or diminished?—They are a good deal larger now.

3287. Is the size of the nets you use the same?—Yes; much the same.

3288. Then there has been no change in your mode of fishing?—None.

3289. Except that the vessels you use are larger boats?—Yes.

3290. What is the advantage of the larger vessels?—26 or 30 years ago they used to be about 36 or 38 tons register; now they are about 48 or 50 tons.

3291. Are your nets any larger in proportion?—They may be a little larger, but not much.

3292. What advantage is there in having larger boats?—We get them to go through the weather better.

3293. Do you mean that you can keep more at sea?—Yes; we have more to encounter in this part than we have at Torbay; large boats are far more safe.

3294. Is it your custom, when fishing, to make for the nearest port in order to sell your fish?—Not in general. In a month's time we may go in and out of Hull; but we don't run for a port directly we have got a take of fish.

3295. If you were fishing off here and got a good catch of fish, would you not run in and sell it?—We should not run in that night; probably we might the next morning.

3296. Do you make for here?—Yes; some of us may go into Newcastle.

3297. Whatever part of the coast you are on do you make for the nearest port where you can get a sale?—Yes; if we are close at hand.

3298. Do you take the harbour that you consider most convenient?—Yes; if we think we can sell our fish.

3299. (*Professor Huxley.*) Have you any vane at the mast-head of your boat?—We have all got vanes.

3300. Are your vanes painted in any particular way?—Yes; mine is red.

3301. Why is it red?—Because I bought it red.

3302. Then you have it only because it was your fancy to have it so?—Yes.

3303. Do you know that there is any reason why it should be a red vane?—Yes; because it is according to law, I believe.

3304. Did you know the law before you heard me read it now?—Yes.

3305. How long is your beam?—44 feet long.

3306. Do you think that that is legal?—No. I know it is not legal; but many things are done that are not legal.

3307. Is there anybody to meddle with you whether you have a long beam or a short one?—No.

3308. There is nobody to meddle with you?—No, nobody comes to meddle with us in beam-trawling.

3309. What is the size of the mesh of your net?—It is about 6 inches, and from that down to 3 and to $3\frac{1}{2}$.

3310. Is the beam attached to your net the same size as it always was, or is it longer?—It is longer; it used to be 40 feet.

3311. Do you know that that is against the law?—Yes, I believe 36 feet is the proper length.

3312. No, 38 feet?—Well, somewhere about that.

3313. Do you have any nets outside the meshes of your trawl net in order to make these meshes a little smaller?—No.

3314. What is the weight of the head-irons of your trawl net?—From about 250 lbs. to 300 lbs.; they are of different sizes.

3315. Do you know of any law why you should not have them more than a certain weight; did you ever hear of this?—"The total weight of the two irons or head-pieces of a trawl shall not exceed 287 lbs.?"—That is rather more than $2\frac{1}{2}$ hundredweight.

3315a. Do you load the ground-rope of your trawl?—Yes.

3316. What with?—I twist a rope round it.

3317. Do you use any lead?—No.

3318. No iron chains?—No; only ground-rope.

3319. Then you don't weight it at all?—Yes, it makes it a little bit heavier.

3320. But you don't put any lead upon it?—No.

3321. Do you know of any reason why you may not put on as much lead upon the rope as you like?—We find we can do without it, and we don't want to have the expense of putting it on.

3322. At the same time you don't know why you should not use more than a certain quantity?—No.

3323. In fact there is nobody to make you acquainted with the law?—No.

3324. I suppose you are not much given to law-reading?—No, we get on very comfortably without having anything to do with law.

3325. What price have you been in the habit of getting for trawled fish?—We get different prices; it all depends upon the quantity caught.

3326. But I want to know particularly whether you get as much money for your trawled fish as the hook-and-line fishermen get for theirs?—I think there is very little difference; we compete with one another.

3327. Do you sell your fish cheaper than the hook-and-line men?—No, we try to get all we can for our fish.

3328. Do you think you can always have the same price in the market as the hook-and-line fishermen?—Yes; we are very well satisfied with what we get.

3329. Do you ever have a part of a cargo of fish rejected on account of its being damaged?—We do sometimes find our fish damaged on account of contrary winds which prevent us getting into market, and they are then condemned.

3330. You mean that they are condemned because they are not fresh; because they have been kept too long?—Yes.

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3331. Do you not adopt the system of despatch-boats?—Yes; we have them with ice, but not here.

3332. I believe that one remains constantly in attendance upon the trawl-boats?—Yes.

3333. Why is that not done here?—We don't require it here, we can go in every morning.

3334. Then I am to understand that if you kept out at sea any time your fish would get stale?—Yes, of course it would.

3335. Is any portion of it rejected because it is injured or bruised?—No, I never had such a thing happen to me.

3336. Are the scales on the fish?—They are more or less on the fish; sometimes they are all off.

3337. Do you ever have fish rejected because the scales are off?—No, never.

3338. Did you ever have them rejected because the gall bladder had burst?—No, I never saw the gall bladder burst.

3339. You never saw such a thing?—No.

3340. Do you think that if they liked to do so, the trawlers could get out of the way of the lines of the long-line fishermen?—Yes, if they put up proper lights we could avoid getting foul of them.

3341. Are there no buoys attached to the long-lines?—Yes.

3342. Are they so large that you can generally see them?—No, they are somewhat small; they have small bladders upon them generally.

3343. The buoys you have seen have been commonly bladders?—Yes.

3344. How large would they be?—I suppose they were what you would call bullock's bladders; rather large-sized bladders.

3345. Have you seen a kind of buoy that stands out of the water with a little tuft at the top?—Yes.

3346. Are buoys of that nature sufficiently large to attract the attention of trawlers?—We can see them by day, but of course we cannot see them by night. We trawl according to the breeze.

3347. You cannot do much in steering if you have got the trawl down?—I fancy we could generally get a little out of the way, but not much. The vessel generally steers herself.

3348. Do you take a long time to get the smack's head round when the trawl is down?—No, only about half-a-minute.

3349. Is it perfectly easy for you to get out of the way if you wanted to do so?—Yes, I think so.

3350. If the buoys were large enough, and you could see them, you think the trawlers ought to do no damage at all?—I think not.

3351. Are your boats all numbered?—Yes. There may be one or two that have just been fitted up which have not had time to have their numbers put on.

3352. Who looks after the numbering of the boats?—There are officers on shore, I believe.

3353. Do you mean the Custom House officers?—Yes.

3354. If you are found without having your boat numbered are you allowed to go out of the docks without having it numbered?—No.

3355. Is there anything done if your number is obliterated or not visible?—We are threatened that if we don't number our vessels we shall be stopped.

3356. Do you ever get any stones in your trawl net?—Sometimes.

3357. What size is the biggest you have seen?—We have had them occasionally as large as a ton and a half.

3358. A good catch that?—Not very good on the part of the catchers.

3359. Do you ever trawl over ground where there are stones as big as that?—Yes, we do sometimes.

3360. Don't you avoid ground with stones like that if you can?—Yes, but we can't help it sometimes. I am speaking now of the ground down south at Torbay.

3361. You would not trawl in such a place if you knew it?—No.

3362. What is the ground you commonly do not trawl over?—Where the long-line fishing goes on.

3363. What kind of ground is that?—Well, I have seen long-liners close in shore in 26 fathoms with rough stony ground.

3364. Is that the kind of ground you don't like to trawl over?—Yes.

3365. Are you aware that it is the law that you are not to trawl where the herring and mackerel-fishing is going on?—No.

3366. One of the articles in the Act of Parliament says: "Trawl-fishing is forbidden in all places where "there are boats engaged in herring or mackerel drift-"net fishing." The next article says: "Trawl-boats "shall always keep at a distance of at least three "miles from all boats fishing for herring or mackerel "with drift-nets." Did you know anything of that before?—No.

3367. Article 26 says: "Whenever herring or "mackerel boats shall commence drift-net fishing "in any place whatever the trawl-boats which may be "already fishing in such place shall depart therefrom "and shall keep at a distance of at least three miles "from the said drift-net herring or mackerel boats." Have you ever heard of that before?—No.

3368. Nobody has enforced that law?—No.

3369. Then if the drift-net men went out from here and told you trawlers to get out of the way would you do so?—Yes, I think we should as fast as we could.

3370. Why?—Because if we remained we should annoy ourselves as well as them.

3371. In what way?—Why, we should soon get entangled with them.

3372. But you did not know it was the law you should get out of the way?—No, I never heard of it.

3373. If you got among them would you not say it was their own fault, and tell them to get out of the way?—No, we should haul our trawl up and go away.

3374. But you did not know it was the law that you should do so?—No, but we should do so for our own benefit.

3375. But how should you like to be obliged to do so if the long-line fishermen came among you?—If we had our trawl put down first they would not come among us.

3376. If they did would it not interfere with your trawling?—There is plenty of long-line fishing going on but they don't interfere with us.

3377. But they complain that you interfere with them?—We don't like to get entangled with them if we can help it.

3378. Would you object to any law that would compel you to go away from wherever there was long-line fishing going on?—No, I think not at all.

3379. Then do you think there is plenty of room for the long-line fishing as well as the trawling?—Yes. If the long-line fishermen would not shoot unless within 10 or 15 miles of the shore we could go into 50 fathoms water if we choose.

3380. You say you get more fish here than at Torbay?—Yes.

3381. What is the reason?—At certain times of the year a great deal more fish is brought up here than at Torbay.

3382. Has that always been going on, or is it taking place now particularly?—No, I think it has always been going on.

3383. Do you trawl over the same ground day after day?—Yes, we do so here.

3384. How long have you been trawling this season?—About eight weeks.

3385. Have you trawled over the same ground day after day?—Yes.

3386. What length of ground do you trawl over?—Sometimes 14 or 15 miles.

3387. About what breadth of ground do you trawl?—It would be the breadth of the beam.

3388. But I mean, how much ground will you be covering day after day?—We go over about 44 feet of ground in breadth.

3389. Do you go over one ground one day, and

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a different ground the next?—No; if we have got a good lot of fish in one place we like to put our nets in the same place again.

3390. Would a mile be about the breadth of ground you fish over?—Yes; a mile or two.

3391. Then, if I say that you fish over ground 18 miles long by two broad, would that be it?—Yes; but it would all depend upon the wind.

3392. Do you fish every day?—Yes, except Sundays.

3393. You have been fishing here for the last eight weeks?—Yes.

3394. Has your catch been greater or lesser during the latter part of the time than at first?—I fancy that we find more now than we did eight weeks ago.

3395. Then you are certain that you get just as many fish as you did eight weeks ago?—Yes.

3396. On this narrow fishing ground of 18 miles long by two broad?—Yes.

3397. Do the long-line fishermen fish there?—I believe they do shoot there sometimes.

3398. Do you ever bring their long-lines up in the trawl?—No.

3399. I understood you to say that you never get spawn up in your trawl net?—No; but I should like these men to say what it is they call spawn.

3400. I suppose you have seen herring caught when they are full?—Yes.

3401. Then, when the herring are full, have you not seen the fish packed together and spawn coming out of the female fish?—Yes, sometimes.

3402. Have you never seen any spawn like that brought up in your trawl?—No; I fancy it would be a most inconsistent thing if a small thing like a pin's head should not pass through our mesh if we did catch it.

3403. But the herring spawn keeps together in great masses, does it not?—Yes.

3404. I have seen a mass of herring spawn larger than that box upon the table?—Yes; but I never saw herring spawn in a trawl, nor do I believe that any man who went trawling ever did.

3405. The beam of your net is kept off the ground by head-irons, is it not?—Yes.

3406. It would be about two feet from the ground?—Yes.

3407. Do you ever trawl fast enough to lift the beam off the ground at all?—We don't if we can help it; but I think we do it sometimes.

3408. You never load your foot rope?—No.

3409. Not with irons or leads?—No.

3410. What do you cover it with old stuff for?—It makes it heavier and saves the rope.

3411. But you put nothing heavier than rope around it?—No.

3412. How is it you contrive to get hold of the large stones?—We do catch them sometimes, and drag them, but we don't want them, and soon put them away when we get them.

3413. If you were dragging along at the rate of two or three knots an hour, your nets would not go over the ground but would lift, would they not?—We could not go at that speed through the water. We give them a long rope according to the wind, and if we have 150 fathoms and a heavy breeze we will have it well out.

3414. But you think the foot rope always keeps fairly on the ground, although it is not weighted?—Yes.

3415. Is there any difference between the price of trawled and hooked whiting?—I have heard that hooked whiting will make more money.

3416. Have you found that yourself in the market?—Yes, a little at times, but there cannot be much difference between hooked and trawled whiting. They are all of one sort, but I fancy that perhaps the hooked whiting looks a little better to the eye.

3417. (*Mr. Caird.*) How many men are there on board a trawl-boat?—Five men.

3418. Is that sufficient?—Yes.

3419. When you bring the trawl up does it not often contain stones?—No, not often.

3420 Are there any stones in it at all?—Yes, sometimes there are.

3421. Do not the stones you catch injure the fish?—We don't catch enough to do that; I don't think they injure the fish.

3422. But surely if you brought up very large stones they would injure the fish, would they not?—If we catch a large one the fish may be squeezed a bit, but if they are much injured we should not bring them ashore at all.

3423. Do you ever get any coals in your trawl net?—We catch a few sometimes.

3424. Do they do any injury to the fish?—No.

3425. Do you bring them up in large quantities?—We may bring up half a hundred weight in six or seven hours dragging.

3426. You don't do that in Torbay?—No, in no place except here.

The witness withdrew.

JOHN CLEMENTS called and examined.

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3427. (*Mr. Caird.*) Are you a trawl-fisherman?—Yes.

3428. What part of the coast do you hail from?—Hull.

3429. Are you in the same boat with the last witness?—No.

3430. How long have you been engaged in trawl-fishing?—32 years.

3431. During these 32 years where have you particularly followed trawl-fishing?—I have been 15 years at Hull, but I have been down here at Sunderland for 10 summers now.

3432. Did you trawl on the coast of Yorkshire opposite Hull?—Yes.

3433. Then you have now extended your fishing further north?—It is only in the summer time we come down here. We do it because we think we can earn 1*s.* or 2*s.* extra.

3434. Did you leave Hull in consequence of any falling off in the quantity of fish you caught?—No, there was plenty of fish, but it was to get a better market that we came here. We came here because we knew we could bring the fish into market good.

3435. How was that?—When we were at Hull we had frequently to send the fish by cutters, and if we could not get ice sufficient to keep the fish fresh they became stale. We thought it better to come here and land our fish every morning.

3436. Could you not land your fish fresh at Hull every morning?—No, we might be 30 miles off.

3437. You are nearer port here?—Yes.

3438. That is one reason why you came here?—Yes.

3439. You did not leave Hull because there was a diminished number of fish?—No, I believe there are more there than there are here.

3440. Have you ever found any spawn in your trawl nets?—No. I have seen plenty of spawn on the water's edge, but I have never seen it in the trawl.

3441. You never brought it up from the bottom?—Not to my knowledge. I never took any notice of our having done so, and if what we have brought up is spawn then I don't know what spawn is.

3442. What do you find comes up in your nets?—Why all sorts of fish—soles, gurnets, turbots, brill, dabs, and every kind almost you could mention.

3443. What is the smallest fish you catch?—Gurnets and dabs.

3444. How many are they in quantity compared with the whole of the fishing?—Well, I have brought ashore two baskets of small fish.

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3445. Do you ever throw them overboard?—When we can't get them in fresh we chuck them away.

3446. Have you found in your experience, which extends over so long a time, that the quantity of fish you catch is increasing or diminishing?—It is 10 summers since first I came here and then we could get about 10 baskets ashore in a morning.

3447. What sorts of fish?—Haddocks, plaice, and perhaps 20 pair of soles. Now we can bring ashore, sometimes, 70 pair of soles.

3448. Then you have found that there has been an increase in your take of fish instead of a diminution?—Yes.

3449. You have told us that you have been here 10 summers, was anybody here trawling before you came?—No.

3450. And during all that time there has been a steady increase?—Yes.

3451. Do you notice any change in the size of the fish you get, on the average?—No, they are much about the same.

3452. Then it is not your opinion that trawling has diminished the quantity of fish?—No, I think it has increased it, because the foot-rope is constantly stirring up the bottom and supplying the fish by that means with food. The fish will be behind picking up the food as we stir it up.

3453. What is the food?—Worms of all sorts and slugs. I know very well that when we have been trawling over the same ground for any length of time the guts we have thrown overboard have been swallowed by the fish.

3454. Do you not think that you disturb the spawn?—No.

3455. Have you never seen it inside the fish? Have you never found that it has been swallowed?—Yes, I have sometimes seen it off Well Bank, but only there.

3456. You have never found it on this coast?—No, but I have found fish off Well Bank very often full of herring spawn.

3457. Of herring spawn?—Yes.

3458. Do you agree with the former witness that the quality of the fish you catch by the trawl is as good as the quality you get by the line?—At times they are a little bit disfigured, but when they are landed in that way we sell them at a somewhat cheaper rate.

3459. Is there any large proportion of your catch disfigured?—No, not very large. Sometimes we have a few that are a little bit smashed; some of them we heave overboard, and others we sell at different prices.

3460. How many of your catch do you think would be injured?—I cannot say.

3461. Would one-half of your catch be injured?—No.

3462. Would one-fourth?—No.

3463. Would one-tenth?—No. This morning we had our nets up, and there were only two or three haddocks spoiled out of 17 basketfuls.

3464. Two or three haddocks out of 17 basketfuls?—Yes, each basketful containing about seven stones.

3465. When you took your 17 baskets to market did you find them bring as much money as fish caught with the long-line?—No.

3466. Not your good fish?—No.

3467. Why is that?—Because we catch more of them, and we are obliged to retail them off quicker and cheaper.

3468. Then it is not because they are inferior in quality?—No. There are people in the town who have enjoyed what they never did since we came here—that is, plenty of fish, and cheap fish too.

3469. Do you think the quantity you bring in affects the price of the fish?—Yes.

3470. Do you know whether you have added much to the supply of fish in this market as trawl-fishers?—We have added very greatly to the supply, I am sure.

3471. Can you tell me from your own experience what you would have considered, 20 years ago, a good day's fishing in a trawl-boat?—Well, I can hardly give you a day's fishing 20 years ago. We generally go month by month.

3472. Then what would be a month's fishing?—We generally allowed 40*l.* or 45*l.*, or 50*l.* at the outside. We should consider that a good month's fishing.

3473. Fifty pounds?—Yes.

3474. What is your experience now of the value of a month's fishing?—I think it would bring us from 80*l.* to 120*l.*

3475. Has not the price of fish very much increased within recent years as compared with what it was in former times?—I don't think it has increased much, but we have a great deal more fish and more vessels to catch them. We have bigger vessels and go farther a-field for the fish. Small vessels dare not go as far as we go. We go to the Dogger Bank and outside the Dogger Bank, and God knows where we don't go.

3476. Then do you find that you can make more than you did 20 years ago?—Yes.

3477. That is by the increased quantity of fish you take, and not by any increase in the price of the fish?—Yes.

3478. Do you fish on the Dogger Bank?—Yes, sometimes we go there.

3479. Do you find any fish inside, between the Dogger and the coast?—Yes, there is a pit we call the 'Silver Pit', and we get a good many fish there.

3480. Do you find that fishing in-shore is as profitable as going to the Dogger Bank?—At certain times of the year it is, and we fish in-shore then.

3481. In point of fact you follow the fish?—Where they go we go.

3482. What time of the year do you consider it best for fishing on the Dogger?—The winter time.

3483. Is summer time the best for in-shore fishing?—Yes.

3484. What is the cause of the difference?—There are more fish in the summer time go in-shore and we can get them into the market fresh, and get more money for them.

3485. Do you ever interfere in fishing along the coast with the line-fishers' nets and lines?—I have seen them interfered with at times, but I never had any experience of it. I never interfered with any of them. At the same time it is often difficult to avoid them because we don't know where they lie. I have seen a small bladder, but I hardly knew what it was until I found it was a buoy.

3486. Did you not get foul of the nets in that case?—No, that was on the rough ground where we dare not go.

3487. If you had passed among them you would have injured them, would you not?—Yes.

3488. Have you ever observed a buoy like that (*pointing to one on the table*) at sea?—No. I may have seen one like that on a long-line, but never on a turbot net. I never came foul of any man who had a long-line.

3489. Has any fisherman ever complained that you have destroyed his line?—No, not that I have heard of.

3490. What is the length of the beam of your trawl?—Forty feet.

3491. Is it longer than it was in former years?—Yes, a little.

3492. Have you increased the length and size of your trawl-beam?—Yes, it formerly used to be 35 or 36 feet. The vessels we used then were smaller, and could not have stowed away a larger beam.

3493. Are you not aware that there is a restriction as to the length and size of your trawl-beam?—I believe there is, but nobody has ever interfered with us.

3494. Nobody ever interfered with you?—A gunboat told us once that the beam ought to be 38 feet long, but he went away again, and we took no more notice of him. He took away one of the trawls, but returned it to us again.

3495. Can you tell whether you are constantly passing over the same ground by the smoothness of the ground?—Yes.

3496. If you clear off any roughness, and bring up stones at the bottom, can you tell again when you are passing over the same spot?—Yes.

3497. If on that ground you were to lose anything overboard would the trawl pick it up?—Perhaps it might.

3498. Do you find that you get as many fish when passing over the same ground?—Yes, quite as many.

3499. How do you know that it is the same ground?—We tell generally by the depth of the water; the water so soon deepens that we know directly.

3500. (*Professor Huxley.*) Can you make out where you are by your bearings?—Yes.

3501. Do you take a compass with you?—Yes.

3502. Have you a mariner's compass on board?—No.

3503. What then?—Only a common compass. By our lead and our compass we are enabled to go within a few fathoms of water.

3504. Do you go by a chart or by knowing the country?—Only by knowing the country.

3505. I understand you to say you have found herring spawn in the haddock?—Yes.

3506. Did you ever find it in flat-fish?—No.

3507. Have you any notion where the herring spawn?—No.

3508. But when you get herring spawn in a haddock you suppose the haddock got it on the ground you were trawling over?—Yes. If they had not been on the ground we should not have caught them.

3509. Then if the haddock contrive to get some herring spawn your trawl ought to get some, ought it not?—No, our foot rope would pass over it. The herring spawn lies very flat and we would not pick it up unless it might be a piece the size of your fist or a little bigger.

3510. But the herring spawn is in great masses at the bottom, is it not?—I never saw it in that state. Perhaps I may be allowed to say that we catch a deal of sand.

3511. Do you mean in your trawl?—Yes, it soaks in.

3512. When you stop to heave the trawl in it goes in at once?—Yes.

3513. But does not the sand pass through the meshes?—Yes, by the time we get the trawl up it is all gone.

3514. The sand cannot get in when you have got any way on you?—No, directly we weigh the sand runs through, and when we get the net to the water's edge it is all gone.

3515. Do you suppose that the sand is mixed up with the fish?—No.

3516. You heard the question I put to the last witness, namely, whether he would object to a restriction keeping the trawlers away from the long-line fishermen?—Yes.

3517. Do you agree with him?—We try as much as possible to get away from them because if we get entangled with them it hinders us of our night's work. We have no desire to get foul of them at all.

3518. The last witness said he would just as soon as not have a law passed preventing you going within three miles of the long-line fishermen?—I never was foul of any herring nets in my life, and I have now been a fisherman for 32 years.

3519. I am talking about long-line fishermen. Would you have any objection to have a law passed preventing you from going within three miles of the long-line fishermen?—I can hardly say.

3520. I mean within three miles of any place where long-lines are shot?—Three miles is a long way, and at the time they might happen to be fishing on that ground we should have to go out where could get no soles at all.

3521. Do you think that such a restriction as that would prevent your getting any fish at all?—It would prevent our getting any soles.

3522. Would it prevent your getting any other kind of fish?—I fancy we should get the haddocks but we should lose the soles.

3523. Are haddocks so plentiful that you get them wherever you trawl for them?—The further off we are the more haddocks we get. It is just the other way with soles.

3524. Do you catch turbot?—Very rarely. I have only had one this winter.

3525. Do you catch halibut?—I have only had two of them.

3526. Do you get many codfish?—Yes, plenty of cod.

3527. Is it common to catch many cod?—Yes, I have had 108 in one haul.

3528. Where was that?—Off Flamborough Head; 30 miles off.

3529. Is it common to catch them?—Sometimes. We had five or six large cod this morning.

3530. You heard the regulations I read with regard to the trawlers?—Yes.

3531. Did you know anything of them before?—No, I never heard of them before.

3532. The Custom House authorities see to the numbering of your boats?—Yes.

3533. But they don't trouble themselves about anything else?—No.

3534. Have you ever had the size of your net's meshes examined?—Yes.

3535. By whom?—By a gunboat here.

3536. Did you ever know a trawl-boat that carried nets with meshes of an improper size?—Yes, sometimes.

3537. Did you ever know any notice of it taken by the authorities?—Yes. I believe a neighbour of mine at Sunderland lost his nets once but it was owing to a mistake of the government officer's. They thought the mesh should be $1\frac{3}{4}$ inches from knot to knot.

3538. The Act of Parliament says—"Trawls shall be made with nets the meshes of which shall at least be one inch and three quarters square from knot to knot along the line." You see the officers of the gunboat were quite right?—It should be 7 inches in the square then.

3539. Yes, 7 inches square. You stated that the commander of the gunboat measured the net and took it away because the mesh was not large enough?—Yes. He measured ours at the same time and said it was right.

3540. But he seized the other?—Yes.

3541. What became of it?—He took it to the Custom House and then returned it to the right owner at Hull. Both vessels belonged to one owner, who went to Captain Randolph of the "Cornwallis," who interceded for him, and the net came back again all right.

3542. There was no penalty enforced?—No punishment, but I believe the captain of the boat was fined.

3543. He was fined?—I will not be sure.

3544. (*Mr. Caird.*) To whom are you referring—the captain of which boat?—Of the smack.

3545. (*Professor Huxley.*) Has there been anyone here this season to examine your trawl-boats?—No, there has been no one here this season. I believe there was no one here last season. I think it will be two years since there was any one here. I have been here 12 years altogether and they have only missed two years.

3546. Have your nets only been examined once in the course of these 12 years?—Only once.

3547. That is all?—Yes.

3548. One of the witnesses stated that if he trawled more than a certain time, and his trawl remained down more than a certain time, he would lose by it?—Yes, if he allows it to remain down longer than six hours he will get a great deal more fish than he could heave up. The consequence would be that he would burst his net and lose it.

3549. Are the fish more damaged the longer you leave the nets in?—Yes, the shorter the haul the better the fish.

3550. Do you ever heave a trawl up and find no fish injured at all?—Yes, we have had them just as lively as if they were caught on a hook-line. Scores of them we have had in that way.

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3551. Does that happen when you have a good haul?—Yes, it is better then, frequently, than at any other time.

3552. Do any of the fish, when they come up, appear marked with the trawl?—Yes, perhaps one or two or so which we heave overboard again.

3553. There is no large proportion marked?—No, sometimes we may stamp on one or two and damage them ourselves.

3554. Do you ever have any fish rejected by the dealers on account of their being damaged?—Never in my life. I never had any damaged by the net and if they have been damaged at all it has been by their being kept too long.

3555. Did you ever know of trawl-fish being damaged or rendered unsaleable in consequence of having the gall bladder burst?—No, never in my life.

3556. Did you ever see the gall bladder burst?—Yes.

3557. How has it been done?—Sometimes we may have cut the gall bladder when we were gutting the fish, but we always wash them clean, so that if the gall burst the fish would soon be quite clean.

3558. You don't gut your fish on your trawl-boat, do you?—Yes, we do it directly we have caught them. We don't do that off here because we can take the fish into market quite fresh, but we are obliged to do that when we send the fish in by cutters. We don't know when they will get to market, and we are obliged to gut them.

3559. But you don't do that here?—No, because they come here ashore all in their bloom just as they are caught.

3560. Supposing any large proportion of the fish had the gall bladder burst, would you bring them ashore like the rest?—I cannot tell.

3561. I want to know whether when you do not bring the fish ashore but gut them on board, you have had occasion to reject any of them and throw them overboard on account of the gall bladder having been burst?—No, never in my life.

3562. You never found that the gall bladder had been burst?—No.

3563. You never had fish rejected on that ground?—No.

3564. Did you ever see fish spoiled in consequence of the gall bladder being burst?—If the fish is kept very long. There may come a gale of wind and we should be compelled to put them down in the hold. On opening the hold next morning I have sometimes found the gall bladder burst, and we put them overboard.

3565. Did you ever eat fish that had the gall bladder burst?—No.

3566. Then you can't say if it gives any particular taste to it?—No.

The witness withdrew.

H. Meldrum.

HENRY MELDRUM called and examined.

3567. (*Mr. Caird.*) Do you belong to this place?—Yes.

3568. Are you a trawl-fisher?—No, but I have been for a short time in a trawler, for a week or two.

3569. Was that on this coast?—Yes.

3570. What time was it?—Some time last summer.

3571. Where did the trawl-boat come from that you were on board?—Hull.

3572. Were you a hand on board the boat?—Yes.

3573. How long were you on board?—About a fortnight.

3574. Did you in particular observe what came to the surface in the trawl net?—Yes, decidedly.

3575. What have you seen brought up in the trawl net?—Well, I have seen a good deal of spawn, small fish, and large fish likewise.

3576. Was spawn generally in the trawl net when it was brought to the surface?—Yes, it was all in the trawl net; both mud and sand and all sorts of fish mixed up together.

3577. Was there much spawn?—There might be a basketful.

3578. Did you always find spawn in the net when it was brought up?—Yes.

3579. Every day?—Every time it was brought up.

3580. You say that there were always many small fish in the net?—Yes, a great quantity.

3581. What proportion of fish altogether would be brought up in the trawl net at one haul?—As much would come up in the net at one time as one of our boats would catch in the whole season.

3582. How much would you say?—Perhaps a ton of spawn, large fish, and small fish.

3583. Have you been present when the fish were sorted?—I was the man who had to sort them.

3584. How many basketfuls would be good fish?—Perhaps there would be 14 or 15 good baskets, and 14 or 15 bad baskets.

3585. Then it would just be about half and half?—Yes.

3586. Was that the case constantly?—Yes.

3587. Did it never vary?—No; it never varied, not one inch.

3588. What was done with the small fish?—They were all tossed overboard.

3589. Were none of them brought ashore?—Three or four baskets might be. This (*producing a bundle of fish*) was what was brought ashore. This is what they call 'small fish', and this is some of the largest of the small kind.

3590. When were they caught?—Yesterday.

3591. Were they brought to market?—Yes.

3592. Is that about the size you refer to when you speak of small fish?—These are about the biggest of the small fish brought to market.

3593. Are the small fish generally dead when they are brought up?—Yes, the whole of them.

3594. Then there could be no advantage in putting them back into the sea?—No, it would be no good.

3595. Did you observe that the marketable fish were at all injured by being dragged along in the trawl?—Yes, they were sorely injured.

3596. Was a large proportion injured?—Yes.

3597. How many were living when they came to the surface?—Not one; I never saw a live fish come up in the trawl.

3598. What kind of fish are generally caught in the trawl?—All sorts; cod, ling, turbot, and skate. We have sometimes thousands of skate not the size of the first joint of your finger.

3599. They are always dead when they are brought up?—Yes.

3600. How many trawls have you seen brought to the surface? How many times have you seen it hove up?—Perhaps three or four dozen of times; it might be six dozen; I can't tell to a time or two.

3601. Yet you never saw a live fish come to the surface in the trawl?—No, none of any sort.

3602. What else would be in the trawl besides fish?—There would be coals, stones, mud, and all sorts of fish. The codfish has to be washed, and put in baskets, and packed up.

3603. What proportion of the fish you caught were good fish?—Perhaps half of it.

3604. Then half of it would be injured?—Yes, half would be condemned and thrown overboard.

3605. Are you speaking of small fish?—Yes, both small and large. Half the complement that comes up is mangled to pieces by being dragged over the ground.

3606. Have you seen the large fish mangled?—No, none whatsoever; it is generally the small fish that are mangled.

3607. Are the large fish in good order for the market?—Yes, pretty fair.

3608. (*Professor Huxley.*) What do you mean by large fish and small fish?—Why, there is a great deal

of difference between one of these fish (*pointing to the bundle*) and a cod.

3609. What is the smallest of the large fish; do you call an ordinary-sized sole a large fish?—No, a small one.

3610. Are all soles that are brought up damaged?—No, that is a fish that is not so easily damaged.

3611. Are they all of them damaged and unfit for market?—No; I never saw a sole damaged at all.

3612. Not one?—Not one.

3613. Does that apply to small soles as well as large?—I never saw any small soles.

3614. Are they generally one size?—Yes.

3615. What size will they be?—They range from a foot to 15 inches.

3616. Did you never get soles as small as these?—I never got one.

3617. Then all soles that come up are uninjured?—Yes.

3618. You say soles run from a foot to 15 inches long?—Yes.

3619. Have you ever seen a haddock brought up 15 inches long?—Yes.

3620. Do you find them damaged in the net?—Part are damaged and part are not.

3621. Then a large part of your take would be damaged?—I should say the greater part would be damaged.

3622. And yet the soles are not damaged?—No, soles are not damaged.

3623. What reason do you give for that?—I can't tell but I never saw a damaged sole during the time I was in the smack.

3624. Did you say that you would find a haddock 15 inches long caught by the trawl undamaged?—I don't suppose you would, but you might.

3625. Did you ever see cod 15 inches long come up in the trawl net?—Yes.

3626. Were they damaged?—Yes, a great part of them were.

3627. Were the large cod damaged?—No.

3628. About what size do you call a large fish?—About that size (*measuring*). I think they float on the top of the trawl nets and that keeps them from going on the ground.

3629. How small is the size of the cod you have seen come up without being damaged?—From a foot to 15 inches.

3630. That has not been damaged?—Not at all.

3631. But a haddock of that size is damaged?—Generally so, because it is a much tenderer fish than the young cod.

3632. Did you ever see any fish with the gall bladder burst when the trawl was drawn up?—I never opened any of them, but I rather think it would be.

3633. Why do you think so?—Because they have such a nasty smell. If you smell one of these fish you will think that it is so.

3634. Do you think that the gall smells?—I have opened many a fish and broken the gall bladder.

3635. And has it a smell?—It has a smell and a taste also.

3636. Have you tasted gall?—I have tasted gall. I have fried haddocks caught in the trawl net, and have found them with a nasty bitter taste which I think was in consequence of the gall bladder having been burst.

3637. Did you taste the fish brought up in the trawl?—Yes; I did not do it always, but I have eaten them.

3638. You said you knew the gall had burst by the smell?—Yes.

3639. Then I judge from that that it has a particular smell, what is it?—Well, it had no particular smell but it had a particular taste.

3640. You said you judged from the smell?—All I know is that we have never had any smell from our own hook-caught fish.

3641. You spoke just now of a great quantity of spawn coming up in the net?—Yes.

3642. What sort of stuff was it?—From what I could see of it it was herring spawn.

3643. What sort of appearance had it?—There were pieces about this size (*holding up his hand*); they were in clusters.

3644. In clusters?—Yes; they were of a yellow colour.

3645. Were they quite loose?—No, they were in a body.

3646. Were they in a kind of ball?—Yes, but of different shapes.

3647. Had it a horny stiffish kind of feel when you took hold of it?—Yes, it was quite stiffish.

3648. Was it sticky?—I can't say that it was.

3649. Could you break it easily in your fingers?—Yes.

3650. Quite easily?—Yes.

3651. Was it tough?—It was rather toughish with a substance of a watery nature in the middle of it.

3652. Was it hollow?—No, it was substance but with a watery nature.

3653. Did you ever see young fish in it?—No, never.

3654. Did you ever see black spots like the eyes of fish in it?—No, never.

3655. Did you ever see herring spawn?—Yes.

3656. Where did you see it?—In the fishing boats this season.

3657. Was it like what you have been describing?—Yes. In fact I hung 20 herrings up, their spawn was all clustered together and was just the same as that which was brought up in the trawl nets.

3658. Then you think it was herring spawn you saw?—Yes.

3659. Did you ever see any herring spawn in the fish brought up in the smack?—No, I never saw them.

3660. Do you think that flat-fish or any other fish feed on the herring spawn?—I am sure I cannot tell; it is very possible that they do.

3661. How much may we understand came up at a time of this spawn?—Perhaps a ton.

3662. A ton of spawn?—Yes, or rather a ton of fish, and perhaps there would be a basket of it at a time. It would be all mixed up with mud and spawn, and in fact it was all mingled together, and we generally tossed it overboard.

3663. Then on the average there would be a basketful of spawn every time the trawl was hauled up?—Yes.

3664. Where was the trawling ground upon which you observed this?—It was off Sunderland.

3665. Off Sunderland?—Yes, in about 25 or 30 fathoms of water.

3666. Is that the same trawling ground that was described just now?—Yes.

3667. What time was that?—I think it would be about the month of July.

3668. Do you recollect the day at all?—No, I don't recollect the day.

3669. Were there any herrings about here at that time?—No, none.

3670. Had there been any before?—There had been none in-shore. There might have been some in the offing, but there were none of our men catching them.

3671. There was no appearance of herring at that time?—No.

3672. There were no birds or porpoises?—No, but we generally see birds at all times.

3673. If you know what is called the 'appearance' of herring you will know what I mean. Was there a peculiar clustering of birds. Have you been a herring-catcher?—Yes.

3674. Then you know what they call the 'appearance' of herring, do you not?—Yes.

3675. When was this that you were trawling?—In 1862.

3676. In July 1862?—Yes.

3677. And it was then that you took up large quantities of herring spawn?—Yes.

3678. Yet there had been no trace of herrings there before?—No.

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3679. Then how did you get it?—There had been herring there no doubt, though they were not visible.

3680. Is it customary in this part of the country to find full herrings in July?—Not frequently.

3681. Did you ever hear of full herrings in July?—No.

3682. Do you know what time the herring spawn?—That I don't know.

3683. You know what a full fish is?—Yes.

3684. What time do you get full fish here?—We have had them at all seasons.

3685. But in what months?—This month.

3686. Do you mean the month of September?—Yes.

3687. Did you ever get full fish in August?—Yes.

3688. What—full fish?—Yes.

3689. Did you get it in the early part of August?—Yes, more so in the early part of August than in the back end.

3690. Is it more common to get full fish here then than in September?—Yes.

3691. They never fish here for herrings in July?—Very seldom; I never did it myself.

3692. Were you in the trawler later than July—in August or September?—I was only there a few weeks.

3693. Was any of the witnesses who have been examined proprietor of the boat?—No; he is here in the room, but he has not been examined.

3694. Are you acquainted with anybody else who has seen the spawn taken in trawl-boats?—No.

3695. Have you ever heard of it?—Never. I have only been speaking of what I have seen. It is no gain to me to come here to be examined, but I am merely giving you all the information I can.

3696. Have you seen any other spawn but that of herring taken in the trawl-boats?—I don't know any other spawn.

3697. Have you seen anything taken up that was at all like herring spawn?—Yes, there are several things that imitate spawn, but whether it is spawn or not I cannot tell.

3698. But you are clear about the herring spawn?—Yes.

3699. What day in July was it?—It was about the middle of July.

3700. How do you know that it was July?—To tell the truth, I went merely for pastime. I don't exactly recollect the time, but if you ask about the time no doubt the man to whom the boat belonged will tell you.

3701. I only mean what month it was, nothing else?—I think it was July, but I am not sure.

3702. What is your ordinary occupation?—I am a seaman.

3703. Do you go herring-fishing here?—Yes, and lobster-catching as well.

3704. Does your herring-fishing begin in August?—Yes.

3705. Was there anything that kept you from herring-fishing that year?—I don't think I was herring-fishing that year at all.

3706. Were you away during the months the herring-fishing lasted?—Yes, I was shell-fishing.

3707. You were engaged during these two months?—Yes, I was in the shell-fishing during the season.

3708. Then it is quite clear that you could not have been away trawling during the same months?—I suppose it would be after the shell-fishing that I went trawling.

3709. It happens to be a matter of some importance to get the exact date; can't you give us a better idea of the time?—No, I can't tell you.

3710. Is there anybody here who can tell?—Yes, the skipper of the vessel is here.

H. Roberts.

HENRY ROBERTS called and examined.

3711. (*Professor Huxley.*) Are you the skipper?—Yes, but I am not supposed to tell him his time.

3712. What time was it, I want to know?—It would be the latter part of September and the first part of October. It would be between those two months.

The witness withdrew.

H. Meldrum.

HENRY MELDRUM re-called and examined.

3713. (*Professor Huxley.*) Do you think that these fish now on the table are injured or not?—No.

3714. But they were brought up in a trawl net?—Yes, but it is the haddocks that are principally damaged; they are of a much softer nature than other fish.

3715. Are fish as small as these caught by the hook?—No.

3716. You never saw fish so small as these caught by the hook?—No, except it might have been by little boys fishing in the river.

3717. (*Mr. Caird.*) Do you say that the fish now upon the table were caught in the trawl,—those very fish?—Yes.

3718. Do you say that all the small fish are injured in the trawl?—Yes, they are all injured.

3719. How are they injured?—You can tell that they are injured by the smell of them.

3720. Show me how they are injured?—You can tell that by the softness of them; good fish are as stiff as can be.

3721. How long is it since these fish were in the trawl?—They were all caught yesterday.

The witness withdrew.

W. Boyes.

WILLIAM BOYES called and examined.

3722. (*M Caird.*) With regard to these small fish that are said to have been caught in a trawl, do you happen to know whether they were caught in a trawl or not?—Yes.

3723. How do you know that?—Because they were fetched ashore in a trawl net.

3724. Are they in an injured state at this moment?—They are just as I got them. I put them in a basket and covered them over.

3725. Have they been injured by the trawl?—Yes.

3726. In what way?—There are the fins and other parts of the fish mashed to pieces; likewise the guts, they are all mashed and chafed to pieces.

3727. (*Professor Huxley.*) Do you consider these to be specimens of damaged fish?—Of course they must be; they are damaged fish.

3728. Do you think that if you had caught these dabs with the hook and line that they would not have been in the same condition?—Not in the least.

3729. Why, this is Monday?—Yes.

3730. Have you any evidence to show at what time these fish were caught?—No; they came on shore on Saturday at 11 o'clock.

3731. Is there anything to prevent their having been caught on the Friday?—I do not know, they came ashore for sale on Saturday.

3732. But you do not know how long they had then been caught?—No, I do not know how long they had been in the vessel.

3733. They might have been caught on the Friday?—I cannot say.

3734. You cannot say of your own knowledge?—I cannot say whether it was Friday or not; all that I know is that they come ashore every day, therefore they must have been caught between Friday night and Saturday morning.

3735. Why, these fish are stale. If you put your

nose to them you will ascertain that fact at once?—Yes; they will not keep like the line-fish.

3736. But they are quite stale?—Yes.

3737. Now, do you think it is quite fair to bring these forward as specimens of trawl-fish when they have kept for three days at least?—There is only one day gone by yet.

3738. But if they were caught on Saturday morning, Sunday has since elapsed, and this is the afternoon of Monday?—That is two days.

3739. But, I suppose, the boat would have to come here after the fish was caught?—I do not know, I did not catch it. I only brought them here to show the size of the fish they caught, and the mashed state they are in.

3740. But there is another question I wanted to ask you, are those fish damaged or not?—Certainly they are.

3741. But these fish are not bruised?—Of course they are.

3742. Do you mean to say they are bruised?—Yes.

3743. In what way?—The gut is emaciated for one thing.

3744. Emaciated is not bruised?—All the fins are bruised.

3745. Then, by emaciated you mean bruised?—Yes; mashed.

3746. You mean smashed?—Yes; but we must speak our own mother's tongue.

3747. Are the scales off those fish?—Yes, they are.

3748. Let us see (*scraping off the scales with a knife*), why, here are the scales?—They are not scales.

3749. Nonsense; do you think I do not know what scales are, why it is as rough as a rasp?—The scales are off several of these fish.

3750. Bring me another. I will tell you if the scales are there or not. (*Examining another fish*), Why, I can feel the scales here; they are as much on this fish as ever they were. (*Examining another*), The scales are partly off that one. What I wish to get at is a simple matter of fact. An assertion has been made that the scales are off these fish; but when I take out my knife and scrape them I can scrape off as many as I want. I do not see that these fish are broken in any way; their skin does not appear to have been broken?—Yes, it is.

3751. Will you show me one?—There is one (*holding up a fish*).

3752. Why, the skin is not broken here. The gills have been broken, but the flesh of the fish is not broken at all?—Yes, it is broken.

I tell you that the flesh of the fish is not broken at all.

(*Mr. Caird.*) Bring some others that you say are broken.

3753. (*Professor Huxley.*) Our only desire is to get at the fact?—Here is another.

3754. The reason why we have gone so particularly into this point is this: it is quite right that you who are adverse to the trawlers should state your own opinion. You bring your own specimens of the fish and you tell us these are trawled fish, and that they are bruised and damaged. We have examined the fish one by one, and we neither find them bruised nor scaled. If those specimens are damaged fish, I do not know anything about it.—We cannot catch a small fish like this one on the hook, and if you destroy all the small fish you will have no big ones.

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3754*a*. That is quite another thing. Do you consider that these are the largest of the small fish caught by the trawl?—There are a good deal of them much smaller than that. Some of them are that small (*pointing to the first joint of his finger*). Some of them are much more scaled than these are.

3755. How is it that small fish like that are caught in the trawl. So far as I understand the mesh of the trawl net is an inch and three quarters from knot to knot?—I do not know how small it is, but it will fetch up a crown piece, and the more weight it has in the net the closer the meshes will draw together.

3756. Is it brought up by the weight of the net?—Yes; it draws the fish up altogether.

3757. Am I to understand that you do not think any regulation with regard to the size of the mesh of the trawl net would do any good?—I do not think it would.

3758. What is the largest sized mesh you have ever seen used in trawling?—I can hardly say.

3759. If it is as big as the mesh of a turbot net would it catch all the fish?—Yes; supposing that the main part of it was made to contain a weight. If you can fetch up sand, surely you can fetch up anything less than a crown piece.

3760. Do you think that the size of the mesh is not a matter of much consequence?—I cannot say so.

3761. Do you think that if the mesh were made 4 inches wide it would still catch small fish?—Yes, provided we were getting on heavy ground. The bag shakes up, and all that gets in the bag must tend to stop it up. A piece of wood would stop it up.

3762. Would the fish stop it?—Yes, if they got big ones in they would stop the small ones from coming out.

3763. Have you ever seen trawling?—Yes, I have trawled about a dozen times. I have a small trawl net of my own, but I do not use it much. I take to the line-fishing in preference.

3764. Do you ever get spawn in your trawl net?—No, I only fish with the trawl in shallow water about two or three fathoms.

3765. Do you ever fish with it for soles?—Yes.

3766. And you never get spawn of any sort?—No, we always trawl on the clean smooth ground where there is nothing to interrupt us.

The witness withdrew.

HENRY ROBERTS re-called and examined.

H. Roberts.

3767. (*Mr. Caird.*) Are you a trawl-fisherman?—Yes.

3768. Where do you hail from?—Hull. I served seven years apprenticeship to it.

3769. Have you been at sea as a fisherman?—Yes.

3770. How long have you fished here on this coast?—This is the seventh summer that I have been here.

3771. Do you find in your experience in fishing on this coast that your catch of fish has increased or diminished?—It has increased by one half this year.

3772. Can you give us a comparison by taking one month when you first commenced fishing seven years ago and a month now?—We get two fish where we only got one formerly. With an average breeze we can catch from 18 to 30 hampers.

3773. From 18 to 30 hampers?—Yes, and each hamper will weigh from 7 to 7½ stones.

3774. And how many would you get?—With a nice breeze we should get in two or three tides about 30 hampers, and we should average from 40 pairs of soles to 75 or 90 pairs.

3775. You would do that now?—Yes.

3776. What was the quantity of fish you caught seven years ago?—Seven years ago it would average from 20 to 25 or 30 pairs or soles and about 13 small baskets of fish.

3777. Has that increase been going on gradually?—It keeps increasing. There are more vessels employed in the fishing now than were ever known before. On a general rule where there have been five or six vessels for some years there are now from 11 to 13.

3778. And are the whole of them getting as good fishing as you?—Yes, there is a variation. Sometimes some will go along and get a good week's work. Even though they are fishing alongside and within hail of each other there will be a great difference in the takes of some boats fishing from a mile to half-a-mile of each other.

3779. At what distance from the coast?—From 15

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to 18 miles. If the wind happens to be westerly we drop off.

3780. Do you find it more successful to fish here than off Hull?—No; there are more fish by half at Hull than there are here, but we cannot get them so fresh to market.

3781. You can come in here quicker?—Yes, we can bring the fish in more fresh out of the water. We can almost bring them in alive into the market.

3782. Is that the reason why you have come here to fish?—Yes.

3783. Are they mostly Hull trawlers that fish off this coast?—Yes, they are from Hull and from Brixham, but the most of them belong to Hull.

3784. And has the number been increasing year by year?—Yes, and it will continue to do so.

3785. For the same reason?—Yes, because they can get their fish fresh to market.

3786. Do you ever bring up any spawn in your trawl net?—I never saw any unless it was herring spawn.

3787. Have you caught herring spawn?—Yes, in abundance.

3788. In the trawl?—Not in the trawl, but in the fish themselves, particularly in the haddock caught off the Dogger Bank, the Well Bank, and the Off Banks. We have been catching 20 hampers of fish, and we have not had one that has been clear of herring spawn.

3789. Do you mean herring spawn that has been taken by other fish as food; do you find it in the inside of the fish?— Yes.

3790. You mean what the fish has eaten?—Yes, what they have devoured.

3791. But you never found it in a lump in the net?—No, I think that would be impossible. It could not take place.

3792. Then you do not agree with the other witness who said that it frequently came up in the net?—No, I think it is impossible that it could.

3793. Why is it impossible?—Why, herring spawn is like the cod's roe. When the herring shoots it it is just the same, and there are plenty of dog-fish to devour it. We catch herring spawn on the Dogger Bank when we have shoal water, from seven fathoms up to 15. We generally average 28 to 36 and 40 fathoms off here, but the herring swims light in the water and as it spawns so the haddocks eat it.

3794. Did you ever notice when you had been drawing up the trawl whether you had much dead fish in the net?—Yes, we have often as much dead fish as alive.

3795. Are the dead fish marketable fish?—Yes, they are all marketable, they have all been caught between five and six and eight hours.

3796. Have you no unmarketable fish?—Yes, if we have a strong wind. If it happens to blow hard we have to take our net along at a rapid rate, and if there happens to be a great deal of surf on heaving it up it will wash about a great deal until we get it on board, and the consequence is that occasionally the fish are terribly mashed about.

3797. What do you think of the fish that has been produced before us to-day?—Why I think if the man who brought them here had been out of the water as long as those fish have he would want a little dubbing himself.

3798. Are these small fish not marketable?—Why the larger fish are the better they are, and the lighter they swim in the net. They keep clear of the dirt at the bottom of the net. It is those dabs that create the dirt.

3799. How many baskets of fish will you bring up in your net in one haul?—That will depend very much on the breeze we have.

3800. But take an average haul?—If we have three hours breeze out of a six hours' tide we can raise up seven or eight hampers.

3801. Seven or eight hampers altogether?—Yes, we should do that here on this ground.

3802. When you sort the fish how many hampers would be small fish not saleable in the market?—The whole of these would be fit for the market.

3803. The seven or eight hampers would be marketable fish?—Yes.

3804. And how many hampers would there be of unmarketable fish?—Perhaps a basket, perhaps not so much, perhaps sometimes there might be a couple of baskets.

3805. Has it ever occurred in your experience that one half of the fish you bring to the surface is not marketable fish?—No, that is entirely false.

3806. Has a quarter of the fish been unmarketable?—No, nor a fourth part of it, sometimes we may have a few that are not marketable.

3807. Have you found that the fish are injured from being knocked about in the trawl?—At different times I have seen some of it bruised. It has probably been blowing a heavy gale, and sometimes we have had the net alongside and it has taken us two hours to draw it in. In that case some of the scales might be knocked off the fish and the inside of the fish might be a little rubbed.

3808. I understand that the fish taken off this coast is not opened and gutted directly it is caught?—If it was it would make 24 hours difference. The fish you have seen here to-day has its gut in. If it had been taken out it would have kept for 15 hours longer.

3809. Do you find when you go to market with trawl-fish that it does not bring as good a price as the fish caught with hook and line?—Decidedly they do. We can get our fish in here when they cannot get out to supply the market at all.

3810. But when both descriptions of fish come in together, does yours bring as much money as theirs?—If I were to buy fish for the purpose of selling it again, I think I should buy hooked fish.

3811. Is that because they look better?—Yes, because they look a little better; they are brighter and they have all their slime upon them.

3812. (*Professor Huxley.*) This fish has been just placed on the table, and I understand that it was caught last night. Now look at that fish; is it what you consider a good specimen of a trawled fish?—That is as beautiful a fish as was ever caught. I will open it; there is the gut, now I will shew you the gall.

3813. I want to know whether you consider that fish a fair specimen of a trawled fish?—Yes, it is as fresh as you would get it at any market in England.

3814. Are the majority of trawled fish in as good condition as that?—Equally as good.

3815. You were speaking of the hooked fish being better. You say nothing about their having the scales on?—No, they are better in appearance.

3816. These fish have their scales on, have they not?—Yes, but they have not the slime.

3817. Do you mean the slime or the scales?—The slime, which makes the fish appear better when it is first caught.

3818. This fish has its scales?—Yes.

3819. You were talking just now about the haddock eating the spawn of the herring, how do you know that? Do you find the spawn in the stomachs of the haddock?—Yes, they are often full of nothing else. In fact, we cannot get the fish without twisting the bag and then the spawn runs out of them, but we only find that in shoal water off the Dogger Bank and the Well Bank.

3820. What depth do you call shoal water?—Eight or 10 fathoms of water.

3821. Do the herring spawn on the Dogger Bank?—Yes.

3822. Do you find herring there?—Yes, I believe they take their course there. For the last four or five years they have taken their course to the east of the Dogger up the Yarmouth roads.

3823. What time of the year do the herring spawn over there?—I do not know what time, but we have caught the haddock in that state in the month of December.

3824. You have caught them full of herring spawn?—Yes.

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3825. Do you catch them at any other part of the year?—Only in the month of December.

3826. When you catch them in that state do you find them in shoals?—Yes, for instance, I may be fishing here, and another boat there, and I may have 30 hampers while my neighbour has none.

3827. Do you think the haddock are feeding on the spawn?—Decidedly I do.

3828. There is a great difference between you and the other witnesses?—Probably so; one man's experience is very different from another's.

3829. But here is a difference as to a matter of fact. At what time of the year was the last witness on board your smack?—Between the latter part of December.

3830. You heard what he stated?—Yes; what he mentioned to you as being herring spawn is what we call "teats"; some call them "thumbs". It is a kind of weed that grows at the bottom of the sea, but I believe it is of a living nature. It would be about the size of your fist.

3831. Is it like this (*showing a drawing*)?—Yes, and it is full of holes. It is full of nothing but water. We catch many tons of that during the year.

3832. Do you catch it at any particular time?—No, there is no particular time at which we catch it.

3833. At the particular time to which the last witness referred, can you state that this was the substance he spoke of, as having been brought up in the net?—Yes.

3834. Then he was stating what was perfectly true, but he was mistaken in the nature of what it was?—Yes, but he knows nothing about what it was. He does not know what fishing is at all. He understands nothing but crab and lobster-fishing.

3835. Did you ever get haddocks with herring spawn in them in the month of September?—Yes, I have got them 50 or 60 miles out at sea off the Dogger Bank.

3836. What part were you fishing when Meldrum saw these things?—We were fishing off Sunderland, E.N.E. of this.

3837. Do you often get the herring spawn in the haddock there?—I never saw such a thing as herring spawn in my life off this coast.

3838. Do you think that Meldrum has confounded the two things?—Yes, he has misunderstood the thing altogether.

3839. Have you been a herring fisherman?—No, I never went herring-driving in my life.

The witness withdrew.

REAVELEY ATKINSON called and examined.

R. Atkinson.

3840. (*Mr. Caird.*) Do you wish to offer us any evidence?—I wish to make an observation or two. I am not a regular fisherman. I am only engaged as a sort of amateur fisherman, but I think I can give you some evidence that will be of service to you.

3841. What experience have you had of the fisheries on this coast?—I have lived at Sunderland all my life, and I have been more or less connected with the seas. My father was a waterman, and all my brothers, with the exception of one, have been upon the sea. In former years, when I was a little boy, I usually accompanied them, and in fishing at that time we could always take an abundance of fish. I remember distinctly 25 years ago, when my father was living, that we caught on one occasion upwards of 100 haddocks. They were not very large haddocks, but were a little smaller than the three now lying on the table. We could do that almost every day in the neighbourhood of Ryhope, two miles south of this. We used to fish then in from three to five and six fathoms of water, or perhaps a fathom or two more, about half a mile or three quarters of a mile from the shore. I have frequently fished in the same place since then, and I have found the supply of fish gradually decreasing, especially during the last five or six years. About six years ago a young man named Anthony Gibson and I were fishing in that neighbourhood and we caught about 16 haddocks, a larger quantity of whiting, and a few flat-fish. Since then I have fished there more or less every year. I have a small boat of my own about the length of this table, and I can only go to sea when the weather is very fine, but my experience is that every year the number of fish is growing less and less. Three years ago I caught four or five haddocks. Last year I only caught two. And this year, although fishing under the same circumstances, and being reputed a tolerably good fisherman, yet I have only caught one. I have caught whiting and flat-fish to some extent, but not to the extent they were formerly taken.

3842. Do you know whether the total supply of fish in Sunderland market has diminished or not of late years?—I think there is as large supply as there used to be, owing to the increased number of boats employed.

3843. Is there an increased number of boats?—Yes.

3844. And they have increased the number of fish supplied?—Yes, but the take of fish has generally been less for each boat, although in the aggregate, on account of the number of boats engaged, there has perhaps been a large supply. I am perfectly satisfied, however, that the number taken by each boat is considerably less than it used to be.

3845. Have you anything to add to what was stated by the former witnesses as to the cause of the decline they have spoken of?—I cannot say anything with regard to the spawn being taken up, my experience being confined to in-shore fishing. I have never seen any spawn taken up in the trawl, but I can speak most positively as to the decrease in the supply of fish. I know there are a great number of amateur fishermen, old men and others, who go out when the weather is fine, and they can all of them corroborate the statement I make.

3846. But you cannot add anything to what was said by the other witnesses from your own knowledge as to the cause of the decline in the number of fish?—As far as I know it must result from this, that the trawlers are gradually working northward and impoverishing the fishing grounds. For the last 20 years they have been gradually working northward, and there has been an increased supply of fish, which is kept up in the same ratio as the increase in the number of boats. But now they have come further northward and are so numerous in this neighbourhood that the supply of fish is decreasing very alarmingly.

3847. Do you mean the fish caught by the line-fishermen?—Yes.

3848. Have you anything more that you desire to lay before us?—Yes. There is another kind of fishing here which I think ought to be mentioned, and that is a kind of fishing commonly called "sweeping". I have an idea that the herring fishery is destroyed to a very great extent by that process of fishing. The nets are shot out into the sea where a considerable number of young fish have congregated in the bays or creeks along shore. As the nets are drawn in, these small fry, which we call "sile", are drawn in with them. I have followed in my boat a net so drawn in. Whether they are herrings or not I cannot tell; but I have observed these young fry escaping from the net wounded and injured, writhing and turning in every direction. Of course those so injured would soon become a prey to other fish, even to a shrimp. Others that were unable to get out of the net were drawn up on the shore and left there to perish. Now I consider that to be a waste of God's gifts.

3849. (*Professor Huxley.*) By "sweeping," do you mean circular fishing?—I mean riding at anchor. It is a net put out from the shore.

3850. A seine net?—Yes.

3851. You used the word "sile." Did you apply that to the herring?—I don't know whether they are herrings or not.

3852. They are small fish?—Yes, and they have a resemblance to herrings.

The witness withdrew.

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R. Laidler.

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ROBERT LAIDLER called and examined.

3853. (*Mr. Caird.*) Are you a fisherman?—No; I am a fishcurer and a fishmonger.

3854. Have you been long engaged in that business?—Yes, for 17 years.

3855. Are you in the habit of buying both line-fish and trawl-fish?—Yes.

3856. When did trawl-fish first come into the market here?—About four years ago.

3857. Has the quantity brought into the market considerably increased during that time?—Yes, they have brought great quantities of fish ashore.

3858. Are they not sold in this market?—Yes, but I never bought much of them.

3859. Don't you buy them?—Sometimes I do, and sometimes I don't. It depends very much on the quality of the fish brought in.

3860. Do you find a great difference between the quality of the line-fish and the trawl-fish?—Yes, decidedly.

3861. Do you mark that by the difference in the price which you pay?—There is a great difference sometimes in the price of the fish. We generally know what fish will suit our market. I know the fish that I can carry to market and that which I cannot carry. The fish that sometimes come ashore from the trawl-boats we could not send to market. It would not carry the distance. If it happens to be good in quality then I may buy it, and I send it to Glasgow and other parts of the country.

3862. What is the difference in the price you pay on the average for cod caught by the line and cod caught in the trawl?—This last year I have paid a good deal more for fish than I have done for the last 30 years. I used to be able to get cod for 1*s.*; this year it has cost me 2*s.* 6*d.* Ling, for which I have paid 2*s.* 6*d.*, I have this year paid 3*s.* For haddocks, which I used to get for 8*d.*, 10*d.*, or 1*s.* a stone, I have had to pay this year 15*d.* and 18*d.* a stone.

3863. Has that increase of price taken place this year?—Last year it increased a little, but not so much as this year.

3864. What do you suppose to be the cause of that increase?—It is the decrease in the number of fish brought into the market; there is not the same number of fish in the market now that there used to be.

3865. Then, is the total quantity of fish brought into Sunderland market on the increase or on the decrease?—It is rapidly on the decrease; there is not so much brought into the market by the cobles as there used to be.

3866. Has there been a decrease both in the line and the trawl-fishing?—Decidedly; the white-fishing this year has been 30 per cent. less than it has ever been before in my knowledge.

3867. Do you mean that the average supply to your market has been a third less?—Yes.

3868. Are any fish sent there without being sold in your market at all?—Not a great deal. The hawkers take away some in carts, and sell them.

3869. Is a large proportion of that which is brought on shore offered to you?—I can buy any quantity I like.

3870. Are you in a position to state whether the supply has increased or decreased during the last five years?—It has decreased very much.

3871. Can you show us in figures what that diminution amounts to?—Not at this moment, but I could by reference to my books; the price of herrings is about the same per cran or per 1,000, but for white fish and haddocks the price is much higher.

3872. I was speaking of the quantity, not of the price?—The price is generally regulated by the quantity.

3873. Are you paying more for fish this year than you did last year?—Decidedly I am.

3874. Is there a smaller supply coming on to the beach this year than there was last year?—There is a great deal less brought by the line-fishermen in the cobles.

3875. But taking both cobles and trawl-boats, is there a smaller supply?—Yes.

3876. How much has the daily or weekly supply diminished; have you any means of telling?—Yes, by the cobles; we have 13 cobles out of Whitburn, and 22 or 23 out of Sunderland, and I should say that the decrease of fish during the last few years would average one third of the take.

3877. The take of the cobles?—Yes; there are eight or nine of these trawling smacks trawling about here now. They fetch in great quantities of fish; that causes a supply, but it is not the supply that I look to; I want the line-fish.

3878. Has the total quantity brought ashore both by the cobles and the trawl-fishermen increased or decreased?—It has decreased in the cobles.

3879. But not in the trawl-boats?—I never studied or went much into the market for trawl-fish.

3880. When did trawl-fish first come into the market?—About three years ago, according to my recollection; I should say that it has not been in the market more than four years.

3881. (*Professor Huxley.*) Is there any record kept here as to the quantity of fish brought in by the cobles?—No.

3882. The Custom House authorities do not keep any record?—No.

3883. Then, there is no record of any kind kept?—No.

3884. You can only answer for what you purchase yourself?—Yes.

3885. Have you the means of knowing the quantity of trawled fish brought into the market here?—I have seen the trawls fetch in from 30, 40, to upwards of 60 pad baskets of haddocks. I have seen them below that figure. Upon an average I should say they would bring in 30 baskets at least.

3886. You have no means of knowing of your own knowledge whether the quantity of fish brought in by the trawlers has increased or diminished of late years?—I think that it has decreased.

3887. How do you know that? You stated just now that you were not a purchaser of trawled fish.—At times I buy it; it is according to the quality of the fish, whether I take it or not. Sometimes the fish will carry to the market; at other times it will not.

3888. Then, how do you know that the quantity of trawled fish supplied to this market has diminished?—We have as many boats here, and if the larger number of smacks that we have here now brought in the same quantity of stuff that the boats used to bring in formerly, the supply would be enormous. The quantity now brought in by each boat is very much smaller, and therefore I say that the number of fish has decreased.

3889. Do I understand you to say that the proportion brought in per boat has decreased?—Yes.

3890. But do you conceive that the total quantity has been increased or decreased; which do you mean?—I think it has decreased.

3891. So that not only has the total quantity decreased, but the proportion per boat also?—Yes.

3892. What means have you of knowing that?—I know what the quantity was when the boats first came here. I have seen them bring in 60 pad baskets of haddocks. I have seen skate, cod, ling, turbot, and soles fetched ashore in large quantities, and within the last year or two I believe these smackmen who are now in the room will admit that I am stating the fact when I say, that taking each night's fishing, one with the other, they won't average 20 baskets for the week round, and I have seen them average 60, and above that too.

The witness withdrew.

WILLIAM COBLEY called and examined.

3893. What are you?—Why I have been selling fish here during the last six months, and I have never seen that man who has just given evidence as a buyer of fish here all the time.

3894. Are you a salesman?—Yes, and I have three smacks here. I have been acquainted with the fisheries for the last 40 years. I was brought up in Brixham. At that time there was not a smack over on this coast but what belonged to Brixham. There were then not above 100 smacks; 30 or 40 used to leave Brixham and go to Dover and Ramsgate. I have followed that business for 17 or 18 years. Some time afterwards the smacks came down to the Silver Pits. There they found plenty of fish, and they then took to trading to Hull, and what was then only 100 or 150 has now grown up to upwards of 800. It has been stated that the smacks have cleared the west coast, and the south coast, and that now they have come to clear this coast. Now let me tell you that there are more smacks now at Brixham than there were 40 years ago. At that time there were none at all in Dover or Ramsgate, and now there are between 30 and 40, and there are 200 out of Yarmouth: 20 years ago there were none at all out of Hull, and now there are 300. The reason we have come down here is this: From the beginning of May until September our smacks have to go to the North Sea fishery from whence they send their fish to London by ice-cutters. This year they have not been able to get ice, and the consequence has been that one half the fish that has gone to London, not having sufficient ice to preserve it, has been condemned when it got there. That is the reason we have come here for three or four weeks' fishing. It was not because the fish had diminished, but because we wanted to find a nearer market for it, and not have to pay the carriage and find our fish condemned afterwards. With regard to the diminution of the fish, I have an observation to make in reference to my trade. I am a basket maker, and I supply the smacks with baskets for my fish. In Hull when we pack up our fish they go to London, and we see no more of the baskets. They are sold with the fish. 14 years ago, when I went to Hull as a basket maker, six or eight basket makers served the place, and now 20 dozen would not serve it.

3895. Is that on account of the increase in the supply of fish?—Yes, 14 years ago there were about 30 men and boys employed in making baskets, and now in Hull alone there are upwards of 200.

3896. In Hull?—Yes, the only reason the smacks are here is, that they don't like to send their fish to London and make nothing out of it. In point of fact we are anticipating at present that we shall be able to make Sunderland quite as important a fishing town as Hull is.

3897. Do you sell your own fish?—Yes, on the beach.

3898. Do you ever see long-line fish there?—No, I have seen none from the cobles since I have been here.

3899. During the time the cobles are engaged in the herring-fishing, has the market been satisfactorily supplied from the smacks?—Yes.

3900. If the supply depended on the cobles, would there be any other fish at all during the herring season?—No, none.

3901. Do not some of the long-line fishermen continue the white-fishing at the time the herring-fishing is going on?—Yes.

3902. Do the trawl-fisherman interfere with the herring-fishing at all?—No, they know nothing about it.

3903. Then during the whole time that the cobles are engaged at the herring fishery, the other fishing does not go on, so far as they are concerned?—No.

3904. But you continue your fishing?—Yes, the same as ever we did, and since I have been here, when I have been on the quay side packing up my fish, I have found them bringing in such quantities that they are not able to sell them. We cannot sell the fish because the supply is so great. If we get into Shields with a pair of soles we could not get more than a penny apiece for them, while we can get 8*d.*, 9*d.*, and 11*d.* a pound for them by sending them away.

3905. Then you can do much better by sending them away?—Yes.

3906. Do you think that the introduction of your trawled fish has lowered the price of fish in this market?—Not in the least.

3907. Has your additional supply caused a less price to be paid for the fish?—Since I have been here, there has been no coble-fish at all. The only fish we send away that there is no demand for here are soles. 20 or 30 pairs are quite enough for this market, and we cannot sell them at all unless we can supply them very cheap.

3908. Then you don't sell your fish here?—Yes, we sell all the haddocks here.

3909. You have always a good sale for the haddocks?—Yes, but with regard to the soles, the buyers, if they buy all the fish you have, pack it up and send it away. They take out baskets of haddocks to sell all over the town, but they pack up the soles for Manchester, Liverpool, and elsewhere.

3910. And how is it with regard to the cod?—There are very fair cod got here.

3911. How is it with regard to the turbot?—I don't think I have seen more than six turbots here since I have been here.

3912. Is there much ling?—No, it is very scarce. Now with regard to destroying small fish, you will perhaps allow me to mention what I have witnessed in Torbay. They use the seine nets there, and when they shoot them for sprats and herrings I have seen scores, ay hundreds, of turbots brought ashore not so large as my hand. That is a proof, I think, that the fish go to shoal water and not to deep water to spawn.

3913. (*Professor Huxley.*) Are you the only basket maker in Hull?—There are many others there now.

3914. We shall go to Hull by-and-by, and perhaps you will provide us with the exact statistics of basket making there during the last 20 years?—I shall be most happy to get them for you. When I first went there a man whom I knew had but one apprentice. He now employs 12 men and 40 apprentices, which is a clear proof that there is no dimunition in the number of fish.

3915. Do you find that the trawled fish fetch a higher price in the Manchester market than hooked fish?—No, the fish sent from Sunderland will fetch a better price than fish from any other part of the country.

3916. Do you think that the purchaser knows the difference between trawled fish and hooked fish?—No. I have received numerous letters saying that my fish sold better than many others, and it would be no use for me to send rubbish into the market. They tell me that rubbish would be of no good.

3917. What do they mean by "rubbish"?—Stale fish. I understand from those who have the carriage of the fish, that, if they had a cart of hooked fish and another cart full of trawled fish, if they had to travel 30 or 40 miles in a cart without springs the trawled fish would turn out better than the hooked fish. The hooked fish look better to the sight, but there is no solidity in it.

3918. Will hooked fish fetch more than trawled fish in Sunderland?—I have not seen any sold here, but I have heard the women selling fish here say that if it were not for us, where they can get a haddock now and sell it for a penny, they would not be able to do so for 3*d.*

3919. Do you think that in consequence of the supply of haddock sent into the market by the trawl-boats, the price of haddock has been lowered?—Yes, that must be so.

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3920. But is that the result of your experience?—Yes.

3921. Is it the general report here?—Yes. If you were to go among the women who sell the fish, you would soon be surrounded by 50 of them if you were to say a word against the smacks, and they would tear your eyes out. With regard to the man who has just given his evidence, all I have to say is, that during the time I have been here I have never seen him as a buyer of fish at all.

The witness withdrew.

G. Ainslie.

GEORGE AINSLIE examined.

3923. (*Mr. Caird.*) You are a fish salesman, I believe?—Yes.

3924. How long have you been a fish salesman?—I have been a fish salesman here for about 14 years.

3925. Have you observed any falling off in the supply of fish to this market?—There has been a great falling off in white fish—haddock, cod, ling, turbot, and skate.

3926. Do you refer particularly to the white fish caught by the cobles and the line-fishers?—Yes, to the fish caught by the cobles.

3927. Have you had any experience with regard to fish caught by the trawlers?—Not much. I have only bought it three times this year. It would not suit me at all. I cannot sell it.

3928. Why not? Is the quality inferior?—Well, after I had kept it over night I found the next morning that it was soft and the guts were coming out. I opened 20 or 30 and they smelled so strong that I threw them away.

3929. In the course of the present year you have only bought fish three times from the trawlers?—Yes, and I only had two baskets each time, for which I paid 5*s.* a basket.

3930. Has the price of fish increased?—Yes.

3931. When did it begin to increase?—Three years ago. This last year it got a good deal higher than it was three years ago.

3932. Has the introduction of the trawled fish had a tendency to diminish the price of the white fish?—No, not the price of the fish caught by the cobles; I bought it three years ago at 2*s.* a stone, and I have paid as much as 2*s.* 6*d.*, 2*s.*, 1*s.* 6*d.*, and 1*s.* 3*d.* a stone this year. I have paid as much as 2*s.* 6*d.* a stone, and 5*s.* for ling, and 3*s.* 6*d.* for cod.

3933. What would be the relative price of those fish say five years ago?—I did not deal much in white fish then, I was in the salmon-fishing. That would be 10 years ago. Five years ago you might have got haddocks at 9*d.* and 10*d.* a stone, and you would get a good cod for 1*s.* 6*d.*, and 1*s.* when they were plentiful.

3934. Do you think that the whole quantity of the white fish brought by the cobles is decreasing?—Yes, the total quantity has been decreasing for the last three years.

3935. We have been given to understand that the number of cobles has increased?—There were 12 when I first took to the white-fishing and now there are 14 at Whitburn.

3936. And do the 14 not get as much as the 12 used to get?—No, they do not. In February, March, and April I have seen only 2 crans of fish brought in in a morning.

3937. Have you noticed any difference in the quantity of herring caught year by year?—No, it will be about 20 years since I had anything to do with the herring trade.

3938. Then you do not buy herrings?—No.

3939. Do you send fish to London or Birmingham?—No.

3940. Then do you carry on your business in the local market?—Yes, I sell all I get in the Sunderland market.

3941. Then the demand for fish in the manufacturing districts does not help you in any way?—No, I do not send any fish away from home.

The witness withdrew.

R. Crick.

RICHARD CRICK called and examined.

3942. (*Mr. Caird.*) Have you paid much attention to the question of the supply of fish to this coast for some time past?—Yes.

3943. In what way has your attention been drawn to the subject?—It has been habitual for me to visit the beach morning after morning when the fish are brought in, and I have observed a great disparity in the takes of fish now as compared with what they have been during the last four or five years. In fact the fishermen have complained daily to me about the destruction going on amongst their lines. They have asked me to look into the matter for them, and I have been to various solicitors and to the magistrates, trying to obtain redress for them. I found day by day that they complained that their lines and nets were carried away. I was nevertheless informed by persons in power that they were very sorry, but that there was no remedy that they were aware of.

3944. I believe you have been present during the whole of the sitting to-day and have heard the evidence that has been given?—Yes.

3945. Can you add anything to what has been stated in the evidence of the line-fishermen?—I can only say this, the fishermen have stated to me that they have left their usual fishing grounds simply because their market was not so easy of access.

3946. That applies to the trawl-fishermen, does it not?—Yes.

3947. But have you anything to add to what has been stated by the line-fishermen?—No.

3948. Have they said anything in which you do not concur with them?—No, but I think they said nothing with regard to the fish that are now extinct altogether. At one time we were famous for skate here, and now we have none. I have seen 100 or 120 head of skate brought ashore, and never less than 50 or 60. Now there is not such a thing to be seen.

3949. How long ago is it you are speaking of, when they were so plentiful?—They were quite plentiful not five years ago. I have also seen 30 head of cod and of ling brought ashore. Now there are none. I have noticed a ton or more of fish brought in at a time, and last winter five or six fish were the most they could get at a time.

3950. What do you attribute the decrease in the skate to?—I attribute the decrease to the fact that the spawn is not allowed to come to maturity.

3951. Then in that respect you concur in the evidence of the line-fishers as to the destruction of the spawn and the young?—Yes, I have frequently seen small fish, small haddocks and flat-fish, for instance, offered at my door for sale. The whole town of Sunderland can bear testimony to that fact. It is quite habitual here to see haddocks only two inches long brought to your door and offered for sale.

3952. Do you mean that that takes place at present?—Yes, that occurred only on Friday last, and if necessary I could get two women to come here and corroborate that statement.

3953. Has that been the case for some time back?—Yes, for the last two or three years.

3954. And do the people here buy such fish?—Yes, particularly the poor people, the Irish.

3955. Is there any considerable quantity of those small fish sold?—Yes, they will bring ashore four or five baskets out of a single trawling smack in a morning.

3956. Are they sold at a cheap price?—Yes, they are sold to a number of poor girls, who sell them again, at 6*d.* or 8*d.* a basket.

3957. Could the poor who buy this fish supply themselves with other fish if they were unable to avail themselves of this?—I cannot say. I only know that they can get this very cheap, but I should think it would be very troublesome to them.

3958. Is there any other point on that head which you desire to lay before us?—No, I do not know of anything else. I only know that we are now getting fish very dear in Sunderland. At one time I could buy a good haddock for 3*d.*, perhaps five years ago; and now I am asked 9*d.* for a similar haddock. I know it is a very valuable piece of food, but if these things are allowed to go on we shall have dear beef, inasmuch as the supply both of beef and everything else will not be equal to the demand.

3959. You were a short time ago about to make an observation with regard to the reason that induces the trawl-fishermen to come into this port?—Yes, I have collected evidence from various places, and I have seen some of the old fishermen from Exmouth, Dartmouth, and Plymouth. They tell different stories, but they all agree in saying that they have come here after having destroyed the ground upon which they formerly fished. They have also told me that they have known spawn and small fish frequently sold for manure for the land.

3960. Do their statements in that respect relate to what has taken place on the south coast?—Yes.

3961. Then we shall get at that evidence more directly ourselves when we come to visit the south?—I only wished to show you that you will find considerable difference in the statements of some of these trawlers. I have entered into a correspondence with various gentlemen in Hull. One gentleman, Mr. John Dalton, is largely interested in the trawlers, and yet he tells me that if trawling is allowed to go on for five years more the trawlers will do away with themselves. He states that one of his trawling smacks cost him 1,100*l.* some time ago, and he would be glad to have 400*l.* for it now. He is a very large owner of trawling smacks.

3962. Can you give us the names of any other witness you would wish us to refer to at Hull?—I cannot give you a list at present, but I will do so at Hartlepool to-morrow.

3963. Is there any other point to which you desire to draw our attention; I mean are there any facts within your own knowledge that you wish to lay before us?—I think that you have a very difficult task before you, and I believe the only way to increase the supply of fish and to test the real merits of the case would be not to allow these men to come north of the Humber. If the Legislature passed a measure of that description, in a very few years they would see whether we have been right or not. The trawlers have now possession of three fourths of the island. Two years would test whether they have left any fish to fish for on the ground they have already run over. My impression is that at the end of these two years it would be found that we in the quarter they were excluded from trawling over would be the only people who could get fish at all. If the trawlers are to continue here for two years more, I am satisfied that we shall have no fish. That to me is a dead certainty.

3964. Is there anything else you can add. We are anxious to get as much information as we can?—I am sorry that Captain Ross has interposed his authority to prevent some of the men employed in the coastguard from coming here to give evidence. I applied to him to permit them to attend, but he said he did not wish them to come, that they had no right to give evidence in the matter, and he would have them punished for having offered to come. Now I think they ought to be summoned to attend at Hartlepool.

3965. We, as Her Majesty's Commissioners, are ready to hear any witnesses who choose to place themselves before us with regard to the matter you mention. What points would they be able to speak to?—They can prove that the spawn has been destroyed, and they can prove also by whom the destruction has taken place; they served their time, I believe, on board trawl-vessels, and they can prove the fearful destruction that takes place in trawling. One of them was for 14 years a trawler, and he tells me that he has seen as many as 300 trawl vessels assemble together. He describes the quantity of fish that has been caught, the spawn that has been destroyed, and the number of fish that has been thrown overboard.

3965*a.* We should be glad then if he would come to Hartlepool and give his evidence there. Captain Ross, if applied to, will no doubt allow them to attend. We shall instruct our Secretary to write to Captain Ross to that effect to-night.—I think their evidence will be very valuable.

3966. (*Professor Huxley.*) You stated, I think, that the law as far as you can ascertain does not afford protection to the long-line fishermen?—So we have been told.

3967. Are you acquainted with the Convention between this country and France in reference to the sea fisheries?—Do you allude to that which was passed in 1849?

3967*a.* No, I mean the Convention entered into in 1843. Are you aware of the regulation about numbering the boats?—Yes, I know the boats ought to be numbered, but the question is how you are to get hold of the number. A man says, "I have lost my "nets, but the boat which carried them away was at a "considerable distance off, and I could not distinguish "the number." In such a case you are nonplussed at once.

3968. Then how, under such circumstances, could the fishermen know what vessel had done the mischief?—He would be enabled to see a boat at that distance, and he would see her trawling down right across his lines with the tide.

3969. But that difficulty would exist with regard to any kind of law. You must have evidence before you can bring the law into operation. Do you mean to say that the nature of this fishing is such that it is impossible by any kind of regulation to punish the men who commit offences?—No, I do not say that, but there is a disinclination on the part of the people in office, our collectors of Customs and that sort of thing, to take the initiative. In point of fact, it is calling them from their daily duties, and they are very chary of taking any part in it.

3970. But this Convention has nothing to do with the collectors of Customs. An information laid before the magistrate would be quite enough?—But the fisherman who lays the information has to swear that a certain vessel is the vessel that did the injury, or that a certain man is the man who carried away his nets and lines.

3971. Yes, but if a man robs your orchard and you wish to punish him, you must have proof what man did it?—I am aware of that, but the ocean is a very broad orchard indeed.

3972. Quite so, but you stated that the law is defective, whereas, as far as I comprehend you, you only think it is difficult to administer the law?—I do not think that placing a limit within which trawl-vessels should not fish has much effect. If you limited the distance to 20 miles from the line-fishing ground there are certain persons who, if the weather was thick, would steal in among the line-fishermen. Frequently the lines are cast 20 miles off from the trawl-vessels, and yet the trawl-boats will come down upon them and take away 9*l.* or 10*l.* worth of gear. If the fishermen make any complaint, or endeavour to ascertain who has done it, they only get laughed at. Upon one occasion one of these trawl-boats brought in somebody's lines and had the impudence to claim salvage for picking them up.

3973. He had no business to touch them, had he?—He said he picked them up. I think he said he found the buoy adrift and all the lines up.

3974. But if a line was attached to the buoy he had no business whatever to destroy it?—Sometimes a line will float on the water. They have frequently

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been known to get to the top of the water even with a lot of fish upon them.

3975. Have you ever known a line with 200 fish on the top of the water?—Yes, I think there have been instances of that kind.

3976. I understood you to say that you have paid great attention to this subject?—Yes.

3977. Do you think that the quantity of fish brought ashore has steadily diminished of late years?—I know that it has.

3978. But there is this difficulty that occurs to me. You say that the number of trawlers has increased?—Yes, very considerably. In Hull, within the last few years, there have been upwards of 200 trawlers built, and in Brixham probably the same number.

3979. Then if the quantity of fish is falling off at this terrible pace and your long-liners cannot catch it, how is it that it will pay to build trawling vessels and employ men to work them?—I do not know, but this I do know that they have trebled themselves according to the accounts I have received from Hull. But they also say that very great misery has been entailed upon the parties who have built these vessels. Mr. Dalton informs me that there are none of them paying.

3980. Then how can the fishing go on?—It has gone on for some time but I believe the trawlers are nearly stopped now.

3981. I dare say that you are a business man and are quite aware that a large capital must be embarked in these trawling smacks. I believe they cost, at least, from 300*l.* to 400*l.* each?—They cost much more than that, I should say from 800*l.* to 1,100*l.* each.

3982. Then do you think that if the supply of fish has been falling off so rapidly year after year,—I mean the actual quantity of fish in the sea,—these people would have gone on putting thousands and thousands of pounds every year into this business?—I only know that that has been the fact, but we see that in other businesses as well. We see the coasting trade gradually diminishing and yet coasters are being built.

3983. But these people must be paying their way in some form or other although they may not be making such large profits as they did formerly?—Yes, but they are going on with little profits ruining the living of other people. A man may commit an act of folly one year, and yet not care to do it the next.

3984. I am not speaking of what people may do hereafter, but the evidence we have had is that the number of trawlers has gone on increasing for the last 10 years?—Yes, probably that may be so.

3985. Then this is my difficulty: if there is not a large quantity of fish to catch, how is it that the men of Hull will go on year after year putting thousands of pounds in a business that does not pay?—They had plenty of ground to cover before.

3986. Do you not think that the increase in the number of trawlers is to a certain extent evidence that the quantity of fish on the ground they trawl over has not fallen off?—It is a proof that they have impoverished the ground over which they have come. I think the fact of there being so many trawlers at Hull is a proof of that. Some years ago a place was found out off this coast, called the "Silver Pits," where an immense quantity of soles was found. The trawlers soon settled there, and at that time every man was anxious to get a trawling smack, and he did so until he got his fingers burned. A gentleman of Hull told me not long ago that he would be very glad indeed if he could get 500*l.* for what had cost him more than 1,000*l.* They all acknowledge that they have made a great mistake in entering into this trawling speculation. They invested their money in trawling smacks believing it was going to be a very good thing, and now they find themselves very much mistaken.

3987. Then they have been going on committing mistakes for 10 or 11 years?—No, the great increase in the number of trawlers has not taken place within the last 10 or 11 years; they have invested the best part of their money within the last three years.

3988. Have they invested as much as 200,000*l.* within the last three years?—I should say that they have.

3989. Surely not within the last three years?—I will refer you to Mr. Dalton, whom you will most likely see at Hull. He will give you all the necessary information. I believe the collector at Hull, in one of his letters, says they have as many as 200 vessels belonging to that port now. If you examine the proper persons you will find that what I have said about the increase is the fact. There is a gentleman named Banister, in the town council, and others who will tell you that they have invested their capital very foolishly in trawling smacks.

3990. Is it your impression that the rapid building of these trawling smacks in Hull is due not to its not being a profitable occupation, but to its being a mad speculation?—Yes.

3991. Have you considered, in relation to the question of the fish getting dearer, the effect that the railroads may have had?—I do not know that we send much fish by railroad. Almost all the fish caught by the long-line fishermen is sold to the people of the town and the adjoining localities.

3992. Then you do not think that any portion of the fish caught by the line is sent to the manufacturing districts?—A man might come occasionally to buy herring and send away, but the white fish generally would be sold in the district.

3993. On the other hand, is the trawl-fish sent away by railway?—I think that may be very likely.

3994. But you know nothing of it of your own knowledge?—No.

3995. With regard to the small fish that you say are offered for sale, do I understand you to say that they are bought by the very poor people?—Yes.

3996. Of course the sole object we are concerned in here is the benefit of the people in general, of whom the poor are a very large proportion. Now, do you think it would be of advantage to these people that this supply should be stopped?—Yes, I think it ought to be stopped. Perhaps they may be able now to get 20 small fish for a penny, but I think it would be better for them to have a large fish for 6*d.*

3997. But suppose they have not got the sixpence and happen to have the penny?—They could cut up a large fish for them.

3998. But would they cut up a large fish?—When we had skate plentiful here a poor man could get a good slice of skate for a penny.

3999. I understood from your previous evidence that the price of a haddock is now 9*d.*?—Yes.

4000. Then surely a man cannot get a haddock cut up into nine parts?—Why, need makes a naked man run. All I wish to argue is that it is very bad policy to destroy the young fish.

4001. Then would you prohibit trawl-fishing on the ground that it destroys the young fish?—Not only does it do that, but it destroys the spawn as well.

4002. That would be a perfectly good argument supposing that all the young fish grew up to be large ones, but how many small ones do you think grow up out of 100?—Well, I should say quite 33 per cent.

4003. And what eats the other 70?—I cannot say.

4004. Do not you think it much better on the whole that the poor of Sunderland should have these small fish than the skate, and the cod, and the ling, and so on?—I concur in anything that would benefit mankind, but I do not think that mankind would be benefited by allowing this kind of fishing to continue.

4005. Then do you think that the injury occasioned by taking small fish entirely counterbalances all the good that can be done by getting a little more food for the poor?—Yes, I think it does a long way.

4006. Do you think that the trawl and line-fishing could co-exist on this coast by the adoption of any system of regulations?—No, I think not. I believe that if you were to drive the smacks 30 or 40 miles off they would always be among the men's lines, and then they would have no means of getting at them to know who it was that had carried away the lines.

4007. But are there not gunboats occasionally

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appointed to watch the coast?—I think it would put the Government to a great deal of expense to be running gunboats out there continually. If the Government would adopt the course I suggested a little while ago I think it would prove satisfactory; that is, not to allow the trawlers to come north of the Humber for two years. That would be quite sufficient to show clearly who was right and who was wrong. If they find that we are wrong, then let them trawl away as long as they like.

4008. Do you think that the diminution of fish is entirely co-existent with the coming up of the trawlers?—Yes, I think so.

4009. At various places at which we have been the general effect of the evidence is, that the diminution in the number of fish has been gradual for the last 20 years?—That has not been so with us.

4010. Would you not have felt it before the people further north?—Yes, I think so.

4011. For example, at Newbiggin it was quite clear that the decrease in the quantity of white fish had been taking place since the year 1843, which is 20 years ago?—I do not think we could say that. Our great falling off has been from about five years ago, but perhaps the fish may have been gradually decreasing during the last 20 years. As I have already told you, there is one kind of fish totally extinct; the skate has gone altogether, and the turbot is nearly extinct. They are both fish we were once famous for, tons of them used to be brought ashore.

4012. At what distance away from the shore do you think the operations of the trawlers would affect you. You say that you would stop them north of the Humber, do you think that their fishing south of the Humber would not hurt you here?—I do not think it would do us any good, but I only suggested that they should be stopped north of the Humber in order to ascertain if our complaints have any foundation or not. I think it would demonstrate to the country that the trawlers are the sole cause of the scarcity of fish. We should have plenty here, and they would get none at all.

4013. It comes to the same thing. If you think that, you cannot suppose that trawling south of the Humber would do you much injury?—No, I think not. It is 100 miles to the Humber from here.

4014. Then do you think that 100 miles away would be sufficient?—I think if they were kept off Hull, where they say the fish is so plenteous, we should have no cause to complain. We have no desire to disturb them there.

4015. Then you do not think that any amount of trawling going on off the Humber would do you any harm?—It would not do us any great amount of harm, but my object in prohibiting trawling north of the Humber would be to shew the country that we are right and they are wrong.

4016. That would amount to the same thing?—Yes.

4017. (*Mr. Caird.*) Are you familiar with the herring-fishing on this coast?—Yes, I have been herring-fishing.

4018. Is it a fact that all the men engaged in the line-fishing go to the herring-fishing?—I do not know that that is a fact.

4019. Is the line-fishing prosecuted at the same time as the herring-fishing?—Not generally. Most of them go to the herring-fishing.

4020. Then during the herring-fishing you would be able to obtain no supply of white fish except what you got from the smacks?—That is no doubt correct, but at that time the people generally are inclined to take the herring in preference to the white fish.

4021. (*Professor Huxley.*) You are aware that the manufacturing districts take a great quantity of fish?—Yes.

4022. I understand that if there were only line-fishermen here there would be no fish taken except herrings during the herring season?—The two kinds of fishing could not take place together here. They could not work their lines while the herring nets were down.

4023. Then if there were only cobles here the herring-fishing would put a stop to the supply of white fish during the whole of the time it lasted?—Yes, but we have been quite satisfied with that.

4024. But I am talking of the manufacturing districts?—We do not send our fish there. If the trawlers would only keep to Hull they would be nearer to Leeds and the other manufacturing places than they would be here. I think that is quite sufficient to prove to you that their fishing grounds there are impoverished.

4025. (*Mr. Caird.*) I believe that some person wishes to add something to the evidence he has already given?—(*William Cobley.*) I was only anxious to say a word with regard to the price of fish. Mr. Crick has stated that you cannot get haddocks under 8*d.* or 9*d.* apiece. Now, during the three months I have been here, I have been selling baskets containing from 60 to 80 haddocks, and the highest price I have received for one of those baskets has been 5*s.* I have, however, sold far more at 2*s.* 6*d.* a basket.

4026. What would that be for each haddock?—From a halfpenny to a penny. The highest price that I have had has been 5*s.* for from 60 to 80 fish. No longer ago than the week before last I sold them at 2*s.* 6*d.* the basket.

4027. (*Professor Huxley to the witness Crick.*) What do you say to that, Mr. Crick?—It has not been habitual for me to eat trawled haddocks. He may have sold an isolated basket of fish at that price. I simply say, speaking generally, that I cannot eat one of those trawled fish, and there are lots of gentlemen in this town who can bear testimony to the fact of the gall-bladder having been burst when the fish are sold; that makes the fish anything but pleasant to eat.

4028. I understand you to say that you know the effect of eating trawled haddocks, now what is the effect?—I was quite sick and bad through eating one.

4029. Then are you of opinion that they are unwholesome?—Yes, I think so.

4030. Do you think that those haddocks now on the table are unwholesome fish?—I only know that I vomited after I had eaten one of them.

4031. Has there been any great increase in the bills of mortality in this place since the people here became accustomed to eat trawled fish?—I have not observed the statistics sufficiently to enable me to answer that question.

4032. But you know the statement you have made is a very grave one?—I only state what I know and what I have felt.

4033. You know that, on one occasion, you were made sick after a supper of trawled haddocks?—Yes.

4034. Now, I do not wish to cross-question you, but might not there have been many other things in the supper besides haddocks?—There might have been.

The witness withdrew.

C. Abbs.

Cooper Abbs called and examined.

4035. (*Professor Huxley.*) What are you, Mr. Abbs?—I am a member of the Board of Guardians here, and I have had the sanitary condition of the town under my consideration. I have remarked that the mortality in Sunderland has been much greater of late years than during the visits of cholera to this town.

4037. (*Mr. Caird.*) To what do you ascribe that?—I am not in a position to ascribe it to anything. I am merely stating a fact.

4038. (*Professor Huxley.*) What is the nature of the diseases to which the increase is due?—We have had many low fevers. I daresay we have also had complaints arising from such causes as bad localities—diseases arising from an unwholesome condition of the town. The question has been considered whether

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the town, after all the drainage and improvements that have gone on, ought to have been in such a condition, and we are strongly of opinion that such a result ought not to have occurred.

4039. What was the time when the increase of mortality here was first observed?—I cannot say exactly but it has continued now for a period of nearly two years.

4040. Is it more marked at one time of the year than another?—I cannot state that either, but it has been continuous during the period I have stated, and pretty regular also. I know in addition, as a member of one of the burial boards here, that the burials in that district have been almost one third more than they were in the preceding year.

4041. Does the increase of mortality affect all classes of the population, rich and poor?—That I cannot answer.

4042. Is there any cause within your knowledge to which you can ascribe the increase of mortality? Can you ascribe it to the diet of the people?—I have no information upon that subject. I did not intend giving evidence here, but I live in the immediate vicinity of the Whitburn fishery, and I have been acquainted with the fishermen there, and the supply of fish for a period of 30 years, and have had the opportunity of observing the difference in the takes of fish that existed at that time as compared with the present, and I am quite satisfied that they do not take now one half the quantity of fish they did formerly. I have not been in the habit of purchasing the fish supplied from the smacks, but I can corroborate Mr. Crick's evidence in regard to the price of fish. It is now fully double what I can recollect it to have been.

4043. Are you referring now to fish caught by the cobles?—Yes, I am referring entirely to coble-fish. I could buy haddocks formerly at 3*d.* and I have now to pay 6*d.* Cod that I could formerly get for 1*s.* and 1*s.* 8*d.* I am now obliged to pay 2*s.* 6*d.* and 3*s.* 6*d.* for.

4044. Then do your remarks apply entirely to coble-fish?—Yes. I may also say, with regard to the supply of skate, that it has very greatly fallen off lately. It is a fish that you never see now, and I recollect the time when it was very plentiful. It was formerly a fish very greatly in request, but now it can never be obtained. I am not prepared to state that the decrease in the take of fish is confined to the last three or four years. I should rather be inclined to consider with the Cullercoats people that it has been going on gradually from a much earlier period.

The witness withdrew.

The inquiry was adjourned until Tuesday, September 29, at Hartlepool.

Hartlepool, Durham, Tuesday, 29th September 1863.

HARTLEPOOL.

T. Bulmer.

29 Sept. 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

THORNTON BULMER called and examined.

4045. (*Mr. Caird.*) Have you long been a fisherman here?—I was brought up a fisherman. For generations back my fore-elders were fishermen.

4046. Fishermen at Hartlepool?—Yes.

4047. How many years have you yourself been engaged in fishing?—I have been engaged in it for a good many years. I am now in my 55th year, and I have been engaged in the fishing since I was 18 years old. I have been regularly going at the fishing all the time, with the exception of the time I have been going piloting.

4048. Did you practise both the line-fishing and the herring-fishing?—Yes.

4049. Which of the two is the best source of income to the fishermen here?—I think I may establish it as a fact that considering the length of time a man will go with the line-fishing we receive more benefit from the line-fishing than from the herring-fishing.

4050. Then you mean that the line-fishing is the more important of the two for the fishermen at Hartlepool?—Yes, I do, for this reason: the herring-fishing is of short duration, and the line-fishing lasts almost nine months out of the twelve, with the exception of some years, when the men go a little longer with the herring-fishing.

4051. Comparing the present time with the period when you first began to be a line-fisher, has there been any increase in the number of boats and men employed in the line-fishing?—No; there has been a decrease.

4052. Can you give us the figures?—In the first year I went to sea line-fishing there were 52 boats.

4053. What year was that?—It was in the year 1826.

4054. How many men were there then in each boat?—Some had three men, others had two men and a boy from 17 to 18 or 19 years old.

4055. Were the boats then of the same size that they are now?—Yes, much about the same.

4056. How many boats were there last winter?—There were only 32 last winter.

4057. When did the boats begin to decrease in number materially?—As soon as this became a coal port.

4058. What was the reason of that?—There were a number of pilots here who went fishing, being pilots for the creek of Hartlepool and the river Tees. They gave up fishing, and went as pilots. As soon as they were made pilots that caused a great decrease in the number of boats.

4059. Then the falling off did not arise from any diminution in the number of fish, but because the men went as pilots?—Yes; they wanted the men to go as pilots rather than remain at the fishing.

4060. Did that pay them better than the fishing?—They expected that it would.

4061. Is then the reason of the decline here that the fishermen have become pilots instead of fishermen?—I should say so. But they have been increasing since then. There were not above 22 or 23 boats when they gave up to become pilots, and since then there has been a gradual increase in the number.

4062. They have increased from 22 or 23 up to 32?—Yes, and there will be more this winter.

4063. Will there be an increase from last winter?—Yes.

4064. Do you remember when this became a coal port?—It would be somewhere about the year 1831 or 1832.

4065. In your recollection, has the take of fish by each boat diminished?—I hardly know how to answer that question; there is such a great deal of difference. I can hardly draw any contrast between the difference.

4066. Let us take 20 years ago, when you were fishing; you may remember what quantity of fish on the average you used to bring on shore?—On the average, I should say, we brought ashore three quarters or a ton of fish in a boat.

4067. And what is the average brought on shore now?—Now, on the average, 15 or 16 stones will be the outside.

4068. Has this falling off in the quantity been accompanied by a diminution in the size of the fish?—Well, the fish do not get to the size they used to do.

4069. Do you notice that in a very marked way?—We cannot but notice it, because we are catching the fish every day in the winter when the weather will permit.

4070. In what kind of fish have you observed it more particularly ?—In the haddocks.

4071. Are the haddocks smaller than they used to be ?—Yes, they are.

4072. Has the size very much decreased ?—Yes, they have very much decreased in size.

4073. Can you give us an instance, comparing the weight of haddocks now with the average weight to which they would run 20 years ago ?—I have been catching haddocks when it has been strong weather from the eastward. After a breeze of wind from the eastward the average weight of the haddocks I caught would be from 5 to 6 lbs.

4074. What is the average weight of the haddocks caught here now ?—They will hardly be more than 3 lbs.

4075. Have you noticed the same diminution in regard to the cod ?—Yes, and there has been a great diminution in the number of cod caught. I have been going myself with another man almost at Christmas, and I have hardly caught a cod to call a cod.

4076. Were you in the habit of getting plenty of cod 20 years ago ?—I have seen the boats have to trail them out in rows on the beach and sell them in scores together.

4077. Were you at that time fishing upon the same ground that you fish upon now ?—Yes. If you get a cod now you will get 5*s.* or 6*s.* for it in the winter season, and I have seen them sold almost at 10*s.* a score during the winter season.

4078. With regard to the turbot, do you get many turbot ?—No, it pains me to think about it. I am a great sufferer. My father was a turbot-catcher, and I went with him for a series of years and I have now turbot nets laid in the strongest of weathers on the north-east quarter when the sea has been tremendously heavy. Formerly when we allowed these turbot nets to remain we should find them all straight, but now if we leave them we are in danger of losing them altogether.

4079. Have you ever lost any turbot nets ?—Yes, I had the misfortune to lose two fleets of turbot nets, and having a great family it put me to considerable inconvenience. I have lost as much as 25*l.* or 26*l.* worth of tackle at a time, and that comes very heavy upon a poor man.

4080. But you have not answered my question as to whether the quantity of turbot caught has decreased now as compared with what it was formerly ?—It has decreased very much.

4081. Can you give us any figures or any instances to show the decrease ?—25 or perhaps 26 years ago I went turbot-fishing with two other men and we have hauled up 200 turbot in one day, after our nets had laid in for 45 or 46 hours ; but now you cannot do anything of the sort. Indeed the turbot-fishing is quite lost. You dare not shoot your nets.

4082. Taking the turbot season 20 years ago and comparing it with the turbot season now, what is the difference in the catch now as compared with what it was then ?—Why, we catch none now. In point of fact, no nets have been shot with the exception of a fishmonger's. He had some nets some time ago, but they were destroyed.

4083. Then do you not practise turbot-fishing now ?—No, we cannot, on account of the trawlers.

4084. When did you discontinue it ?—This last season. I had a few nets left, but I did not shoot them for fear of their being destroyed.

4085. Then you have not set your nets at all this season ?—No, not this season.

4086. Will you tell us the reason ?—The reason is this. I believe it will be about four years the back end of last May since we saw two vessels come down to this coast. We were on the off grounds. Seeing them bear down in the direction in which our boats were we went to a brother-in-law of mine. He asked us to go down to the harbour and obtain the assistance of a steam boat if we could. The captain of the steam boat said he would go if he could get the manager's consent.

4087. What did you want with a steam boat ?—It was rather too strong for our boats.

4088. Had you your nets shot ?—Yes. We went on board the steam boat, and when we came to where the nets were the smack's boat was apart from her vessel 200 or 300 yards. We ran alongside and found they had my dan or buoy in their boat. "What are "you doing with that ?" I said, "it belongs to me." He said "I thought it was adrift, and I was hauling it up." I said "How can you say it was adrift when "you have the moorings there ?" At that time I had my nets much broken and damaged.

4089. Did the trawl destroy them ?—Yes.

4090. Not the vessel herself ?—No, it was the trawl ; the vessel could not destroy them herself.

4091. Was that the first time that your nets were injured by the trawlers ?—No, I had a fleet taken away a few years before that, but I never knew who got them. There was another vessel lying alongside of mine at the time. I went to him and told him that my nets were lying there, and that if he did not take care he would destroy them. He was very insolent to me. He used abrupt language not fit to speak before gentlemen like you. We took his number and the captain's name. We found that the vessel belonged to Hull. We took his number and his name with the intention of hauling him up before a magistrate when he came to land, but I have never seen him on the coast since. If I had seen him this summer I should have sued him for damages.

4092. Then because he did not come here again you did not follow the matter up ?—We gave the name to the Coastguard here and they made an impression on my mind that they had telegraphed along the coast and could get no intelligence of him.

4093. Do you say that this happened four years ago ?—Yes, either four or five years ago.

4094. Did you continue to lay your nets that year after that occurrence ?—Yes.

4095. Were they again disturbed ?—I lost one once after that.

4096. What was the value of the net or nets destroyed at that time ?—A turbot net is a particular net for fishing. If one part of that net gets stretched it rolls up and up until you have a great deal of trouble to put it in order again. I had to take 13 or 14 ropes from my net that were stretched so that they were of no use. There is so much trouble connected with putting them to rights, after they have been injured in that way, that you are almost certain of losing your whole season.

4097. But you did go on fishing, did you not ?—Certainly.

4098. Did you catch many turbot that season ?—No, it was not a good season.

4099. Did you go on fishing after that ?—I lost no more nets.

4100. You lost none on the following year ?—No, I lost no nets then.

4101. Did you lose any last year?—Last year I lost a whole fleet.

4102. What would be the value of that ?—It would not cost me less than 16*l.* with the tackle connected with it. I had 21 nets down and I have no doubt that there was a quantity of fish in the nets. Then there would also be the injury done to me afterwards in consequence of having lost the nets. Therefore I do not know exactly the amount of loss I sustained.

4103. Did you ascertain, or had you any opportunity of doing so, how that fleet of nets was destroyed ?—I have not the least shadow of a doubt how they were taken. There were not less than 24 smacks on this coast at the time and I have no doubt that my nets were dragged away by the trawlers.

4104. Did you ever see the nets again ?—No. Two fishermen fetched some leads ashore that were attached to them.

4105. You say you never saw the nets again ?—I went with proper tackle to try to find them, but I have never found them yet.

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4106. Was it during the night or the day that they were carried away ?—I cannot say.

4107. Are your nets set at night or in the day-time ?—They are set during the night.

4108. Was there anything to show the trawling vessel that there were nets there ?—Yes.

4109. You mean something that could be seen during the day, but could it also be seen during the night ?—No, it could not be seen during the night.

4110. Do you yourself hold on by the nets during the night ?—No, we come ashore and leave them.

4111. Then you had no means of ascertaining what vessel it was that carried away those nets ?—No.

4112. And therefore you had no means of recovering the loss you sustained ?—No.

4113. Did you again put in your nets last year ?—No.

4114. Then did the loss of these nets entirely put a stop to your fishing for turbot ?—Yes.

4115. Has that been the case with the other fishermen here ?—I have no doubt of it.

4116. Is there any turbot-fishing carried on here ?—No, with the exception of the fishmonger, who shot a fleet of nets, and had them destroyed.

4117. And he has discontinued the fishing also ?—Yes ; he was obliged to do so ; he had no more nets.

4118. Then you think that turbot-fishing has been put a stop to here owing to the destruction of your nets by the trawlers ?—Yes. I think the loss I sustained in the course of two years would not be less, with the value of my nets, than 50*l.* each year at least.

4119. With regard to the haddocks, can you tell me if the take of haddocks is increasing or diminishing ?—It is decreasing greatly.

4120. How is it with regard to ling ?—There have not been such takes of ling during the last few years as there used to be formerly.

4121. Does the same remark apply to skate ?—Skate have been almost abolished altogether.

4122. Was there formerly plenty of skate here ?—Yes. I have seen lots of it in the turbot nets.

4123. What do you think is the cause of the decrease ?—I think it has arisen in consequence of the destruction of the spawn.

4124. In what way is the spawn destroyed ?—The trawl nets go over the fishing-ground ; they disturb the ground, and they cannot but disturb the spawn, and after it has once been disturbed, I should say it would not ignite again.

4125. Did you ever see a trawl net hauled up ?—Yes ; I did once, but it happened to be inside out.

4126. Then there was no spawn in it ?—No, and there was no sole.

4127. Do you fish sole here much ?—No, not much.

4128. Do you trawl for sole ?—A few men trawl for soles in shoal water.

4129. Do they get many soles by that means ?—Sometimes they do, but they are rather small.

4130. Is that the only mode in which sole fishing is practised here ?—There was a time when they were caught on the hooks, and it was generally supposed that soles caught on the hooks were greatly superior to soles caught in the trawl net. They were also of a much larger size. I never saw small soles caught on the hook. They were generally good sized fish.

4131. Did you find practically that soles of the same size caught by the hook and caught by the trawl would bring an equal price ?—When they were caught here, there used to be a number of boats that followed that employment. The soles they caught were far superior to the soles caught by the net.

4132. But what I want to know is, whether they brought a higher price ?—Yes, they did.

4133. When was that description of fishing for soles discontinued ?—I cannot say. It was a life I did not follow.

4134. Did you ever follow trawling for soles ?—Yes, I did once as a lad, but I never liked it.

4135. Did you ever bring up spawn in your trawl ?—No.

4136. Did you ever disturb it ?—I never went trawling enough to enable me to say, but I think it cannot but be disturbed. Trawling is somewhat similar to ploughing. There is a chain at the mouth of the net wrapped round the ropes to keep it at the bottom.

4137. Are you describing your own trawl or a deep-sea trawl ?—I mean a deep-sea trawl.

4138. What was your own trawl like ?—It was very light in comparison. It would not disturb the spawn anything like a trawl of a greater weight attached to a vessel going at a much greater speed.

4139. Do you think that there is any spawn on the ground so near in-shore as to be caught by your trawl ?—I cannot answer that. I cannot say that I ever saw a fish in two or three fathoms water that was ready to spawn, but in deep water I have caught them in the summer season ready for spawning. It is a particular ground where the turbot goes to spawn.

4140. Do any mackerel come off your coast ?—Yes.

4141. Do you fish for mackerel ?—There are some men here who have mackerel nets.

4142. Do you find it a good business ?—I think they principally catch them along with the herring.

4143. Do the mackerel not come here when the herring are not here ?—Sometimes they do.

4144. Do you follow them then ?—When there are no herrings to be caught they will follow the mackerel.

4145. Do they get good catches ?—In some seasons I have seen 30, 40, and 50 score caught in one boat.

4146. Are there any sprats caught off this shore ?—No.

4147. Do you get any salmon trout ?—No.

4148. Or any salmon ?—No.

4149. Do you fish for shell-fish ?—Yes.

4150. For crabs and lobsters ?—Yes.

4151. Have they increased or diminished ?—They have decreased.

4152. What kind particularly ?—Both kinds, but more so the lobsters.

4153. And to what do you attribute the falling off in lobsters ?—I attribute it to the places being blocked up to which they resort.

4154. How have they been blocked up ?—They have been blocked up with ballast.

4155. Where is the ballast brought from ?—It comes from different places.

4156. Is it brought partly from your own harbour ?—There has not been much brought from our own harbour lately, but it has been deposited there by other vessels. Great quantities of slush have been taken out of West Hartlepool and Seaham. Where the vessels now throw their ballast there was a noted place for lobsters. They are almost all off the ground now.

4157. Have they all disappeared ?—Yes, there are hardly any caught there now.

4158. Is there any regulation with regard to the deposit of ballast here ?—It is not allowed to be thrown from Huntley Footdown to Black Holes in 16 fathoms of water.

4159. Is that the ground on which you expect to find crabs and lobsters ?—The crabs and lobsters are inside of that.

4160. Then can the ballast do them any damage if they are inside ?—The ballast thrown over is a sandy or a muddy substance, and it washes in.

4161. Do you attribute the falling off in the catch of lobsters and crabs to the deposit of ballast on your coast ?—Yes, to that and to the set creels, which are laid in all kinds of weather.

4162. Are the set creels for catching lobsters ?—They are creels set for catching lobsters and crabs. Men go regularly and destroy a great quantity of she fish full of berry, both crabs and lobsters, and that has a tendency to do away with the fish very greatly.

4163. Is there a sale for the she-fish ?—Yes, gentlemen generally like to use them in making sauce.

4164. With regard to bait, have you any difficulty here in getting as much bait as you want for your line-fishing ?—We have had great difficulty and have been at great expense in contending with the officials.

4165-6. Where do you get your bait, in the Tees?—Yes. We get it from Blackshore.

4167. Have you long had that privilege?—Yes, for centuries back. When it was in the hands of the Government we had no trouble, but since the Tees Conservancy Commissioners got it we have been very much annoyed. They wanted us to pay them so much money, and they tantalized us in every way and put us to great trouble and expense. They got us to take out a licence when they had no power at all to grant a licence, and they still hold our money in their hands.

4168. Do the beds yield as much as they did formerly?—Yes, I think there is as great a quantity as there used to be.

4169. Who are the commissioners to whom you refer?—They are the Tees Conservancy Commissioners.

4170. Previous to the time they had any authority there, were these beds under the authority of the Woods and Forests—the Government?—Yes.

4171. I understood you to say that they did not interfere with you?—No.

4172. Did they allow you to take as much bait as you liked?—They interfered with us in no way whatever. But of course it was to our advantage to take mussels of a regular size. Less than that would have been of no use to us.

4173. Are you aware that the bait has increased within the last six months?—Yes.

4174. What is the cause of that increase?—I can hardly satisfy you on that point. I do not know what is the cause.

4175. Do you pay anything for the mussels you get there now?—No.

4176. Then what is the difficulty if you don't pay for the mussels?—We have no difficulty now. We had it some time ago, when we had to contend with the commissioners in order to keep the privilege for ourselves.

4177. Have you now gained your point?—Yes.

4178. And are you entitled to take the bait as you used to take it formerly?—Yes.

4179. And have you found a large supply?—Yes, there is a very good supply this year.

4180. Then you do not suffer any inconvenience from the want of bait?—No.

4181. What number of boats are engaged in the herring fishery here?—There are from 120 to 130 big boats, but when the fish come in-shore there are a number of small boats that go out fishing.

4182. How many boats were engaged in the herring fishery 10 years ago?—10 years ago there would be about 80 or 90.

4183. Then there has been an increase of about one third during that time?—Yes.

4184. Are the boats larger than they were 10 years ago?—Yes.

4185. And do they shoot more nets than they used to do?—Formerly we called 15 or 16 nets a fleet of nets. Now the same boats take 30 or 32 or 33. On the average they will all carry as many as 25 nets.

4186. Then not only have the boats increased but the extent of the nets which each boat carries has also increased?—Yes.

4187. Has that been a gradual increase during the last 10 years?—Yes, I think it has.

4188. How is the take of herrings now compared with what it was 10 years ago?—10 or 15 years ago at a certain season of the year we had a great weight of herrings in at Huntley Foot.

4189. How far is Huntley Foot from here?—About 12 miles. We used to get great quantities then. If we had had as many nets then as we have now we should have almost lost the whole of them in consequence of the weight of fish we were in the habit of taking.

4190. The take was so heavy?—Yes.

4191. What is it now?—When we go in there is a small patch of ground on which we fish; two or three boats go in among the fish; each boat will come and shoot among the others. All the fish lie in very small patches.

4191*a*. Are the shoals not so large as they used to be?—No, nothing of the sort.

4192. When did a change begin to take place from large shoals to small shoals?—Formerly it was a general fishing there every year. We went there as regularly as we could go previous to a number of trawling vessels coming upon this coast.

4193. But the trawling vessels do not fish for herrings, do they?—No.

4194. Then in what way do they interfere with your herring fishing?—They disturb the shoals. We had a good prospect one year, particularly just abreast of Hartlepool. I think that some boats got as high as 4,000. It was at the commencement of the season, and there was hardly a boat that did not get a very canny draw that night. But there came in a breeze of wind from the southward and eastward, and soon there were not less than 30 trawling vessels on the coast. The weather became so rough that our men had to come on shore. It was then reported that some of these trawling vessels got herrings in their trawls that night, and after that there were no more fish got there at all.

4195. Then do you attribute the disturbance of the shoal to the presence of these trawl-boats among them?—Yes.

4196. Is there any other occasion to which you can refer when a similar thing happened?—No, I think not.

4197. Then it was only on one occasion?—No, that was a particular occasion.

4198. But that one occasion could not cause such a falling off in the total quantity of fish as you have mentioned?—I have no doubt that the falling-off is owing to their dragging their trawl nets about. You should see the volume of "marfire" there is when they are going along the bottom. It is in a complete blaze for miles round. Some people call it "water-burn." The flame from their nets is so great that if one was a herring oneself we should be terrified by it.

4199. What has disturbed the shoals do you say?—The disturbance of the water by the nets.

4200. Do you mean the trawl nets?—Yes, they break the shoals.

4201. Have you any interference to complain of on the part of the French fishing boats about here?—They used to interfere with us very much. We were much plagued with them at one time. But there is nothing for them to catch now.

4202. Have you not good herring-fishing here?—No.

4203. Then you are not interfered with by the French fishing boats?—Not much. We had two or three French fishing boats here, but they soon quitted our coast.

4204. Was that because there was nothing to catch?—Yes. If we want to catch herrings ourselves, we have to go 22 or 23 miles off Hartlepool to catch them.

4205. Used they to come here?—Yes, just in at our back door here, as it might be.

4206. When did that change of position on the part of the shoals of herrings take place?—Ever since a number of trawling vessels came off this coast.

4207. How long ago is that?—It is 14 or 15 years since they first came. They gradually increased, until at last a great number of them came down. They not only disturbed the fishing, but they told me out of their own mouths that when they came they found it a very rich piece of soil, but in the course of two or three years they would make it quiet enough.

4208. Has that decline in the herring fishery been gradual since these trawl boats made their appearance?—Certainly it has.

4209. Has it been regularly going on year by year?—We have not had a good season ever since so large a number of trawlers came off this coast.

4210. How is that?—Because they go north and

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south to fish, and it is a mere speculation. It is not the fishermen who buy boats, but speculators.

4211. Does that speculation answer ?—It appears so.

4212. But they go further out to fish now?—Certainly they do at the commencement of the herring season.

4213. I suppose, as you have no French on the coast, that you have no complaints with regard to their coming within the three-mile limit ?—No, the French have not annoyed us this year.

4214. Are you at all interfered with by persons wishing to regulate the time at which you should fish, or the size of your nets, or anything of that kind ?—No.

4215. Do any authorities ever interfere with you ?—No.

4216. Is there any act of the Legislature that controls you as to the time of shooting the herring nets, or anything of that kind ?—I believe there is an Act of that kind in existence.

4217. But is there anybody to enforce it ?—No, I believe not.

4218. Do you think it would be of advantage if all of you were compelled not to shoot your nets until sunset ?—Yes, I do.

4219–20. Do you think it would be of advantage to you as a fisherman if that should be done ?—Yes.

4221. Has much improvement taken place in the accommodation afforded by this harbour within your recollection ?—Yes, there has been a good deal of improvement, especially in the inside. I cannot say that there has been much improvement on the outside.

4222. Has it always been a good harbour for the fishing boats to run to in heavy weather ?—It was more so formerly than it is at present.

4223. Then have the recent improvements not added to the safety of the harbour ?—I think they have not added to the safety of the men who go to sea in small boats.

4224. Is the construction of harbours of this kind not likely, in your opinion, to afford benefit to the fishermen ?—It has not done so at Hartlepool.

4225. Have you ever observed any great difficulty in your keeping the sea, or being able to carry on your trade as a fisherman, owing to the want of a safe place to run to in heavy weather ?—I can hardly say that. When the heavy weather comes, we have to run as soon as it comes, if our boats are too small to stand it. If we were to contend with it for any length of time, we know what the result would be. We are so practised in our boats that we know almost to a hair's breadth what they will do in almost any kind of weather, and if we think the weather is going to be too heavy for us we take it in time, and run for safety.

4226. In the course of your experience has the mode of fishing by line altered, have you adopted any new plans, or do you continue to fish as you did 40 years ago ?—No, we do not fish as we did 40 years ago. There has been a great deal of improvement.

4227. Will you be good enough to tell us what the improvement is ?—Before I went a fishing and since the tackle for fishing was very inferior to what it is now. What we call the "snoods" that we put on the lines are now very much lighter than they were formerly, and they are calculated to catch more fish than formerly ; we call that an improvement.

4228. Has there been any other improvement ?—No, I know of no other improvement.

4229. Do you fish in all other respects as you did ?—Yes.

4230. Has there been any improvement in the herring nets during the last 40 years ?—Yes ; the herring nets used to be from 24 to 27, and 28, and 30 lbs. in weight, just the bare net, and now we have them as low as 12 lbs. in weight, they are so much finer and lighter, and we calculate that one net is as good as two or three of the old ones for catching fish.

4231. Is that because they are less seen by the fish ?—No, the twine is much lighter.

4232. Are the fish caught in the meshes more easily ?—Yes, much more easily.

4233. Has there been any other improvement ?—I cannot say that there has.

4234. (*Professor Huxley.*) On the first occasion that your turbot nets were taken away, how long had they been down in the sea ?—I cannot say.

4235. Do you recollect on the second occasion when a whole fleet was taken, how long they had been down in the sea ?—If I mistake not, we shot them on Tuesday and it was on the Friday that they were taken away.

4236. They were down, then, on the Wednesday and Thursday ?—Yes.

4237. Did you ever hear that that was against the law ?—Yes, I know it was against the law, but I did not know it at the time.

4238. When did you find out that it was against the law ?—When we had the dispute with the Tees Conservancy ; we then got a copy of the Act of Parliament, and I have it now.

4239. You did not know the law then ?—No, a poor fisherman don't want much to interfere with the law.

4240. It is rather the other way, the law wants to interfere with you ?—Yes, but the fishermen generally shoot their nets into the sea, when they do shoot them, and it is not always fine weather to suit them in going out to take them in again. They have also to suit their markets. Once upon a time well-vessels used to come upon the coast. They could take quantities of fish to the London market by sea. Then we could fish at any time when the weather would permit. But since we have had to bring the fish to market ourselves, we try to accommodate the purchasers, and therefore we are almost compelled in a certain sense to break that law. But no one has ever interfered with us.

4241. Are you aware whether the size of the mesh is regulated by the law ?—Yes, if I do not mistake it should be $4\frac{2}{3}$ inches from knot to knot.

4242. No : $4\frac{1}{3}$ inches ?—The size of mesh we work is from $13\frac{1}{2}$ inches to 14 inches.

4243. Does anybody ever examine your bratt nets to see that they are all right ?—No.

4244. Then it appears that a law is passed by Parliament to regulate the fisheries and you are left in entire ignorance of it unless you chance to find it out by accident ?—I only found it out when I got the Act of Parliament.

4245. When was it that you got a copy of the Act ?—It would be about three or four years since.

4246. Then this Convention was sanctioned in 1843, and for 17 years you remained in entire ignorance of it?—I never knew anything particular about it before.

4247. I do not wish to put any question to you that you might object to answer. I only wish to know if you had any means of ascertaining what the condition of the law was ?—No.

4248. Did you ever chance to shoot the bratt nets where the herring-fishing was going on ?—I have set the turbot nets where the herring-fishing was going on, but knowing that it was not right to have any buoys in the way of herring nets we have taken the dans off and put bladders on, so that the nets would go over them and would not be injured.

4249. Do you think that by doing that you were not breaking the law ?—No doubt it was an infringement of the law, but it was not doing my neighbour any harm. If I had kept the dan on it would have torn his nets and partially have destroyed them, but when I took the dan off and only put the bladder on it would do no injury to his nets.

4250. Do you know what the law is on that point ?—I believe there is a penalty.

4251. A penalty against what ?—Against the man who has the mooring there—who has the buoy.

4252. Is the penalty against the buoy, or against the nets being there ?—I cannot answer that.

4253. The law is that you shall set no such net there

at all, whether you have buoys or no buoys. I merely wished to know if you were acquainted with the law. Did you ever see the spawn of skate?—Yes, I have seen it on this beach.

4254. What is it like?—It is in what we call a "purse," not quite four square, and it has a little string in the corner.

4555. Do you know what that string is for?—No; I cannot say.

4556. Did you ever see the spawn fastened to sea-weeds by that string?—No.

4557. Have you any reason to believe that these purses, as you describe them, have been brought up in large masses by the trawlers?—I never was on board the trawlers, and I never saw a trawl hauled up except in the case I have mentioned when the trawler hawled her net up inside out.

4258. I asked you because it is quite clear that the skate have fallen off very much on this coast, and I wish to ascertain if that is in consequence of the spawn being taken by the trawlers, or from anything else?—I attribute the cause to nothing else.

4259. That is only your opinion, you cannot substantiate it by facts?—No, but previous to these trawl-vessels coming upon the coast there was plenty of skate.

4260. That is quite another thing. You have a good many small trawlers here, have you not?—I believe there have been five or six trawling for a short time, and sometimes only two or three.

4261. Do you think that they do any harm?—Well, I should say that they do harm in a certain sense. If a large trawl does harm, then according to their weight and size the small trawls do a little harm.

4262. Would you have them put down?—If I had my own way and was a legislator, I would put down all trawling and everything else that was not beneficial to the public.

4263. You would put down both the large and the small trawls?—Yes, I would if I could.

4264. Do you think that you would catch as many fish, and be able to supply the market as well after trawling was put down as before?—I think the market would be better supplied.

4265. Would as many fish go to market as go now?—Yes, I think so, and there would be more men in Hartlepool who would be prepared to catch soles with hooks. These waters have generally been good for catching both soles and turbot. Our bay is deep, and the easterly breezes about Christmas time send in great quantities of codfish and haddock.

4266. You were speaking about the Tees Conservancy Commissioners endeavouring to control you in some way. What regulations did they pass?—I can hardly tell you.

4267. Were you forbidden altogether to get bait?—They wanted to do that, but Mr. Bell, the editor of "The Mercury," will be able to give you better information than I can on that subject.

4268. How did the regulations that the Tees Conservancy Commissioners endeavoured to impose affect you?—They wanted to put restrictions upon us so that we should take in mussels of a certain size, and we had to pay so much for a licence.

4269. How much were you called upon to pay for a licence?—They agreed to let us have a licence for 5*s.* a year. There was I and two others went up to the Tees Conservancy office at Stockton, and when we got there they would not grant us a licence under 5*s.* a quarter. Now we were almost bound to have bait; we could not live without bait; we could not catch fish without bait; so we agreed to take a licence out for 5*s.* a quarter, and when we did so, we found that there was a placard all round the town threatening all fishermen with penalties for going to the Tees to get mussels at all. Mr. Bell happened to be in the higher part of the town at the time, and he said, looking at the placard, that the commissioners had no right to impose such restrictions. He and Mr. Dalby, a solicitor of this town, befriended us, and Mr. Dalby said he would do all he did free gratis. They led us right into the matter.

4270. I understand you to tell me that the Tees Conservancy Commissioners forbade your taking bait unless you paid them 5*s.* a quarter for a licence?—Yes; in the first instance they wanted us to pay so much per bushel.

4271. But what it ultimately came to was 5*s.* per quarter?—Yes; no doubt it might have gone to that length that we should not have been able to pay what they wanted. They evidently wanted to make merchandise of the mussels in the river Tees.

4271*a*. Did they impose any rule with regard to the size of the mussels that were to be taken?—They wanted us not to take them under two inches in length.

4272. Would that do you any harm?—Yes.

4273. In what way?—Because we can have very good bait out of mussels an inch and a half long; as good bait as a fisherman need put on a hook.

4274. Suppose they had made a rule that you should not take mussels under an inch and a half in length, would you have objected to that rule?—I almost think I should, because we can get good bait from mussels an inch in length, although an inch-and-a-half mussel is the regular size. An inch-and-a-half mussel is regular good bait, and I can get bait, and not bad bait either, out of mussels less than that.

4275. Then if they had said an inch, would you have objected?—Yes, I should.

4276. Why would you have objected?—Because I think it would still have been doing away with a great deal of bait.

4277. In what way?—Because I consider that mussels from an inch and a quarter to an inch and a half would be good bait.

4278. Then under an inch would not have injured your fishing?—Why, under that the bait would not be fit to use.

4279. Were there any other regulations passed about the bait?—They wanted to take all under a certain size and deposit them in an artificial bed, and then after we had laboured for them and carried the mussels to that artificial bed, they at some subsequent time would try to make us pay for them, which might have caused a great deal of inconvenience. Many a time we are compelled to come away in a squall of wind, and we have to be off as quickly as possible on account of the rapidity of the tide.

4280. Before the Tees Conservancy Commissioners got hold of the beds, had there been any falling off in the mussels?—In certain years there had been.

4281. To what do you ascribe that falling off?—There may be different reasons. Sometimes the bait has been low down to what we call the 14th buoy, and when heavy weather comes on, what with the fresh and what with the sea and the strong tide they have been swept away.

4283. Do foreigners come and take them; I mean outsiders, the people from the south or from the north?—We have had a great quantity of boats from the north this year, and some from the south. The quantity is great that comes from the north. I think there would be as many as 40 that would go up on Friday night and Saturday morning, and they would be there nearly all Sunday morning.

4284. Do these people take the mussels as they like, small and large?—I think so.

4285. Do they do any good to your mussel beds?—I cannot say that they do.

4286. If that has gone on for years would not that have diminished the supply?—It must have done so; but they are very prolific are mussels.

4287. Would you like that to go on; would you like them to come from the north and take away the mussels whenever they chose?—There is no law to prevent them.

4288. But do you not think it would be better to prevent these people by some regulation from taking the small mussels with the large?—No doubt it would be.

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4289. Then in that case you would not mind paying for the mussels, would you?—I cannot say. A poor man don't like to pay for everything he uses.

4290. Further north they have to pay a good price, because they have over-fished their mussel beds?—Yes, I believe they do buy them.

4291. Do you think that 5*s.* a quarter, which is only 1*l.* a year, would have been an exorbitant price to pay for bait?—But they would not have stopped there.

4292. But suppose they had stopped there?—Then I do not think it would have been an exorbitant price.

4293. Do you not think that the northern fishermen would like to have their bait for 1*l.* a year?—Yes, no doubt; but it is a privilege which we have at Hartlepool, and which Her Majesty's judges, I believe, have settled in our favour. There are even clauses in the Act, I think, which give us a claim to the beds of which I have been speaking.

4294. You made an observation just now about catching herring in the trawl nets; that is an unusual thing, is it not?—Yes.

4295. Because herring do not commonly keep on the ground, do they?—No.

4296. It is an unusual thing?—Yes, I never saw anything of the sort myself.

4297. And now let me ask you a question in reference to the marfire disturbing the herrings. I have frequently seen herrings caught myself; it is always at night, and when you haul in the nets the whole sea appears to be in a flame, does it not?—Yes.

4298. Did you ever see that disturb the herring?—Yes. I have seen so much of that among plenty of herrings that we could not catch them. They would not take the net.

4299. Does not the hauling in of the drift net give rise to a great deal of this marfire?—It disturbs it more than when it is lying, but they will not take the net even then. When it is a very dark night and the weather is very clear there is so much of that at times that they quite shun the net.

4300. Do you think that the drift net fishing does any great harm to the shoals by causing that display of marfire?—I cannot say that.

4301. But you think that the trawler does so when he makes it?—Yes, I think so; there is such a quantity. We see the herrings on both sides of a man's net when we do not get any herrings. We pull our nets backward and forward until we find the fish. When we see the fish we see them at a short distance from the man's nets but not against his nets. I think that is a proof that there is some instinct about the fish, and that they shun the nets.

4302. Do you think that the marfire does as much harm when it is occasioned by the drift nets as by the trawl nets?—The drift net cannot make anything near the amount of marfire that the trawl net makes. Their net is going sweeping along the bottom.

4303. When the drift net is being hauled in have you not seen the whole sea in a flame?—If you saw the herrings in a drift net on a dark night you would find it a very awful thing, you would be frightened at it.

4304. Are you aware that there is a law now that no herring-fishing nets shall be shot within half an hour of sunset?—Certainly.

4305. Do you want to see that regulation carried out?—I have known that there was such a law for several years.

4306. Is it the practice to shoot your nets now before sunset?—These large boats, and the French boats when they used to visit us, I have known shoot their nets two or three hours before sunset. In the north country I have seen them commence to shoot their nets two or three hours before sunset, and I have seen it also off the Yorkshire coast.

4307. Does nobody interfere with you to prevent it?—I never saw anybody interfere.

4308. Have you now any gunboats on the coast?—Yes.

4309. Do they not interfere with you or visit you?—At certain times they do.

4310. Do you not make your herring nets of cotton now?—Yes.

4311. Is that the reason that they are lighter than they were formerly?—Yes.

4312. Can you afford to make them of cotton now, I mean this last winter?—Yes, but they are rather dearer than they were.

4313. Is there any oyster-fishing here?—No.

The witness withdrew.

T. Davison.

THOMAS DAVISON called and examined.

4314. (*Mr. Caird.*) Have you been long a fisherman here?—Yes.

4315. How many years?—Between 40 and 50 years.

4316. You have heard the evidence of the previous witness, Thornton Bulmer?—Yes.

4317. Do you agree generally with what he has stated?—Yes; I think that he is quite right.

4318. Have you yourself observed that there has been any falling off in the quantity of fish caught by the line-fishermen?—Yes.

4319. Has the falling off been in various kinds of fish?—Yes, in all that we catch on this coast.

4320. Has there been any kind of fish that has fallen off more than another?—I think the greatest falling off, so far as I can see, has been in the haddock.

4321. Has the decrease been in the quantity, or in the size as well?—It has been both in quantity and in size.

4322. Can you give us an example taking 20 years ago?—20 years ago, or rather taking 30 years ago, 50 boats regularly went out; each boat would average about 1½ tons of fish. Now, at this day and within the last four or five years they don't average more than 1½ cwt., or upon a regular scale 2 cwt.

4323. With regard to the size of the haddocks, how much has it fallen off in the average?—We think in these days that if we catch one that weighs 3 lbs. we do great things. In former times we could get five or six score that would weigh 6 or 7 lbs. each.

4324. When was it that the difference came to be evident?—Since the trawling vessels came upon the coast.

4325. I think you referred to 30 years ago?—Yes, from 30 years down to the present time.

4326. Thirty years ago a boat would catch either a ton or a ton and a half?—Yes, it might be a little less some times, but that was the average generally.

4327. Within the last 10 years, has the greatest decline taken place?—Quite so.

4328. Was it a sudden decline or a gradual decrease?—It has been a gradual decrease, and if it goes on it will be utter destruction. The noble beds that we have had will become fallow ground.

4329. Has the turbot-fishing decreased?—Yes.

4330. What is the cause of that?—I know no other cause but the smacks disturbing the spawn. The fish spawn in the months of June and July, and these smacks have come in large numbers upon the coast for the last four or five years. We have had 20 or 30 smacks regularly on the coast ploughing up the ground. They heave their nets in, and when they take them up they destroy a large quantity of fish. When I was a boy of 16 or 17 or 18 years coming up to manhood we went "bratting," and I have got seven score and ten in one haul myself when they were 3*s.* 6*d.* apiece. Now, I have not used bratt nets at all for the last few years. When they have been used the fishermen could not get 40 or 50 even with vast more nets than we had when I was a young man. The decrease, in my opinion, is owing to the destruction of the spawn.

4331. Has the decrease been going on very rapidly?—Yes, it would beggar a lord, let alone a poor man, to stand it.

4332. Do the trawl-boats come on the ground that the line-fishers fish on?—Yes, on the very ground the line-fishers are on, on the very ground that the bratt nets are set.

4333. Do you think that the two kinds of fishing cannot be pursued on the same ground without destroying the line-fishing?—No, they cannot go on together without destroying the line-fishing. Our lines are two miles and more in length, and when the smacks come among them they take them away entirely.

4334. How near shore do you lay your nets?—About three miles from the shore.

4335. Then you don't go to the Dogger Bank?—No, we should require decked boats for that.

4336. What would you do to protect the fishing?—I would knock off trawl-fishing; I would knock off the heads of the trawl; I would knock off their beams. I don't want to hinder them from fishing altogether, but let them fish the same as we do.

4337. But if it is thought proper that they should continue to fish with beam trawls, is it not possible to restrict them to ground where they would not injure you?—Yes, if that is not done England will have to cry out in consequence of the falling off in the fish. In point of fact it is utter destruction that is going on.

4338. In your experience have you found that the quantity of fish brought here by the fishermen has very much decreased on the whole?—Yes, I have.

4339. Has the price of the fish increased?—Yes, it has, but it is the small quantity that we get that injures us. We could make a much better living when we had rank fish than we can now.

4340. What is rank fish?—I mean a vast quantity of fish.

4341. You attribute the blame to the trawlers; have you ever seen a trawler at actual work?—Do you mean hauling up his trawl.

4342. Yes?—Yes, I have seen that done a vast number of times, but I have never been close to them.

4343. Did you ever happen to see what was in the trawl?—No.

4344. Then you cannot speak positively as to that?—No.

4345. Have you suffered any loss in your lines or in your nets owing to the trawl-fishers?—No, I have been a very lucky man myself. I have always shunned them, but others have lost both lines and nets. The man who has just been examined has not told you the whole of the loss he has sustained.

4346. With regard to soles, do you practise trawling for soles?—No.

4347. Do you fish for soles in any other way?—No.

4348. You don't fish for soles at all?—No.

4349. Do you fish for mackerel?—No; but if they come to the net we take them.

4350. But you don't go mackerel-fishing?—No.

4351. Have you never thought it worth your while to fish for mackerel?—No, I never thought it worth my while.

4352. With regard to shell-fish—crabs and lobsters—are they increasing or diminishing?—They are decreasing.

4353. Do you attribute that to the same cause as the last witness?—Yes; there is a place that used to give much satisfaction at Seaham harbour. It was a very well known place for lobsters, and in point of fact there was no better place within 20 miles. It has been utterly destroyed in consequence of the ballast thrown in there. The place is quite smooth now, and the shell-fish like rocky ground. What used to be rocky ground is now quite smooth.

4354. Has that injury to the shell-fish been a gradually increasing one?—Yes, it has.

4355. Has there been any other cause by which the quantity of shell-fish taken has been decreased?—Yes, I think the use of the creels—lobster pots, I mean—has a tendency to decrease the quantity.

4356. Can you get more lobsters in the creels than by other means?—Yes, they let them stand in the water and they get full of lobsters and crabs. If they are allowed to continue that mode of fishing they will knock up the fishing altogether.

4357. Is it not your object when you go to fish to get as many as you can?—We don't like to make destruction.

4358. In what way do they cause destruction?—They take great quantities of the berry fish and destroy them. All these things cause destruction. They rake out the belly of the crab.

4359. Do they do that with the lobster?—No; because gentlemen like the belly.

4360. But if you get a berry lobster do you throw it back into the sea?—No; because we can get some brass for it.

4361. Has the herring-fishing declined in your experience?—Yes, greatly.

4362. Yet the number of boats employed at it has considerably increased?—Yes, considerably.

4363. By going further to sea do they make as much as they did?—There are some of our boats seeking herring at Whitby on the Yorkshire coast; there is not one on our coast. The boats are made to travel further seeking herring than they used to be. We had formerly only to go to our back door to get them, but now, if anything comes, it is only a hand's breadth. Formerly the ground was covered with herrings.

4364. Do you agree with the previous witness that some regulation should be enforced with regard to the shooting of your nets; would that be of advantage to you?—Yes; but we seldom shoot them before sunset.

4365. Do you find that it disturbs the shoals?—I cannot say that I have ever shot them until after sunset.

4366. If a regulation of that kind were enforced, do you think it would be a benefit to all fishermen?—Yes.

4367. Do you think that it would be a proper thing not to allow fishing to take place on the Sunday?—If I had 50 hands I would haul them up for it. That is just the thing we want.

4368. Do some of the boats fish on the Sunday for herring here?—Yes; some delight in it. It is a benefit to those who do. There are a great many, myself and others, who take our start on the Monday morning, and conclude on the Saturday night; but there are men among us who conclude on the Saturday night, and start fresh on the Sunday morning. They will get a better price for the fish, because the Monday morning market is clear. It is a benefit to them that we are out of the market.

4369. Do you think that it would increase the supply if everybody were to abstain from fishing one day in the week?—If there was one day in the week when there was no fishing it would make a great deal of difference; it would make one year out of every seven.

4370. Do the French fishing-boats fish constantly on this coast?—Yes.

4371. Do you think it would be an advantage that they should only fish when you do?—Yes, they should only fish at the same time.

4372. Are many of the fish sent into the interior of the country for sale?—Yes.

4373. Where are they sent to?—I daresay to most of the large towns; most of them take fish that come from this place. London, Manchester, and all the large manufacturing towns have a supply from this place.

4374. Is the price of fish altogether so high as to preclude it being used by the poorer classes?—It is very high for them; it is hard to get at.

4375. But they were formerly in the habit of using fish as an article of food?—They used to live upon it almost entirely.

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4376. Do they do so now?—No; I think they had better buy butcher's meat now; I am not speaking of the better classes, but the poor.

4377. Have they in consequence of the dearness of fish suffered in their living?—Yes, I think they have sorely.

4378. Is there no cheap fish in the market now?—No; very seldom of any kind. The poorer classes who used to get their bellyfull of fish have to make a sup of tea or coffee water do now.

4379. Are you interfered with in any way with regard to the size of your nets or the period of your fishing here; are you in any way regulated with regard to your fishing?—No.

4380. Nobody interferes with you?—No.

4381. (*Professor Huxley.*) Did you know that that there was a law of this kind: "Herring fishermen "being within the fishery limits of either country "shall comply with the laws and regulations of the "said country respecting the prohibition of fishing on "the Sabbath day." Did you ever hear of that?—No.

4382. I believe you stated that you had been a long-line fisherman mostly?—Yes.

4383. Did you ever lose much of your catch of fish by dogfish and suckers?—Yes, I have lost at times a great quantity of fish by dogfish devouring them.

4384. How much do you think you lost on the average?—I cannot say.

4385. Can you give us any notion at all; was it as much as one tenth or one thirtieth, or what?—To speak conscientiously and honestly I cannot answer the question. Sometimes the dogfish are so numerous that they will almost devour the whole; at other times they will be so scarce that there will be hardly any loss to speak of. It would rather be touching upon conscience if I were to speak more definitely as to the average of the loss.

The witness withdrew.

T. Coulson.

THOMAS COULSON called and examined.

4389. (*Mr. Caird.*) Have you been long a fisherman here?—Yes, for 32 years.

4390. Have you engaged in all the kinds of fishing practised on this coast, herring-fishing, long-line fishing, shell-fishing, and bratt-fishing?—Yes.

4391. Do you agree with what the previous witnesses have stated?—Yes.

4392. Is there anything you desire to add to what they have stated; do you think that it would be of advantage that there should be some regulation with regard to the time of shooting your herring nets?—It seldom happens that we shoot our nets before sunset or just about the time when it is setting. That is our rule generally.

4393. Do you think it would be of advantage that that rule should be strictly enforced among all of you?—Yes.

4394. Have you observed that the French boats do not adhere to that rule?—Yes, the French often, I should say, lay before sunset, that is shoot their nets.

4395. Is that a disadvantage to you?—Yes, it is like to be.

4396. In what way?—Because their nets are sweeping over the ground causing us to shift away from where we would like to be.

4397. Do the French come within the three-mile limit?—I have seen them very close in.

4398. Have you ever seen them within three miles of the shore?—Yes, I think I have.

4399. Has that been the case often?—Not very often.

4400. Do you find most fish within or without that limit?—In the first week of August we generally begin to fish in-shore; we will fish then in from 20 to 15 and 14 fathoms. We seldom fish in 12 fathoms, but sometimes we do, and occasionally in 10 fathoms, but not often.

4401. Do you find that the largest quantity of herring you catch is caught within the three-mile limit or beyond it?—I should say it is rather beyond the three-mile limit.

4402. That would be where the French have a right to go?—I don't know exactly.

4403. The limit is three miles?—It is not often that herring are to be caught within three miles of the shore.

4404. Have you observed any injury done to the shell-fish by the depositing of ballast?—I have often heard it remarked that it would do a good deal of injury in the course of time if the ballast is hove on certain grounds.

4405. Have you observed any injury done to the fish by that?—I have not observed it particularly myself.

4406. Are you a lobster-fisher?—It is a long time since I was at it, but I have been.

4407. Did you ever see a deep-sea trawl hauled up?—I have been alongside when they hauled it up but I was never aboard of the smack. Once or twice the vessel has had to haul up from us in order to have our nets cleared.

4408. Have you ever seen one of the nets hauled up?—Yes.

4409. Have you seen any spawn in it?—I cannot say.

4410. You cannot say what was in the net?—No.

4411. (*Professor Huxley.*) Have you any particular kind of vanes on your drift-net boat at the mast head?—Do you mean our herring-boats?

4412. Yes?—We generally take our mast head down when we are fishing.

4413. Do you not put your mast upon a rest?—Yes, upon what we call a "crutch."

4414. Is there any reason why you should not have a vane at the top of your mast?—The masts have to be taken down to the rest usually.

4415. But you rest them on a crutch?—Yes.

4416. Then the head of the mast will be clear of the boat?—Yes, it just goes outside.

4417. Then there is no reason why you should not have a vane on the mast?—I don't see what use it would be when the mast is down.

4418. But there is nothing to prevent your having it if it were of use?—No.

4419. Have you ever heard of any regulation on that point?—No, I never heard anything of that kind.

4420. Did you never know that this was the law: "For the purpose of distinguishing by day drift net "fishing boats from trawl boats both shall carry at the "mast head vanes which shall be at least eight inches "in height and two feet in length." Did you ever hear of that?—No, I never heard of that before.

4421. Has there ever been anybody to examine the size of the meshes of your nets?—I cannot say that I ever saw a man measure the size of our nets.

4422. Do you know whether you are bound to have them of any particular size?—I know that there is a certain hole allowed for us in the net.

4423. What is the rule?—I cannot tell the exact size of the mesh that is allowed us.

4424. Did you ever have anybody examine your nets at all?—No, I have never had any interference with them in any shape.

4425. Do you ever carry any lights at night?—Yes, we constantly have lights.

4426. How do you arrange them?—We have a pan made with rails and a box to keep the ashes inside. We make a fire and light it and it stands there and then a man or boy attends to it. We have a light for our own safeguard; if that fails we have a lantern.

4427. Did you ever hear of this law: "In order "that the boats fishing with drift nets may be easily "recognised at night, the masters of these boats shall "hoist on one of their masts two lights, one over the "other, three feet apart."—In all boats do you say?

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4428. Yes?—Then we have done wrong, for we never had more than one light.

4429. You see it says further: "These lights shall "be kept up all the time their nets shall be in the sea, "between sunset and sunrise." Did you ever hear of "that?—No.

4430. Did you ever know that having other kinds of lights in your boat was illegal, and is forbidden?—No.

4431. There is another article which I will read: "All fishermen are forbidden, except in cases of abso- "lute necessity, to show lights under any other circum- "stances than those mentioned in the present regula- "tions." Have you ever heard of that?—No.

4432. I merely wish to know if these laws are regularly known here?—No. There may be some fishermen who know them, but I do not.

4433. But if the laws were made known all fishermen would be acquainted with them. Can you tell us when the turbot spawn?—I have been turbot-fishing for 22 years. I have seen the spawn coming out of the she fish. I consider that they spawn mostly at the back end of the month of June.

4434. They spawn in June?—Yes, in June or July.

4435. What kind of spawn is it; does it cake together when it comes out?—It is quite loose from the fish.

4436. Does it cake together like herring spawn?—I cannot say. I never noticed it particularly.

4437. The haddock spawn is like herring spawn, is it not?—It is similar.

4438. Do you know when the cod spawn?—There was one particular instance last April. I was fishing myself and caught a pretty large haddock; what we should call a large haddock now spawning; that was a singular time, because we reckon the cod and haddock begin to spawn at the back end of the month of November.

4438*a*. That is your view both with regard to the cod and haddock?—Yes. December, January, and February are the months when cod and haddock spawn most; sometimes at the back end of December. I have seen them when they have lost their spawn lying in. They don't lie in all years, but last April I saw spawn coming out of a haddock in 22 or 23 fathoms of water. I said to my mates at the time that it was a very singular thing to see spawn running out of a haddock in the middle of April. I have no doubt that about the same place where we saw this haddock haddocks would be spawning about the middle of January.

4439. Then it is unusual, so far as your experience goes, to find haddock spawning in April?—Yes, it was that that made me remark it, but I believe the weather has great influence on the fish spawning.

4440. You think that haddocks spawn generally in December or January?—Yes.

4441. What time do the herrings spawn?—I have caught them quite full in the fore part of August. I have caught full fish one week, and spawn fish another. I have caught them quite full in one week.

4442. Was that in August and September?—Yes, in August and September.

4443. That is your great herring-fishing time here?—Yes.

4444. Do you ever try for herring in January or February?—No.

4445. Is there any appearance of herring at that time?—There is a winter herring, as we call it, that comes sometimes. It has never been but once, and I think that was in December. It would be about 24 years since. We were short of bait at the time, and went to try if we could catch herrings for bait, and we got about 600 small herrings.

4446. Were they all small?—Yes, they were all small. There was no large herring about at that time.

4447. Did you ever see full fish about that time?—Yes, they were full fish; they are called winter herring.

4448. Were they full of roe or milt, as the case might be?—I cannot say.

4449. Then by saying full, did you mean that they were of full size?—Yes.

The witness withdrew.

T. Pounder.

Thomas Pounder called and examined.

4450. (*Mr. Caird.*) Are you a fisherman?—Not at present. I was some years back, and any observations I may make on this occasion will go to corroborate the statements of the previous witnesses.

4451. Have you anything that you can add to what they have already stated?—I don't know that there is anything that I can add. The haddock and cod-fishing has declined very much during the last 10 years, and the shore-fishing has declined very much during the last three years. According to the declension at that ratio, there will be very few fish left on the coast shortly.

4452. You have not yourself been a fisherman?—Not for the last 20 years or so.

The witness withdrew.

R. Pounder.

Robert Pounder called and examined.

4453. (*Mr. Caird.*) You are a fishmonger, I believe?—I have been a fisherman upwards of 40 years.

4454. Are you a fisherman now?—No, I am a fishmonger.

4455. How long have you been a fishmonger?—For the last six or seven years.

4456. Do you buy a large proportion of the fish brought ashore here?—Yes, of the kind of fish that is caught in our own boats.

4457. During the last six or seven years have you noticed any decline in the number of fish that is brought ashore here?—Yes, it has declined a great deal since the time I went a fishing.

4458. But has it declined since you began to buy fish?—Yes, a great deal.

4459. What weight of fish did each boat bring ashore six or seven years ago?—From 15 to 20 stone.

4460. What do they bring ashore now?—Now many a day they will not bring ashore 8 stone.

4461. Have you noticed in your business that there is any falling off in the size of the fish as well as in the quantity?—Yes.

4462. In which fish particularly?—In haddock.

4463. Do other fish keep their size?—Do you mean cod?

4464. Yes?—There are very few of them caught now. Many a boat will go a week, and won't get a cod.

4465. With regard to the haddock, is the size of the fish much lessened?—Yes.

4466. How much has it decreased?—If we get a haddock 3 lbs. now we think it a large one.

4467. Do you buy any trawled fish?—I never bought any except upon two occasions.

4468. In the market here do trawled fish bring as high a price as fish caught by the hook and line?—No.

4469. What is the cause of the difference?—Because a great part of the trawled fish is not fit for the market.

4470. If it is quite fresh will trawled fish sell for the same price as fish caught by the hook and line?—Trawled fish never is fresh.

4471–2. Why is that?—They are too long at sea, and they have been dragged along the bottom too much. They are like what is called a "gawped" haddock—knocked to pieces.

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4473. You have had none here this year?—No, not on this side of the water.

4474. Then you cannot give us any comparison of the price of trawled fish and line-fish?—Yes, I can with regard to other years.

4475. What was the difference then, taking a cod of the same weight?—Our coble fish generally brings in about 15*s.* a stone, and I think it will bring nearly as much more as other fish.

4476. Would you give as much again yourself?—Yes.

4477. Where do you send it?—We send it to Manchester, London, Birmingham, Sheffield, Wolverhampton, and many other places.

4478. Where would you sell the trawled fish?—I could not send it that far; it would have to go near at hand into our own market.

4479. Who would buy it?—Some would buy it, no doubt.

4480. Who does buy the trawled fish?—I cannot tell who buys it when it gets into the country.

4481. Is it never sold in the town?—Yes, the poorer classes buy it.

4482. Do the poorer classes buy coble fish?—No, it would be too dear for them.

4483. Then the poorer classes would get no fish at all if it was not for the trawl-boats?—Yes, sometimes they would.

4484. At what times?—When it comes in very plentiful; sometimes fish are cheap, at others they are dear.

4485. In the years you have referred to when trawled-fish came into your market, what proportion of your supply was trawled fish and what proportion line-fish?—There might not have been more than 14 or 15 stones caught in one of our boats.

4486. How much would be caught in one of the others?—Perhaps more than half a ton.

4487. Then there would be a much larger quantity of trawled fish brought into the market than line-fish?—Yes.

4488. When did trawled fish first come into market?—There have been trawlers here for the last 14 or 15 years; they have been in the habit of coming in here during that time.

4489. Have they been increasing?—There have been as high as 30, 33, and 34 in one season on our coast.

4490. You cannot tell what becomes of their fish except with regard to what is sold at home; you never bought it?—Only twice, and I wish I had never seen it.

4491. Why?—Because it was quite rotten before it got to market. I sent it to Edinburgh. There is fish caught there about the winter time, but these were soles that I sent. I received back word that they were rotten when they reached, and I lost about 2*l.* by it.

4492. Do you sell shell-fish?—No, the catch of shell-fish is of little consequence now.

4493. Do you fish for turbot?—No, but I did in years gone by.

4494. (*Professor Huxley.*) Have you no notion what the average yield of the long-line fishermen will be in money?—No.

4495. What do you think a fair average earnings for a fisherman—I mean the fair year's earnings?—The question is not exactly what they get, for it must be remembered that they have a good deal of expense, so a good deal has to go out of it again.

4496. Can you give us an idea of the amount?—I never made any calculations; sometimes I got 10*s.* a day, and some days I did not get 10*d.*

4497. But you must have made something to enable you to support your family?—They were very badly supported sometimes.

4498. What would be a fair amount to place your earnings at?—For a man who goes a line-fishing, his earnings ought not to be less than 2*l.* a week.

4499. Is that what he will get for his fish?—No; I think he ought to have 2*l.* for his wages.

4500. That would be sufficient you think; how much of that would a prudent man set aside for the repair of his boat and his lines?—Every line costs 6*d.*, which for three lines is 1*s.* 6*d.* a day. I cannot tell what expense he would be put to in a week. Perhaps he might lose a line.

4501. I am speaking of the average. Suppose that he spent 20*l.* in the year for lines, and so on, would that be a fair average, or do you think it would amount to more?—It would sometimes be more and sometimes less.

4502. Then the amount he would clear for himself would be 80*l.*, do you think that a fair average?—Yes.

4503. Why were trawled fish not brought into Hartlepool this year?—Because there was nobody who would buy it.

4504. Has there been any dealing in trawled fish this year?—No.

4505. Was there any last year?—I believe there was some last year.

4506. Have the trawlers left this place?—Yes, the smacks have gone to the west side of Hartlepool.

4507. Did they not find it answer here?—The man who bought the trawled fish went to the west side and they followed him.

4508. Did he not find this place comfortable?—No, I think not.

4509. Or was it because the sale of the trawled fish turned out unprofitable?—Most of the stuff was not saleable at all.

4510. Do you mean to say that it was unfit to eat?—Yes, a large proportion of it.

4511. Was half of it unsalcable?—I have smelt the smell of it many times.

4511*a*. Was that owing to its having been trawled, or because it was left too long?—If the country knew as much about what is brought up in the trawl net they would not buy trawled fish at all.

4512. What is brought up in the trawl net?—Why, dead bodies, and everything else. Trawl-fishermen speak of bringing up two dead bodies at a time.

4513. Are there many dead bodies?—Plenty where they trawl, and they are sure to bring them up if they trawl over them.

4514. Does that happen often?—Yes, very often.

4515. Have you yourself seen the contents of a trawl net brought up upon deck?—No.

4516. Then what you state is from hearsay?—Yes.

4517. Have you ever heard of disease being occasioned by trawled fish being eaten?—No.

4518. Have you ever heard of people being laid up in consequence of eating trawled fish?—If they had, they would not have said so; they would not have reported it, probably. If they had been ill they would not have blamed the fish.

4519. You don't think that the fish would hurt them?—No, unless it stunk.

4520. But they would not eat stinking fish?—I cannot tell; there are some queer folks in the world.

4521. But you never heard of disease being occasioned in that way?—No.

4522. Where do the trawled fish go?—Into the country; to little places close at hand.

4523. Do the hawkers buy it?—Yes.

4524. Did you ever hear of disease being caused in a place where it is bought?—No.

The witness withdrew.

LAWRENCE BYRNE called and examined.

4524. (*Mr. Caird.*) Are you in the Coastguard service?—Yes.

4525–6. Have you been long stationed on this coast?—Yes, about 15 years.

4527. Are you familiar with the mode of fishing practised on this coast?—Not very, but I have often seen the fishermen go out to fish, and I have seen them come in and land with their fish. That is all.

4528. Have you been near enough to observe the mode of fishing practised by the deep-sea trawl fishermen?—Yes.

4529. On this coast?—Yes.

4530. Any information you can give us upon that point we shall be glad to have?—I have been with trawl-fishermen myself for five years.

4531. As a trawl-fisherman?—Yes, on the coast of Ireland.

4532. You have seen the mode of fishing adopted by the trawl-fishermen here, and have been a trawl-fisherman on the coast of Ireland. Is the mode of fishing practised here the same as that which is practised on the coast of Ireland?—The same sort of nets and the same sort of gear are used on the coast of Ireland as are used here.

4533. On what part of the coast of Ireland were you a trawl-fisherman?—From the bay of Dublin on the east coast, extending to the northern coast.

4534. What kind of fish did you get by trawling there?—Haddock, cod, plaice, and hake.

4535. Did you continuously follow trawl-fishing for five years?—Yes, for five years.

4536–7. What quantity of fish did you get in one single catch in a trawl on the average?—We generally used to average three hampers a day.

4538. Did you observe whether the quantity caught upon the same trawling ground increased or diminished during the five years in which you were engaged fishing there?—I did not detect any difference in the quantity caught from the time I first went there to the time I knocked off.

4539. Were there quite as many caught the last year that you were there as there were during the first?—Yes, I think so.

4540. You did not find that the practice of fishing with trawls decreased the quantity of fish which were, on the average, caught there during the five years experience you had upon that coast?—No.

4541. Did the number of trawl-boats increase or diminish during that time?—They remained about the same in number.

4542. And did they meet with much the same success each season, and make about the same profit each year by trawling?—Yes.

4543. Were the fish much damaged in a general way when they were brought up in the trawl?—That would very much depend upon the time that we towed the trawl. Sometimes we towed the trawl 12 hours, sometimes six. As a general rule the longer we towed the trawl the worse the fish were.

4544. Was it then when you towed it more than six hours that it increased the damage to the fish?—Yes, the time we towed the trawl would depend a good deal on the weather; sometimes when there were light winds it would be hardly worth while to try.

4545. Because you would go over so little ground, I suppose?—Just so; we should merely go with the flood and come back with it.

4546. What proportion now, on the average, of the fish brought up in the trawl would be in an injured state?—Well I should think two thirds would be sound.

4547. Would as much as one third be injured?—Yes.

4548. Would they be so injured as to be unmarketable?—Yes, particularly haddocks and other kind of small fish. They are a very tender fish.

4549. Were there many small fish not fit for the market at all?—Yes, a great many.

4550. Do you include them in the one third you spoke of?—Yes, in the third.

4551. So that about one third of the fish caught every day was found either to be injured or to be unfit for the market in consequence of being so small?—Yes.

4552. That was your experience?—Yes.

4553. What was done with the fish which you say were unfit for the market?—We did not send them to market at all. We kept them when we got on shore and sold them to the poor people.

4554. You did not throw them into the sea again?—No.

4555. Did you ever bring up any spawn in your nets?—Yes, I have seen spawn brought up.

4556. What kind of spawn?—Several different kinds of spawn were brought up; I could see that it was spawn.

4557. Did you bring it up in any great quantity?—Not a great quantity unless there was seaweed at the bottom, because if there were no seaweed at the bottom to bring up with the spawn the spawn would wash out of the nets, but when there was seaweed it would be brought up because the seaweed would stop the meshes.

4558. Was it common for you to bring up spawn when you brought up seaweed?—The clearer the ground was the more spawn we got.

4559. What quantity of spawn would you bring up on the average in a night?—Perhaps a wash-deck bucket full. It would be washing about the deck and we could feel it; it was like jelly.

4560. Did the men make good wages in the trawl-boat in which you were?—They averaged about 1*l.* a week.

4561. For each man who was employed?—For each man.

4562. Was the owner of the boat on board?—No.

4563. What share did he get?—2*s.* for each share, and a share for the boat.

4564. Each of the men had a share?—Yes.

4565. Did you have a share?—No, I was a boy then.

4566. Did you catch any turbot?—Yes.

4567. And all kind of white fish which are usually brought to market?—Yes, cod, haddock, turbot, soles, and plaice.

4568. Was there much line-fishing practised in Dublin Bay at the same time as the trawl-fishing?—Yes, a good deal.

4569. Were there any complaints by the line-fishermen that the trawl-fishing damaged their business?—Of course there are always complaints by the line-fishermen against the trawlers that the trawlers destroy their lines, and in fact it cannot be avoided, for many times you cannot see their lines at all.

4570. Did you very often destroy their lines?—No, we did not injure them very much, and we never did it wilfully. We sometimes did without knowing it.

4571. Did you without knowing it find that you brought up their lines?—Yes.

4572. (*Professor Huxley.*) Did you ever notice that when the trawl fish were brought up they had any bad smell about them?—No.

4573. Did you ever hear any of a boat's crew say that they had ever noticed anything of the kind?—They were not bad when they were brought up, but of course they went bad if they were kept any length of time. The dead fish that were brought up did not keep so well as the live fish.

4574. Did many of them come up alive?—Yes.

4575. What proportion of the trawl-fish came up alive, speaking upon the average?—They would average, I daresay, better than half.

4576. More than half, you think?—Yes.

4577. Those of course were not much injured?—No.

4578. Have you been accustomed to catch fish with hook and line?—No.

4579. Did the fish which were brought up in the trawl look well?—Do you mean the fish that are caught here?

4580. Yes?—Yes, I think so.

4581. Would you be able to tell them from fish that were caught with a hook and line?—I think it would be very difficult indeed to do so.

4582. You quite understand me—I am speaking of those which come up alive?—Yes.

4483. Did you ever see herrings which have been taken in a drift net brought on shore?—Yes.

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4584. In the ordinary way ?—Yes.

4585. Is it not the fact that commonly when they are brought to shore they have their scales on and look very well ?—Yes.

4586. Did you ever see them brought ashore after there had been heavy weather, and when there had been a good deal of sea washed into the boat ?—Yes.

4587. What state were they in then ?—Most of them would have their scales off. It is washing about in the net that damages the fish.

4588. In your own judgment it is not the fact of catching the fish by means of a trawl, but the washing about in the trawl that damages them ?—Yes, because if the fish come into the net shortly before—say 10 or 20 minutes before you are about to haul your trawl, they will be brought up alive and in very fine condition; but if they get into the net just as you have shot your trawl, and remain washing about in it from six or seven to 12 hours, they will come up more or less damaged.

4589. Were you in the habit of gutting the fish on board the smack ?—Not for the market.

4590. Did you ever have any complaints from the buyers that the fish had their gall bladders burst ?—No; but you see I was an apprentice at the time, and should not have known much about it if there had been.

4591. At the same time you think that if the fish had been injured to a considerable extent you would have been likely to have heard of it ?—Yes.

4592. Are you aware what price the trawl-fish fetched in the market as compared with the fish that had been caught with a hook and line ?—They were pretty nearly equal in price.

4593. Did you ever eat trawl-fish ?—Yes, I have.

4594. Plenty of them, I daresay ?—Yes.

4595. Were you ever taken ill after eating them ?—No; we generally have the best fish aboard the boats.

4596. Did you ever eat them at dinner and supper times ?—We ate them at pretty nearly all times.

4597. How long did you generally live upon trawl-fish ?—All the time we were out.

4598. And you never heard of any person being ill after eating trawl-fish ?—No.

4599. We were talking about spawn just now, tell me what kind of stuff this is that you call spawn ?—It appears in my hand almost like boiled sago.

4600. As soft as that ?—Yes.

4601. What time of the year would it be when you got this spawn ?—I should think mostly in the winter time.

4602. Did you get more of it at one particular time than you did at another ?—No.

4603. Have you ever seen herring spawn ?—Yes.

4604. You know what that is like ?—Yes.

4605. Was this kind of spawn of which you have been speaking like that ?—No.

4606. Not like that ?—No, it looked to me to be more finer.

4607. Smaller, you mean ?—Yes.

4608. And more jelly-like ?—Yes.

4609. Herring spawn is, as you know, a very firm stuff ?—Yes.

4610. But this is all soft you say ?—Yes.

4611. So that as you stated just now if the meshes of the trawl net were not stopped with seaweed the spawn all went through ?—It would go out as the net came up from the bottom. It would wash out.

4612. You have experience in the Coastguard now; do you think that there is any kind of police regulation by which trawl-fishermen could be prevented from doing harm to the line-fishermen ?—I cannot see how the trawl-fishermen can be prevented from using their nets. I tell you what might be done. There might be a law to restrict them from trawling except for a certain number of hours a-day, but they must trawl the net on the bottom for so long.

4613. The reason, I presume, why they do not haul up the trawl quicker is because it is a great deal of trouble ?—Yes, immense.

4614. How long has it taken your boat's crew—you were three men and a boy, I suppose ?—Yes; I have known it take three hours to haul it up.

4615. And all that time your nets are knocking about and washing in the sea ?—Yes.

4616. That is enough, is it not, to damage any fish ?—Yes; it is very severe work indeed.

4617. If they had any machinery which would enable them to haul up the trawl quicker, would it not be a good deal better ?—Yes; it would be better for the fish, better for the men, and better for the cobles. It would be better for the men in the smack, because the fish that are stowed in the bottom of the net and are knocking about with a parcel of shells, and seaweed, and stones, and everything else about them, cannot be of much use.

4618. Would it be a very great hardship to the trawlers to restrict them to trawling during the daylight ?—Yes; it would, because there would be more fish about at night.

4619. You are aware that trawlers are forbidden to come within three miles of drift-net fishermen, are you not ?—Yes.

4620. Do you think that any regulation of that kind having reference to long-line fishermen would be of use ?—Yes.

4621. You think it would ?—Yes.

4622. There is this practical difficulty about it, how would the trawlers know where the long lines were set ?—In the daytime they know very well, but in the night-time they do not.

4623. How are the places marked ?—By buoys.

4624. How far could a trawler see a fisherman's buoys ?—The fisherman can make a mark by buoys which can be seen at a distance of from four to five miles.

4625. That would require a very large buoy, would it not ?—I have seen very large buoys indeed on the line.

4626. As I understand you, you do not see your way to any regulation that would take the trawlers out of the range of the long-line fishermen, at all events in the night ?—Only in the daytime when they shoot their lines and lay them down. But in the nighttime a line may be directly under the bow of a trawler, and you cannot see it. That has happened many times in my time.

4627. As matters stand at present, you do not think that trawling and long-line fishing can be carried on at the same place without the long-line fishermen giving way ?—No.

The witness withdrew.

J. Linscombe.

JOHN LINSCOMBE called and examined.

4628. (*Mr. Caird.*) Are you in the Coastguard service ?—Yes, sir.

4629. Have you been a trawl-fisherman ?—Yes.

4630. Where, on what part of the coast ?—Here and at Torbay.

4631. How long is that since ?—Seven years.

4632. It is seven years since you were a trawl-fisherman ?—Yes.

4633. How many years were you engaged as a trawl-fisherman seven years ago ?—Seven years.

4634. Seven years before that ?—Yes.

4635. Do you remember the number of vessels that hailed from Torbay at that time ?—I should say that they were from 100 to 120.

4636. Did they increase in number during the seven years that you have mentioned ?—Yes, I think there were some 10 or 12 vessels added within that time.

4637. Where did you fish ?—Off Torbay and on the Plymouth ground, and we fished also in the North Sea at that time.

4638. Did the trawl-fishermen of Torbay come at that time up to the North Sea ?—Yes.

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4639. To what portion of the coast did they come in the North Sea?—I cannot exactly say how far we used to come north. I know we used to come east to Ramsgate, and often used to take fish into Ramsgate.

4640. Would you come as far north as the Dogger Bank?—No.

4641. Did you, when you drew up your trawl, generally find many dead fish in the trawl net?—Yes, I have seen a great number of dead fish in the trawl.

4642. What proportion, do you think, as compared with the whole of the fish brought up, would be dead?—Well, I should think about one third.

4643. Were they principally small fish?—I have seen some big ones as well as small dead in the trawl.

4644. Speaking on the average, what proportion of the fish brought up in the trawl net would be injured, and small unmarketable fish?—I have seen a great quantity of fish thrown overboard that would not be sent to market.

4645. For what reason?—On account of their being so small. They were small whiting and haddocks here in the North Sea, but there were not so many to the westward.

4646. Were they dead?—Yes.

4647. Did you ever see any spawn brought up in the trawl net?—A little.

4648. Have you seen it brought up often?—I dare say that there was hardly a time we shot a net but what we had a little spawn brought up in the net. It was, I think, what they call squid or cuttle spawn down in the west part of England.

4649. On the ground that you were in the habit of fishing on, the Torbay and Plymouth shore, did you find that in the course of the seven years' fishing in which you were engaged the fish were getting more or less plentiful?—I cannot say. At times I have seen them very plentiful, and at other times I have known them very scarce.

4650. Was there any marked falling off during that time?—Some years they were very scarce, and in other years they were very plentiful.

4651. (*Professor Huxley.*) Did you ever notice at the time you were trawling that the fish which were brought up in the trawl had any bad smell about them as they came up?—Never.

4652. Did you ever eat trawl-fish?—Yes; in point of fact I was kept on it.

4653. It does not seem to have done you much harm, at all events?—No.

4654. Did you ever hear of anybody being made ill by it?—Never.

4655. Did your smack's crew eat it?—Always.

4656. Were they ever ill after eating it?—No.

4657. Did you ever hear of anybody in Torbay being ill after eating trawl-fish?—No.

4658. They eat a good deal of it there, do they not? Yes.

4659. What kind of spawn was it that you used to draw up in your trawl nets; was it like blackberries?—It was a kind of white slimy spawn, generally found outside the bag of the nets.

4660. Do you think it might have come from the fish inside of the net?—I think not.

4661. You were saying just now that you thought it was squid or cuttle spawn?—Something of that kind, I think.

4662. You do not really know whether it was fish spawn or not?—No, I could not swear that it was.

4663. Do you know what herring spawn is?—Yes.

4664. Was it like that?—No.

4665. You put into Ramsgate sometimes, I think you said?—Yes, we used to put into Ramsgate, and send fish to the London market.

4666. Was there any long-line fish sent in at the same time?—I think not. Not that I saw, at all events.

4667. Did you ever have your fish rejected by the buyers on account of the gall bladder being burst?—No.

4668. Did you get a good price for your fish?—At the time I was fishing I was only a boy. I believe the price was generally arranged beforehand.

The witness withdrew.

CHARLES CAMBRIDGE called and examined.

C. Cambridge.

4669. (*Mr. Caird.*) You are a boat builder here, I believe?—I am.

4670. Have you been long engaged in the business?—I have.

4671. Do you build fishing boats?—I do.

4672. Are they of various kinds and sizes?—Yes; those which are used for catching herrings, and what are used for catching cod and haddocks.

4673. Which is the largest size?—The haddock boats.

4674. Has the number of haddock boats increased of recent years?—Considerably.

4675. Both in size and in number?—Yes.

4676. Do you build a larger description of boats now than you used to do?—Yes for the herring fishery.

4677. And in line-fishing has the number increased or diminished?—I believe it is about an average. We build boats both large and small.

4678. Have you built many boats this year?—Yes.

4679. Both herring and line-fishing boats?—Yes, of both kinds.

4680. How long will a herring or line-fishing boat last if it has the good fortune not to be wrecked?—A line-fishing boat is useable down to 15 years, and a herring-fishing boat about the same time.

4681. And what is the cost of a line-fishing boat?—The expense of a line-fishing boat independent of the rudder or tiller would be about 15*l.*

4682. And what would a herring-fishing boat cost?—40*l.* or 50*l.*

4683. Are you paid for the boats when they are delivered?—Yes.

4684. Do you find any difficulty in getting payment from the fishermen?—Not generally.

4685. Not this year more than in former years?—No.

4686. You find them good customers?—All, or a considerable number, of them make it a point of duty to have the money ready for the boat when it is delivered.

4687. There is no debt on the boats?—Not worth speaking of.

4688. Is the cost of keeping the boat in repair very great?—No, not a great deal except it gets damaged by accident.

The witness withdrew.

JAMES FELLOWES called and examined.

J. Fellowes.

4689. (*Professor Huxley.*) What is your name?—James Fellowes.

4690. Are you a fisherman?—Yes.

4691. How do you fish?—By means of a trawl.

4692. Have you a smack of your own?—Yes.

4623. How long have you been employed fishing that way?—16 years.

4694. Are you a man belonging to this part of the country, or do you come from further south?—I come from Kent.

4695. From what part of Kent?—From Canterbury.

4696. Do you hail from the port of Dover then?—No, from Hull.

4697. Where have you been engaged in fishing principally?—In the North Sea, from Beachy Head to Sunderland.

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4698. Have you been fishing over that ground for the last 16 years?—Yes; almost 16 years.

4699. Do you trawl over one part of that district more than you do over another?—I trawl in the North Sea for the most part.

4700. What particular part of the North sea is it that you trawl over more particularly than over any other?—A place we call the "off-ground," the Silver Pits, right away to Schelling, and along this coast.

4701. What is your practice; is it to go out fishing for some time and then come into port and sell the fish you have caught? Will you be good enough to explain your ordinary practice?—We go out of port every night, and come in every morning.

4702. Do you put into this port?—Not into this; we put into West Hartlepool.

4703. Has that been your practice only this last year or two?—No, I have been in the habit of doing it these 12 years; I have been always in the habit of putting into West Hartlepool.

4704. Why do you go to West Hartlepool in particular; why do you not come here?—Because they will not buy the fish.

4705. Do you mean to say that the people who eat the fish will not buy them of you?—No, because when we go away, which will be somewhere towards Christmas, the season will be over, and if the buyers here buy the fish of us now, the Hartlepool fishermen will not let them have any fish all the winter. It would be throwing away the only chance they have.

4706. Then it is not because the people who consume the fish have any objection to trawled fish, but because the buyers are intimidated and are afraid to buy them?—Just so.

4707. And at West Hartlepool are there no long-line fishermen?—Yes, there are a few.

4708. Do they not make the same objection then?—No, there are so many who come from other places and from Scotland, and so many foreigners, that we are all in one mess like.

4709. How long do you commonly have your trawl down?—About six hours.

4710. And how long does it commonly take you in ordinary weather to haul it up?—One hour.

4711. How many men does your crew consist of?—Five hands or six is the crew of a smack; I have three men and two boys.

4712. And it takes you one hour to haul up the trawl?—Yes, except in very bad weather.

4713. How long would it take you to do it in a gale?—We can get it in fast when there is a moderate breeze, because as the vessel "fills" the net is hauled in, but I have been two hours in a gale, and I do not know whether I have not been more.

4714. That is about the longest time that it has taken you to get the trawl in?—Yes.

4715. Is it not possible to have any machinery by which you could haul in the nets quicker; would not a crane or a capstan be of any good to you?—We have a capstan; there is some improved machinery for hauling in, which has been introduced of late years.

4716. Is there much damage done to the fish by their being dragged through the water?—No, sir, I find none.

4717. None at all?—No.

4718. When the fish come up in great quantities is it good?—Very good.

4719. Is it alive?—A great deal of it.

4720. What should you say is the proportion of the fish which come up alive?—I should think it was more than two-thirds.

4721. Do you include in that estimate the small fish?—Yes, the lot.

4722. Are the small fish more commonly dead than alive when they are brought up?—No, I cannot say that they are.

4723. So that taking the large and the small fish together, the fish which are fit for the market are about two thirds?—No, I do not think that that is so, I think that they are all fit for the market.

4724. The fish that are brought up dead as well as those that are alive?—Yes.

4725. You do not consider that the dead fish are unfit for the market?—No.

4726. Are they much bruised?—No.

4727. Can you get a sale for them when you bring them on shore?—Yes.

4728. Who are the people who buy them?—They are sold in the market. Last week we had 30 large baskets of fish, which were sold to three buyers for 8*l*.

4729. But I am speaking particularly of these small sized fish?—For two or three seasons I have been catching a large number of small haddocks, but I am glad to say that this season there are very few indeed.

4730. You have found the haddocks this season of a full fair size?—Yes.

4731. How do you account for the long-line fishermen not catching them, if you can get plenty?—I account for it from the fact that they have not the same mode of fishing.

4732. Will not the haddocks take the bait?—The thing is this, the line is put out, and the fish have got to go to it, whereas we on the contrary go to the fish.

4733. But surely they ought to get some of them? And so they do I suppose.

4734. They tell us that they do not?—Facts and figures are stubborn things. If you saw them come on shore I think you would be of opinion that they get a good many.

4735. What is the average size of the haddocks which you get in the trawl?—About 12 inches long; some are larger and some smaller, but that is the average length.

4736. How many of them would go to the stone?—That I cannot tell.

4737. Are haddocks of that length what the line-fishermen would call small fish?—I do not know.

4738. Do you ever bring up any spawn in the trawl?—That is a question I do not understand unless I got a fish out of the water and took the roe out.

4739. You know what spawn is; you have seen it, I suppose?—I know what you call ray eggs, little black things.

4740. Do you get them in the trawl often?—No, not often.

4741. You do sometimes, I suppose?—When we get them, it is always a large catch of fish.

4742. Do you get them loose from the bottom?—No, not generally, I think.

4743. You think, I suppose, that the fish shoot them after they get into the trawl?—Yes, just so.

4744. Do you know what herring spawn is like?—No.

4745. You know what fishermen call spawn—a sort of gelatinous stuff—do you ever get that in your net?—I cannot say that I know what they call it.

4746. Have you ever taken trawl-fish into the market when the long-line fishermen have taken their fish there in competition with you; in West Hartlepool, for instance?—Yes.

4747. Did the fish that was brought in by the long-line fishermen sell better than yours?—I cannot say. You would be best able to get that information from the salesmen, I should think.

4748. Did you ever find the salesmen pass yours over for the sake of buying long-line fish?—No.

4749. Have any of your mates known them to do so?—That I cannot say.

4750. Have you any reason to know that it is a common thing to happen?—No, I do not know any such thing. I believe the salesmen who live by it are of another opinion, and show that they are by their actions.

4751 Do you know where the trawl-fish goes generaly?—Yes, to all parts of the kingdom.

4752 Do you hear of any complaints being made by the salesmen with respect to the gall bladder of

the trawl-fish being burst?—I never heard such a thing in my life.

4753. Are you in the habit of eating the trawl-fish?—Yes.

4754. And your smack's crew, I suppose, are in the habit of doing the same thing?—Yes.

4755. Did you ever find the fish bitter at all?—No, never.

4756. Were you ever seized with illness after eating it?—No.

4757. Did you ever know of cases of illness among the crew of the smack after eating it?—No.

4758. You have never seen any of the men taken very ill after eating trawl-fish?—No.

4759. Did you ever hear of such a thing?—No, sir.

4760. (*Mr. Caird.*) Did you ever heave any of the fish overboard?—There is a sort of fish that we call the boy's perquisites, which are sometimes thrown overboard. They are principally dabs and gurnets, not a marketable kind of fish. When they are brought on shore they are generally sold to the lower orders of people, and the produce divided among the boys. We never class them with the other fish. All the other fish that come on shore are sold to the salesmen.

4761. You do not heave them overboard at all?—No.

4762. They are always brought on shore and sold to somebody somewhere?—Yes, when there is a market for them; but when the market is glutted with herrings the people do not care much about haddocks and other white fish, but now that there are no herrings they are glad to have them.

4763. Do you find that the take of the trawl-boats is increasing or diminishing?—I should certainly not say that it was diminishing, judging by the catch last Monday night, for it was the largest quantity of fish brought on shore here that I ever saw.

4764. But taking one year with another, and not judging by the catch of one night, do you make as good a season's fishing on the whole now as you did when you first began?—Yes.

4765. Do you find as many fish on the ground which you go over as ever you did?—Yes.

4766. Then you think that the quantity of the fish is increasing, and not decreasing?—Always at all times of the year, in its season; and when the weather is good, we find the fish plentiful.

4767. What part of the south coast have you trawled upon before you came here?—On the North Foreland, on the ground round Rye bay, and off Yarmouth.

4768. Why did you leave those particular places to come to the North Sea?—Because the North Sea is so much more advantageous for my line of life.

4769. Are those places still being fished by trawl-boats?—They are.

4770. Do you know if they yield as much as they used to do when you fished over them?—Yes, and I know that they are still increasing the number of the trawl-boats.

4771. But you found it advantageous to come further north?—Yes.

4772. Because you can get larger takes of fish, I presume?—Yes, just so.

4773. And a good market for your fish?—Yes; it is a great fishing port, and a large market is Hull.

4774. Do you send fish at all to Grimsby?—It goes to Hull and Grimsby by the smack, and then by the train.

4775. You do not bring all your fish here then?—No, we leave here in a month or two's time.

4776. And then you go south to Hull?—And then we go south to Hull, and go out 60 or 100 miles.

4777. Do you go to the Dogger Bank?—No, it would hardly pay to go there. There is too much fish.

4778. Too much fish. What do you mean?—I mean that there is too much fish there, and that if we were all to go there we could not get a market for it.

4779. Because there is too much fish?—Yes.

4780. Will you be kind enough to explain that to us, for I really do not understand it?—The Dogger Bank literally swarms with haddock and plaice, and if we all fished there we could not get a price for the fish that we should bring in in our boats.

4781. Are haddocks and plaice not so profitable then?—It is the distance that we should have to go to get them that would make it unprofitable.

4782. Do you not go some distance for the winter fishing?—Yes, for winter fishing we do.

4783. As far as the Dogger Bank?—Further than that.

4784. Then it cannot be the difficulty of getting to market that prevents you from going to the Dogger Bank?—No, but there are no soles there, and that is our living mostly.

4785. They pay more for soles, I suppose?—Yes, and that is our chief living, the sole-fishing.

4786. Have you had long experience as a fisherman on the Dogger Bank, on the north coast, and on the east coast?—Yes, I have been 12 years master of a smack.

4787. Have you found that the take of fish in your trawl nets is increasing or diminishing on the whole?—I cannot say either the one way or the other.

4788. The takes are much about the same, are they?—Much about the same.

4789. Has the number of boats increased within the last few years; are they more or less in number?—They have been at a little bit of a stand-still, I think, for the last three or four years.

4790. Then the business has not been so profitable?—Not so profitable perhaps as it was three or four years ago.

4791. You told us that you sometimes trawled on the Dutch coast?—Yes.

4792. What boats did you meet with on the Dutch coast?—The London boats.

4793. Did you not meet with any of the Dutch boats?—Oh yes, swarms of them.

4794. And the French boats?—No; not French boats, but we did with the Ostend boats.

4795. Do the Ostend boats trawl in the same manner as you do?—Yes.

4796. And have they done so for many years?—Yes.

4797. Do you find as many fish on that coast as there used to be?—There has been no difference in any respect in my experience.

4798. Are there many Dutch trawling boats?—A very large quantity of them.

4799. Are they successful, generally speaking?—That I cannot tell; as soon as we get our proper quantity of fish we hoist sail and away to market.

4799*a*. Do you sell your fish in Holland or Belgium?—No.

4799*b*. You bring it to the markets here?—Yes, in ice cutters.

4800. (*Professor Huxley.*) You said just now that your business, the business of trawl-fishing, was not so profitable just now as it was three or four years ago?—No, it is not.

4801. What is the reason of that?—One reason is the very tempestuous weather we have had lately. One day we lost five smacks and all hands, and numbers of them broke their booms and lost their sails.

4802. Do you mean that the business has not been so profitable on account of unusual losses?—Yes, owing to the stormy weather.

4803. Or do you mean that the fishing business is not so profitable because the yield of the fish has fallen off both in size and quantity?—No, we could always catch as much fish as we wanted.

4804. The trawl will catch as much fish as ever, but the last year or two the weather has been such as to destroy the boats and the tackle?—It has.

4805. Do you expect that by-and-by as the losses are made good more capital will be invested in the fishing business?—Yes, they are still investing money in the fleet.

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4806. Supposing you had plenty of capital, would you invest it in trawl-boats?—Yes, sir.

4807. You yourself would invest money in trawl-boats?—Yes, because it is my trade.

4808. Do you think it would yield you a good return for the investment?—Certainly.

4809. (*Mr. Caird.*) Are any of the men paid by wages, or do they all get a share?—They all get a share, that is how the vessel is worked.

4810. They all share?—Yes, they all share, and nothing get nothing have.

4811. What will a man's share amount to on the average in a year?—It will amount on the average to from 1*l.* to 1*l.* 10*s.* per week.

4812. Is that taking the average of a whole season's fishing?—Taking the average of a whole twelvemonth through you mean, do you not?

4813. Yes?—Well, if a man does middling he makes about 30*s.* per week.

4814. Not more than that?—That is about the average.

4815. How many shares are there in a vessel?—Eight.

4816. How many men are there in the boat?—Three men and two boys.

4817. How many shares go to the men?—Each and gets one share and one eighth of another.

4818. How many does that make altogether; let me hear how those eight shares are divided?—Each man gets a share and an eighth. There is the skipper's two men and a boy. Out of this there is the vessel and the boy's money. Take the men's wages first: each man gets a share and one eighth out of the eight shares; the skipper gets a share and a quarter and half that again. That is the master's wages over that of the men, a quarter of a share.

4819. How many shares does the vessel itself get, does it get as much as the men?—I do not know, you must take it out of the figures.

4820. (*Professor Huxley.*) Each man gets one share and one eighth?—Yes.

4821. That is two and a quarter?—Yes.

4822. Then the skipper gets what?—A share and a quarter and half a quarter.

4823. That is altogether three shares and five eighths. Then what do the boys get?—What is left is for the vessel and the boys.

4824. Yes, but what does each boy get?—Three parts of a share.

4825. (*Mr. Caird.*) The boys are apprentices, I suppose?—Yes.

4826. And they represent the owner of the vessel in some respects. Do they take part of the owner's share?—No, the owner takes them and keeps them and looks upon them as his own children, and he takes their part of the share.

4827. So that about three and a half out of the eight shares goes to the men, and the rest to the ship and the apprentices?—Yes.

The witness withdrew.

W. Bartlett.

WILLIAM BARTLETT called and examined.

4828. (*Mr. Caird.*) Are you a trawl-fisherman?—Yes.

4829. How long have you been so?—For 30 years.

4830. Where do you hail from?—From Hull.

4831. Have you been 30 years in Hull?—No, in Hull and Torbay.

4832. How long have you been in Hull?—15 years.

4833. And 15 years you hailed from Torbay?—Yes, serving my time and all.

4834. During those 15 years that you were in Torbay did the trawl-vessels considerably increase in number?—Yes.

4835. And in size also?—Yes.

4836–7. And did the fish and the catchers of fish increase or diminish?—They increased.

4838. Were there many trawl boats at Hull when you first went there?—No, only 14 or 15.

4839. How many are there now?—They are 300 strong if you include Grimsby and Hull as one port.

4840. Did you include Grimsby also when you mentioned how many trawl-boats there were 15 years ago?—Yes.

4841. And has the take of the Hull boats, counting each boat or taking them together continued to be quite as good as the take of the small number of Hull boats was 15 years ago?—Better. We can prove that the takes are better.

4842. Do you make more money now than you did 15 years ago?—Yes.

4843. Is that on account of the greater price of the fish you catch now than you could obtain 15 years ago?—No, it is because we catch more fish.

4844. Then you don't find the fish dearer now than they were 15 years ago?—Not at all, it varies does the price of fish in the market.

4845. What may be the fair average catch of a trawl-boat at the present time?—I could tell you what I caught the other night, but one night does not make a year.

4846. What did you catch the other night?—Last Monday night I caught more fish on this ground than I ever caught before.

4847. But taking one year, taking this last year, for instance, and comparing it with the quantity of fish caught in one year, say ten years ago, would you say that you have an increased quantity of fish now as compared to what you had then?—Yes, we increase, go where we will, if you will allow us to explain it to you. On the Hartlepool ground, as upon every other ground, the oftener the smacks and the trawls go there the more fish they get, and for this reason; we compare the fish in the sea with the birds in the air, the farmer in the field with the fisherman in the sea. The farmer in the field ploughs the ground, and the birds in the air follow after to pick up the worms, and we can say safely too that wherever we go with our trawls we plough the ground at the bottom of the sea. The fish cannot live upon the bait of the long-line fisherman, but wherever we plough the ground with our trawls the fish always come there after the worms that come up from the ground at the bottom of the sea, just as the birds of the air come after the worms which the farmer ploughs up when he ploughs his fields.

4848. Do you find then that in passing over the same ground a second time you are able to get as many fish in a draught as you did before?—Yes, and oftentimes more.

4849. Have you never found in your experience that you exhaust the fish on a particular ground?—No.

4850. Not on any part of the coast?—We never go back exactly over the same piece of ground in trawling; probably we do not go within a quarter or half a mile because the tide and the wind will not allow us to do so.

4851. But you never noticed any decrease even when you did go nearly over the same piece of ground?—No.

4852. In the course of your experience as a trawl-fisherman have you found practically that while the fish are more abundant they are at least as large now as they used to be?—Yes, we have never seen such a thing in Hartlepool this summer as a small haddock at all. The fish buyers will prove that. You can have the fish buyers to answer for themselves. The fish caught this season are quite fit for any gentleman's table in England.

4853. Do you find when you draw up your trawl net that many of the fish are dead or seriously injured?—Sometimes they are.

4854. What proportion on the average should you think were dead or injured?—Well, at times we get our net down two or three hours and sometimes it is

down six hours. The shorter the time it is down the more live fish we have in the net when it comes up.

4855. But on the average what proportion of the whole number of fish taken would be dead or injured by the trawl ?—Sometimes there may be one-third, and at other times none at all. I have seen the trawl nets come up when there was not one dead fish in them.

4856. What do you do with the dead ones when they come up ?—They are just as good as if they were alive.

4857. Do you bring all you can on shore whether dead or alive or injured when they come up, or whether they are small or not ?—Yes, all of them come on shore. What we call injured is perhaps not what you call injured. If a fish should be very much bruised we throw it overboard, that is the only thing it is fit for, but if it is dead without being bruised it is as well as if it was alive.

4858. Is there a large proportion injured in the way you speak of ?—No, and if you will allow me to speak, the long-liners' fish are dead when they come on board, and even the herring himself before he comes out of the net. You are aware that it is not because the fish is dead that he is condemnable, for he is as good as ever he was.

4859. Do you ever bring up any spawn in your nets ?—No, I never saw such a thing.

4860. Not in the nets ?—No, and I will put it to yourself whether, if it is like what it is said to be, it could be brought up in the net. The spawn was compared by the fisherman here who spoke of it a little while ago to something like sago—I think I heard that name mentioned. Now I ask you, would sago hang about a net when it was washing about in the water ? Can any gentleman suppose that when it is proved that the trawl nets are in the water a long time, and all the trawl-men say they may be in the water one or two hours, or six hours, anything like sago would hold together in that net until it was hauled on board ?

4861. At what rate does the net go through the water ?—Sometimes as fast as the tide, and sometimes only a mile or two an hour.

4862. Do you go so fast that the drag would prevent the spawn adhering to the net ?—As I understand the spawn of fish is naturally slippery and would not hold, and I repeat again that spawn would not hang to the net or anything else when it is washing through the water. No man can show it to me. I have a vessel qualified for anything, and I will take any disinterested man on board my vessel for a week or a month, and show him all the ins and the outs of the fishing. He will see the fish brought up, he will see all these points himself, and everything belonging to the fishing.

4863. Do you ever find the long lines of the line fishermen brought up by your nets or injured ?—No, I have been told by the long-line fishermen that it will not hold on to their lines if there is a smart breeze.

4864. Have you never brought up their lines ?—No, I never did.

4865. Have you ever known the long-lines injured by the trawl nets ?—Yes, once, and then I paid the man for it.

4866. Never but once ?—Only once, and he came to me as the man who did it, and I gave him another line.

4867. Do you fish on the same ground as the long-line fishermen ?—Yes.

4868. Do you not know that the long-lines extend over a distance of two miles sometimes ?—I know that there is a good length of line sometimes. A man just now remarked that we could see the buoys four miles off—the buoys of the long-liners, but the long-liners' buoys are only about as large as a hat.

4869. Have you ever injured the long-lines ?—No, except that once.

4870. Do you think you could pass over them and not injure them ?—Yes, I think I could get my nets right over them without any injury to them. I will prove it to-morrow morning any ways. I will go out with the long-lines, and if there should be a breeze of wind I will take my nets over the long-liners' lines and not hurt one hook on them. I am quite prepared in that case also, that any disinterested man shall come on board my vessel and see that, with a breeze up and my nets down, I will go over a long-line without injuring it.

4871. Suppose you had not a breeze, what would happen then ?—Then I should not get where they were. My net would not go down without a breeze. I cannot trawl my net without a wind.

4872. If you saw the buoys on the long-line fishermen's lines could you change your course with sufficient rapidity to escape them, or at all events with sufficient rapidity to prevent any injury being done to them ?—Yes, and I would do so rather than do any man an injury.

4873. Even when it was blowing hard ?—Yes, and I may say that I believe it is the desire of the trawl fishermen generally not to hurt their fellow creatures who follow another mode of catching fish ; I know it is so in my case.

4874. (*Professor Huxley.*) You were talking about the size of the haddocks just now ; what do you call a small haddock ?—Well, I should think that a haddock half a foot long would be a small one.

4875. Have you not been in the habit of getting haddocks even smaller than that in your trawl ?—No, not so small as that.

4876. What should you say would be a full sized haddock ?—Well, that is rather a puzzle to me. I have seen haddocks as long as that (*measuring a space of* 18 *or* 20 *inches on the table with his hands*), but I should think about a foot or 14 inches would be the average size of a full-grown haddock.

4877. Do you get them abundantly ?—We do. I can show you clearly that what these men say is not correct, for any man who calls himself a fisherman can tell at once by looking at the mouth of a fish whether that fish has reached its full growth ; and any buyer can tell, so you do not want to go to any fisherman to inquire about that.

4878. We were talking about spawn just now. It is necessary to remark on that point that the description of fish spawn which has been given is not a correct or accurate description. The substance which has been described is not fish spawn. The spawn of a herring is a very firm substance indeed, is it not ?— I beg your pardon, I think not.

4880. What do you call the spawn of herring ?—True it is that when it is in the belly of the fish it is solid and firm, but when it is shed out into the water it is all of a slippery soft substance like water and glue. That you will find is the nature of herring spawn, and the spawn of every other fish. Near spawning time, and under certain circumstances, if you squeeze the fish it runs from them like water,

4881. Did you ever squeeze the spawn from a fish about spawning time into a bucket of a water ?—I suppose if you go into a herringer's boat you will be quite satisfied.

4882–3. But with regard to the firmness of the spawn, you are quite correct in stating that the spawn when it comes from the herring is quite soft and sticky, but if you had ever taken the trouble to let it run into a bucket of water, and let it be there for 12 hours, you would then find it firm and hard and as stiff as a bit of leather ; it would stick to the bottom if I turned the bucket upside down ?—I know perfectly well that it would be after that time, but it would be dead.

4884. Herring spawn, when it is shed on the ground, would, after it got hard, keep in your nets as well as fish would, would it not?—Well, all I can say is that I never saw any such thing in my life. There is another thing upon which, if you will allow me to speak, I wish to enlighten you. Our forefathers' day is gone ; we do not live in that day. We are a race of fishermen now who are trying to progress with the times. We are doing so, and we are trying to do it ; but the long-line fishermen cannot do it. We could

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agree very well at one time, some 10 or 12 or 14 years ago, and we can agree all the time the herring season lasts, but we cannot agree afterwards, because in the smaller boats how can the men go and get their living. It is impossible to get it in small boats. But if they could get the vessels that we get, and go to sea like we do, they would get a living. We do not destroy the fish. We can at any time go into a strange or distant fishing ground, and when we catch good marketable fish we can carry them to the best market. But they cannot do anything of the kind; they are obliged to fish upon their own ground, and cannot go anywhere else. Let them get large vessels as we do, and supply every market as we do. But the small boats will never do that. Depend upon it the old plan must and will eventually go out.

4885. You consider that the trawlers have succeeded by introducing new and improved machinery into the mode of catching fish?—Yes, and by so doing they have condemned the old system.

4886. Do you think that the effect of introducing new and improved machinery into the business of fishing is something like the effect produced by the introduction of machinery into cotton spinning?—Well, I do not know about that, but we had to condemn the old mode of fishing because we could not get a living at it, and beyond that our lives were not as safe as they are in the larger trawling vessels.

4887. Have you ever found that the fish when they came up in the trawl had any bad smell about them?—No.

4888. You have never noticed such a thing?—No, never.

4889. Have you ever eaten trawl-fish?—Yes, sir.

4890–1. Have your smack's crew eaten it also?—Yes, frequently.

4892. You never saw any of the men ill in consequence of eating it?—No. There is another point on which I wish to say a word. I never saw a dead man come up in a net, as was said just now.

4893. Did you ever hear of such a thing as a dead body being brought up by the trawlers in their nets?—Well, there may have been a part of a dead man brought up. I think I have heard of that.

4894. Part of a dead man, you say, was brought up?—Yes, and I have known of a dead man coming up with the hook on a long line as well.

4895. A dead man could not take hold of a hook, could he; how was that?—Why, a hook could catch in a man's fingers or arms or other parts of the body. In fact, I saw one come up, so that a dead man is just as liable to get hold of a hook as he is to be brought up in a trawl net.

4896–7. You do not think that it is a common occurrence?—No, not one man out of a hundred could ever say that they saw a dead man in the trawl.

The witness withdrew.

G. Pearce.

GEORGE PEARCE called and examined.

4898. (*Mr. Caird.*) You are a trawl-fisherman, I believe?—Yes.

4899–900. What part of the coast do you hail from?—From the port of Hull.

4901. How many years have you been engaged in fishing from Hull?—Eighteen years.

4902. What was the number of trawl-boats hailing from Hull at the time you began?—About 40.

4903. Do you know what the number may be now? Something like 300.

4904. Are they larger vessels now than they used to be?—Yes, considerably larger.

4905. Do you make as good a living now as you did then by trawl-fishing?—Equally as good.

4906. Do you make a better living, do you think?—Yes, of the two I think we do.

4907. Has not the price of fish very much increased during the last 18 years?—No, it has rather diminished if anything.

4908. Do you not get so much for codfish now as you did 18 years ago?—No, we find fish very cheap indeed, and we have frequently left one market and taken our fish to another, in consequence of the market being so bad, there being so much fish there; and we have found many times that when we have gone to another things have been no better, in consequence of the quantity of fish which has been caught, so that we have been obliged to get what we could for them.

4909. Can you tell us from your recollection what the price of fish was 18 years ago in Hull?—About that time it might run from 10*s.* to 12*s.* a pot. Sometimes it was more, and sometimes less.

4910. What would it be on the average 18 years ago?—Perhaps it might be 14*s.* a pot.

4911. What might it be 10 years ago?—Something about the same price, but in bad weather the price rises very much. I have known it as high as 2*l.* a pot.

4912. What did it average last year?—From 10*s.* to 14*s.* a pot. Sometimes more, and sometimes less.

4913. So that the average price now is just about the same as it was 18 years ago?—Yes.

4914. You do not then attribute your better circumstances so much to any increase in the price of the fish as to an increase in the quantity of fish that you bring on shore?—Yes; for instance, in former years when we first went trawling, such fish as haddock and plaice were very little thought of. When I first went out we used to get a quantity of live plaice, and the skipper said, "Boys, heave them overboard." I was astonished, but the fact was there was not any market for them. Now, however, everything is sent to market but the very small fish.

4915. Now you keep more fish than you used to do?—Yes, and more money is made a considerable deal than used to be made then.

4916. The only fish now thrown overboard are the fish that are not marketable?—No, not any, except what my friend spoke of, such as gurnet and dab.

4917. Are they not given to the apprentices, now?—They are when we come in every day, but when we go out of Hull we go out for five or six weeks, and what we catch in the night we put into baskets, and put the baskets on board other smacks, and they take them on shore for 1*s.* a basket. That has been the reason why so many fish get into the manure houses. There were 50 manure houses formerly as a receptacle for small and bruised fish, and I can state that there never was a small fish of any kind put into the manure houses without its having been condemned in consequence of the bad weather. There are many times when we take the fish out at sea sometimes 120 or 140 miles off in the Silver Pits. Even when the weather seems favourable I have been four or five days away and never expected to get to Hull again. The consequence is that the fish have been condemned and used for manure.

4918. But when you are far out at sea and have to send the fish home, you are not in the habit of sending home the fish that are not marketable?—Only gurnets and dabs. We never have done so with respect to haddocks, which is the chief fish we catch at such times.

4919. In bringing up the trawl what quantity of the fish in the trawl net are usually injured?—It all depends upon the weather. If I have had a trawl in the water as long as 10 hours, and sometimes I could not get it out for the weather sooner, we should have a good many injured and dead, on account of the washing about in the water. Sometimes we have it down three, four, five, and six hours, but we generally consider six hours is a fair haul. There are sometimes as much as one third of the fish dead or injured. There may be more or less, but in no case is the fish condemnable when they come up in the net.

4920. Are they never so much injured as to be unfit for food?—No, I think not.

4921. Then they are all marketable provided you can get on shore while the fish will keep good?—Yes, and as a general rule there is no such thing as having bad fish brought on shore, because we do not go off above nine or 10 miles. We haul up in the morning, and have the fish ashore the same day.

4922. Do you ever have any spawn brought up in your net?—No; I do not know what the meaning of spawn is, to see it in the net. I have heard of 40,000 tons of spawn being destroyed. I can only say that I have held what they call the spawn in my hands, and I certainly do not think that that kind of stuff would keep in the nets when they were going through the water.

4923. Do you agree with the previous witness that the fishing grounds you frequent yield as much fish as they formerly did?—Yes.

4924. And that you are not impoverishing the ground by going daily to the same place?—No; I got last night 200 stone of haddocks.

4925. Are they as good in respect to size as they used to be?—Yes; they are much larger than those that were caught last year.

4926. Have you caught many cod?—No.

4927. Do you catch many turbot?—No. I am sorry to say we have been six or seven weeks and have not had 10 turbots.

4928. What is the reason that you do not catch them?—I really do not know, except it is that the Hartlepool men catch them in the nights, and the smacks come and take them away to London.

4929. They said they used to get them some years ago, but do not now?—All that I know is that we never catch any quantity of turbot in the trawls. We may sometimes catch two or three. I should like to see one or two now and then. It make's a morning's work look a little better sometimes than it would otherwise do. With regard to the turbot at the mouth of the Tees, my friend there behind catches baskets and baskets full of turbots not larger than plaice, and little smelts, and brill.

4930. How does he catch them?—By little boats and trawls; some of the little boats keep small trawls on board.

4931. How do you know that?—The fish buyers tell me so.

4932. Are any of those fish buyers here to-day?—I saw one of them just now in my house. I am sorry to say that he was in a sad condition last year from these men refusing to let him have fish in the winter because he bought smack-fish; there are others now in this place who have continual orders for fish but they must not buy smack-fish.

4933. Why must they not buy smack-fish; these people you say have orders?—Yes.

4934. Who do they get their orders from?—From those who supply the London market and the Manchester and Leeds markets.

4935. Do they not want to buy the smack-fish?—Yes, they want to buy the smack-fish, but they cannot do so, because if they buy the smack-fish the other fishermen will not let them have any of their fish in the winter season when there are no smack-fish here; it is nothing in the world but a bad feeling.

4936. (*Professor Huxley.*) Did you ever get a dead man brought up in your trawl?—No, I never did.

4937. Did you ever know of any one who did?—Yes, I think I have heard of one who did, but I forget his name.

4938. Have you ever in your experience injured the lines of the long-line fishermen?—Never.

4939. Can you well help coming across their lines sometimes?—No, I think my friends shoot their lines very early in the morning, and consequently they have no light; we may be going along at the same time not very far off, and I do not see how we can very well avoid them; in the day we can, but I do not see how we can in the night. I don't see that that has anything to do with the trawling.

4940. No, that is quite true, they are two entirely different and distinct questions, and I will ask you about both. Did you ever notice that the fish had a bad smell when they came up?—No.

4941. You do not think that the trawling gives them a bad smell?—No, my friend has stated that the trawl-fish would not keep so long as the line-fish, but he is quite mistaken, for I have kept them longer. I will tell you the reason why they will keep longer; it is because the slime on the line-fish makes them go sooner, whereas in the trawl-fish the slime is washed off; that is the evidence of the buyers.

4942. Your fish commonly goes to Manchester and other markets, does it not?—Yes.

4943. Did you ever hear any complaints from the buyers that the trawl-fish would not keep?—No, never.

4944. Have you ever brought fish to market in any place where long-line fishermen bring their fish?—Yes.

4945. Where?—I was at Sunderland three weeks ago, and I read a statement in Mr. Crick's writing that the skate was very scarce. I can tell you what occurred to me. I was off the Scotch coast managing some fishing smacks on the ground there, unfortunately we caught very little; my brother mates caught only one, and we caught four or five skate. We did not land at any Scotch fishing port, but we landed at Sunderland on Saturday morning. It appears I asked too much for the skate. You know we are sometimes like Jews. They said, "Don't talk like that, we have "had so many skate this year that they have been "almost given away."

4946. When did you catch the skate?—On Friday night. Well I asked some of the men there and they said that there were so many skate caught and brought to Sunderland that they were scarcely worth anything.

4947. Where were those skate caught that were taken to Sunderland?—They were catched on the Dogger Bank. You will have evidence to show that the hook-and-line boats get quantities of skate.

4948. I want to know whether you have been in the habit of taking your fish to a port where the fish were taken which were caught by the long-line fishermen and where consequently they competed with you?—Yes.

4949. Where have you done that?—At Hull.

4950. And did you find that you could get as good a price for your trawl-fish as the long-line fishermen could get for their fish?—Yes.

4951. Have you never had your fish refused in consequence of those which were offered in competition with them being long-line fish?—Never, if our fish are in good order. If we get there before our fish is bad we find that they have quite as good a chance of selling as any. I do not know what England would do if they had only to depend upon the long-line fish.

4952. Have you had any complaints made by the buyers of your fish that the gall bladders were burst?—No.

4953. Do you gut your fish on board?—Yes, sometimes, and one may sometimes burst the gall bladder if he does not understand the proper mode of gutting.

4954. But the gall bladder will not burst in any fish before they are gutted?—No.

4955. Have you never seen a fish stained green in consequence of the bursting of the gall bladder?—No.

4956. Have you often eaten trawl-fish?—Yes, many and many a time, and so have my crew also.

4957. Have you never suffered from illness in consequence? We are informed that it is unwholesome?—No, I never suffered the slightest illness from eating it.

4958. Do you know who buys the small fish?—Young women and lads buy it, and go hawking it about from door to door.

4959. Have you a good market for it?—Yes, it fetches from 1*s.* 6*d.* to 2*s.* per hamper.

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4960. Is there generally a pretty good market for it?—Yes, at the time that the herrings are not about there is, but when there is a great quantity of herrings about the people do not care for it.

4961. But at the time when there are no herrings about there is a pretty good market for it?—Yes.

4962. When the herrings are about, are they as ready to buy as they are before?—No. This morning out of 20 hampers of fish we had only two small; that is all we had out of the lot.

4963. Were they all sold?—Yes.

4964. Would the poor people who buy these small fish be able to obtain fish at all if the small fish were not brought to them?—It is according to the weather. If my friends the liners cannot get in then of course they would have no fish at all if it were not for the trawled fish.

4964*a*. But the better kind of trawled fish is rather dear, is it not?—It depends upon the weather.

4965. Is the trawled fish cheaper?—Yes, it always goes cheaper.

4966. If they could not get these small fish, would they be able to buy the larger fish?—No, the small buyers have not sufficient capital to enable them to speculate in the large fish.

4967. Then they would not buy fish at all?—No. As regards destroying the small fish, I have a man who sails with me who lived at Withernsea. He says that they frequently caught 20 stone of fish on a line, and that 10 of it was small. I mentioned that to a fish buyer at Hartlepool, and he said that there were sometimes more small than that. He said that the present people caught a great deal more small fish than they did before. Like the disciples of old, we cast in our nets and we gather what we can. I can make nothing of this cry against the trawlers, except that it is a nasty bad feeling they have among the line-fishermen.

The witness withdrew.

JOHN HARRISON called and examined.

J. Harrison.

4968–9. (*Mr. Caird.*) Are you a fishmonger?—Yes.

4970. Have you long been a buyer of fish?—It is now 14 years since I commenced for myself.

4971. Do you ever buy any trawled fish?—Yes.

4972. Have you been in the habit of buying it regularly?—Yes, until this year.

4973. You have bought none this year?—No.

4974. Have you any complaints to make of the quality of the trawled fish?—I have just given to that gentleman (*the secretary*) the letters which I received from the parties to whom the fish was sent.

4975. Three letters have been put in from which it would appear that some fish that you sent to Newcastle at different dates was condemned as being unfit for human food?—Yes.

4976. Was it trawled fish?—Yes.

4977. Has it ever happened that you have sent any fish caught by line that was equally condemned?—No, never.

4978. Were the fish in a bad state when you saw them?—The smack was in the day before I bought the fish and sent it away. I hardly considered that it was bad, but those are the letters that I got respecting it.

4979. Had it been stormy weather?—No, it was close weather, and the smack was in the day before.

4980. Then they had been kept overnight?—I sent them the next morning. The smack was in the day before; I bought them the day before, and sent them away the next morning to Newcastle.

4981. It is not unusual, is it, if fish is kept for a time, that it should become unfit for human food?—It ought not to turn bad in one day. The fish caught one day and sent away the next ought to be good.

4982. Have you bought line-fish and trawl-fish at the same time?—Yes.

4982*a*. Have you made any distinction in the price paid for line-fish and trawl-fish, if equally fresh?—Yes, there is a distinction in the price. Sometimes we would buy two or three cobles of fish and divide them among the customers.

4983. You have not found that the customers have made any complaints of the mixture?—Sometimes they have.

4984. But they were so little distinguishable that you thought you might do that?—Sometimes they have been rather worse than at others. Sometimes they have been alive, as the saying is.

4985. When they are alive, are they as good as the line-fish?—Of course they ought to be.

4986. Is there any difference?—There should not be any difference.

4987. Is the line-fish alive when it is brought ashore?—Yes, part of it.

4988. Is a large proportion of it alive?—No, not as a general thing, unless it is plaice or soles. With regard to the white fish, the cod, haddock, or such like, it is very seldom that they are. We may have an odd one or two alive sometimes.

4989. (*Professor Huxley.*) Do you mean that the trawl-fish when brought ashore are commonly dead and unfit for food?—No; I have seen them come on shore very fresh indeed, but sometimes I have seen them brought on shore very bad indeed.

4990. Have you on any other occasion sent trawl-fish to the market and had it rejected, except in the three cases you have brought under our notice?—I have sometimes sent fish and had it found fault with, but they have always paid for it except in these cases.

4991. Why was it found fault with?—They thought it was rather old. They said they would prefer coble fish if they could get it.

4992. Is that because it had been kept for some time?—Perhaps it may have been kept a day or two before the trawlers came in.

4993. Suppose there came ashore trawled fish and hooked fish, caught at the same time, do you think that there would be any difference in the length of time those fish would keep?—Yes.

4994. Which would keep the longest?—The hooked fish of course.

4995. Why would it keep longer than the trawled fish?—The hooked fish bleed, but the trawl fish is bruised and knocked about, and never looks so well as the hooked fish.

4996. Is that so; have you tried the experiment?—Yes; I know the difference between hooked fish and trawled fish, and I know that hooked fish will keep longer than the other.

4997. Have you had fish which you knew had been caught at the same time, and have you kept them and found that the trawled fish became bad sooner than the hooked fish?—The trawlers have gone off the same night as the line-fishermen, and I have bought fish of both the next morning, and have found that there was a great difference.

4998. How much difference?—Perhaps there might be a day.

4999. A day's difference?—I think that there might be a day's difference.

5000. Have you often observed that?—Yes, many a time.

5001. (*Mr. Caird.*) During the time they are at the herring fishery is there a supply of white fish other than herrings brought in by the line-fishermen?—Sometimes a coble will go off; perhaps one or two will, and they will come in with a few haddock.

5002. But they do not as a practice follow the line-fishing at the same time as the herring-fishing?—No, only a few old men will do it.

5003. Do the trawlers bring white fish ashore while the herring-fishing is going on?—Yes.

5004. Then, notwithstanding that the line-fishermen

do not go to the white-fishing while the herring-fishing is going on, the market is still supplied?—Yes, the market at West Hartlepool is. We should not get much white fish unless it were a few mackerel or soles otherwise. We have a few soles brought in in the small cobles.

The witness withdrew.

JOHN HYSLOP BELL called and examined.

5005. (*Professor Huxley.*) Are you acquainted, Mr. Bell, with the history of the circumstances to which a fisherman alluded in his evidence to-day in reference to the dispute with the Tees Conservancy Commissioners?—I was not present this morning when the statement was made, but I was living in the district at the time the facts transpired, and I was familiarly acquainted with them.

5006. Will you be kind enough to tell us what the circumstances were?—About the end of October 1859 a placard was circulated in this district intimating that the Tees Conservancy Commissioners had acquired parliamentary powers by which they had become the sole proprietors of the fishing and the rights of fishing in the River Tees. It also defined the boundaries of the River Tees by a boundary different from that which had been popularly understood, fixing it at some distance seaward. The placard further stated that from and after a day specified any person fishing in the River Tees without a special licence from the Tees Conservancy Commissioners would subject himself to particular penalties. Reference was also made to an Act of Parliament passed in the previous year as the authority for these regulations. On referring to that Act I found that it was a private bill which gave authority to the Tees Conservancy Commissioners to purchase all the rights of the fishery or fishing in the River Tees by agreement or compulsorily. A schedule was attached to the Act which specified the rights of the fishery that had to be purchased by agreement, but there was no specification contained in the Act as to the rights that were to be purchased compulsorily. This placard, which was issued in October 1859 was in reality the first intimation to the public that the Tees Conservancy Commissioners were assuming themselves to be the proprietors under the Act of the public rights in connexion with the fishery.

5007. Had the Conservancy Commissioners made no proposition to the fishermen here to induce them to give up their rights of fishing?—None whatever. The placard also stated that a certain form of licence would be granted, and on referring to the form, a copy of which I will put in, I found that the licence was in reality a surrender of rights. It was not a licence at all, but a promise from that time on the part of the fishermen to surrender their rights. The amount to be charged for those licences was generally very small, but had the fishermen purchased them they could not have gone to the fishery again without purchasing a right they had surrendered. Attention was drawn to the subject, and several public bodies undertook to defend the fishermen from what they regarded as an imposition, while several legal gentlemen undertook to protect their rights gratuitously. The next step that was taken by the Tees Conservancy Commissioners was the passing of certain byelaws which they had power to make. In one of these an attempt was made to establish a licence, certain of the byelaws being definitions and assumptions based upon the surrender of the fishermen's rights. The passing of these byelaws was opposed before Mr. Justice Williams, who struck out every one of them that contained such an assumption in it, or described the Tees Conservancy Commissioners as the proprietors of the rights of fishing. Perhaps I may be allowed to explain that the reason this was of importance to Hartlepool was that the Hartlepool fishermen had been in the habit for a long time of resorting to the River Tees for mussels to use as bait. The corporation of Hartlepool were originally the proprietors of the harbour under a charter from King John, and they found, under a charter subsequently granted by Queen Elizabeth, that a certain place called "Black Shore" at the mouth of the Tees (which derived its name from the fact that it was black with mussels) was a part of the ancient port. On that ground, when the Tees Conservancy Commissioners gave notice last November of their intention to introduce a bill into Parliament to enable them to purchase all the rights of fishing in the River Tees, and when they specially named in the bill they introduced that they wished to buy prescriptive rights, the corporation gave notice of opposition. The ground upon which they did that was that they possessed a prescriptive right which had not been terminated by any subsequent legislation. The result was that the Tees Conservancy Commissioners at one stage in the progress of their bill in Parliament, either immediately before or immediately after the second reading of the bill, withdrew all the fishery clauses, so that at the present time the question stands in this position: The Act of Parliament upon which the Tees Conservancy Commissioners based their claims passed in 1858; it was referred to in the placard issued in October 1859 as containing penal enactments against the fishermen in this neighbourhood who were in the habit of resorting to the Tees for bait, and clauses giving the Conservancy Commissioners power to impose penal restrictions upon the fishermen when pursuing their ordinary course of employment; and yet the fishermen, having discovered that the claims of the Commissioners were a mere assumption, and fortified by the decision of Mr. Justice Williams on the byelaws and by the decision of the Commissioners themselves not to press the fishery clauses introduced in their bill of this year, are daily breaking a law which is nugatory.

5008. If the Act of Parliament had already given to the Tees Conservancy Commissioners the powers they claimed how is it that they felt it necessary to press the matter further before Parliament?—The Act gives the Commissioners power to purchase by agreement or compulsorily. On referring to the Act it was clearly seen that they had only acquired the right to purchase, and had they succeeded in inducing the fishermen to purchase licences from them the fishermen in point of fact instead of buying would have been sold.

5009. There are two questions involved in the matter, so far as I understand it. In the first place there is a doubt as to the propriety of the measures taken to secure the transference of the rights of the fishermen, and the second point is whether the regulations laid down by the Commissioners were in themselves hurtful or not?—Quite so.

5010. Are you acquainted with the regulations they attempted to lay down?—The fishermen of this place were themselves of opinion that they would no longer be able to get bait if the regulations drawn up by the Conservancy Commissioners were enforced.

5011. One of the fishermen stated to us in his evidence this morning that in his belief what was required of them was that they should pay 1*l.* a year for a licence, and that certain regulations should be enforced to prevent them from taking mussels less than a certain size?—That was one part of the regulations. Another was that the fishermen should not raise mussels of any kind except at particular times and from particular situations, and that such times and situations should not be settled for the whole season beforehand, but should be defined arbitrarily by bailiffs so be appointed by the Tees Conservancy Commissioners and in their discretion. The result would have been that if the bailiff wished to favour the fishermen of any particular locality, or wished to make a private fishing for the benefit of the river and send fish off to the market in London themselves, as a means of supplementing the revenues of the river,

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of course they could have done so and could virtually have excluded all other fishermen from the place.

5012. Then I understand you to say that the regulations which the Tees Conservancy Commissioners were desirous of enforcing were partly to keep up the supply of bait, and were partly in the nature of commercial restrictions?—Yes, just so.

5013. As far as the regulations in reference to keeping up a supply of bait are concerned, do you think they were unwise or inexpedient? Take, for instance, the regulation that no mussel should be taken under a certain size?—I have not sufficient practical knowledge upon a subject of that sort to enable me to answer the question, but I have been informed by the fishermen that they would never think of taking mussels under the size fixed by the Commissioners as they would be of no use to them.

5014. In the course of our inquiry we have had great complaints that mussel beds have been unwisely and wastefully fished, particularly by strangers, but of course that is a question altogether apart from the legality of the proceedings of the Tees Conservancy Commissioners?—Quite so.

5015. Then in reality the whole question is in abeyance at present?—Yes, but the letter of the law still exists.

5016. But it is permissive?—Yes, that is all.

5017. It gives the Tees Conservancy Commissioners the power of purchasing if they can?—Yes.

5018. Then in reality the fishermen are fishing without breaking the law because the conditions of the Act of Parliament have never been complied with by the Commissioners themselves?—In one respect I believe they are breaking the law.

5019. In what way?—The Tees Conservancy Commissioners have carried out some of the other provisions of the Act which enabled them to appoint bailiffs and every act of disobedience on the part of the fishermen to the orders of these bailiffs is a violation of the Act of Parliament.

5020. But the Act could give no power either to the Commissioners or to their bailiffs unless it was fully carried out?—No, except inconsistently. It gives the Commissioners power to appoint an officer to do a particular duty and if there are no duties to discharge then of course there is an inconsistency.

5021. If the Commissioners themselves have not completed their contract then of course their bailiffs can have no power and that part of the Act becomes void?—I certainly think so.

5022. And the fishermen are left at liberty as the Act stands?—Yes.

The witness withdrew.

(*Mr. Caird.*) We have now examined the whole of the witnesses whose names appear upon the list handed in. If there is any fisherman present who wishes to add anything to what has been said, or is desirous of contradicting any of the evidence given to us, we shall be glad to hear him.

There was no response, and the inquiry was adjourned to Wednesday, September 30, at Staithes.

Staithes, Yorkshire, Wednesday, 30th September 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

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JAMES FELL called and examined.

5023. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, I have been a fisherman for 40 years.

5024. What are the principal kinds of fish you find on this coast?—There are a great many different kinds of fish got here.

5025. Which kinds do you find chiefly profitable to you as a fisherman?—Well I should say herring, haddock, cod, ling, halibut, skate, and turbot.

5026. Is the herring fishery or the other white fishery the most profitable to you on the whole?—We fish mostly for the other sort of fish. We have a season for the herring-fishing. We have just closed the inside fishing for the herring season.

5027. The other white-fishing lasts longer?—Yes.

5028. Do you find that on the whole it yields an amount of money in the course of a year larger than you obtain during the short season the herring-fishing lasts?—Yes; the long-line fishing with many people lasts all the year round.

5029. In the course of your experience as a long-line fisherman, have you observed whether the catch,—the average catch,—of a boat is increasing or diminishing?—It has greatly diminished in my time.

5030. Can you compare it with any time, say 10 or 20 years back?—I don't think there is one fourth or one fifth the catch now compared with what was the catch 10 or 15 years ago.

5031. How is that; are the same number of boats employed?—I have known 14 or 15 boats fish from this place when I was young, and now there are 16 or 17.

5032. Then during your time there has only been an increase of three boats?—Yes, but before my time there were 18 boats. I have heard old men talk of a time when there were 18 boats.

5033. The number of boats then has been pretty stationary?—Yes, sometimes we have had rather more than at others.

5034. Are the boats manned by the same number of people who used to man them?—Yes.

5035. Are they about the same size?—Yes, perhaps a little larger.

5036. Do they carry more lines, or do they carry about the same number of lines?—About the same.

5037. Speaking of 20 years ago, what would you consider an average catch of fish then?—In how long?

5038. In one day's fishing say?—Well, sometimes we got a good catch, and sometimes we got very little.

5039. Take a month's catch?—We generally go for a week.

5040. Then 20 years ago what would you consider an average catch of fish for a week?—I have been going for a week and I have brought 700 or 800 cod ashore, a ton of halibut, and a great number of skate and haddocks.

5041. Has that been in one week?—Yes, and other boats have got the same number as mine. Now we can hardly get any fish on the same ground close to the Dogger. The smacks are there now, and they have so trawled over the ground that they have ruined everything about there, where we used to get the most fish; where, as I have just told you, we have been catching a ton of halibut, besides other fish; but now we have quite abandoned the ground upon which we got that quantity, as we find we can't get any at all.

5042. Then do you fish on different ground now?—Yes, we were obliged to leave that ground because we could catch no fish. If we did happen to be fishing there the trawlers came amongst us and would take

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all our lines away. There were so many there that we could not keep clear of them.

5043. Then I understand you to say that you don't fish now where you did 20 years ago?—No, we go now more to the northward.

5044. Then you have changed your ground altogether?—We never go where we used to catch so much fish.

5045. Twenty years ago you were in the habit of going there?—Yes, all the fish we caught came from there then. All the salt fish we cured came from there then.

5046. You have told us how much you could catch 20 years ago, as a long-line fisherman, in a week, now tell us how much you are able to catch now?—I never see a fisherman get more than eight or nine score of cod now, while we use to get 600 or 700 frequently.

5047. How is it with regard to other fish?—There has been a trifling falling off with regard to other fish, but nothing in comparison to the falling off in the catch of cod.

5048. With regard to the price paid for fish now as compared with what it was formerly, what would a week's fishing be worth 20 years ago; what would be the value of your fish?—We sold it for various prices. It is hard to tell what the average would be, but fish was then not one fourth part of the price it is now.

5049. Can you not tell us how much a week's fishing on the average would give you 20 years ago in money?—Do you mean a good week?

5050. No, take a fair average week?—We used when we had got a good catch to get 20*l.* We used to sell the boat's load for 20*l.* a week.

5051. What would you get for an ordinary week's fishing?—From 10*l.* to 12*l.* or 15*l.*

5052. What would you make out of an ordinary week's fishing now?—About 15*l.* or 20*l.* when we get a good middling catch.

5053. Then there is not much difference in the value of a week's fishing to the fisherman compared with what it used to be?—The fish sell so much higher now.

5054. The difference is in the increase of price; then the loss falls on the public; the public have to pay more for their fish?—Yes.

5055. Has the falling off you spoke of in the quantity of the fish been in any particular kind, or has it been general?—It has been general among all sorts of fish, I believe.

5056. Has there been any falling off in the size of the fish as well as in the quantity?—Yes, they are never so big as they used to be.

5057. You were in the habit of getting larger cod than you do now?—Yes, they were larger a good deal.

5058. What would be the average weight of cod 20 years ago?—They were larger than they now are. I have seen cods weighing 4 stones brought ashore; but we very rarely see any like that now.

5059. With regard to haddocks, was the size of the haddock larger then than it is now?—They have greatly diminished in size. The trawlers have cleared millions of them away; they have destroyed the haddock more than any other fish.

5060. Is there any fish more than another that you have ceased to catch on this cost?—Yes, if there be any at all, I should say it is the haddock.

5061. Is this a good place for turbot-fishing?—Yes, it is a good place for all sorts of fish.

5062. Do you get as many turbots as you used to get?—We get a deal of halibut.

5063. You still get a deal of halibut?—Yes, but not one fourth we used to get.

5064. What about the turbot?—When we shoot bratt nets we get a good few, but not one quarter the quantity we used to get. I have known 7 score got in one haul. Now they reckon 14, 15, or 20 a great haul.

5065. Is there any particular part of this ground upon which you find the quantity of fish has greatly diminished?—Do you mean inside or outside?

5066. Both.—Well, at the outside where we used to get so much there is none now. I mean off the Dogger Bank. With regard to the inside fishing, I have been catching a thousand haddocks a day, but now we can't get above 30 or 40. Formerly, in a small boat, I have known them bring ashore from 800 to 1000 in the course of an hour's fishing.

5067. Is that what you call "inside fishing"?—Yes; now they will not get more than 30 or 40 on the same ground.

5068. Speaking of the ground outside, do you refer to the Dogger Bank?—Yes, where smacks go now.

5069. Were you in the habit of going in your open boats to the Dogger?—No, we always went there in decked boats.

5070–1. Have you many decked boats here?—Yes, you saw one come in to-day.

5072. How many of these decked boats have you?—Seventeen.

5073. Do I understand you to say that they go to the Dogger Bank now?—No.

5074. Why not?—Because the smacks have ruined the ground; they would catch nothing if they went.

5075. Then are there big boats in the long-line fishing?—Yes, they start fishing in February and they continue until July with the long-line.

5076. But you don't go to the Dogger Bank now?—No; at the edge of the Dogger where fish used to be so plentiful there is nothing to catch with the long-line now.

5077. What do you attribute the falling off to?—To nothing but the smacks.

5078. How do they do any injury?—They kill all the young spawn.

5079. Have you ever seen a trawl drawn up to the surface?—No, but I have heard the smack men talk of it.

5080. What do you attribute the falling off in the inside fishing to?—To the smacks; because the fish breed outside, and they can't come in.

5081. Do smacks come inside?—Yes, close to Staithes, within half a mile; they come where we got the haddocks, and we can't get any since they came.

5082. Do they do you any injury by getting foul of your lines?—They would do if they came in contact with them; but we generally get our lines out when we see them coming.

5083. Then you don't complain of the damage done to your lines by the smacks?—No, but at Scarborough and Filey they dare not shoot their lines for them.

5084. Have you altered your mode of fishing during the last 30 or 40 years?—No, but our gear is superior to what it used to be, and still we catch less fish.

5085. In what way is it superior?—Our nets and lines are finer.

5086. How long is it since you noticed this particular decline in the fishing?—About 20 years ago. We never noticed any falling off in the North Sea till the trawlers came.

5087–8. Has the catch of fish been gradually decreasing?—It has been gradually getting worse during these last 30 years.

5089. Is it worse this year than it was last?—Yes, and it will wear out altogether if these smacks are not stopped.

5090. But have you not variable seasons in fishing?—Not on the ground-fishing—what we call "line-fishing."

5091. What sort of bait do you use for your lines?—Generally mussels or flitters.

5092. Have you a supply in this neighbourhood?—No.

5093. Where do you obtain them?—We get them from Boston Deeps.

5094. You have none on your own shores?—No.

5095. Does it cost you much in a season to obtain bait?—We pay 9*d.* and 10*d.* a basket. We call a bushel a basket.

5096. How many will a boat use in the course of a year?—Each boat uses a great many mussels in the

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course of a year. The big boats have six men, and the small ones have three.

5097. Is the price of mussels increasing?—No. A man will use 3*l.* or 4*l.* worth.

5098. Do you mean a boat or a man?—A man.

5099. Then how many men are there in a boat?—Six men at a time.

5100. Then that would be 18*l.* or 24*l.* for bait?—Yes.

5101. Has the price increased or diminished?—It is much about the same.

5102. Do you find you have a sufficient supply for all your wants?—Yes, we get plenty when the water permits.

5103. You don't suffer any hardship in your fishing for want of bait?—Sometimes we do when we can't get them. Occasionally the weather will not permit the boats to come here.

5104. Are you deprived altogether of your fishing then?—No, we get limpets on the rocks, and we use them, but they are not so good as mussels.

5105. Is there anything else but the smacks to which you attribute the falling of in the fishing here?—No, I have never thought of anything else.

5106. Is there any ballast laid off this shore in any way?—No. I have been catching a thousand head of cod myself in the course of a morning within sight of Staithes. Now we seldom see more than two or three score brought ashore. There has been more this morning than we have had for some years. I have been catching a thousand head, and there have been men who have been catching more than that in the big boats.

5107. Is there a good fishing for crabs and lobsters here?—Yes.

5108. Is it increasing or diminishing?–Diminishing.

5109. In what kind of shell-fish is the diminution most noticeable?—In both kinds. There are not as many as there used to be by a great way.

5110. What do you think is the cause of that?—I believe that the smacks kill everything, and I suppose that they kill shell-fish too.

5111. Are there any more fishermen engaged in this village in fishing crabs and lobsters than there used to be 20 years ago?—Yes, I believe there are more than there were 20 years ago, but there is not half the quantity of lobsters and crabs caught that there used to be then.

5112. Then the quantity of fish caught has not been proportionate to the increased number of men?—No, there are not half the crabs and lobsters caught that there used to be.

5113. With regard to the herring fishery, do you find it has been increasing or diminishing?—They are curious to judge. Sometimes there will be a middling season and sometimes a bad one. They fly on the top of the water. They are different altogether from ground-fish.

5114. But has the herring-fishing diminished?—There are not one quarter the number of herrings that there used to be. We have much better gear to catch them with than we had formerly. Notwithstanding that we can't catch anything like the same quantity now.

5115. Are there the same number of boats in the herring-fishing that there used to be 20 years ago?—I think there will be rather more boats engaged.

5116. How many more?—Only two or three; there is little difference.

5117. Do you not think the shoals of herring that come upon your coast are as large as they used to be?—They are not a quarter as large as they used to be. I have known them extend as far as the eye could reach, and every boat engaged would get 48 or 50 last of herring. Now it is not one in 20 that hits them. There are certainly more craft on the coast than there used to be, but not one in 20 hits the fish. About 20 or 30 years ago all the boats would get plenty.

5118. Do any French fishermen come upon this coast?—Yes.

5119. Do they disturb your fishing?—Yes, we cannot fish where we used to fish.

5120. Do they come within the three-mile limit?—Yes.

5121. Do they pay no regard to the restriction in that respect?—No, wherever the fish are they will be among them; they will come right close on to the land; we cannot drive with them, their nets are so much stronger and thicker than ours; their warp is so big that it would tear our nets to pieces.

5122–3. But your boats are as big as theirs, are they not?—No, we have no boats as large as theirs.

5124. Then you find you cannot fish with safety along with the French boats?—No; we are obliged to give them a wide berth, and we often miss the herrings altogether through them.

5125. Do you observe any particular time at which to shoot your herring nets; do you shoot them about sunset?—Yes, about sunset.

5126. Do the French fishing boats observe the same time?—They shoot when we do, but they often take the ground from us. We never think of shooting our nets until about sunset, and they go where they think the herrings are in order to get the place from us.

5127. Do you find that the largest quantity of herrings is found within the three-mile limit, or beyond it?—Sometimes they are within the three-mile limit, and sometimes beyond it.

5128. But taking the season as a whole, are they more within or without the limit?—When a body of them gets together, they are generally well in.

5129. Then it is of great advantage that you should have protection to the fishing, and that the French boats should be kept without the three-mile limit?—Yes.

5130. Would it be of advantage that the Frenchmen should be entirely excluded from that three-mile limit?—Yes.

5131. Has anybody ever come round to give you protection?—I have never seen a boat this season; there is one that comes sometimes.

5132. When did you see any interference with the Frenchmen on your shore?—When did I see anybody interfering with them?

5133. Yes, to give you protection?—I have never seen anyone there this season.

5134. Was there anyone there last season?—I think there was.

5135. Did they do any good?—I never saw them do any good; the Frenchmen were always upon the ground wherever they wanted to be.

5136. But do the English gunboats not come here at all?—Not that I saw; we have very often had a French gunboat here.

5137. Has there been no English gunboat?—I have seen one, but it is a bit since.

5138. Did she interfere with the French?—I never saw her interfere with any one here.

5139. Do you find that the shoal of herrings is apt to be broken if you shoot your nets before sunset?—I think they don't rise generally until about the close of the evening.

5140. Do you think it would be a good thing to have a regulation put in force that no fishermen should be allowed to shoot their nets before sunset?—The big boats would want to shoot them before sunset; they have a great length to shoot. With regard to the small boats it would not so much matter; about sunset would do for them.

5141. Then you think that the same regulation would not apply equally to large and small boats?—Not at all; large boats would have to shoot before sunset.

5142. They require longer time for shooting a greater length of nets?—Yes.

5143. But if they were to begin earlier would they not disturb the shoals, and injure the fishing in general?—No, I think not; we don't get any fish until it is nearly dark.

5144. But would not the dropping of the nets into the sea before sunset disturb the shoals?—No, I think not.

5145. Would you not think it would be an advan-

tage to you as a fisherman that there should be a regulation enforced by authority to prevent fishermen from shooting their nets until a certain hour, everybody being obliged to adhere to the regulation?—It would be better if all hands were to consent to conform to it.

5146. You think that hour should be a little before sunset, in order to enable large boats to get their nets out?—Yes.

5147. How long before sunset would you fix the hour?—An hour, or half an hour; then the sun would be down when they got their nets shot.

5148. Have you ever noticed whether Frenchmen on your coast shoot their nets on Saturday and Sunday?—Yes, they do, both on the Saturday and Sunday.

5149. Do you?—No.

5150. Then they have the advantage over you of one day's fishing in the week?—Yes, two nights' fishing.

5151. Two nights' fishing?—Yes, Saturday and Sunday nights. They are the only men who bother us.

5152. Do the Frenchmen injure you in the herring-fishing?—Yes, but the smacks do the most evil; we would not mind about the Frenchmen if the smacks were abolished.

5153. I suppose you mean that you would like to restrict them to their own ground?—No, I would abolish them altogether, and compel them to go a-fishing with the long-line, like us. Unless they are stopped they will ruin the North Sea entirely; they have done so to a great extent already. I think if they have unlimited sway, in the course of a few years the British fisheries will become extinct altogether.

5154. (*Professor Huxley.*) I understood you to say that you have about 17 or 18 large boats here?—Yes, we have 17.

5155. What is the tonnage of each of those boats?—About 60 or 70 tons.

5156. Sixty or 70 tons?—Yes, about 60 or 70 tons old measurement.

5157. What is the length of the boats generally?—About 56 feet.

5158. And the beam?—About 17 feet; from 17 to 18 feet.

5159. Are they completely decked?—Yes, they are completely decked.

5160. What is the rig; how do you rig them?—They are yawl rigged, similar to that you saw here this morning.

5161. With two masts and lugs?—Yes.

5162. How much does such a boat as that cost when completely fitted out?—It would cost about 1,100*l.* or 1,200*l.* to fit one out for the herring-fishing.

5163. Do you include nets in that?—Yes, everything necessary to make her ready for the herring-fishing.

5164. Where are they built?—Whitby and Scarborough are the principal places, I think.

5165. Are the boats generally paid for as soon as they are obtained, or do you take credit for them?—They are generally paid for directly after they are obtained, or within a trifle.

5166. Is there any considerable debt upon the boats here?—No, I don't think there is.

5167. You have a number of small boats in addition, I believe?—Yes.

5168. How many of them altogether?—It is difficult to tell. We have some large herring boats that are less than them.

5169. Are they decked or undecked?—They are undecked.

5170. What would they cost?—They would cost 50*l.* or 60*l.* to fit them out.

5171. How many of these boats have you?—Six or seven.

5172. Then you have some small cobles also?—Yes, we have a great many small cobles.

5173. How many have you?—I can't exactly say.

5174. Give a rough guess.—Well, I should say about 50.

5175. What will they cost each?—About 50*l.* or 60*l.* each altogether to fit them out.

5176–7. They are used for the line-fishing, are they not?—Yes, and for the herring-fishing as well.

5178. Have these boats all the tackle for fishing?—Yes.

5179. You spoke of inside and outside fishing; what do you mean by that—what distance from the land do you call inside fishing?—From 10 to 15 miles off.

5180. And outside fishing is beyond that?—Yes, a long way beyond that.

5181. Do you set bratt nets here?—Yes, they are set every season.

5182. Is there any very great length of bratt nets set?—No, there is not any very great quantity of these nets set; it is not carried on so much as it used to be.

5183. Do you catch many turbots with them?—Yes, but nothing to what we used to catch.

5184. Have you had to complain much of their being carried away by trawlers?—Yes.

5185. Have you lost any yourself?—I have never been in the habit of setting them, but I believe that some Staithes men have lost their nets.

5186. Is there any man here who has lost nets?—Yes, I believe there have been some lost this season; but I don't know what it was that took them away.

5187. Have you heard any complaint from Staithes fishermen of their having lost bratt nets owing to the trawlers?—There has not been much complaint about here, but I have heard a great many complaints in other places.

5188. How many nets will be required to fit out a herring boat?—Do you mean a large boat?

5189. Yes, let us take a large boat first?—A large boat will carry 120 nets.

5190. What is the length of each net?—Ten fathoms on the rope.

5191. What is the length of your snoods; do you call them snoods or head lines?—We call them nossles.

5192. They are very short commonly, are they not?—They are not above a foot long.

5193. Do you always have them about that length?—Yes.

5194. How deep will your net itself be?—About 15 score deep to our mesh.

5195. What is the size of your mesh, is it 36 to a yard?—Generally 31 to the yard. There are some 36, and there are many nets that ought to be condemned on account of the size of the mesh; they catch herrings that are not fit to be caught.

5196. What is the average size of the mesh here?—30 to 31. There will be 15 score of these meshes to the depth of the net. Most of them are 15 score, but there are some rather less.

5197. That is about five or six fathoms, is it not?—Yes.

5198. Why do you have them 31 or 32 to the yard?—Because we find that that size suits the herring-fishing.

5199. Do you know of any law upon the subject?—There used to be a law to destroy all nets that were not of the proper size.

5200. What do you think is the proper size?—There used to be a law which fixed the mesh at a proper size when a shilling would pass through it.

5201. Do you think there is any such law?—I don't know; there ought to be.

5202. You don't know that there is one now?—No. At Yarmouth they destroy millions of herrings when they are not of any use to anybody, and they are sold for manure.

5203. Is that in consequence of using too small a mesh?—No; but they take them when they are very young.

5204. Are you not aware that by the regulations now in force a herring net should be an inch from knot to knot in the mesh?—That is perhaps the old law you are alluding to.

5205. No, it is the law now in force. I will read it to you: "The meshes of all nets used for herring-"fishing shall not be less than one inch square from

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" knot to knot along the line." Did you ever hear of that?—That is the old law.

5206. Does anybody come to examine your nets?—I never saw anybody.

5207. Did you never hear of anybody coming?—No; we have none of these small nets here. It is the Scotchmen who have so great a number of them; they come to Whitby and catch herrings when they are not fit to be caught.

5208. Where do the Scotch fishermen come from?—From different parts of Scotland.

5209. The fishery officers look sharp after them in Scotland, and they won't allow them to use small meshes there.—They catch a great deal of small herring on *this* coast.

5210. I understand you to say that the French fishermen interfere with you by having heavier tackle?—Yes.

5211. Are their buoys heavier than yours?—Yes.

5212. Do your boats keep the sea?—Yes, our big boats do, but our small ones come in almost every day.

5213. Do your big boats keep the sea regularly?—Yes, they send their herrings in in the small boats.

5214. Do they keep the sea as long as the Frenchmen?—Yes.

5215. And yet you can't fish among the Frenchmen?—No, we can't. We are sure to come together. If we take a fair berth from them, we shall be alongside of them in the course of two hours, and then we have to haul in our nets.

5216. There are two regulations contained in this Act of Parliament; one is that the French fishing boats shall not come within the three-mile limit, and the other that decked boats shall always keep a certain distance from undecked boats.—We don't think so much of our own boats as of the Frenchmen. Our own boats will keep clear of us, but the Frenchmen won't haul in for us at all.

5217. What would you propose to do with the Frenchmen?—I would keep them off the coast altogether.

5218. Would you not allow the Frenchmen to come at all, or would you keep them beyond the limit?—The limit ought to be six miles instead of three.

5219. Would you be satisfied if the limit was extended to six miles, and the Frenchmen were to keep beyond that?—I would rather see them not come at all.

5220. But do not the Yarmouth boats come here?—Yes.

5221. Are their boats heavier than yours?—No, about the same size.

5222. Do they ever get foul of you?—Sometimes we are obliged to come near them, but the Frenchmen we dare not come near.

5223. Are the Yarmouth boats fitted like your own big boats?—Yes.

5224. Do your big boats ever shoot their nets among the small ones?—We all mix together sometimes.

5225. Did you ever hear that there was a law against that?—No.

5226. Did you ever hear of this,—"Whenever " decked herring boats and undecked herring boats " shall commence shooting their nets at the same time, " the undecked shall shoot their nets to the windward " of the decked boats, except they should prefer going " to leeward, to a distance of at least half a mile, to " shoot their nets." Did you ever hear of that?—I never heard that there was such a law in existence; but we generally try to shoot to the windward of them if possible.

5227. Then, there has never been anybody to meddle with your fishery, or give you any information about the law?—No; I think we must have a copy of that law at Staithes, and then we shall know about it.

5228. Do you carry any particular kind of vanes at the masthead of your herring boats?—Sometimes we have a vane on the mizen masthead.

5229. Did you ever hear of any law on that subject; did you know that you were obliged to have vanes of a certain colour?—No.

5230. Did you ever hear of this,—"For the purpose " of distinguishing by day drift-net fishing boats from " trawl-boats, both shall carry at the masthead vanes " which shall be at least eight inches in height, and " two feet in length. The colours of these vanes " shall be for British trawl-boats, red; French trawl-" boats, blue; British drift-net boats, white and " red; French drift-boats, white and blue. It is " understood that the vanes of drift-boats shall be " divided vertically into two equal parts, of which the " white shall be nearest to the mast"?—No.

5231. Do you not carry a white and red vane?—No.

5232. Then, you never heard of that either?—No.

5233. You would like the French to keep away altogether?—Yes.

5234. Do you know that there is a law about not shooting your nets till half an hour before sunset?—No.

5235. Did you ever hear of this:—"It is forbidden " to herring drift-net fishing boats to shoot their nets " earlier in the day than half an hour before sunset, " except in places where it is customary to carry on " the drift-net fishing by daylight"?—No.

5236. You see then that there is a law upon the subject?—Yes; but our big boats mostly get their nets set before sunset.

5237. How long are you in the habit of letting your bratt nets remain down in the winter?—They will shoot them one day and haul them in the next.

5238. They put them in one day and haul them in the day after?—No, the day after that.

5239. Did you ever hear that that was against the law?—No.

5240. I ask these questions not for the purpose of accusing you of breaking the law, but in order to ascertain whether you have heard of these laws. Did you ever hear of this:—"Such bratt nets, trammels, " and other set and anchored nets, shall not, except " in unavoidable cases, remain more than 24 hours in " the sea without being taken up"?—No, I never heard of that.

5241. What are what you call "farming" or "farning" boats?—The boats we leave at Staithes.

5242. Do you mean the large boats?—Yes.

5243. Why do you give them that name?—They always have called them that about Sunderland and Newcastle.

5244. Do you know the reason?—I don't know exactly. It may be because a century ago they only carried five men.

5245. They are "five-men boats"; you think that is the reason?—Yes, it's an old custom that was in use long ago.

5246. What time of the year do you consider that turbot spawn; have you ever noticed?—No, a great deal of mystery attaches to the spawning of fish in the sea.

5247. What time of the year do herring spawn?—In October or the following months.

5248. In October, November, and December?—Yes.

5249. Do you ever get herring in January or February?—No, we never fish for them then.

5250. Do you have an appearance of herring then?—I have known small herrings caught for bait at that time.

5251. But they don't come in great shoals then?—No, it is only small herrings we get then; we never fish for them then. With regard to the shoals, they are nothing so large in comparison with what they used to be.

5252. How long is it since the trawlers first came on this coast?—About 20 years since; they first came to Hull.

5253. How long has your trawl-fishing been falling off?—It has been falling off gradually ever since they came.

5254. Do you think that the trawling and the long-

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line fishing can go on together?—No, I think it is impossible; they will trawl themselves out and do for us too.

5255. Do you think that any kind of regulation could be introduced so as to permit both to go on together?—No, they should never be permitted to come on this side of the Dudgeon Deeps.

5256. Where is that?—It's away south.

5257. Should they come to the Dogger Bank?—I think not.

5258. Why not?—Why, that is one of the finest breeding grounds in the North Sea; that is where they have done most damage.

5259. Do you agree with the witness who stated at a previous meeting, that he would not mind if the trawlers were kept six miles outside the Dogger Bank?—Yes, if the fishing is to go on at all they should be kept on the other side of the bank.

5260. Do you think that sufficient fish would be caught with the hook-and-line to supply the markets if there were no trawling?—Yes, the chief part of the fish got by the trawlers is not fit for human food.

5261. Why not?—It is all knocked to pieces and the gall bladders are all burst.

5262. Have you ever seen that; have you seen the fish all destroyed?—Yes, the haddocks are all knocked to pieces, and they are not fit to be offered for human food. The chief part of what they get is not fit for the market.

5263. Have you ever seen the contents of a trawl-net emptied?—No, but a trawler told me 10 years ago that it would make a man weep to see what they destroyed. I have seen fish offered for sale myself that have had the gall bladders burst.

5264. How did you know that the gall bladders had burst?—I have seen all the guts hanging out of the fish, particularly with regard to haddocks.

5265. (*Mr. Caird.*) Have you fished with the line on the Dogger Bank lately?—Nobody goes there now, they dare not go; the trawlers would take all their gear away.

5266. Then you have not fished there lately?—No.

5267. Have none of your boats fished there?—No.

5268. How long is it since they have fished there?—About 20 years, I should think.

5269. Is it 20 years since you went to the Dogger Bank?—No; it is 20 years since the smacks came there.

5270. How long is it since you were there?—About 10 years.

5271. You have not been there within five years?—No; it would, I think, be about 10.

5272. Then you can't tell, from recent experience, whether line fishing would be profitable or not on the Dogger Bank?—No; but I don't think we could catch anything there.

5273. But none of your boats have been lately there?—No; but the Scarborough and Filey men have been there frequently, and they could not get anything at all.

5274. Did they discontinue going because they could not get anything?—Certainly.

5275. Did they find that they could get more fish on their own shore?—Yes; but they can get but little anywhere in comparison with what they used to get.

The witness withdrew.

ROBERT VERRILL called and examined.

R. Verrill.

5276–7. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, about 48 years.

5278. Have you practised all the kinds of fishing followed on this shore?—Yes, all but trawling.

5279. Do you agree generally with the witness you have just heard examined as to the falling off in the quantity of fish caught?—Yes.

5280. In what kinds have you noticed the falling off most?—In haddocks, cod, and ling.

5281. Have they fallen off in size as well as in quantity?—Yes.

5282. Has the cod fallen off in size?—Yes, a great deal.

5283. And the haddocks?—Haddocks have quite fallen off; there are scarcely any to catch now.

5284. What would be the weight of the cod caught in former times?—We have had them as high as 4 stone, and from that down to 1 stone.

5285. What is the weight now?—It is very rarely we get a cod of 4 stone now; they seem to be quite thin compared with what they used to be. This place of ours, about 20 years ago, was the principal fishing part we had. It used to supply all the principal places round with the best of fish, and they were reckoned the very best fish that could be caught.

5286. Are the fish now not of the same quality that they were formerly?—No, nor anything like it.

5287. The haddocks are not as good?—They are not as good, and what is more, there is none of them to catch.

5288. Do you get any turbot now?—Very few.

5289. Did you formerly get many?—Yes, a good many.

5290. What do you think is the cause of its falling off?—I think the cause is the destruction of the young. We cannot catch any large fish unless we have the young fish first to breed up into large fish. We used to catch the small fish first, and by putting the small fish on the hooks, then we caught the large ones.

5290*a*. Did you catch small fish as well as large ones on the hook?—Yes, they came to the bait.

5291. Do you think that you yourself don't destroy the fish by catching the small ones?—No, we don't destroy them as the trawlers do. The food is destroyed now before it comes to perfection. We have got haddocks at the best of perfection, and still the larger fish have swallowed them. We have got both on the same hook. Formerly we would shoot the same quantity of line we shoot now and bring as many as 5 or 6 score of cods ashore, and 15 or 20 score of haddocks. On the same lines now that we have shot for years back we can't fetch 20 haddocks ashore.

5292. Are your lines much the same that they were 20 years ago?—No, they are a great deal superior.

5293. Are they longer?—They are larger and finer and the hooks are better adapted for catching fish.

5294. Do you use the same kind of bait?—Yes, exactly. I can attribute the falling off to nothing but the small fish being destroyed before they come to perfection.

5295. What destroys the small fish?—The trawlers.

5296. Have you ever seen the nets drawn up?—Yes, and I have seen the small fish shot overboard.

5297. Have you been alongside the trawler when the nets were drawn up?—Yes, I have been alongside, but not on board.

5298. What have you seen come up in the trawl net?—I have seen large quantities of small fish, haddock, codlings, which are young cod, and such like. I have seen the trawl taken aboard on the deck, and have watched them pick the soles, and then throw all the others overboard. All that was thrown overboard was quite destroyed.

5299. Was any large proportion of the whole fishing thrown overboard in that way; suppose there were 20 basketfuls altogether, how many would be thrown overboard?—I should think 15 out of the 20 would be cast overboard.

5300. Three fourths of the whole?—Yes.

5301. Were they small fish or mangled fish?—They were all sorts, haddocks, codlings, and everything.

5302. Was it because they were small or because they were mangled that they were thrown away?—Because they were small.

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5303. They were too small to be useful to take to market?—Yes.

5304. Did you notice whether they were injured by the trawl?—Yes, they had been lying there while they got dead. Now I have taken them off the hook alive as "wick" as they ever were. I have put them down into the water again, and I have never seen but one lie on the top of the water until it died, and birds, such as gulls, came and took it away.

5305. How often have you seen the trawl net drawn up?—Two or three times in the herring season, when we have been in the large boats.

5306. Was it always the case that three fourths of the fish were too small to be marketable?—Upon a fair calculation that is about the general thing.

5307. Have you ever seen any spawn in the nets?—I never had much practice among trawl-boats, but I have talked to the men working upon them. They told me that they have seen all kinds of spawn destroyed.

5308. When did you notice that the quantity of fish caught by your lines was beginning to diminish?—I think it has been gradually diminishing for about 20 years.

5309. Have the smacks been fishing on your shore during the whole of those 20 years?—They have been out when it is soft ground. They can't come here on our hard ground, but they have been in the North Sea, on the Dogger Bank, at Bridlington and further north; wherever they could find ground to trawl upon they were there.

5310. When did you first begin to complain of the injury done to your fishing by the trawl-boats?—We complained for a long while among ourselves; we always said they were destroying the fishing.

5311. You think the destruction has been going on gradually for the last 20 years?—Yes.

5312. Have you never a good fishing season one year, a middling one the next, and the next year a much better one?—No; we have not seen that since well into the teens of years. Our large boat at times brought large quantities of haddocks ashore which have been cured here. The boats themselves had six men each in them, and they have cured, each boat, a ton of the best salt fish. Now, for the last 15 years there has not been a single ton cured among all the boats in the fleet.

5313. For the last 15 years?—Yes, they have not cured as much within the last 15 years to the best of my recollection.

5314. Were these fish cured when the big boats were out at sea?—No, they were brought ashore on the beach and split, salted, and dried at once.

5315. On the beach?—Yes, and on the hills.

5316. Perhaps at that time there was not so good a market for your fish as there is now?—Not quite.

5317. Your fish can get quicker to the market now in consequence of railways and other conveniences?—Not so much at this place as others.

5318. Are you not nearer railways than you were before?—Yes; but not at the time I speak of. We had men with good horses who would take our fish away to Leeds and Manchester almost as quick as it goes now.

5319. Do you believe that 20 years ago you could get your fish to the market as soon as you can now?—We did not send so much away as we send now; but every fish we send away now has to go 12 miles to the nearest railway station. All has to be taken away in cart. If we had a railway down here we could send it a good deal quicker.

5320. What do you think would be the best remedy for the falling off in the long-line fishing?—I think the best remedy would be to destroy all trawl-fishing.

5321. Do you mean to stop it entirely or to limit it within bounds?—Yes, I would stop it altogether. It is good for nothing. It destroys the small fish before they come to perfection. That is one reason. Then with regard to the fish caught in the trawls, there is very little of it useful. There are just a few soles and such like that are saleable; the rest is taken and bundled overboard dead and wasted. If there were only long-line fishing all the small fish would come to perfection and make food for the large ones, and all of us would benefit in consequence.

5322. Have you noticed any falling off in the shell-fishery—crabs and lobsters?—I don't know much about that; there may have been a little falling off.

5323. Then it keeps pretty steady?—I don't know that there is any falling off there; there is a difference in the people catching them; sometimes there are a number, and there may be more catchers of crabs and lobsters in one season.

5324. Has there been any increase in the number of men employed in catching crabs and lobsters in this place during the last 20 years?—Yes.

5325. Do they catch more than they did formerly?—No, they catch no more, but they still keep catching a fair thing.

5326. There is not so great a diminution in the quantity?—No, not so much.

5327. With regard to the herring-fishing, how is it that you have a great deal more people engaged in catching herring than there were 20 years since?—Their nets are a deal finer and larger.

5328. What is the difference in the number of men employed in the herring-fishing now compared with what it was 20 years ago?—I should say that there are about twice as many employed now as there were then.

5329. When did that increase in the numbers particularly commence?—It commenced more particularly since the factories began to manufacture cotton nets; that has made more fishermen and more boats.

5330. Are nets cheaper and better now?—They are no cheaper, but quite as dear to our men; but we could catch a larger quantity of herrings with our old nets than we can now. I think the reason of that is that there are more nets, boats, and men at work catching herrings now.

5331. If nets are dearer, and they don't catch more fish, how do you account for it that the people using them should increase in number?—I make out that wherever there was an individual out of work, he got a few nets and got into a boat; they thought they would get rich, and so they got more factories to make nets for them, and that led to there being so many men engaged in the fishing as there are now.

5332. Has there been in consequence an increase in the quantity of herrings brought ashore here?—No.

5333. Do they get as many herrings as they used to do?—No.

5334. Not the whole of them put together?—No, they don't.

5335. Do you agree with the previous witness, that the shoals of herring are not as large as they used to be?—I quite agree with him; I don't think they are as large.

5336. Are you interfered with in any way by the French people in the herring-fishing?—Yes, they are very impudent men those Frenchmen; they come and take the ground from us, they are so bold. I have had my nets put overboard, and I have seen the herrings among them, and I have seen Frenchmen so impudent that they would start fishing at the end of my nets. They have shot their nets down, and I have been obliged to take mine aboard and go quietly away.

5337. Was that because their boats were stronger and better manned than yours?—Their boats are stronger, and their gear is stronger. We fly, because if we did not get away we should lose all we had.

5338. Were you fishing at that time within the three-mile limit?—Yes.

5339. Do they often come within it?—Yes, they come within a mile and a half.

5340. Do you catch the largest quantity of herring within the three-mile limit, or beyond?—Upon a fair average, I think the largest quantity of herrings is caught seven miles from land; that is as fair a calculation as I can give you.

5341. Do you think that any regulation as to the

time of shooting the nets would be of advantage to the fishermen?—No.

5342. Am I to understand that you have no desire to have any regulation enforced?—Yes.

5343. You would let every man take his own plan?—Yes.

5344. You would have no interference of any kind?—No, none at all; not in that respect.

5345. Are you in any way interfered with now?—No.

5346. Would you not desire the Frenchmen to be kept without the limits to which the Convention binds them?—Yes, I should like to see that.

5347. Then you would like that interference?—Yes, I think that would be of great advantage.

5348. But you would not have any restrictions with regard to your own fishing?—No, none at all.

5349. Would you like to have some restrictions with regard to the smacks engaged in trawling?—Yes.

5350. (*Professor Huxley.*) Have you any summer-fishing for cod?—We have tried summer-fishing, but we can't get anything, not so much as would pay us for our bait; we have not done anything in that way for many years past.

5351. How many years?—It is 15 or 16 years since we used to go cod-fishing off here in our summer boats. I have brought ashore as many as six or seven score capital cod at a time, but now, though we went for six or seven weeks we should not get six or seven score. In point of fact it would not pay us for our bait and gear.

5352. How long did your summer season last?—For cod-fishing we began in the fore part of July, and continued until September. That was for the cod-fishing time.

5353. Do you not carry on this cod-fishing now in the summer time?—No, we go to the herring-fishing.

5354. There was a great quantity of cod brought ashore this morning?—There is no account to be taken of them.

5355. Why not?—Because like swallows they fly about after the herring. They are here to-night and there the next. One day they are off Scarborough, and the next nobody knows where to find them.

5356. Then during the summer you have no fishing for cod unless the herring are there?—When the herring are there in general there will be a few cod swaddling among the nets in deep water.

5357. The cod we saw to-day had been caught with the hook?—Yes, but not such hooks as we have been speaking of. They are a different hook, and we have a few lines for them when they are swaddling about the water.

5358. Were these caught with the hand-line?—Yes, with a few hooks.

5359. Then you don't set your long-lines now?—No.

5360. How long is it since you set your long-lines?—Two or three months.

5361. When will you begin to set them again?—We are going to set them now. They had them shot the other day, but they neither got cod nor haddock. They have six lines with 400 hooks on each line, and when they hauled them in they did not get a haddock, unless it might be three or four little things. That was all they got on six lines with 18 or 20 scores of hooks on each line.

5362. Twenty years ago were you accustomed to set your long-lines during the summer, in July, August, and September?—Yes.

5363. Did you catch plenty of fish?—Yes.

5364. But for years past you have left off doing that?—Yes, we can't catch haddocks now.

5365. You say it is 15 or 20 years since you were able to do anything with the long-line summer fishing?—Yes, it is all that.

5366. To what do you ascribe it?—I can think of nothing unless it be the trawling.

5467. You have had a good winter-fishing all this time?—No, we have had a very poor one; 40 cobles go regularly in the winter time, but it is very rarely we get a cod ashore.

5368. Do they go from October until March?—No, they go from the fore part of November till March. I have seen plenty of cod and haddock got all winter. It is now rare to see 20 good haddocks and half a dozen cod in one coble.

5369. Where do you shoot your long-lines during these months?—We shoot them about six miles off, from that to ten; then we change the ground. There is hard rocky ground for seven, eight, or ten miles, and then we come into soft ground again. That is the place that they can trawl over with their smacks.

5370. Do you prefer setting your lines on the hard or soft ground—which yields you most fish?—The hard ground; the bait will lie longer there.

5371. The smacks cannot come there, can they?—No.

5372. They never trawl over your lines there?—No, they are fast enough for that.

5373. Do they go over the soft ground?—Yes; it is there where the damage is done.

5374. Have they ever carried away your lines?—No.

5375. Are there in a season's fishing many complaints of lines having been carried away by trawlers?—There is a soft ground here that runs about a quarter of a mile in breadth to four miles in length, and they can put their trawls in that and drag them along; if we have our lines there they take them away altogether. In point of fact we dare not put them down there now owing to the trawling.

5376. Nobody puts them down there now?—No, that is the place where we often had to shoot in the summer time. Now if the trawlers come we have to take our lines up, if they happen to be there. They take the ground from us altogether, and we are compelled to get out of the way.

5377. Then you set most of your lines on the other ground?—Yes, and we bait the lines longer there. We bait them with small fish and catch large ones. They will lie longer on the clean ground, and fetch more turbot, ling, and cod.

5378. Do you go out with your long-lines as far as the Dogger Bank?—No, but the large boats have been many a time off the Dogger Bank, by the Dogger side.

5379. Do you fish with long-lines or hand-lines?—Long-lines.

5380 Is that on the hard or soft ground?—The soft ground.

5381. But these trawlers can trawl over there?—Yes.

5382. Have you lost any lines there?—When we went there there were no trawlers.

5383. Did you ever hear of any Staithes fishermen losing lines there?—They never were there.

5384. Don't they go in the winter to the Dogger?—No, their boats lie up in November. Then we have 40 cobles or small boats with three men in each boat.

5385. Did you hear of the small boats losing their lines last winter?—No, not by the trawlers.

5386. Then your idea of the injury done by the trawlers is not in carrying away your lines so much as in destroying the spawn and small fish?—Yes, they have done great injury among our nets.

5387. Do you mean bratt nets?—Yes. I have bratt nets.

5388. Have you ever had any bratt nets carried away by the trawlers?—No.

5389. Do you know anybody who has?—They could not trawl on the ground where we set our bratt nets.

5390. You don't set them on the soft ground?—No, on the hard ground.

5391. Is that always the case?—Yes.

5392. Why don't you set them on the soft ground?—It is too far from the land.

5393. The fish are commonly among the herrings?—I have had them set on the soft ground about 15 miles from this place, but the fish were not good.

5394. You said the trawlers had carried away your nets, what nets were they?—Our herring nets.

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5395. Did they come among your herring nets?—When our nets were out, if the night was coarse our nets would be ahead of the vessel and then half a dozen trawlers would come right over them. Our boat having to drift with the wind and tide they would come right athwart the trawl ropes, and rather than that the trawl ropes should receive any damage they had a large thing like a knife which they put down under the water and it would cut our nets and warp, and let all go adrift.

5396. Could you never find out who did that?—No.

5397. Your boats were made fast to your nets?—Yes.

5398. Could you not see who did it?—Not in a dark night. Before we got our vessel under weigh the trawler would be gone.

5399. But you know that the trawler can be punished for that, that it is against the law?—Oh yes; they have had some serious expense to make up occasionally. Some of them have been found out by the Scarborough fishermen.

5400. Are you acquainted with this article of the convention: "Trawl-fishing is forbidden in all places where there are boats engaged in herring or mackerel drift-net fishing." Did you know that that was the law?—Yes.

5401. Do you know that this also is the law: "Trawl-boats shall always keep at a distance of at "least three miles from all boats fishing for herring "or mackerel with drift-nets." Did you know that?—Yes.

5402. Do you think it is possible to enforce that law, or do you think the difficulty of seeing the trawlers at night is so great that it would be impossible to enforce it?—I don't side with that regulation at all. It would just give them the same privilege that they have now; my opinion is that they should be done away with altogether.

5403. Supposing this law were enforced, you don't think it would afford sufficient protection?—No.

5404. Not even for the herring-fishing?—It would be a protection for keeping them off, but still it would give them a license to come to the ground, and would be no advantage to us fishermen.

5405. Although it would protect your drift-nets, you think the trawlers would be a great means of mischief by the mere fact of their trawling?—Yes, but it will not protect our nets at all, not if they were seven miles off. I have seen when they have had their trawls off us that before the flood or ebb, or whatever tide we had driving us, was spent, they would be alongside of us.

5406. But the law says they must keep three miles off always?—That is impossible; they could not do that.

5407. Do you drive on them, or do they drive on you?—We drive on them.

5408. The law says more than that: "Whenever "herring or mackerel boats shall commence drift-"net fishing in any place whatever, the trawl-boats "which may be already fishing in such place shall "depart therefrom and shall keep at a distance of "at least three miles from the said drift-nets, herring, "or mackerel boats." You see that they must get out of your way?—Yes, but they must have the trawl on board to do that. If they take the trawl on board they can come as near as they like.

5409. Whether they have it on board or not they must always keep at least three miles away from you according to the law?—There may be one boat fishing here with drift-nets, and as far as the eye can reach all round you will see a hundred sail of all sorts of fishing craft going with the tide; so that if your boat is three miles from one of them, I will be bound to say that soon another will be nearly on the top of you.

5410. But supposing the law could be enforced, do you think it would afford sufficient protection?—No, I don't think it would be any protection at all.

5411. Do you mean that it could not be carried out?—They could not keep clear of the fleet of herring boats if they had their trawls down.

5412. But they are bound to get their trawls up and go off?—If they did that it would do.

5413. You think that would be a protection?—Yes, but there may be a part of the night when my nets are overboard, and when I look at them I find there is no fish. Then I get the nets aboard as fast as possible, and go eight or ten miles from that place. I heave them over again. I can see the herrings running in the water, and therefore I put the nets overboard. Now that may be the very place where the smacks are trawling.

5414. But they are bound to get away from you according to the law?—But they may not see us on a dark stormy night.

5415. Have you no lights?—Yes.

5416. What sort of lights?—A white light, a candle.

5416*a*. Have you two lights on your masthead, one above the other?—No.

5417. Did you ever hear of any law requiring that you should have two lights on your masthead?—Yes, I believe there is a law to that effect.

5418. You don't obey it?—Yes, they do; they put one light above the other at Scarborough and other places.

5419. I understood you to say that there is nobody here to see whether you obey the law or not?—No.

5420. So you just do as you like?—Yes, but I know that the law is that we should have two lights, one above the other.

5421. But still you don't obey the law, and there is nobody to ask you any question?—No.

5422. (*Mr. Caird.*) You said there were no trawlers off the Dogger Bank when you used to fish there?——Yes, when we used to go with our large boats formerly.

5423. At that time there were no trawlers off the Dogger Bank?—No.

5424. How long is that ago?—It will be 20 or 30 years since.

5425. Why did you discontinue going there?—I gave up going in the large boats and went in the small ones, and then two or three years back I went with the large ones again.

5426. It was not from want of plenty of fish that you discontinued going to the Dogger?—There is nothing worth while going for now.

5427. You say you gave it up some years ago, at which time there were no trawl boats on the Dogger?—I gave it up because I thought I would rather be in another boat. When we give a large boat up, we generally start with a small one.

5428. Do you get any mackerel on this coast?—Very few.

5429. Do they not come here?—There has been a few, but we have never had a mackerel season here.

5430. Do you never try to catch them?—We have been to catch them at the proper time, but there is never any quantity to catch.

5431. Have you a proper kind of net to catch them with?—I believe there are a few.

5432. Has it not been worth following?—I suppose with our nets now we will catch mackerel as well as the mackerel nets used to do.

5433. Do you mean your herring nets?—Yes.

5434. With your herring nets you think you can catch all the mackerel that come on this shore?—No.

5434*a*. Do the mackerel sometimes come here when the herring are not here?—Sometimes they do.

5435. Do you try to catch them when the herrings are not here?—No.

5436. Why is that?—We try to catch herrings; we never go with the intent to catch mackerel and nothing besides; but very often we have been trying to catch herrings, and instead of getting herrings we have got a quantity of mackerel.

5437. Hitherto, you have never thought it worth your while to follow the mackerel fishing?—No.

The witness withdrew.

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John Webster called and examined.

J. Webster.

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5438–9. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, I have been a fisherman for 30 years.

5440. Do you agree with the previous witnesses that the quantity of all kinds of fish caught on this shore has fallen off?—Yes, I quite agree with them in what they have stated.

5441. Do you agree with them that the cause of the line-fishing being now so unproductive is the operation of the trawlers?—Yes.

5442. Have you ever seen a trawl net drawn to the surface?—No, never.

5443. Then you cannot speak with regard to what there is in the trawl net of your own knowledge?—No.

5444. Where particularly have you noticed that the fishing has become defective?—Upon our own ground.

5445. Have you been in the habit of fishing on the Dogger Bank?—I have been there, but it is a good many years since.

5446. How long is it?—23 or 24 years since.

5447. Were there any trawl-boats there then?—Not that I saw.

5448. Why did you give up fishing on the Dogger?—I went with a big boat, and I left it to go with a small one.

5449. Did the big boats continue to fish on the Dogger?—Yes, for a good many years after that.

5450. But you yourself never went back?—I continued with the small cobles.

5451. With regard to the herring-fishing, has there been in your experience a decline in the size of the shoals that come on your shore?—There has been a decline. We used to have three or four lasts caught in a night, but now there are not so many thousand caught.

5452. How many are there in a last?—10,000.

5453. You say that you have seen one boat bring ashore three or four lasts in a night?—Yes, and sometimes with a good catch I have seen seven, eight, or nine last brought ashore.

5454. What, 90,000 fish in a boat?—Yes.

5455. What is the largest fishing you may have seen within the last 10 years?—20,000—two lasts of herrings.

5456. What do you think is the cause of that falling off?—I think it is all owing to the smacks.

5457. Do the smacks disturb the herring-fishing as well as the line-fishing?—Yes.

5458. In what way do they disturb it?—The herrings in general come upon the soft ground and spawn. The smacks are trawling over that ground, and they drag among them and break up the spawn, and the fish flits. In that way they destroy all before them.

5459. Have you noticed that since the smacks came upon the ground the herrings have become fewer in number?—Yes.

5460. How long is it since you began to observe this?—I can't recollect.

5461. Have you not sometimes a season in which there is a great quantity of herrings caught?—That is not often the case now; the catches are all very moderate now.

5462. Have you not had a good herring season during the last 10 years?—No, only just a canny one; but the herrings have sold much better than they used to do, or else the men could not have made a living out of it.

5463. Are you disturbed at all in your fishing by the French fishermen?—They come drifting upon us with the wind, and we are obliged to haul in from the place they are fishing.

5464. Would you desire to see any regulations established as to the time of shooting your nets?—No, I would not, I would allow every man to shoot when he liked.

5465. Do you find that the French fishermen come within the three-mile limit?—Yes.

5466. Then they pay no observance to that?—No, they come within a mile sometimes.

5467. In your mode of fishing, do you destroy any young fish?—No, we don't destroy any, we catch them all with the hook.

5468. Do you destroy any spawn?—No, I never saw such a thing.

5469. Do you trawl for soles?—No, I never saw a trawl shot in my life, nor hauled up either. I have seen them dragging them, and I have seen herrings among the trawls, and they have flown away like birds to get clear of them. I have seen that when the Hartlepool trawlers were at work.

5470. You have seen the herring among them?—Yes.

5471. In what way did that arise?—The trawlers were dragging among them spoiling the spawn.

5472. The herring spawn?—Yes.

5473. I thought you said the herrings themselves?—The herrings were there too at the bottom; at the night time they rise to the top. When they are lying on the ground they go with the tide up and down, and when they are floating the trawlers come among them and move them.

5474. (*Professor Huxley.*) What time of the year was that you saw the trawlers destroy the herrings?—In June or July.

5475. You were taking herring at that time?—Yes, we were fishing for them.

5476. What condition were they in, were they full fish?—They were full fast fish; they were ready to spawn. The herring spawn is quite hard before they spawn, but just before they begin to spawn it turns quite soft, and then they go to the bottom to spawn.

5477. You saw that these herrings were quite ready to spawn?—Yes.

The witness withdrew.

Burton Verrill called and examined.

B. Verrill.

5478. (*Mr. Caird.*) Are you a fisherman here?—I have been a fisherman here for 30 years.

5479. Do you agree with the previous witnesses in the statements they have made?—Yes.

5480. Is there anything that you desire to add?—Yes, I should like to say a little if you will ask me the questions.

5481. Have you ever been on board a trawl-vessel?—I have frequently been alongside a trawler.

5482. Have you seen a trawl brought up?—Yes.

5483. Have you done that more than once?—No, only once. It was in the month of July last, I believe. Only this year.

5484. This year?—Yes.

5485. Are you able to tell me what was in the trawl?—There was an abundance of small fish. I was not on board the vessel the time the trawl was drawn up, but they heaved two basketsful into our boat. They were all small fish—gurnets, dabs, plaice, and all sorts of small things. They then set sail and went away. The trawl net was full of the small fish. A great deal was thrown overboard. There was as much in the net as seven men could take on board.

5486. Then your two basketsful was only a small proportion of the catch?—Yes, a very small proportion.

5487. Would you like to have any Government regulations or restrictions in regard to the herring fishery, as to the time of shooting your nets and so on?—I don't know much about the herring-fishing. I go sometimes by chance, but I think the regulations we make among ourselves are quite good enough. I would let any man have his own freedom to shoot his nets when he pleased.

5488. You think that would be better than imposing any regulation?—Yes, I think it would soon cause war on the fishing ground if it was not so.

5489. Have you the same complaint to make as the

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other witnesses, with regard to the French fishing boats?—Yes.

5490. Would you like to see your own fishermen protected by the French boats being kept without the three-mile limit?—Yes.

5491. Do you think it would be better for your fishing if that were so?—Yes.

5492. Are your principal takes within the limit, or beyond it?—Perhaps a little beyond it.

5493. That would not protect your fishermen against the French boats then?—No, but I should like to see the gunboats sent at them. I should like to see them made away with altogether. I don't like to see the French fishing boats on the ground at all.

5494. (*Professor Huxley.*) Do you set any bratt nets?—No.

5495. Are you principally a long-line fisherman?—Yes.

5496. Did you ever have any of your long-lines taken away by the trawlers?—No, I once had one turned end over end, but I got it again. It was a great chance, however, whether I did so or not.

5497. Still you never have lost one?—No.

5498. You heard me read some of those regulations? Yes.

5499. Did you ever hear of any of them before?—I never heard of any except the regulation with regard to the light.

5500. Did you ever hear of any regulations about bratt nets?—No, I did not trouble my mind about them.

5501. Do you think that anything short of putting down the trawlers would be of any advantage to you?—I would abolish them altogether if I was in the Government.

5502. Would you not allow them to come on the coast at all?—No, they are entirely dragging the ground up; they are making it all good for nothing.

5503. Were many of the fish you saw brought up in the trawl net dead or alive?—There were some of them alive when they came out of the water, but when they were knocked down altogether in a heap they would soon be dead.

5504. Did they smell bad?—I was not on board, and could not, therefore, say.

5505. Did those they gave you smell very bad?—No, they were not bad. I took them for bait.

5506. Have you ever occasionally eaten trawled fish?—Yes, I think I have eaten trawled plaice sometimes.

5507. Were you ever ill in consequence of eating it?—I never was ill in my life.

The witness withdrew.

W. Thompson.

WILLIAM THOMPSON called and examined.

5508. (*Mr. Caird.*) You are a buyer of fish here?—Yes.

5509. Have you been long engaged in that business here?—Yes, for the last 33 years.

5510. Do you buy a large proportion of the fish that comes ashore here?—I used to do so; there is no large quantity got here at all now.

5511. Do you buy a large proportion of what is got?—I keep on buying it the same as other people.

5512. Then you can tell us whether the quantity has increased or diminished?—There is not one quarter, not one sixth part of what there used to be.

5513. Not one quarter altogether in a season's fishing?—No; in the whole season's fishing from the 1st of January to the 1st of January again there is not one quarter of what there used to be formerly.

5514. Is there any difference in the size of the fish caught?—The codlings are about the same, but in the haddocks there has been a diminution.

5515. Do you agree with one of the previous witnesses about cods in former times having been as much as 4 stones?—That has only been the case in an odd one or so. Sometimes we get an odd one of that weight now.

5516. Then you think it was a mistake to say they were of that weight?—Yes, speaking generally.

5517. You mean to say that you occasionally catch as large fish as you did formerly?—Yes, we do get an odd one by chance.

5518. Then I understand you to say that occasionally very large fish of that kind used to be caught formerly, and that occasionally there is one caught now?—Yes, but with regard to haddocks they are not generally as big as they used to be.

5519. There has been a falling off in the size of the haddock?—Yes, there is not one twentieth part of them caught now. I have got more out of one boat in one day's fishing 25 years ago than I can get out of 20 boats now.

5520. Can you tell us the quantity of fish that would be caught in a season, a week, or a month?—No, but I can give you some idea of what used to be cured.

5521. What quantity of fish used formerly to be cured here?—I should say that as much as 200 tons used to be cured here.

5522. How long ago is that?—That would be 20 years since, from that up to 30 years ago. I believe you will be able to get statistics of the whole fish cured from the Fishery Board at Edinburgh.

5523. Do they get a return of the fish cured here?—Yes, they have got it within the last 10 years to my knowledge.

5524. What quantity is cured here?—About 4 tons for every 50 or 60 that used to be cured.

5525. Has that not arisen from the fact that you can send your fish to the market fresh now?—It may partly have arisen from that, but that would not affect it to any great extent. The great reason is that we can't get fish to cure now. When we have fish in the warm weather it must be cured.

5526. In the warm weather you cannot keep fish?—No.

5527. Have you no ice to keep it in?—No, it would not pay the railway carriage here. We should have to pay 3*s.* a cart for ice, and we have too much land carriage to pay for the fish to render it profitable to keep ice. Then, again, the cods would not be in season at that time.

5528. Take 20 years ago, what quantity of fish came in on a fair day's fishing in the morning?—Do you mean from the Dogger Bank?

5529. I mean your fishing altogether.—There have been boats going to the Dogger Bank every year, and they have been five or six times on the Dogger Bank this year.

5530. How have they done there?—They have got next to nothing. I bought enormous quantities one day some years ago on the Northumberland coast. I have been at Newcastle with immense quantities of fish caught in a day or two. I have bought as many as 1,800 large fish 15 or 16 years ago.

5531. Is there anybody present who has been on the Dogger Bank this year?—No, they are all at sea now in the big luggers. There is not a boat that has got 80 stones of halibut this year. When I was young we have caught 12 score of halibut in two days.

5532. This year you say you have caught none?—The highest catch has not reached 80 stones, and where one would get 40 stones other boats would not get 10.

5533. That is the catch of halibut of which you are speaking?—Yes.

5534. How has it been with regard to the other fish?—They used to get 700 or 800 head for converting into salt fish; 500 or 600 score in two or three days. They were constantly bringing that quantity ashore for curing. Now they can only get 60, 70, or 80, and it is only a very chance boat that gets 5 score. The consequence is that they very seldom go a long way out now.

5535. Then you say from your knowledge of the

fish brought in by the boats from the Dogger Bank that the takes have greatly fallen off?—They have almost entirely fallen off, and it was the best fishing ground they had formerly.

5536. What kind of fish do you particularly refer to?—The cod and ling.

5537. Has the cod fallen off in size?—It was the best fish we had, but it is not there at all now; they don't catch any.

5538. With regard to the herring-fishing, have you noticed any considerable decline in that; has the quantity caught here fallen off?—The catch of herring by each boat has fallen off, but there are ten craft to catch them now, for one that there used to be.

5539. Are there in the whole as many caught as there used to be?—I should say there are a great deal more caught altogether; but, as I have just told you, there are ten craft now for one that was formerly.

5540. Then the total quantity brought ashore has not decreased, but each boat gets less?—Yes.

5541. Do you, as a fish buyer, find that you can get as much fish as you used to do?—No, all the strange boats run to Whitby; sometimes there are 700 or 800 sail.

5542. Do you think there is as much fish caught off this shore as formerly?—Yes, I should say there are more herrings caught from the 1st of June to the 1st of October than used to be caught formerly.

5543. To what markets do you send your different kinds of fish?—To Manchester, Liverpool, Birmingham, London, Nottingham, and all round the country.

5544. Which is your principal market?—Our principal market is London.

5545. Do you send all your best fish to London?—Yes, generally.

5546. Do you get the best price there?—No, it is lower there sometimes.

5547. Where do you get the best price?—At little places where there are only 50 or 60 people, but they cannot take a large quantity, so the greater part of the fish necessarily goes to Manchester, London, and the great markets.

5548. Small places have not a regular market and you cannot depend upon them, is that it?—Yes.

5549. In the course of your experience as a buyer of fish, have you extended the number of places to which you send your fish now as compared with the number you sent it to 20 years ago?—We always sent to London.

5550. Do you send to many places of 60,000 or 70,000 people?—The fish goes to Leeds; it used to go to Bradford, Huddersfield, and all round that neighbourhood.

5551. Do you find that you have a greater number of markets open to you than you used to have?—Yes, we can get the fish in quicker.

5552. To a greater number of markets?—Yes.

5553. Is that of advantage to you?—Yes, a little.

5554. Has the price of fish increased during the last 20 years?—Not much.

5555. What was it before?—It was worth more money when we had to cart it than it is now.

5556. Was a stone of good fish worth more money then than now?—Yes, they bring their fish from long distances now, even from Scotland. If there had been no railways fish would not have been got under 6*s.* or 7*s.* or 8*s.* a stone. If there had been trawling then they would not have got their fish to the market.

5557. Has trawling done anything to decrease the price of fish?—They send all their rubbish into the market.

5558. Why do you call it rubbish?—Why it is injured and knocked about in consequence of the trawl dragging upon the bottom; a great portion of it is not fit for use. It is only that portion on the top of the trawl that is good for anything.

5559. Have you ever bought any trawled fish?—No, I dare not send it to the market. I have seen plenty of it, however. Only the week before last at Scarborough I saw plenty of it.

5560. (*Professor Huxley.*) Do I understand you to say that the cod and the haddock are smaller than they used to be?—Yes, the haddock especially, and the cod a good deal; they have both fallen off. It used to take 20 or 23 score to the hundredweight, but now it takes from 30 to 33.

5561. Is there any difference in the size of the herring?—The size of the nets is larger, and bigger fish are caught than there used to be.

5562. Do you have to pay more to the fishermen than you used to have for the fish?—Yes, I give more for the fish now.

5563. I am speaking of the price per stone?—Yes, we pay more now.

5564. But yet you don't get as much as you used to do?—No.

5565. Then in that case it must have been a dead loss to you dealers?—Yes, and a loss to the catcher.

5566. But how can that be if the fishermen get more money?—They get more money, but they have not as much fish to sell.

5567. I understand you to say that as compared with 20 years ago, fishermen get more money for their fish and the public have it rather cheaper, and that between the two the dealer gets less profit. Is that what you mean?—Yes; they get them a little cheaper in the country. I mean trawled fish. Good line-fish is becoming dearer inasmuch as it is scarcer, and we are obliged to give more for it on the beach than we did formerly.

5568. You give more for it now?—Yes; I did not give as much for it when the carts were going. We used to supply Yorkshire, Leeds, Manchester, Halifax, Bradford and many other places, but they can come quicker to many of these places from Scotland now.

5569. What is the difference in price per stone you get for cod now compared with 20 years ago?—One day it may be 1*s.* and another 2*s.* 6*d.* It was the same then. It used to get up sometimes from 2*s.* 6*d.* to 7*s.*

5570. Then do you get per stone for cod the same or about the same as you used to get?—Yes, unless there happens to be a trawl near.

5571. But I mean taking one day with another?—I can get as much now as I did then.

5572. Do you not get as much in the market as you used to get for your fish taking one day with another?—Sometimes but not regularly. It is carried to market for one third less than it used to be when it was carted. It was obliged to be sold then for more money.

5573. Is the average price you get for your fish less than it was 20 years ago?—I think it must be less when all the expenses are reckoned up.

5574. But I want the price apart from the expenses?—It does not fetch so much money as it did, but it costs three times as much getting it to the market.

5575. If you paid 1*s.* for a certain weight of cod fish 20 years ago, do you mean that you will not get 1*s.* for it now?—No; on the whole the money the dealer gets per pound or per stone is less than it was 20 years ago.

5576. On the other hand you have to pay more to the fishermen?—Yes, because it is got for less money to the market.

5577. As matter of fact you have to pay more money to the fishermen?—Yes.

5578. You can afford to pay more because you don't have so much carriage to pay?—Yes. I know that it is 3*s.* a hundredweight for carriage all over. I know what it will cost so that then we have only to get it to the railway. If I buy a ton of fish I know what it will cost precisely to bring it to the market. Many a time I pay more money for the fish than I know I shall be able to get for it.

5579. (*Mr. Caird.*) Then the advantage derived from the reduced cost of sending fish to the market chiefly goes into the pockets of the fishermen?—Yes, and into the pockets of the railway companies; they get plenty of it.

5580. But it costs less to carry it now than it did formerly?—Yes.

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5581. But you get less for it in the market?—Yes.

5582. And yet you are able to pay the fishermen more?—Yes.

5583. Then the difference is given to the fishermen?—Yes.

5584. What do you think is the cause of fish becoming cheaper now with a much larger consumption?—Formerly none of the Northumberland fish could come to the market; it never could get further than Newcastle; but as it comes now there is a larger supply in the market than there used to be.

5585. Do you believe there is a larger supply than there used to be?—Yes, it comes now to the market from so many places—from Penzance and Scotland.

5586. Take the Manchester market, does a larger supply go to Manchester than did 20 years ago?—Yes, three times as much from the fisheries all round the island.

5587. Is the supply increasing?—Yes of trawled fish, but not of fish caught by the lines.

5588. Is it owing to the trawlers that the supply is increasing, not diminishing?—It is increasing in the meantime, but 20 years hence we will have no fish at all, because they will have killed all the fish round.

The witness withdrew.

G. Webster.

GEORGE WEBSTER called and examined.

5589. (*Mr. Caird.*) Have you long been a buyer of fish here?—Yes, for 30 years.

5590. Have you found that the quantity of fish brought ashore here for sale by the fishermen has increased or diminished?—It has diminished vastly. It has greatly diminished.

5591. Have you noticed if there has been any falling off in the size of the fish as well as in the quantity?—The fish are far less in size now, and a deal less in quantity.

5592. In which fish have you particularly observed any diminution in the size?—In the haddocks and codfish.

5593. Has there been much diminution in the size of codfish?—They don't keep up to the point they did.

5594. Were you formerly in the habit of getting any turbot here?—Yes.

5595. Do you get any now?—A little sometimes.

5596. Do you get any skate?—Yes.

5597. Any soles?—Very few are found here, this is not a place where they can practise trawling at all.

5598. There is no trawling for soles here?—No.

5599. Have you got as many herrings lately as you used to get?—I don't think the trawl-fishing affects the herring-fishing so much as it does the line-fishing.

5600. Do you think there is as much herring caught here as there was formerly?—Yes, we have as good a supply of herrings as we ever had; the takes on the average are quite as large.

5601. Do you agree with the previous witnesses as to the price of fish; is the price of fish in this place less than it was 20 years ago?—I can't say that it has fluctuated very much, but then we got four times the quantity of fish we get now; at the same time the markets are more steady and regular now than they were then; we don't find fault with the market at all, we realize a good price, but we can't get a sufficient quantity of fish to send to market.

5602. Ten years ago was the price paid for fish in Manchester the same as it is now?—It was much about the same.

5603. The price has been pretty steady?—It has not much increased or diminished. We had good markets and bad ones then, and we have good markets and bad ones now. It is just according to the quantity of fish sent into the market.

5604. Then, on the whole, you say that there has not been any great or gradual increase in the price?—I can't say that there has. Sometimes when I buy fish on a good day I expect a good market for it, but when it arrives in Manchester, there are such quantities of the rubbish caught by the trawlers in the market that there is hardly any market for our fish at all. In such cases we are obliged to sacrifice a good deal of money.

5605. Have you ever bought any trawled fish?—Never; but I have seen it sold at low prices in the market, and I have seen great quantities of it carted away that could not be sold at all.

5606. Where was that?—At Leeds, Manchester, and other places.

5607. How did you know it was trawled fish?—The fish was much knocked about, and some of it was in a state of decomposition. It had evidently been kept on board until it became bad.

5608. But that is not fish that can be sold with advantage in any market?—If it had been caught with a line it could have been sold to advantage.

5609. But you could not expect fish in such a state of decay to sell in the market?—It will sell when there is nothing else.

5610. Would fish beginning to rot sell anywhere?—Yes, for manure.

5611. Is it sold for manure in Manchester?—I have seen 100 baskets sold together and taken away for manure.

5612. (*Professor Huxley.*) I understand you to say that sometimes you could not get a good price for your fish on account of trawled fish coming in and supplying the market?—Sometimes it injures us very much.

5613. You are speaking now of your fish being in perfectly good condition when it is sent to market?—It generally is in very good condition. If we saved the train to-day, all the fish you saw on the beach this morning will be in the market to-morrow morning.

5614. If this trawled fish is bruised and bad, how is it that people will buy it?—Because they can afford to sell it so much cheaper.

5615. But would not people like to have sound fish rather than broken and damaged fish?—There are all sorts of people in the world; some persons like a great lot of stuff for very little money.

5616. But surely they would rather purchase your good fish than damaged and broken trawled fish?—But if they had not that damaged trawled fish to get people would be obliged to buy good fish.

5617. If your fish is driven out of the market by trawled fish, surely it could not be so bad, or it would not drive your fish out of the market?—It always does affect the market. We always realize a less price for our fish when the trawlers' fish comes in, and the more that comes in the lower the price is.

5618. But you don't find in the agricultural market that when a man sends bad wheat into the market it drives out the good wheat. Then how does the trawled fish drive good fish out of the market?—I don't know how it is, but it is the case. I think a large quantity of bad wheat coming into the market would affect the price of good wheat; it would bring it down in price, although it might not drive it out of the market altogether. For 17 seasons I have had fish at 1*s.* per stone, but I now pay 1*s.* 9*d.* I have had 100 stone from 16 boats in the course of a week, but last week I had only 50 stones for a whole week's fishing, and it was just cod and ling that was caught where the trawlers could not come.

5619. Do you think the price you pay to the fishermen has increased of late years; I mean the price per stone?—Yes, the price I give for fish here has increased a good deal, because the railways have opened up fresh markets. I can get the fish away for less money than I did formerly.

5620. You are able to pay more to the fisherman because you pay less for the carriage of the fish to the markets?—Yes.

The witness withdrew.

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G. Westgarth.

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GEORGE WESTGARTH called and examined.

5621. (*Mr. Caird.*) You are acquainted with the fishing on this coast?—Yes, I am. I am not much acquainted with the fishing myself; I never have been. I am an alum manufacturer and live about a mile from here, but I am constantly about the place and know a good deal about the fishing. I have known Staithes for the last 60 years. In the early part of that time we sent our alum away from this place in small vessels to London, Hull, and so on. 40 or 50 years ago we hardly had a ship that went either to Hull or London in the season, but took some fish with it, and further back, when I was a boy and a young man, the fishermen caught a great deal more fish in comparison with what they catch now. They caught a great deal more in the winter time. At that time it was split and salted, and I remember the immense quantities of fish that were caught day by day. As soon as the fish came in-shore every day it was split, washed, and converted into salt fish. We have taken in our vessels 43, 50, and 60 barrels of fish, and at one time we took as much as 200 barrels.

5622. All of salted fish?—Yes, pickled fish. We took it to Hull, where it was sent into the interior of the country.

5623. Was that in the summer time?—No, in the depth of winter, but in the summer time they salted also.

5624. But don't the facilities for getting fish to the market now in the winter time, when there is no risk, explain the fact that fish are sent to the market fresh and are not salted at all?—Yes, to a certain extent. I have seen large quantities split up here and salted. I frequently send down in the winter time for fish now, and find it very difficult to get one at all. The fishermen said they had not got more than was sufficient for baiting purposes. The quantity of fish caught has fallen off enormously. There are three kinds of fishing—the small cobles, the large cobles that go in the herring season, and the large boats. The large boats have already been described to you. They used to go from March, about Lent, till the beginning of the herring-fishing. Then all the rest of the winter the men who go in the herring boats take to the small cobles, because they cannot land the large vessels here. In the winter time there are about 50 cobles going to sea with three men in each, but they get little; they get very little fish now. What is the cause of that I can't tell, but they attribute it to the trawling. In the summer time we have not only the large boats going—from 10 to 15 or 16 of them—but a certain number of the cobles are engaged in fishing as well. In former times I have frequently known that they have been obliged to throw fish overboard, they have been so loaded. There is no such thing now. At that time the cod-fish they caught was principally converted into salt fish. The quantity of dried fish that we took away in our small alum boats at that time was enormous. True, there have been railways since, but the quantity taken away altogether is very small compared with what it was then. We have had 8, 10, 20, and 30 tons of dried fish on board for London at one time. I remember that at one time a brig came and was loaded with dried fish for the Mediterranean. When I recollect all these circumstances I have no doubt in my own mind that the fishing has greatly fallen off, except with regard to the herrings. In the herring-fishing there has been an enormous increase in the number of vessels. 43 years ago there was no real herring-fishing here at all, they merely caught a few for bait. The coast is now covered with herring vessels, so that there is as many herrings caught as ever there were.

5625. Is there any record kept here of the quantity of fish brought ashore?—No, I think not.

5626. Then you have no means of comparing it accurately with what it had been in former years?—The only way I have of comparing it is by calling to mind the fact that I frequently send for fish now, and am not able to get any. That never occurred in former years.

5627. But that may be accounted for by the fact that by sending it to market they get a better price for it?—No, they cannot get fish, that is the reason. One of the witnesses examined here, Mr. Fell, has told me that he has come ashore with 50,000 haddocks, and now he will not get five or ten. I have known our workmen buy a score of haddocks at 9*d.*, 8*d.*, 10*d.*, or 1*s.*, and 1*s.* 6*d.* or 2*s.* a score was considered a high price. Now, last year I have frequently given 1*s.* apiece for two or three haddocks, and when I wanted them I could hardly get them. Then with regard to the trawlers, there can be no doubt about the injury they do. The fish will spawn on soft ground, and if they are running their heavy trawls over that soft ground it must necessarily be most destructive; wherever they come they must injure the fish. Of late years I have been in the habit of going frequently to Scarborough and Hull, and I have seen fish caught by the trawlers, not in the trawl net, but packed up in hampers. I am certain that if they were turned out on the sand here nobody would buy them at all. The scales were all rubbed off and the skin was broken.

5628. Where would it go to?—To the manufacturing districts.

5629. Do they not know what good fish is, then?—We who are accustomed to the line-fish here would not buy it, and I believe that a large quantity would have to be taken and thrown overboard.

5630–1. Can you tell us as a fact within your own knowledge that they do throw a large quantity of the fish they catch overboard?—No, I never was on board a trawler to see.

5632. We are glad to hear all you have to say, but we prefer facts to opinions?—I cannot give you any facts except with regard to the quantities of fish that were sent away from here in the winter time, before the railways were opened, in a pickled state. I can also tell you that the quantity of fish now landed here by the small cobles in the summer time is nothing in comparison with what it used to be. They may get a middling catch now and then, but where they get a good day's fishing they get nine or ten bad ones.

5633. Does any refuse from your alum works go into the sea?—Yes, but not to affect the fishing.

5634. How do you know that?—It is so very small in quantity.

5635. What is it?—It is the residuum and washings.

5636. Is it in a fluid state?—No.

5637. And do you not think that that may have frightened the fish from the shore?—No, it has been going on for the last 200 or 300 years.

5638. (*Professor Huxley.*) How long have you known this place, Mr. Westgarth?—For 60 years.

5639. Has the population increased?—Yes.

5640. The fishing population?—Yes.

5641. By how much has it increased?—By one third or one fourth or so.

5642. Do you say it has increased 30 per cent?—Yes, 30 to 35 per cent.

5643. Has the number of boats increased during your knowledge of the place?—The number has varied very considerably. There have been 15 or 16, and I have known them as low as 11 or 12.

5644. Then there has not been very much variation?—No; a few boats only.

5645. How has it been with regard to the small boats?—I think they will have increased in proportion to the population; they take three men in each coble.

5646. Then they will be a third more in number than they were 40 or 50 years ago?—Yes, but as to the quantity of fish there is no comparison; I have sent a boy down three days together for a few haddocks and have found that there has been none in the boats.

5647. Have you observed the condition of the inhabitants and the way they live?—Yes.

STAITHES.
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5648. Have you observed any falling off in the comforts of the people?—No, I don't think so.

5649. Do they live much in the same way that they did 40 or 50 years ago?—Yes; if the fish were caught in the same quantity now it would not sell so high, but it would be of general advantage to the fishing population.

5650. Have the people any difficulty in setting up the boats they require?—No, I think not.

5651. The fishing population are going on as well as they did at that time?—Yes.

5652. Do you think that the amount of money they obtain for the fish now is as great as it was 50 years ago although the quantity of fish caught has fallen off?—Yes. I should think so, but there was no herring-fishing then. The herring-fishing was all carried on by Yarmouth boats at that time.

The witness withdrew.

J. Trattles.

JOHN TRATTLES called and examined.

5653. (*Mr. Caird.*) Have you been a fisherman here?—Yes.

5654. You are a shipowner now?—Yes, a boat-owner.

5655. You have not yourself been fishing for some time?—No. 50 years ago the Dogger Bank was always our best fishing ground. We used to go there principally to fish off the edge of the Dogger, and we always got an abundance of fish. For 25 years it was our study to get to the Dogger Bank for fishing, but for the last 15 years it has fallen off. During that period it has fallen off more and more every year. We always could get a cargo of fish as soon as we got to the Dogger Bank in my time.

5656. You are speaking now of when you used to go fishing yourself?—Yes.

5657. Is it 25 years since you used to go the Dogger Bank?—Yes.

5658. Is it within your own knowledge as a fisherman that there came a time when the fishing was less successful?—In my time we were always successful when we got to the Dogger.

5659. How long did that success continue?—For 25 years.

5660. Did it decrease when you were there?—It did decrease as soon as the smacks got to work on the south end.

5661. Was that during the time you were in the habit of going there?—It is 15 or 16 years since I have been there.

5662. Then you cannot tell us how it has decreased?—All that I know is that it has decreased.

5663. Have you yourself gone to the Dogger Bank and found that you could not get fish?—Yes.

2664. How long is that ago?—10 or 12 years ago.

5665. Did you often go to the Dogger Bank then?—Not very often.

5666. But when you did go you found a great difference in the fishing compared with what it had been in the previous times?—Yes, there was a wonderful difference. There was not one third part of the fish to be caught.

5667. What was the cause of that?—Because all the fish had been banished and the young destroyed.

5668. You are speaking now of 10 years ago?—Yes, and it has been decreasing ever since.

5669. How long is it since you first observed the trawlers coming to the Dogger Bank?—It is about 20 years since they came there.

5670. When did you begin to see the fishing on the Dogger Bank declining?—It has been declining for the last 20 years. There has been a regular falling off from year to year, until our fishermen are discontented and been prevented going to the Dogger at all.

5671. How many smacks were on the Dogger after you first noticed the fishing fall off?—I don't know. They trawled south of the Dogger and we used to give them a wide berth.

5672. Then you don't know how many were trawling there when you first noticed the falling off? No.

The witness withdrew.

(*Mr. Caird.*) Is there any other fisherman who desires to offer evidence?

There was no response, and the inquiry was then adjourned till Thursday, October 1, at Filey.

Filey, Yorkshire, Thursday, 1st October 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

FILEY.
A. Pettit.
1 Oct. 1863.

The Reverend ARTHUR PETTIT called and examined.

5673. (*Mr. Caird.*) Are you the incumbent of this parish?—No, I am curate of the Iron church.

5674. Have you resided here for some time?—For about nine months.

5675. Have you made yourself acquainted with the condition of the fishermen here?—Yes.

5676. Can you give us any information with regard to their condition and complaints?—I find that their constant complaint is about trawling, because in their opinion it injures the spawn of the fish. Another of their complaints is, that the trawlers catch many small fish which are of no use for the market, and are by them thrown away.

5677. The trawlers do that?—Yes; and they complain also that the trawlers spoil a great number of fish.

5678. Can you give us any facts as to the number of boats and men engaged in the fishing here?—With regard to the number of boats there are 30 small boats and 47 larger boats engaged in the herring-fishery. The 30 cobles, which are engaged in the white-fishing, have three men in each, and sometimes three men and a boy. There are 27 larger boats called "yawls"; these yawls have six men each. The rest of the herring boats have fewer men.

5679. Are the yawls decked boats?—Yes, and there are 20 half-decked or quarter-decked.

5680. Do you know the number of men engaged in fishing here?—There are about 400 or 500, I believe.

5681. Will you be kind enough to give us whatever information you have in your possession with regard to the fishing here; we shall be glad to receive it?—I believe that the population of Filey—that is, the fishing population—has increased about one-third, or perhaps scarcely as much. The number of boats engaged in white-fishing is about 30, and each boat contains three men or three men and a boy. They go on an average for five days a week. A few fishermen follow small beam trawl-fishing. There are only two or three boats engaged in that way. They trawl during the summer, just within the bay. The herring fishery is the harvest. There used to be only 12 yawls, but they have now increased to 27.

5682. Can you give us the date to which you refer

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when you say that there used to be only 12 yawls?—That would be more than five years ago. In 1860 there were 24 or 27 boats destroyed by a wind.

5683-4. Within the last six or eight years has there been an increase from 12 to 27 yawls?—I cannot speak to that. Three years ago there were 27. The herring fishery begins about the middle of July, and lasts until the end of September. It is rather late this year. There are different kinds of fish caught here; they are chiefly the haddock, which is mostly caught in February, codfish, skate, a few whiting, and conger eels. They used to get a great many turbot before the trawling commenced, and soles were got with hooks. It was not uncommon to obtain four score in the bay 20 years ago, and they were all got by the hook. There is only a moderate supply of lobsters and crabs. There are but few rocks, which causes the supply to be inconsiderable. The supply of fish generally has fallen off from one-half to two-thirds.

5685. In what period of time?—During the last 20 years.

5686. Do you refer to the total supply of fish brought ashore?—Yes.

5687. Notwithstanding the increased number of boats employed?—I hardly know. I think the figures must refer to the catch of each boat. I believe that the number of men has not increased, although the boats have increased so many. There is a great complaint here that a soft ground, about 40 miles out, which they have regarded as the nursery for the fish, inasmuch as the fish used to spawn there, is now being constantly trawled over. There are upwards of 100 miles of trawling ground there. The trawlers came to Scarborough 20 years ago. Our fishermen used to get large quantities of cod there in the latter part of March, but they get none now.

5688. They caught the cod off that soft ground?—Yes. One fisherman told me that they could have taken up cod almost in their hands, and that now they get none. They used to get 800 head of fish a day in the small cobles which are used for white-fishing, and they often got 500 or 600, but now they may go fishing for eight days with only the same result. In every case they say there is a noticeable decrease since the trawling commenced. They have heard the trawlmen say that tons and tons of small fish are thrown overboard, killed, and wasted. Twenty years ago the trawlers came to Scarborough, and in the course of two years a piece of smooth ground, about four miles in length, was completely raked, and every description of fish that used to be found there was taken away. Now they have gone elsewhere, and the fish are increasing again; but in the course of two years they quite swept that fishery clean.

The witness withdrew.

BENJAMIN SIMPSON called and examined.

B. Simpson.

5689. (*Mr. Caird.*) You were a fisherman, I believe?—Yes.

5690. And now you are a fish salesman?—Yes, a fish salesman.

5691. Have you had a long experience of the fishing on this coast?—About 28 years.

5692. What different kinds of fish particularly are caught on this shore?—Cod, ling, haddock, skate, halibut, turbot, soles, plaice, thornback, and herring.

5693. Have you any shell-fish?—Yes, crabs.

5694. And lobsters?—Yes, and lobsters.

5695. Which of the two branches of fishing, the ordinary white-fishing or the herring-fishing, is the most profitable to the fisherman?—Of late years the herring-fishing has been most profitable, but in former times the white-fishing was. I think from 1840 up to 1850 I have caught from 300 to 400, 500, and 600 head a day, and now it would take you a week to catch six or seven score.

5696. Was that in the long-line fishing?—Yes, the long-line.

5697. Have you observed any falling off in the size of the fish as well as in the quantity?—I cannot say anything about that.

5698. Have you observed any particular fish that has fallen off more than another?—Yes, the halibut; that has fallen off very much.

5699. Do you get as many turbot now as you used to get?—No, nothing of the sort. I have been getting nine and ten in the course of a day by long-line fishing, and now they may go a week and cannot get one.

5700. Do you fish for turbot with the long-lines?—Yes.

5701. Have you never used a net for that purpose?—No.

5702. With regard to soles, are they increasing or diminishing?—They are diminishing very fast.

5703. Tell us what quantity you were in the habit of catching in a day's fishing 10 years ago?—There are other men who can give better evidence upon that point than I can, men who have been more used to catching them.

5704. Have you been accustomed to shell-fishing?—No.

5705. Is there any particular part of your fishing ground you have observed in which a deficiency has more especially occurred?—Yes.

5706. Where is that?—Off the Spurn Point. Twenty years ago we used to get 600 or 700 head of fish a day there; now they cannot get above 20 head, or three or four score at the outside.

5707. And that ground was at the Spurn Point?—Yes, about six miles east of the Spurn.

5708. When did that decline in the fish begin?—It did not begin until the smacks came.

5709. How long is that ago?—About 20 years. I cannot tell to a year or two; perhaps it may be 28 years ago.

5710. Is it 28 years since the smacks began to come on that ground?—I think so.

5711. Has the decline been progressive ever since. Has it continued to decrease until now?—Yes, our fishermen have now done fishing there altogether.

5712. When did they give over fishing there altogether?—Within these last four or five years; it is only an odd time now that we go there.

5713. Then where do you fish now?—Right off here, close to the Dogger Bank, and that is about clean now.

5714. Has it fallen off there also?—Yes.

5715. How far off is that ground?—About 35 miles.

5716. On the edge of the Dogger Bank?—Yes, in deep water.

5717. Has that falling off taken place lately?—It is about three years since I gave over. During the heavy gales that occurred in 1860 I lost my boat in Filey Bay.

5718. Were you in the habit of going to the edge of the Dogger Bank?—Yes.

5719. Did you get large fishings then?—How long ago do you mean?

5720. Twenty years ago?—Yes.

5721. Did you get as large fishings 10 years ago?—No, not so large.

5722. Had the fishing begun to decline then?—Yes.

5723. Was that on the ground the smacks began to trawl over?—Yes.

5724. Is there any ground near Filey Bay that you have observed to be declining in its yield of fish?—Yes, there is a piece of ground three or four miles from this.

5725. What kind of ground is that?—It is sandy ground.

5726. Was that formerly a good fishing ground?—Yes.

5727. For all kinds of fish?—Yes, cod, haddock, ling, skate, soles, and all kinds of fish.

5728. How long is it since it was a good fishing ground?—Perhaps 20 years. It has kept declining ever since.

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5729. When did the smacks first go on that ground?—About 20 years ago, or a little more.

5730. Then it is 20 years since you had any good fishing on that ground?—Yes, real good fishing.

5731. Where have you had any good fishing during the last 20 years?—We have not had any good fishing at all. When I first went we used to get as high as 18 or 20 score a day, and when I gave over 20 or 30 stone was considered a great deal.

5732. Have you ever seen a trawl net drawn up on a trawl-boat?—Yes, I have, but I have never been accustomed to trawling. At the same time, I have been on board a trawler when the net was drawn up.

5733. Is that long since?—About 10 years or more.

5734. On what ground was that?—Off Dimlington.

5735. How far off the shore is that?—Twenty-five miles.

5736. That is not the Dogger Bank?—No.

5737. Is that off any other ground you referred to in your previous evidence?—Yes.

5738. Then on some of that ground you say the fishing has been spoiled by the trawlers?—Yes.

5739. What came up in the trawl net when you saw it drawn up on deck?—There was not a deal in the trawl then; it was in the summer time. We went aboard in order to get a little bait.

5740. Were there any small fish in the trawl net?—There was not a deal of any sort when we were there. There were, however, a few small gurnets, and such like.

5741. Were they mangled at all by the trawl net?—I did not take particular notice.

5742. Was there any spawn in the net?—I cannot say.

5743. You saw nothing that would induce you to believe that the trawl was particularly destructive to the fish?—I did not take any notice; there were plenty of small fish in the trawl.

5744–5. Is that the only time you ever saw the trawl net hauled up?—Yes.

5746. Is there any mode by which in your opinion the trawl-net fishers and the long-line fishers could prosecute their business together without injury to each other?—I do not know. All I know is this, before they came there used to be plenty of fish, and now there is very little of any kind.

5747. What would be the remedy you would propose in order to bring back the quantity of fish there used to be?—I think all the fishing should be line fishing. They used to practise long-lining in the cod smacks.

5748. Do you think that you could catch as many fish by long-lining as they can catch now in a trawl smack?—Yes.

5749. Are you of opinion that you could keep the markets in the country as well supplied with fish as they are if you were to prevent trawling?—Yes, quite so; we used to supply them before.

5750. How long ago?—25, 28, or 30 years ago.

5751. How far do your fish go into the interior of the country?—To Leeds, Manchester, and all on that way.

5752. Were there facilities for sending the fish to market then?—We used to have to take them in vans.

5753. Then they could not be sent as cheaply or as quickly as they can now?—Yes, quite as cheap but not so quickly. As many carts used to go out then as now.

5754. Referring to the herring-fishing, I understand you to say that that has become of late years a more valuable fishing than the white-fishing?—Yes, except within the last two years, during which it has declined.

5755. Do you think the shoals of herring are not as great as they used to be on your coast?—Yes, and they are not so good.

5756. Not so large?—No.

5757. Has the number of boats employed increased or diminished?—It has increased.

5758. Have they been making as good a business of it?—Yes.

5759. Has there been any increase in the price of herrings?—Yes, here there has.

5760. What is the difference as compared with what it was five years ago?—This year it has been very low. Just now, at present, it is low, but there has been a good price, taking it altogether.

5761. Is there much difference between the price now and what it was five years ago?—I think it is better.

5762. Speaking of the price of 1,000 herrings, could you get as much for 1,000 herrings five years ago as you could get to-day?—Yes, as we could get to-day, because it is very low this week, and so it was last week; they have been as high as 20*l.*, and they are only 5*l.* or 6*l.* now.

5763. Twenty pounds for how many?—For 10,000. The fish is inferior.

5764. Taking into account the increased number of boats, are there as many herrings brought ashore here as there were 25 years ago?—No, not as many by a great quantity.

5765. Is there anything to interfere with your herring fishery here?—I cannot say whether the trawlers do or not. I cannot say that.

5766. Then you do not attribute the falling off in any way to the trawlers?—I cannot say, and it is of no use my stating that which is wrong.

5767. Are you at all disturbed by the French fishermen coming among you here?—Sometimes we are.

5768. Are you much disturbed by them?—Yes, but they are more disturbed on the Scotch coast.

5769. I am speaking now of your coast; do they interfere much with your operations?—Yes, they annoy us a good bit.

5770. Have you had any Frenchmen off this coast this year?—I cannot say; I have been ashore buying fish this year.

5771. From your experience as a herring fisher, do you think it would be advisable for Government to adopt any regulation as to the time for shooting the nets, and that it should make all the fishermen conform to it?—I do not know about that. I should say the proper time is just about an hour before sunset. The nets ought not to be shot before then.

5772. Do you think it would be any advantage that everybody should be compelled not to shoot their nets until a certain fixed time, so that one man should not have an advantage over another in that way?—I cannot agree with that.

5773. Do you believe it would be best to leave everybody to adopt their own opinions upon the matter?—Yes, I may want to go to sea, and another may not be so eager; and the consequence of adopting a regulation of this sort would be that however soon I might get there, I should have to remain until my neighbour came.

5774. Then you think it would be better to leave the fishermen to regulate these matters in their own way?—Yes.

5775. Not for the Government to come forward and interfere at all?—No, not with regard to shooting herring nets.

5776. Is there any law or authority to interfere with you now in the prosecution of your business as a fisherman?—I do not know that there is.

5777. Does anybody come here and ask you about the size of your nets, and the season at which you ought to fish for any particular kind of fish; is there anyone who enforces any regulation upon you at all?—No.

5778. Nobody enforces upon you any law that now exists?—No.

5779. You have not in your experience seen any fishery officer, or any other authority coming to Filey for that purpose?—I have heard tell of them, but I think the other fishermen here will give you better information on the matter than I can. I have heard some of them say that they have had their nets measured.

5780. You are a fish salesman, I believe?—Yes, at present.

5781. Where do you send your fish to?—To

London, Manchester, Nottingham, Derby, and other places.

5782. How do you regulate the particular market to which you send your fish ; how do you decide on which market you ought to send your fish to?—We get letters from the different markets every day, and we send to those at which we think we can get the best price for our fish.

5783. You send it to those which offer the largest price ?—Yes.

5784. Is there any particular kind of fish that you send to particular markets ?—Yes, the soles and turbots are all sent to London and Manchester, the cod-fish goes to Nottingham, Derby, and Manchester.

5785. Where are the herrings sent ?—They are sent to London, Manchester, Nottingham, Derby, Leeds, York, and other places.

5786. Which is the principal market for the fish caught in Filey ; where does the largest proportion go ?—A great part goes to London, and a considerable quantity to Nottingham and Manchester.

5787. How long is it since you began to be a fish buyer ?—Three years.

5788. Has there been any change in the prices during those three years ?—There has been a better price since I gave over fishing than there was before ; upon the shore here, at the seaside, the fish have brought more money than they did when I went to sea.

5789. The fish bring more money now than they did three years ago ?—Yes, at the seaside.

5790. And how is it with regard to Manchester, does it bring as much there ?—No, not so much by a good deal.

5791. How is that ?—There is so much competition here.

5792. Competition here ?—Yes, at the seaside.

5793. But that would not make the fish cheaper in Manchester unless there was a larger supply there ?—No.

5794. Has the fish to your knowledge been reduced in price at Manchester during the last three years ?—I cannot say what it was before, but I know what it is now.

5795. What was it three years ago ?—It brought more money then than now.

5796. Have you gone to Manchester with fish yourself ?—Yes, I have been there when a catcher ; I have been to Manchester with fish.

5797. Were you at Manchester with your fish three years ago ?—No, I was there 10 years ago.

5798. You were not there three years ago ?—No.

5799. Have you been in the market within three years ?—No.

5800. Not at all within three years ?—No.

5801. Are you aware of the cause why fish is fetching a lower price in Manchester now than it did three years ago ?—No.

5802. Is it because there is an increased supply in the Manchester market ?—No, I think not ; the trade is so bad up in the west country that I think that is the reason.

5803. There is a smaller consumption ?—Yes, ever since the American war commenced.

5804. Was the price of fish better two years ago than it is now ?—It was three years ago, but it was very bad indeed last year.

5805. (*Professor Huxley.*) Have you ever been selling fish in any market—your hooked fish ; I mean when there was trawled fish in the market ?—I have at Scarborough at the seaside, but not up in the west country.

5806. Did you find the price of fish lowered by the trawled fish being thrown into the market ?—Yes.

5807. You cannot get the same price for your hooked fish when the trawled fish is thrown in ?—No.

5808. Does the supply of trawled fish lower the price of fish generally ?—I do not know how that is ; I know that fish was cheaper before the trawlers came than it has been since.

5809. Cheaper before they came ?—Yes, I have known it sold here at fourpence a stone.

5810. Have you ever found yourself driven out of the market by the trawled fish ?—No, I cannot say that I have.

5811. Does trawled fish fetch as good a price in the market as hooked fish?—No; hooked fish will fetch more if it be fresh.

5812. Will it in the Manchester market ?—Yes, the codfish.

5813. Now do you think that people here know a trawled fish from a hooked fish ?—If they do know it they do.

5814. But do they know it ?—I should think they would ; one has all the gloss and the scales on, and the other has not.

5815. Do you ever get a better price for your hooked fish than the trawlers can get for theirs ?—I could do so on the seaside, but as I told you before I have never been up in the west country.

5816. 20 years ago did the fishermen get a higher or a lower price for their fish than they do now ?—They used to get a lower price for it.

5817. They get much more now for a stone of fish than they did then ?—Yes, sometimes here in the depth of winter I have delivered 107 stone of fish for 54*s*., and all last winter it was fetching nearly 2*s*. a stone.

5818. I understood you to say that the price paid in the market for your fish was not so much as it used to be ?—It has not been since the American war began.

5819. Then how is it that you can afford to buy your fish dearer and sell it at about the same price ?—We can not afford it at all ; we are doing no good. We are working for nothing; we get very little profit at all.

5820. How many years has that been going on ?—For the last three years.

5821. The dealers, then, are worse off than they were ?—Yes, a long way.

5822. Are the fishermen better off ?—I cannot say that they are.

5823. Do they get more money for their fish ?—No, they get less for it.

5824. On the whole you do not think they get as much money for their year's fishing ?—No.

5825. How many boats were there here fishing about ten years ago ?—About 12.

5826. Can you recollect what was the size of those boats ?—According to the old measurement they would run from 30 to 60 tons.

5827. Were they decked boats ?—Yes.

5828. Were there any small boats ?—Yes, there was a great quantity of small boats.

5829. Do you recollect how many ?—Twenty years since there would be 20 going herring catching.

5830. Twenty small boats ?—Yes.

5831. And how many boats were there going long line fishing ?—There would be about 10 small boats going out from here when the large ones were out.

5832. Were the larger ones principally employed in the long-line fishing ?—Yes, and they used to go off Hull, Boston, and Lynn. They would go also to Yarmouth and catch fish, but that is all done away with now.

5833. What is the cost of one of these boats used in long-line fishing ?—I have had one that cost 500*l*.

5834. How many tons was it ?—It was 39 according to the new measurement.

5835. Did it cost 500*l*. including the sails and fittings ?—No, the sails and ropes, the boat, the lines, and the nets were all separate.

5836. What would be the total cost to make it ready for sea ?—1,000*l*.

5837. Would the lines and the nets make that difference ?—Yes, it would not be a long way off.

5838. What did the little boats cost when they were fitted ?—Some of the small ones would cost about 22*l*., and others would cost about 60*l*. or 70*l*.

5839. Has the number of boats increased ; what is the number now ?—26, I think.

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5840. Then that is rather a larger number?—Yes.

5841. Are you speaking now of the larger boats?—Yes.

5842. Is there a greater number of small boats?—No, they are about the same. There are 20 now. They got diminished to only one once, and then they got up to 20 again.

5843. Within the last 20 years there has been a considerable number of boats added to the large boats?—Yes, about 13.

5844. That has almost doubled the number?—Yes.

5845. From your knowledge of the fishermen are you enabled to say that most of these boats have been paid for or are they mortgaged?—Most of them have been paid for, all of them I think. I do not suppose there is a mortgage upon one of them.

5846. Then to say nothing about the wear and tear of the boats, there must have been something like 13,000*l.* paid for new boats and fittings during the last 20 years?—Yes, or perhaps you had better call it 10,000*l.*, you would be about right then. Of course that includes the gear, the nets, and everything.

5847. Do you know how many fishermen there are in the place?—About 130.

5848. Are there not more than that?—I do not suppose there are.

5849. How many are there in each of the large boats?—Nine.

5850. Then there must be more than 130?—Yes, but not what you would call proper bred fishermen.

5851. How many owners of boats are there in the place, or part owners, or share owners?—I cannot say, there are some of the owners in Scarborough.

5852. Are the boats not owned by Filey men?—No, the men who go in them are Filey men, but there may be Scarborough men who have part shares in them.

5853. How many men will take a share in a boat?—Two or four.

5854. Do you think that the property of most of the boats is in the Filey men?—Yes, most of them.

5855. Suppose we say there are 200 fishermen, will that be the outside number?—Yes, if you mean proper bred fishermen.

5856. Men who take part in owning the boats?—They do not own the boats; they go in them, but they do not own a part.

5857. How many, taking a rough estimate, have an interest in the boats?—I cannot say.

5858. Do you think there are 150?—I question if there are as many as that.

5859. You doubt whether there are so many?—Yes, you may say 100, and I think you will not be far under the mark.

5860. Then during the last 20 years these men have been enabled to pay 10,000*l.* for new boats?—The boats do not all belong to the fishermen.

5861. Do they belong to merchants in the town?—Yes.

5862. Does any large proportion of them belong to merchants in that way?—Some will have a quarter, some one half.

5863. Are the merchants of this town disposed to invest their money in that way?—No, they are not, unless it is that a body being overset with a boat asks them to take a quarter or so.

5864. Do the fishermen prefer to have them themselves?—Yes if they can, but when they are beat they look out for a friend.

5865. Do the fishermen get ready money in that way usually?—No.

5866. Do they pay interest for it or do they make the lender of the money part owner?—A man stands a part, and receives his benefit from the boat.

5867. But somehow or other the money has been found in this place during the last 20 years, and it has amounted to something like 10,000*l.* for fishing boats?—It has been got somehow or other, but I cannot say when, nor how, nor in what way.

5868. (*Mr. Caird.*) Are your large boats big enough to follow the trawl-fishing?—They are not strong enough, or else some of them are large enough.

5869. Has it never occurred to your fishermen to try that kind of fishing?—No, we think it will not answer; we think it would pull them to pieces.

5870. Is your harbour here adapted for boats to come in, the size of trawl-boats?—No, we want a harbour very badly.

5871. Would a harbour be of great benefit to the fishermen?—Yes; from the want of a harbour I have myself lost two boats. In 1844, owing to the want of a harbour, three boats and all hands were lost. I was out with them, and we tried to get into Scarborough, and we had to run ashore, and our boat was the only one that was saved.

5872. If you had a harbour do you think your fishermen would adopt trawl-fishing?—I cannot say anything about that.

5873. Have you heard that the trawl fishermen make a better business of it?—I do not think they do. I know for myself that I did not make a good business of it.

5874. Were any of the new boats to which you refer provided by fishermen coming from other places, or do they belong to the native fishermen?—They all belong to here.

5875. Have you not had any fishermen who have come from other places and settled here?—We have had some who have come here from the south, but they have not got any boats or anything of that kind.

5876. Then the increase in the number of boats has not been from strangers coming to the place?—No.

5877. It has been confined to the people themselves?—Yes.

The witness withdrew.

D. Crawford.

DAVID CRAWFORD called and examined.

5878. (*Mr. Caird.*) You are a fisherman here?—I am not a fisherman at present, but I was about 18 years ago, and I was a fisherman for about 17 years.

5879. For 17 years previous to that?—Yes.

5880. And since that for the last 18 years have you been a fish buyer?—Yes.

5881. In the course of your experience over so many years have you noticed any marked change in the quantity of fish brought on shore here by the fishermen?—When I went fishing 24 years ago we got as much fish in one day as we could get now in six, and on the same ground. Where we used to fish 24 years ago was in 24 and 25 fathoms of water. Just before the smacks came among us we could go and get from 20 to 25 score a day and now at the present time we may fish six or 10 days for 25 score.

5882. Has that falling off been in any particular kind of fish or in all kinds?—In all kinds, especially in cod and haddock.

5883. Has the size of the fish decreased as well as the quantity?—There is not so much difference in the size, but there is a great deal of difference with regard to the scarcity of the fish.

5884. Have you a good supply of bait here?—We have not a very good supply of bait.

5885. Where do you get your bait?—We generally get it from Boston Deeps.

5886. Have you none on the coast here?—We have flitters or limpets as you call them.

5887. Have you no mussels on your shore?—There is a little spawn but they come to no perfection.

5888. Have you never had mussels here fit for bait?—No.

5889. Have you always been in the habit of getting them from a distance?—We have always brought them from Boston Deeps.

5890. Has the supply been equal to your requirements. Have you always had enough without any difficulty in obtaining it?—Yes; we have always had sufficient bait.

5891. Has the price increased at all?—No.

5892. Then the falling off in the fishing has not in any way been occasioned by a difficulty in obtaining bait?—Not at all, we have as good bait now as we had then although it is rather scarcer.

5893. What do you think is the falling off of the catch of fish?—The only true evidence I can give you is just this, the supply began to fall off about 24 or 26 years ago just when the trawl-fishing commenced. We used to fish up to 24 or 27 fathoms of water and we could get plenty of fish. After seven or eight years we were altogether banished from that ground, which was north-west of Flamborough Head, and we had to come into 24 fathoms of water. The trawlers followed us down there. Formerly we could get as many fish as we liked, and now there is not one fourth part of the fish to be got there that there was formerly.

5894. Were you ever in the habit of fishing on the Dogger Bank?—Yes.

5895. Do you perceive any falling off in the quantity of fish you used to get there?—Where we used to get 150 stone of halibut in a day and sometimes 200 stone we might now fish for six days for 100; there is just about that difference.

5896. And how do you think the trawl-boats have operated in diminishing your catch?—The only evidence I can give on that point is this, I consider that where they can get one ton of valuable fish to bring to the land there are two or three tons of small fish that are wasted and thrown overboard.

5897. Have you ever been on a trawl-boat when the trawl was drawn up?—Never, but I have frequently had conversation with men who have been trawling.

5898. You were never alongside when the trawl was hauled up?—No.

5899. Have you bought trawled fish?—Yes.

5900. In what state were they when you bought them?—They were hardly fit to eat.

5901. Had the vessel been long at sea?—They cannot get in exactly when they wish, sometimes they are two, three, and even four days before they get in.

5902. Speaking of trawled fish as compared with fish caught by the long-line, have you noticed any marked difference between trawled fish and long-line fish?—Of course there is a great difference. It is generally six hours before the trawl is taken in and the fish are dead before they are hauled up.

5903. Do you buy trawled fish at the same time as long-line fish?—Yes, I have done so occasionally, but very seldom.

5904. Can you give us any comparison of what you paid for cod caught in the trawl and cod caught by the long line?—Sometimes we can buy trawled fish for 6*d.* and 9*d.* apiece while we always reckoned that our long-line fish would fetch 1*s.* 6*d.* or 2*s.*

5905. Would that be for fish caught on the same day?—Yes.

5906. Fish coming ashore at the same time?—Yes.

5907. Fish equally fresh?—The fish would not be equally fresh, but there would be very little difference. If I had a quantity of fish set before me now as a fish buyer, some of it caught by the trawlers and some of it caught by our long-lines, I would give a shilling a head more for the one than the other.

5908. Would you do that without even looking at it?—Yes.

5909. Would that be because you believe the trawled fish would be inferior?—Yes.

5910. Is it not the case that the fish is sometimes alive when brought in by the trawl-boats?—There may be some, but it would be very few.

5911. Then you might make a mistake in the price you give in that way?—We always reckon a long-line fish to be worth double as much as a trawled fish. The fish cannot be so good after they have been dragged along for six hours at the bottom of the sea.

5912. Have you ever gone to Manchester market with your fish?—No, I never was at Manchester.

5913. Have you ever been at any other market?—None but Hull.

5914. Is that some time ago?—Yes, 20 years ago.

5915. If I understand rightly you had no trawled fish then?—No, very little.

5916. Then you cannot tell us the difference in the price between trawled fish and long-line fish in the market?—I can prove that our fish is worth two shillings a stone, and that trawled fish is not worth one shilling.

5917. Is that in the Manchester market?—In Manchester, Liverpool, Leeds, Sheffield, Nottingham, and other places.

5918–9. How do you know that?—I have had an account to-day.

5920. Were they in equal condition?—I cannot say.

5921. Then you cannot really draw a comparison?—All the statement they give us with regard to trawled fish is simply that trawled fish is at such a price.

5922. Have soles fallen off much here?—We never have many soles here. What they catch here they catch generally by the hook.

5923. Do you catch any mackerel here?—Yes, we have got a good many this summer.

5924. Is mackerel-fishing followed as a business here?—Never before last year.

5925. Have they begun to get mackerel nets here?—No.

5926. Do they catch them with the herring nets?—No, they catch them with hooks.

5927. Is that found to pay well?—Yes.

5928. Do the mackerel come in with the herring? They come in the same season, in August.

5929. Have they ever been here when the herring were not here?—No.

5930. Are there any sprats caught here?—No.

5931. Has the herring-fishing diminished or increased?—It has diminished a good deal.

5932. To what do you attribute the diminution?—To nothing but the trawlers taking up the spawn.

5933. Do you think that the shoals of herring are not as strong as they used to be?—No.

5934. Do you not find that you may have a good season one year, then a bad season, and then a good one again?—Yes, but I take it from 20 years ago, and I am quite satisfied that they are not as plentiful as they were 20 years ago, and that the quality is not as good.

5935. Have you as many herring boats now as you had 20 years ago?—Yes, we have 13 large boats more.

5936. What was the number 20 years ago?—13.

5937. And how many have you now?—26 or 27.

5938. How long is it that the Frenchmen have been off your coast?—I do not know.

5939. Do not they come off your coast?—I have not seen them this year.

5940. How is the price of herring this year compared with what it was last year, and in previous years?—The price is not so good as it used to be; it has not been so good this year, buying them on the beach, as it was last year.

5941. Do you mean that you do not give so much to the fishermen?—No.

5942. Do you get as much for them in the market towns that you send them to?—No, if we did we should have to give more for them.

5943. You cannot speak so much here as at other places with regard to the interference of the French fishing boats with the herring-fishing?—When I went to sea they used to interfere very much with us. I do not know whether that is the case now or not.

5944. Is there a large fishing here for crabs and lobsters?—Yes, we have a very fair and good fishing of both crabs and lobsters.

5945. Does that continue to be as good as it used to be?—No.

5946. Which particularly has fallen off?—Lobsters.

5947. What is the cause of that?—I am sure I cannot say.

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5948. Are they more closely fished than they used to be ?—No, I do not think there are any more men engaged in catching them than there used to be.

5949. Are they not fished over a greater part of the year than they used to be ?—No.

5950. Are not the small fish caught more frequently than formerly ?—In the winter time, about Christmas, they catch a few lobsters.

5951. Have the crabs not diminished in the same proportion as the lobsters ?—No, I do not think they have.

5952. I understood you to say that you have been a purchaser for the last 17 years ?—Yes.

5953. Taking this year and comparing it with 10 years ago can you buy as many crabs and lobsters now as you could then ?—Not as many lobsters but as many crabs.

5954. Has there been a change in the price of the fish since then ?—There has been a little change ; the price both of lobsters and crabs has been rather dearer.

5955. Do you think the fishermen here are making a good business of it ?—At present I am sure they are not.

5956. Last year did they ?—Last year they did pretty well.

5957. Did they do as well as they did 20 years ago ?—20 years ago they used to go to Yarmouth.

5958. Then 10 years ago ?—I cannot say that there is any difference between last year and 10 years previous.

5959. (*Professor Huxley.*) You were speaking of the long-line fishermen having been banished by the smacks from where they were accustomed to fish ?—They were not exactly banished, but they left because they could not get any fish. 30 miles off Flamborough Head to the north-west of us we used to get plenty of fish 22 years ago, but as soon as the smacks came there the quantity fell off.

5960. Was the diminution so great in the first year the smacks came that you could get no fish ?—The fish gradually diminished.

5961. How many years was it before you found it not worth while to fish there at all ?—In the course of four or five years we were forced to leave the place.

5962. Did the smacks go over the ground the whole of that time ?—Yes.

5963. Do they go there now ?—Yes.

5964. Then they find fish there ?—The fish they catch is not what we caught. We think that they have ruined the ground by taking the spawn up.

5965. Do you find that the trawlers ever interfered with you by dragging your lines ?—They have occasionally broken us adrift.

5966. Did you ever have your lines carried away by a trawler ?—Never, but they have occasionally trawled over the lines I had put out, and thus have broken us adrift.

5967. Did you ever find that they could go over your lines without bringing them up ?—Yes ; it would not bring their vessel up.

5968. In trawling over your ground did they ever carry away your lines ?—They never carried away mine.

5969. Have you ever seen them go over the ground where your lines were set without bringing them up ?—Yes.

5970. Then do you think that trawling may be engaged in where long-lines are set without bringing them up ?—Not always, but occasionally it may.

5971. Do you know of any fisherman who ever suffered great injury by reason of his lines being taken up ?—Yes ; I have known two or three instances.

5972. Is it a thing of frequent occurrence ?—No.

5973. You say that you do not consider trawled fish good to eat ; why is that ?—It cannot be good for much after it has been dragged over the ground for six or 12 hours at the bottom of the sea, and then kept for two or three days in the boat.

5974. Do you think that being in the trawl for six hours would render the fish unfit to eat ?—Yes, some of it.

5975. Would the fish be bad to eat ?—I should think so ; some of it would be dead.

5976. Is a fish bad when it has been dead six hours ?—It would be when it had been kept three days.

5977. But if your line fish were kept three days it would not be particularly sweet, would it ?—It would not take much harm.

5978. Do you think that trawling makes the fish bad ?—I do.

5979. Have you ever seen fish come out of the trawl-boat bad ?—I have seen it come out of the smacks bad.

5980. Have you ever eaten trawled fish ?—No.

5981. Then it never made you ill ?—No.

5982. Did you ever hear of its making people ill ?—No ; but I have heard of its being seized, though.

5983. You heard what the previous witness stated respecting the increase of the number of boats during the last 20 years ?—Yes.

5984. Do you agree with that ?—Yes.

5985. Do you agree with him as to the cost of the boats ?—I know that one of our boats would cost 600*l* bran new, to get everything in her, without the nets and lines.

5986. What would the nets and lines come to ?—Close upon 300*l*.

5987. Then do you think that it was an overestimate to say that a boat completely fitted would cost 1,000*l*. ?—I think that is rather above the cost.

5988. What sum would you put it at ? 800*l*. or 900*l*. ?—About 850*l*. is as near as I can come.

5989. Do you agree with the last witness as to the boats being free from mortgage for the most part ?—Yes ; I do.

5990. You are a business man, now let me put this to you : It is difficult for me to understand the exact position in which you are. You state that the fishery has been falling off, and that the fishermen have not earned what they did previously, and I want to know how, under such circumstances, they have contrived to put this large amount of capital into new boats ?—That is a difficult point for me to explain. There may be different persons who own the boats ; for instance, there may be three or four persons owning one boat. Some years ago there were nine boats entirely wrecked. My father had one and my brother and sister another, and when I came back from Sheffield, at the time they were destroyed, they did not know where to get another, but they got up a subscription, and having got friends who stood a part, they got another. I think it would be found to be the same in a variety of instances if the cases were fairly investigated.

5991. Was the money absolutely given, or was it lent ?—I believe it was partly given. I think more of it was given than lent.

5992. I do not wish to go inquisitively into this, I only wished to ascertain how it was that so large an amount had been invested ?—The money was freely given ; if it had not been for that many of the fishermen would have been set fast.

5993. Thirteen boats of the value you have mentioned would cost something like 10,000*l*., do you believe that that sum has been given in the course of 20 years to the fishermen of Filey ?—No, they have earned it themselves.

5994. Then my difficulty is this, how, if the fishing has fallen off, can they have contrived to save 10,000*l*. and invest it in new boats ?—Some of them have had to borrow the money.

5995. But then they have had to pay interest for it ?—Very likely they have ; I do not know.

5996. Have you ever set turbot nets upon this coast ?—No.

5997. Is it not the practice here ?—No, not here.

5998. Did you ever find that you were annoyed by the price of fish being lower in any of the markets you supply than you thought it ought to be ?—Yes.

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5999. Did you ever find that injure you ?—Yes, many a time ; often we have not been able to get the price we ought to have.

6000. You have not been able to get the price you would have got if the trawled fish had not been there ?—Yes, a large supply of this inferior fish in the market generally or partially spoils the sale of ours.

6001. So that the influx of trawled fish damages the sale of yours ?—Yes, to a great extent.

6002. (*Mr. Caird.*) You were speaking just now of some of your boats having been lost in bad weather ?—Yes.

6003. Have you any refuge you can run to here in bad weather ?—We have nothing here ; we can only run into the Humber.

6004. You have no refuge in your own bay ?—No, if the wind be southward or eastward or up in the south-east.

6005. Can the large boats run in ?—No, they must keep at sea or run into the Humber.

The witness withdrew.

JOHN JENKINSON called and examined.

J. Jenkinson.

6006. (*Mr. Caird.*) Have you long been a fisherman here ?—About 63 years.

6007. Are you still a fisherman ?—Yes, but I do not go out in the large boats now.

6008. Do you agree with the last witness as to the falling off in the quantity of fish caught on this coast as compared with what it was formerly ?—Yes.

6009. What do you think is the cause of that ?—I should say it was the trawling that has done it.

6010. When did you first notice the falling off ?—I have seen it ; I was a trawler myself about 28 years ago.

6011. How long were you on board a trawl-boat ?—About a year.

6012. Where did you hail from ?—Scarborough.

6013. In what way did you see the injurious effect of trawl-fishing ?—We used to trawl for about six hours either north or south, and when we took our net in we had always a great deal of young fish, spawn, and such like. After we had taken out of it what fish we required we used to take a shovel and shovel the rest overboard. There would be fish among it of this length (*measuring*) young cod, skate, whiting, and other fish.

6014. Were they dead ?—Yes.

6015. And they were entirely lost ?—Yes.

6016. Was a large proportion of the whole fish of that character ?—As nigh as I can tell there would be about three bushels of it.

6017. How many bushels would be there altogether ?—We had a great weight of soles and haddocks.

6018. Do you refer to any particular time, when you say you saw three bushels thrown overboard ?—No, we threw over about that quantity nearly after every drag.

6019. How many would there be that were not thrown overboard ?—Not more than two bushels.

6020. Then you threw overboard more than half of the whole draught ?—Yes, sometimes three times as much as we took.

6021. You are speaking now of 27 years ago ?—Yes.

6022. There was no sale then for this small fish, was there ?—No, we could not bring it to land, it would have been putrid before we got it in.

6023. Was there any spawn in the nets ?—There was what we call spawn, but what it was I cannot tell ; it was much knocked about with dragging in the net. We had crushed it all to pieces. It was just like a jelly when we got it in. We supposed it to be spawn.

6024. Was there much of it ?—Yes a great deal, and a good deal of small fish too.

6025. Between the spawn and the small fish there would be about three bushels ?—Yes.

6026. And that was a common thing ?—Yes.

6027. Did the large boats get more in a week's fishing than a line boat would get ?—No, but they destroyed a great deal more.

6028. Did they not get more fish to the land ?—Not a quarter. I have caught more in four hours than they have got by trawling in a week.

6029. Then it must have been a bad business for them ?—We could not make anything of it in those days.

6030. Have you had any experience of the herring-fishing ?—Yes.

6031. Do you find it falling off ?—Yes.

6032. Are you at the herring-fishing now ?—No, I am not ; it is about three years since I gave over.

The witness withdrew.

EDMUND CRAWFORD called and examined.

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6033. (*Mr. Caird.*) Are you a fisherman here ?—No.

6034. What is your business ?—I am a fishmonger at present.

6035. Have you ever been a fisherman ?—Yes ; I have been in my present business three years only.

6036. And previous to that you were a fisherman ?—Yes.

6037. Do you agree with the previous witness as to the falling off in the quantity of fish caught off here ?—Yes.

6038. Does that apply to all the fish caught off here ?—I think so.

6039. Does it equally apply to herrings ?—I do not believe there are half the herrings caught off here now that there were 10 years since, if the boats had had as many nets as they have now. The boats used to fish with 50 or 60 nets, and now they have 120 and 130, and they do not get more with their 120 and 130 than they used to get with 50 and 60.

6040. Do you think the increased number of boats and nets does not give so much ?—No.

6041. What is the cause of that ?—There are not so many herrings to catch.

6042. What is the cause of that ?—I cannot say ; there is a diminish.

6043. You know no reason for it ?—No, unless it is that the trawlers take the spawn. Ten or 20 years since they would get a boat's load in a night.

6044. What is the cause of the falling off in the white-fishing ?—The trawling.

6045. Have you been on board a trawler ?—Yes, once or twice.

6046. Have you seen the trawl drawn up ?—Yes.

6047. What have you seen in it ?—I have been on board at Dimlington to get bait, and I have helped them to get in the trawl, and I have seen several bushels of fish about the length of my finger thrown overboard. There were more tossed overboard than were kept.

6048. Did any of them appear to have been mangled or hurt by the trawl ?—They were always very soft and scored, the haddock especially, as if they had been scraped with a knife.

6049. How long is it since you have been on board a trawl-boat ?—About six or seven years ago. I have been three years ashore.

6050. Do the trawl-boats come off your shore ?—Yes.

6051. Do they come in increasing numbers ?—Yes.

6052. Are there more now than there were last year ?—Yes, in our "outsand" fishing.

6053. Is that the place the former witness referred to as having been raked clean of fish ?—They come

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in now on those grounds, to fish for soles and haddocks.

6054. Do they find plenty of fish?—They find a few, but not so much as they did.

6055. Do more trawlers come now than used to come?—Yes.

6056. Do they not find fish when they come?—Yes, a little.

6057. From your own knowledge does a trawl-boat make a better business of it than a line-boat?—I do not think they make as good.

6058. Can you speak of that from your own knowledge?—No, but I do not think they do. They do not earn half as much as many of our line-boats, but they are not at half the expense.

6059. Do you find the markets to which you send your fish supplied now in an increasing or dimishing ratio?—The markets are only very poorly supplied at present.

6060. What is the cause of that?—I cannot say.

6061. Do you say they are not well supplied?—There are plenty of fish; we have nothing but herring here at present.

6062. In the large markets, such as Manchester and the places to which you send your fish, have they plenty of white fish?—They have only been middling off these last two years.

6063. Are you speaking now with regard to price?—Yes.

6064. During the time the herring-fishing is followed here, how long does it last?—About 20 weeks.

6065. Do your men not catch white fish at that time?—Not much.

6066. Is it always discontinued at that time?—Yes.

6067. Do the trawlers discontinue fishing at that time?—No, I think not.

6068. Do you get any mackerel off this shore?—There have been a few got off this shore, but not many.

6069. Do the fishermen get a good price for the mackerel?—Middling.

6070. Does it pay the fishermen to attend to that business?—I do not think it would pay them if any number of them engaged in it. There are only a few boats that go round the bay now. If there were any large number of fishermen they would do no good.

6071. Does anybody interfere to regulate the fishing, I mean in regard to the size of the nets, or the time of fishing?—No.

6072. Do you think it would be to the advantage of the fishermen that they should have some Government interference with them?—I think not.

6073. You would rather not be interfered with at all?—No.

6074. Do you know whether the French fishermen interfere at all with the herring-fishing?—I believe they do.

6075. Do you know that of your own knowledge?—I have been interfered with, and I have had my nets cut away.

6076. Do they come within the three mile limit?—Yes.

6077. Does anybody tell them that they shall not come there?—No.

6078. Did you when you were fishing get a larger proportion of your catches of herring within or without the three-mile limit?—Sometimes I have got a good deal only half a mile off.

6079. But, taking the whole herring season, where is the largest quantity caught?—On the off side.

6080. That is where the Frenchmen are entitled to come?—Yes.

6081. Can you both fish together without interfering with each other?—Yes, if we kept off each other. What causes the destruction is the nets being set together. Their boats are much stronger, and their nets are as strong again as our nets, and if they come upon us they knock us to pieces.

6082. Can you see the shoals of herring from the shore before the fishermen start?—No.

6083. Do you think it would be of advantage if any plan could be adopted by which any signal could be given to tell where the shoals of herring are?—I do not know how such a signal could be given.

6084. Could not a watch boat be stationed off the shore, and be enabled to signal?—No, you cannot find any except in the night time.

6085. Do you shoot your nets before night-time?—Yes, and often when they haul them in again they get nothing in them.

6086. Do not you see any before night-time?—Very seldom.

6087. Has there been any improved system of fishing adopted during the last 20 years for either line or herring net-fishing?—I do not know that there has been any improvement; there has been an increase.

6088. Do you mean in the quantity of boats and nets?—Yes.

6089. But there has been no change in the mode of catching fish?—No.

6090. It is just the same now as it was formerly?—Yes.

6091. Have you found it to be quite as successful?—There are double the quantity of nets; that is all.

6092. Do you use the same kind of boats that you did formerly?—Yes.

6093. (*Professor Huxley.*) You heard what the last witness said about his business being damaged by the influx of trawled fish?—Yes.

6094. Have you found the same result?—Yes.

6095. Do you think the sale of trawled fish in the market operates injuriously on the sale of white fish?—Yes, a good bit.

6096. Does it do so always?—Yes.

6097. Are you in the habit, during the herring fishing here, of fishing in undecked boats?—I was never in an undecked boat herring fishing in my life.

6098. Then the boats you generally fish in are decked boats?—There are 26 decked boats, and 20 undecked.

6099. All of them employed in the herring-fishing?—Yes.

6100. Do the French boats interfere with the decked boats as well as the undecked?—Yes.

6101. How is that?—The tide sets them all together.

6102. Does it not set you together when you go fishing by yourselves?—Yes, we are all together, the French and all of us.

6103. Do the French boats interfere with you more than any other boats?—I do not know that they do. We try to gets our nets up without tearing or wasting them, but the Frenchmen never care about our nets at all.

6104. You say that their tackle is stronger than yours?—It is as strong again. Their boats have 26 men on board; our small boats have only three, and the large ones eight or nine.

6105. If your boats all go out together, do you all shoot together?—Why if we think there is a chance of herring we go as near as we can.

6106. Do your decked and undecked boats keep away from each other?—No, they go as nigh the shoal as possible.

6107. Have you heard of any law upon that subject?—I have heard of it, but I never knew of its being put in force.

6108. No gunboat ever comes to put it in force?—I saw once a north country boat at Staithes bray our barrels in while we stood looking at them.

6109. Have you had no one to tell you what the law is?—No.

6110. Do your herring boats carry any lights at night?—Yes.

6111. What sort of lights?—Generally a lantern, in a piece of wood which stands seven feet high.

6112. Do you have one light or two?—Only one.

6113. Did you ever hear of any law obliging you to have two?—Yes, I have.

6114. Did you ever trouble your heads about it?—I do not think we ever have.

6115. Nobody has ever found fault with you?—No.

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6116. Did you ever have any gunboat or any fishing vessel on this coast?—I have seen gunboats, both French and English.

6117. Do they ever interfere with you?—They never meddled with us.

6118. Do they interfere with the French if they come within the three-mile limit?—No.

6119. Then what was the good of them?—I do not know.

6120. What is the size of your herring nets?—31 cotton and 31 hemp.

6121. Do you mean 31 to the yard?—Yes.

6122. Did you ever have 36 or 39 to the yard?—Yes, I have seen them of that size for fishing little herrings, in Bridlington Bay.

6123. Is there any reason why you should not have your meshes 40 to the yard?—No, I think not. We just have them as we like.

6124. Does nobody ever look at your nets?—No.

6125. Do you know of any law upon that subject?—No, there was some talk about it four or five years ago, but we heard no more of the matter. I had a small net and I sold it for 5*s*., and the man I sold it to has been trawling with it ever since for anything I know.

6126. You have been a long-line fisherman?—Yes, for 20 years.

6127. I think you said you use the same bait for all kinds of fish?—Yes; we generally use mussels.

6128. Do you ever use a herring?—Yes, for cod.

6129. And when you cannot get that you use mussels?—No, we never use mussels; lampern eels are the best bait for cod-fishing in the winter time. They are the best bait we can get.

6130. Is that a good bait?—Yes, for codfish.

6131. Have you had any difficulty at all in keeping up a good supply of bait?—No, there is plenty of bait in Boston Deeps since we made them give over taking it for manure.

6132. Who interfered and prevented that?—The Lynn authorities at Boston.

6133. Do you mean the corporation?—Yes, I believe they interfered. Before that the bait used to be taken away by cartloads.

6134. Have you been in the habit of losing much by the dog-fish?—Yes.

6135. How much out of your fish will they take?—They generally take haddock, sometimes a few cod. Haddock they will clean off almost directly, if there be any.

6136. Do you lose any considerable portion of your fish in that way?—Yes, in the winter time I have seen as many as two or three score of haddock heads left on the line.

6137. The heads only?—Yes, nothing but the heads.

6138. Do the dog-fish do you more damage than the suckers?—The dog-fish do us most damage; the suckers do not do so much harm.

6139. Do you agree with the previous witnesses as to the cost of your fishing boats?—Yes, I think a good boat will cost about 1,000*l*. I do not think any man would get one under 1,000*l*. I have been an agent to a firm for the sale of nets, and I do not think a fisherman would get a fleet of nets under 200*l*., if he would even get one for that.

6140. There has been an increase in the number of nets used during the last 20 years?—Yes.

The witness withdrew.

W. Jenkinson.

William Jenkinson called and examined.

6141. (*Mr. Caird.*) Have you been a long-line fisherman here?—Yes.

6142–3. Are you still a fisherman here?—Yes.

6144. Do you agree with the previous witnesses as to the falling off in the quantity of fish caught?—Yes.

6145. What particular kind of fish has fallen off?—The codfish has fallen off. On the Dogger Bank we used to get plenty, and now if we fish there for a week we get very few indeed. The quantity caught there has been falling off ever since the trawlers came upon the bank.

6146. How long is it since you have observed the trawlers?—I saw them first about 30 years ago.

6147. Have they been coming off your shore during the last 30 years?—Yes.

6148. Have they been coming within four miles of your shore during that time?—Yes, within four miles of our shore, but the most harm they have done has been on the south coast, on the soft ground.

6149. Have you soft ground four miles out?—Yes.

6150. And have the trawl-boats been coming on it?—Yes, they have been for 26 or 27 years on that ground.

6151. Do they still come?—Yes.

6152. Are they as numerous or more so than they were formerly?—Just about the same.

6153. Are they quite as numerous as they used to be?—Yes.

6154. Do you set your lines there?—No.

6155. Why do you not set them?—Because we are afraid of the smacks taking them away.

6156. Do they take away your lines?—Yes.

6157. Have you ever lost your lines by the smacks?—I do not know that I ever did; there are people in this room who have done so. When we fall among these smacks we are afraid to set our lines, and we generally come away.

6158. Did you ever observe a trawl go across your lines?—Yes, many a time.

6159. Did it cross them without hauling them up?—No.

6160. It hauled them up?—Yes, and they were carried to Scarborough.

6161. Do you ever see a trawl net drawn up on deck?—No, I never saw one.

6162. Then you cannot tell us the contents of a trawl net?—No, but I have heard a fisherman say that he has seen a ton and a half thrown overboard.

6163. Have you long been a herring fisher?—Yes.

6164. Do you find that the herring-fishing has fallen off?—Yes, it has fallen off a good bit.

6165. Has not the number of boats increased considerably?—Yes.

6166. Does not each boat make as good a business of it as it used to make?—They may get a good season by chance, but it has fallen off very greatly during the last two years.

6167. What is the cause of that?—The smacks are the reason; they fish in the daytime, and we at night. We dare not come among them when they are fishing, we are obliged to go to one side, and we are forced to go outside somewhere or other.

6168. Do the trawl fishermen come among your herring nets when you are fishing?—Yes.

6168*a*. Do they get foul of your herring nets?—Yes.

6169. Have you ever had any of your herring nets fouled?—No.

6170. At what time are you in the habit of shooting your herring nets?—About an hour before sunset.

6171. Do all the fishermen conform to that custom?—Very few shoot before sunset.

6172. Would there be any advantage in having a law to compel them to shoot their nets at a certain time?—There could not be a law without interfering with the herring-catching, because the herrings are always taking their course.

6173. You think there would be no advantage in having a law?—The best law would be to keep the smacks away. If I were to go and shoot my nets, and these smacks were to come in, they would take every one of them up in a very short time.

6174. I think none of the previous witnesses said anything about the smacks injuring the herring-fishing?—No.

6175. Do you go to the herring-fishing now?—No, I do not go much. I have been a week or two this

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last year, that is all. But I know one thing, the smacks have done a very great deal of damage and a very great deal of hurt.

6176. Do you know the difference in the price of the fish as compared with what it was 20 years ago?—We get a better price for the fish than we did 20 years ago.

6177. Are the fishermen as well off now as they were then?—I do not think they are.

6178. In what way are they less comfortable?—They can get a better price for the fish, but there is less fish to catch. If they could catch more fish, even at a less price, they would get more money than they do now.

6179. Do you think they are not so well off now with a smaller quantity of fish than they used to be when they had a larger catch and a smaller price?—I think not. I have been a fisherman upwards of 70 years, and I do not think the fishermen are as well off as they used to be.

6180. What was the size of the boats at the time you refer to compared with what they are now?—They are a great deal better now than they were then.

6181. At that time were there any large decked yawls?—Yes, they had just begun to get decked boats when I first went.

6182. Are they about the same description of boat that they were 70 years ago?—They are better now, and of more tonnage.

6183. Have you found any difficulty in coming in here in stormy weather with the large boats?—I have at times.

6184. What have you done in such cases?—When I have come here and found I could not get in, I have been obliged to go to the Humber before I could get any shelter.

6185. You have been obliged to make for the Humber?—Yes, Scarborough we dare not try.

6186. Would it be of advantage to you if you had some shelter you could run to in heavy weather?—Yes.

6187. Do you think that would have a tendency to increase the number of fishing boats?—Yes, and the boats down south also might come in then; the Scotch boats and all the smacks could come. They could come here when they could not go to Scarborough. They can come here now when they cannot get into Scarborough.

6188. (*Professor Huxley*). How long is it since you saw the trawlers interfering with the drift-nets?—I do not exactly understand you.

6189. You spoke of the trawlers coming among the drift-nets, how long is that ago?—That would be 20 years since.

The witness withdrew.

E. Scales.

Edward Scales called and examined.

6190. (*Mr. Caird.*) Have you long been a fisherman here?—It is 20 or 30 years since I first began.

6191. Do you practise all the kinds of fishing practised on this coast?—Yes, cod-fishing and line-fishing.

6192. Long-line fishing of all kinds?—Yes, and soleing and herring-fishing.

6193. Do you find in your experience that the quantity of fish you can bring ashore now has fallen off as compared with what it was 20 years ago?—Yes, it has fallen off three parts.

6194. You can only bring in one part out of four ashore now as compared with what you used to bring?—No.

6195. Has the quality and size of the fish diminished as well as the quantity?—I see no difference in that.

6196. Has any particular kind fallen off more than another?—Yes, all kinds have fallen off—the haddock, the cod, ling, halibut, and all kinds.

6197. What do you think is the cause of that?—Nothing but the trawling.

6198. When did you particularly begin to notice the falling off?—We found it out as soon as ever the trawlers began to come.

6199. Has it been diminishing gradually?—Yes, ever since they came.

6200. Have they been increasing in number?—Yes.

6201. Have they come in close to your shore?—Yes.

6202. Have they done that for some time?—Yes, there are 18 or 19 of them going up every day.

6203. Do they trawl on the ground in which you used to fish?—Yes, and upon ground that we fish upon now.

6204. Do you catch fish now?—Yes.

6205. Do you get plenty of fish?—No, about 6 or 7 stone. Some odd times we may get 20 stone where we used to get 70 or 80.

6206. How many years is it since the trawlers began to come here?—About 20 years, and since then they have increased more and more. They have been getting a nice catch of fish, and they have kept increasing the number until they have cleared the ground very nearly.

6207. Do they still get a nice catch of fish?—I should say they can hardly make a living out of it now.

6208. Have you ever seen them bring up the trawl?—No.

6209. Then you cannot speak as to whether the fish are damaged by the trawl or not?—No, but I have seen some that had been taken to Scarborough that had been all torn to pieces, and had had all the scales pulled off.

6210. How long is that since?—Only last week.

6211. Had the trawler been at sea some time?—No.

6212. Had it just come in?—Yes, it went off at night and brought the fish in in the morning.

6213. Was a great proportion of the fish damaged?—Yes, there were more damaged fish than good fish.

6214. Out of the one boat?—Yes.

6215. Did you see every kind of fish that came out of the trawl-boat?—I saw the soles, I believe there were no bratt.

6216. Did you see all of them?—Not all. I saw what they brought to sell.

6217. Did you see all they had on board the boat at that time?—I saw all that came on the pier to be sold.

6218. How many baskets were there that were not good?—About two baskets.

6219. What was done with them?—They were sold for what they would fetch.

6220. They were not thrown overboard then?—No, I cannot say how much was thrown overboard.

6221. But you do not know that as a fact?—No, but the fishermen would tell us that they had thrown some overboard.

6222. With regard to the herring-fishing has there been as much decline as some of the witnesses have mentioned, or has the herring fishery been as good as formerly?—No, not half.

6223. Are there more boats than there used to be?—Yes.

6224. And do they not bring as many fish ashore as the boats did when they were fewer in number?—No, I think if they got the same that they got formerly they would lose all their nets by them.

6225. Why?—Because there was that quantity of fish on the ground formerly.

6226–7. What is the cause of the diminished quantity?—I cannot tell unless it be the trawlers.

6228. Does anybody interfere with you at all in regulating your mode of fishing?—No.

6229. Would you like to have somebody to come and tell you when you ought to fish, and when you should shoot your nets?—No.

6230. You think it better to take your own will upon that matter?—Yes.

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6231. (*Professor Huxley.*) What is the price of herring now, compared with what it was 25 years ago?—We sold the herring better then than now. I have been selling it for manure.

6232. Did you get a better price for it in that way?—No, but there was such a quantity caught.

6233. How long is that ago?—Twenty years; there were no curing houses then.

6234. Are there curing houses here now?—Yes.

6235. Is there a large quantity of herring cured?—Yes.

6236. Do you get as much money by your herring-fishing now as you did 20 years ago?—No, I think not.

6237. Do you catch less white fish also?—Yes.

6238. And do you get less money for it on the whole?—For soles better, but we do not get that quantity of fish.

6239. On the whole you do not get so much money?—No.

6240. Then the catch of herring has not made up to you for the loss of the white fish?—No, nothing of the sort.

6241. Were the soles that came out of the trawl much damaged?—I did not take much notice of them, they looked good, all the soles that came out of the trawl.

6242. You spoke just now of damaged fish?—I meant the whiting and little haddocks; those are the things they destroy, they are a tender fish, and they go bad in the net.

6243. The soles were pretty good?—Yes, they are a hard fish.

6244. When you spoke of damaged fish did you mean that they were bruised, or that they were small fish?—I meant they were bruised; there were good sized haddocks all mashed, and there were whiting that would have fetched a good price if they had come up with a hook, bruised and all mashed.

6245. Are you a herring fisher?—Yes.

6246. Do you ever get herring in January and February?—In February, no, it is too late; we give over then.

6247. What are your fishing months here for herring?—We start in the back part of July, and we laid up last week.

6248. Then do you go on till October?—Yes, the big boats do.

6249. Did you ever see an appearance of herring here in February?—No.

6250. You never did see any?—No.

6251. You heard me ask some questions just now about a law relating to lights and regulations of that kind, did you ever hear of them?—Yes, I have heard of them, but they were never set up.

6252. Do you know of the existence of any law about the size of your herring meshes?—No.

6253. Did you ever hear of any regulation about decked and undecked boats?—I cannot say that I ever did.

6254. Do the French interfere with you much?—There have been a few on the coast here; there have been less this year than for a vast of years.

6255. Has that been the case during the last few years?—There were a good few last year, but very few before that.

6256. Do you agree with the last witness that when they come among you they do you much damage?—If you take your nets down they will shoot over you, and take no more notice of you than if you were not there, and therefore you must get out of the way.

6257. Your decked boats are pretty big boats, are they not?—Yes.

6258. Are the French boats bigger than yours?—They are nearly as big again.

6259. Therefore you cannot hold your own with them at all?—No.

6260. Then if the Frenchman shoots over you and damages your nets, cannot you complain?—Yes, if it was of any use.

6261. Why is it of no use?—You cannot make anything of them.

6262. They are numbered, are they not?—Yes, but the gunboat takes no notice of them; she is in the harbour instead of being out here.

6263. But if you complained to the commander would it not do some good?—Yes, he has gone sometimes and brought them in, but he is always in the harbour now, so he is keeping a good look out; he has been in Scarborough now for a fortnight or three weeks.

6264. If the gunboat was wide awake and looked well after them, would he afford adequate protection?—I think so, but we never know when he is there.

6265. Would you be content if the French were kept outside of the three-mile limit?—Yes.

6266. Are most of the fish caught within the three-mile limit?—No, most of them are caught five, six, seven, and eight miles from the shore.

6267. Then what would be the good of keeping them outside the three-mile limit if most of the fish are caught seven or eight miles from the shore?—They should not come where the thick of the boats are when there is a shoal of fish; they all cleave to it as thick as may be; one will see a great quantity of herring and then all the rest will bring up there; they will bring up as nigh as they dare to them.

6268. You know it is the law that a foreign vessel shall not shoot her nets within three miles of the English coast?—Yes, but there is nobody there to hinder them.

6269. Suppose the gunboat were there to carry out the law, would that be of any use?—Yes, if they kept the Frenchmen to their limits it would do good, but the gunboat never comes nigh hand to them.

6270. But if the fish were seven miles off, then the Frenchmen would be entitled to fish; if he could only be kept three miles off he would be as nigh the fish as ever?—Yes.

6271. Then there would be no great good in enforcing that regulation?—No.

6272. When fishing, have you been interfered with by the trawlers?—Yes.

6273. Have they come trawling across your drift-nets?—Yes.

6274. Are you aware that that is contrary to the law?—Yes; they did till we found them out.

6275. Have they no numbers?—Yes; but it is generally dark. Four years since they came right down over our nets, and took all the buoys from them, and destroyed them altogether.

6276. Could you not fine them?—No; although we caught the boat we were so busy that we could not stop her till she got too far off.

6277. Then you in your small boat were unable to catch her?—Yes; we did not think of taking the trawler's number until it was loo late. If we had had the number we should have made him pay the damage, but we did not succeed in getting it.

6278. Do you think that any kind of police regulation would be of any good? Suppose the gunboat was among you could she not keep the trawlers from going across your nets?—Yes; I think so.

6279. Or if a man-of-war's boat rowed guard all night would that be of service to you?—Yes; they all lie as nigh as they dare among one another. The trawlers should keep at the outside. When there is one among them although you see a shoal of fish you dare not lie among them.

6280. But the law says a trawl-boat shall always keep at a distance of three miles from the herring boats. Did you ever hear of this? "Trawl-boats "shall always keep at a distance of at least three "miles from all boats fishing for herring or mackerel "with drift-nets"?—Yes.

6281. Do you think if that were enforced you would have sufficient protection against the trawl-boats doing you any damage?—Yes.

6282. If the trawlers were obliged always to keep three miles from you they would do you no injury?—No.

6283. Have you ever been herring fishing in decked or undecked boats?—Yes, in decked boats, and in undecked boats also.

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6284. When you were in an undecked boat have you shot your nets near where the decked boats were fishing?—Yes.

6285. Did you know that that was against the law?—No.

6286. Did you ever hear of this law—"Whenever "decked boats and undecked boats shall commence "shooting their nets at the same time the undecked "boats shall shoot their nets to windward of the "decked boats, except they should prefer going "leeward to a distance of at least half a mile to shoot "their nets." Have you never heard of that law?—No; we never heard of it.

6287. But that is the law?—It is a very bad law then. That law won't do.

6288. Why do you think it is a bad law?—Why, if you see any herring near you, you are not going to stand outside of them.

6289. Do you prefer the chance of taking the fish and running the risk of being fouled?—We haul in when we have any fish in the nets, and when we can get none we go and look for them. If we rouse a shoal of herring in the water, then of course we will have our nets among them if we can.

6290. That is always the case?—Yes; it is of no use going to land without herring.

6291. But there is a law relating to decked boats as well. The Act of Parliament says, "The decked "boats on their part shall shoot their nets to leeward "of the undecked boats unless they prefer going to "windward to a distance of at least half a mile to "shoot their nets;" so that you see the law keeps the decked boats away from the undecked boats, as well as undecked boats away from decked boats?—Yes; it keeps them all at a distance.

6292. What do you think of that provision of the law?—I do not think it will do at all. It cannot be better than it is now.

6293. This law was made to prevent the chance of decked boats fouling undecked boats?—Yes.

6294. Would you rather take your chance of being fouled, in order that you may get what fish you can?—Yes.

6295. Do you think the trawlers do you a great deal of harm?—Yes; a great deal.

6296–7. What would you like to have done with the trawlers; would you like to have them condemned?—Yes; the whole lot of them.

6298. Would you not let them fish anywhere?—No; only with a hook-and-line.

6299. At one place a long-line fisherman told us he would keep them 12 miles outside the Dogger Bank, would that suit you?—Yes. We do not often go there. We could not get our fish in from there; it is over far.

6300. Do you think the long-line fishing and trawling could go on on the same ground together?—No.

6301. Why do you think they could not?—Because I have experienced it. I have some long-lines going yet, for aught I know, at the stern of a trawler.

6302. Why do you think that the two processes cannot go on together on the same ground?—They are so much stronger than we are and when they get hold of our tackle they take it all away together.

6303. Have you ever lost tackle of that kind in consequence of its being carried away by the trawlers?—Yes.

6304. How long ago?—Four years.

6305. Is that the only occasion on which you have lost long-lines?—Yes, that is the only case.

6306. Were they all carried away together?—Yes.

6307. Where they destroyed?—I never saw any more of them.

6308. Is it possible for the trawlers to work over the long-lines without carrying them away?—They might do so an odd time, but I am sadly afraid when they go over mine that they will take them away altogether. It is not often that they go over them without injuring them.

6309. Is there any other reason why you would put the trawlers down?—Yes, because they destroy all the fish. When I go out fishing now I can hardly get anything.

6310. You do not mean to say that they destroy all the fish, because I believe they go on getting fish themselves?—They can hardly manage to make a living of it.

6311. In your experience of them has the number of trawlers increased?—I believe it has, but I think they are at the far end now. There is a good lot of them to sell.

The witness withdrew.

W. Cammish.

WILLIAM CAMMISH called and examined.

6312. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, ever since I went to sea when I was 11 years old.

6313. Are you still practising the fishing?—No. I gave it up about 14 or 15 years ago.

6314. Is it the case that although the number of boats has increased in the herring fishery, some of them may not be making much by it?—The seasons alter. Sometimes there is a good supply of herrings and at other times they are very scarce.

6315. Can you give us any reason why the number of boats should have increased at the herring-fishing if the fishing itself has fallen off?—No.

6316. Is it not the fact that the number of boats has increased?—Yes, there used to be only 11 or 13.

6317. And how many are there now?—26 or 27.

6318. Do some of them make a more fortunate fishing than others?—Yes a great deal.

6319. Some are very fortunate while others may be very unfortunate?—Yes.

6320. Is it the case that in one season you may have some boats making a very good trade of it while a greater number are making a very bad trade?—Yes; that is so this season. The herring-fishing is quite a lottery business. The herring run in shoals and some may be more fortunate than others in coming across the shoals.

6321. Are there men who are more fortunate than others every year?—No, they are not always so.

6322. So the fortunes are pretty equally balanced taking an average number of years?—There are some who are fortunate for some years and then their good luck falls off and there are some who have been unfortunate one season who have been more fortunate in other seasons.

6323. Is it by the good fortune of some that the boats have increased?—They have increased by different people taking shares in them. There are many who do not go to sea themselves who have an interest in some of the boats.

6324. But surely they would not put their money in these boats if they did not find it answer?—Some do put their money in and they do not find it answer.

6325. But I presume they expect it to answer when they invest their capital?—You are right there, nobody speculates in a business without looking for something in return.

6326. Have you ever seen the trawl-boats hauling up their trawls?—No; I never was aboard of one.

6327. Do you agree with the previous witnesses as to the falling off in the produce of the line-fishing?—Yes, I have been at that business and I have got an abundance of fish. I have got large quantities with nothing for bait but mussels between Flamborough Head and Dimlington.

6328. Has the take fallen off considerably from what it used to be?—Yes, I can see from what the men bring in now that it has fallen off.

6329. Do as many boats go to the fishing now as did in your time?—They do not go upon the same

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ground I used to go upon at all. They could get nothing there, not between Flamborough Head and Dimlington.

6330. Do the trawl-smacks go there?—Yes, I think so.

6331. Do they get good takes?—I do not think they do, but I do not know. Our fishermen never go there.

6332. Is there any ballast thrown into this bay at all?—No.

6333. Is there any refuse of any kind thrown into the bay that could damage the fishing?—No, the boats all lie in that Brigg there.

6334. (*Professor Huxley.*) Have you known this place for many years?—Yes.

6335. For how many years?—For more than 60.

6336. Then you know pretty well the ins and outs of it, who owns the boats and who does not?—Yes, I know some of them.

6337. Do you think that the number of fishermen owning boats or having part shares in boats has increased during the last 30 years since you have known the place?—Yes.

6338. Has it largely increased?—Four or five years ago the herring fishery was good; there were large catches and the prices were good, and that made men speculate in that business, but during the last four or five years it has fallen off very much.

6339. How many years is it since the price of herrings was very good?—It would be about five or six years back.

6340. How many boats were here about 10 years ago, I mean the large boats?—I can hardly tell; there were perhaps 12 or 14, but I never kept any account.

6341. 12 or 14?—There used to be that number for several years.

6342. How many boats had you five or six years ago when you had this great take in the herring-fishing?—Perhaps 17 or 18, but I do not know rightly.

6343. 17 or 18?—Yes.

6344. Then there have not been more than five or six added in consequence of this lucky stroke in the herring-fishing?—No.

6345. How many have been added? You said the number of boats had increased in consequence of the people obtaining large profits from herrings, how many have been added, have there been more than three or four?—Perhaps four or five, or may be six.

6346. Do you think there was such a large sum of money taken at that time in the herring-fishing that persons could afford to invest 5,000*l.* or 6,000*l.* suddenly in herring-fishing boats?—It was not one person that would do that.

6347. Was the take enough to enable them to do it?—I cannot tell.

6348–50. It must have been a tremendous take to enable you to clear 5,000*l.* or 6,000*l.* all at once?—They never did it.

6351. You heard the evidence given a short time ago as to the fishing boats being for the most part paid for; there are no great mortgages upon them, are there?—I cannot tell that.

6352. Have you any notion how the fishing population as a general rule stand here; are they doing well or are they in difficulties?—That I cannot tell.

6353. Have you no general notion, have you no idea at all?—It is not my business to interfere with regard to other people's circumstances.

6354. I am not speaking of any individual, but with regard to the whole town. A man generally knows whether the town is prosperous or not?—It has not been so prosperous this last year or two.

6355. If there was any distress, I presume the fishermen would be in debt to the shopkeepers; I am not seeking to inquire into any particular person's affairs, but I want you to speak generally?—All I can say is that the herrings have been indifferent for the last few weeks.

6356. You do not think as a general rule that the fishing for herring has made up for the poorness of the fishing for white fish?—No, nor anything else. At the white-fishing they used to earn a good deal of money. They went away at the latter part of February, and fished from Lent up. During the whole of March they would fish, and they used to earn a good deal of money, more than they can earn now if they were to go five or six months to the herring fishery.

The witness withdrew.

R. Pickering.

Richard Pickering called and examined.

6357. (*Mr. Caird.*) Have you been at sea in a trawl-boat?—Yes.

6358. Have you been more than once?—Yes, several times.

6359. Off what coast?—Off Flamborough Head and off the Silver Pits.

6360. Have you frequently observed the trawl net brought to the surface?—Yes.

6361. What proportion of the fish brought up on the average was marketable, and what proportion was not marketable?—By far the greater part of it was marketable. I have seen as many as five tons hauled up at one haul, and there would not be more than two or three basketfuls thrown away.

6362. Were the two or three basketfuls so small that they were thrown overboard?—That is not exactly the reason. Among the fishing apprentices it is a perquisite to take what they call the dabs, the small whiting, the rays, the gurnets, the crabs, shell-fish of every description, whelks, and other things. The smacks stay out for two or three weeks, and occasionally five or six weeks, and they do not keep this fish for the boys, except the last two hauls or so before they proceed home, and that is the reason the small fish is thrown overboard, but for the last two hauls before they are going home there is nothing thrown overboard.

6363. When they keep for days together at sea have they any means of sending the fish they catch to market?—Yes.

6364. But they do not think that this small fish would pay the carriage?—No.

6365. What would be the average amount of small fish of that kind thrown overboard?—When I was on board they packed the fish in baskets, and out of 20 baskets there might be two or three of small fish.

6366. You observed the condition in which the marketable fish were?—Yes, so far as I saw it, it was always in a good condition, except it had been kept for some time on board the vessel.

6367. Was it mangled or much damaged?—I never saw it even cut through the skin.

6368. Did the fish come on board alive?—Yes, the whole of them.

6369. Does that apply to the small fish too?—All of them are alive when they are first drawn up but they soon die.

6370. Have you seen any spawn hauled up in the trawl?—Never.

6371. Have you ever seen spawn lying on the deck?—I have noticed it after they have gutted the haddocks. Haddock devours spawn of every description.

6372. How many times have you had occasion to see the trawl net drawn up?—I have seen it drawn up several hundreds of times.

6373. In different seasons?—Generally from February to October.

6374. Has that been in different years;—Yes.

6375. How many years is it since you saw it?—It will be four years since and perhaps four or five years preceding that since I saw it before.

6376. Do you know whether the trawl-fishers make a good business of it?—Yes, they do very well. The owners seem to do very well. I am acquainted with several of them.

The witness withdrew.

FILEY.

G. Douglas.

1 Oct. 1863.

GORDON DOUGLAS called and examined.

6377. (*Mr. Caird.*) Mr. Douglas, have you had much opportunity of observing the state of the fishermen and the trade in this place?—Yes.

6378. Have you been here for some time?—I have been here very nearly four years.

6379. Have you yourself gone to sea with the fishermen?—Not here, but I have in other places.

6380. Then such experience as you have has been derived from what you have seen on the shore?—Yes.

6381. During the four years you have been here, have you observed whether the take of fish has increased, decreased, or remained stationary?—I cannot speak positively as to that. I have heard great complaints on the subject, and I know that there has been very little fish got of late years compared with other places with which I am acquainted, where the trawlers do not exist.

6382. Can you say whether, in the course of those four years, you have observed the take of fish diminishing?—I can say nothing, except from hearsay.

6383. Have you ever observed the trawl-boats at work?—I have seen the fish landed at Scarborough.

6384. Are they in good condition when they are landed?—No, they are in a very bad condition. They are much mashed and bruised.

6385. Is that constantly the case?—Yes, with regard to all the trawled fish I have ever seen.

6386. Have you seen much fish landed at Scarborough?—Yes, I have seen several smackloads landed.

6387. Have you seen it coming in day by day?—Yes, day by day. I am very often at Scarborough, and I generally go down to the pier.

6388. Is all the fish damaged in that way?—Yes, I have never seen any that has not been.

6389. Are the fish put ashore there?—Yes, and they are all bruised and mashed.

6390. Have you often seen it sold?—I have seen it before it was sold, but I have never been at the actual sale of it.

6391. Have you ever seen good fish brought ashore?—No, not good looking fish nor large fish.

6392. Was it in great quantities?—Yes, there have been a good many smacks here.

6393. Would one smack have the average fishing of a line-boat?—In the present day I think it would, because the fish has been very poor on this coast lately.

6394. Have you seen a line-fishing boat come alongside with a smack?—No, but I have compared them.

6395. Would there be more in a smack than in a line-boat?—Some days there would and in others there would not.

6396. (*Professor Huxley.*) When you spoke of damage to the fish, Mr. Douglas, to what extent do you mean that it was damaged; do you mean that the look of the fish was not so good, or that it was absolutely torn?—I do not think the fish looked anything near so good, and I do not think it would be so good to eat. I think the driving of the fish in the trawl breaks the gall bladder.

6397. Did you ever eat trawled fish?—No, with the exception of soles.

6398. Did you find any difference in the soles?—Not so much in the soles, they are flat-fish; but with regard to others I think the trawling breaks the gall.

6399. Have you ever examined the fish to ascertain whether the gall bladder was burst or not?—I have never examined them personally, but I have known persons who have done so. I have never been on board and seen them haul their nets in the trawlers.

6400. You do not know of your own knowledge that the gall bladder has burst?—No, I know nothing, excepting what I have heard the people say who have examined them and found the gall bladder burst.

6401. Do you find that the trawl-fish are invariably scaled or have they their scales on?—It has a generally rubbed, or bruised, or scratched appearance.

6402. Have you taken the trouble to scrape one and ascertain whether the scales were on or not?—Generally they are so much scraped that they would hardly bear any more scraping.

6403. I tried it the other day, and I did not find it difficult. Have you ever tried it?—No.

6404. Have you ever seen the scales broken off a fish caught in the trawl?—Yes, I have seen the scales of haddocks broken off.

6405. Is it so common, do you think, that it spoils the fish *en masse*?—I should say so.

6406. Have you seen it as a matter of fact. Have you seen a large proportion of the fish with their scales broken?—I will not say a large proportion, but as a general rule they look bruised as if they had been walked on and well trampled. I have seen them trample on the fish on board as if it was so much dirt.

6407. There is a great difference between fish looking bruised and having its skin broken. I want to get at the fact whether the skin is broken or not. There is the same difference as between a man's face being bruised and his face cut. Have you observed the skin being broken, or at all destroyed?—I have seen it broken.

6408. Is that a general rule among the trawled fish?—I will not say that it is a general rule.

6409. Have you found there is any difference in the length of time the trawled fish will keep as compared with other fish?—I cannot say from my own experience, but from the look of the fish I should not say it would keep very long. I see all the boats of the line-fishers coming in here in the winter time.

6410. You said that you had occasionally eaten soles that had been caught by the trawl?—Yes.

6411. Did you ever find that they did you any harm?—No.

6412. In examining the fish market, have you ever noticed any difference in the price given by the dealer for trawled fish as compared with hooked fish?—I have never taken such particular notice. I can only speak of what I have seen at Scarborough.

The witness withdrew.

(*Mr. Caird.*) Is there anyone in the room who desires to add anything to the evidence which has been given?

There was no response; and the inquiry was then adjourned until Friday, October 2, at Flamborough.

Flamborough, Yorkshire, Friday, 2nd October 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

FLAMBOROUGH.

T. Fell.

2 Oct. 1863.

TANTON FELL called and examined.

6413. (*Mr. Caird.*) Are you a fisherman at Flamborough?—At present I am.

6414. Have you been for some years a fisherman there?—All my life I have been at fish buying, fish catching, or fish curing.

6415. Have you been engaged in all those businesses?—Yes.

6416. Are you engaged in them at present?—At the present time I am engaged in fishing.

6417. What different kinds of fish are caught off

this coast?—Cod, hake, skate, ling, herring, plaice, conger eels, and various other kinds of fish.

6418. How many years back does your experience extend?—40 years.

6419. Has there been any increase in the number of fishing boats here within the last 10 or 20 years?—Yes, there has been a considerable increase in the number of fishing boats.

6420. Can you tell us what the number was about 20 years ago?—I cannot give you the exact number. There may be 9 or 10 boats more now.

6421. There are 9 or 10 boats more now than there were 20 years ago?—Yes.

6422. Are the boats larger now or smaller than they were formerly?—There are more large boats now than formerly, but they still carry the same number of men.

6423. But is there a larger number of hands on board now than there used to be?—I think they will have rather more hands now than they used to have. The herring boats carry far more.

6424. How many boats are there here which are engaged in the herring fishery?—I think there are somewhere about 30.

6425. How many are there engaged in the long-line fishery?—There are about 42 in-shore boats.

6426. Have you different boats for the herring-fishing, and for the long-line fishing?—Yes.

6427. I want to know what number are engaged in the long-line fishing?—I think there will be about 42; but there is a difference; in some years there were 43 or 44. In some years there are sometimes more and sometimes less.

6428. Have you noticed in the course of your experience any change in the quantity of fish that can be brought on shore in a single catch by one boat on the average?—Yes, as things were in times back,—I mean a number of years back,—they would average a great weight of fish in a take. Now the fishing is quite different. In point of fact it has been turned upside down.

6429. You are now speaking of the long-line fishing?—Yes.

6430. What would be a fair day's fishing 20 years ago?—A boat would get 58 or 60 stone of cod, haddock, and other fish. They would average that each boat.

6431. And what will the average be now each boat?—Sometimes 12 or 15 stone. A catch will be something in that way. We have very few caught now at all. Sometimes a boat will go out and only get 2 or 3 stone.

6432. Then there has been a falling off in the take of fish?—Yes, an immense falling off.

6433. Has the falling off been in any particular kind of fish?—It has been in cod in general.

6434. Are the fish as large and as fine as they used to be?—No, there are very few fine fish caught now as compared with what were caught formerly.

6435. Have the haddocks diminished in quantity?—Greatly.

6436. Have they diminished as much in quantity as the codfish and the other fish caught here?—The cod and the haddock are much the same. They are a light sort of fish, and they are generally caught here young; the codfish are also very small, weighing 3 lbs., or 4 lbs., or 5 lbs.; they are a very small-sized fish.

6437. Were you not in the habit of catching fish of that size 20 years ago?—Yes, plenty, and much larger too. We used to get plenty of cod and haddock too.

6438. Do you get any turbot here now?—No, not here.

6439. Was not this at any time a fishing place for turbot?—No, very little.

6440. Have you much fishing for soles?—No, the trawlers have done away with that.

6441. Have you any trawl-boats here?—No.

6442. Neither large trawlers nor small ones?—No.

6443. What do you think is the cause of the falling off in your fishing?—According to my idea the principal cause is this: We used three or four of us to cure fish from 1835 up to 1844. At that time there were very few trawlers; I do not suppose that there were more than seven or eight, and we could send our boats out to Dimlington, and they would bring us in 2,000 head in a day or two's catch. That is far more than is caught now. Well, the trawlers kept increasing, and as they increased so the fishery kept diminishing, and we thought that the falling off was caused by the trawling. Whether it was or not, it is not for me to say. We say that that was the cause. At last they came down right across and athwart the Edge, and the fishing gradually diminished until now we can scarcely get a cod in a day.

6444. Have you observed in particular fishing grounds whether the quantity of fish caught have gradually diminished. Have there been particular grounds on which that diminution has been more marked than on others?—Upon all the grounds off here the fish have gradually diminished, particularly codfish and haddocks.

6445. Do the trawl-boats come on the same ground you fish over with your long-lines?—Yes, they come over some parts of it, and we dare not attempt to fish where they are. They carry us away just like a whirlpool.

6446. Are there some parts of your fishing grounds upon which you have not been interfered with by them at all?—Yes, there are many places where they cannot trawl on account of the rocks. That is where we get our fish now; I mean all that we do get.

6447. Have the fish fallen off there?—There are only a very few miles of ground upon which they cannot trawl.

6448. Upon those few miles do you find more fish than upon the ground where they do trawl?—Of course we do.

6449. Have you observed that yourself?—Yes, that is the principal spot upon which we catch our fish.

6450. Can you catch as many there as you could before the trawlers came here?—No, the large fish do not come in now; the fish run off to the soft ground in the spring time. The trawlers destroy the spawn, and I believe that that is the cause why the big fish do not come in. At any rate, we say so.

6451. Have you ever seen a trawl net drawn up to the surface?—No.

6452. Then you cannot speak of your own knowledge of any actual destruction caused by the trawl nets?—No, I cannot. I never was on board a trawler.

6453. Do you fish for shell-fish here?—We do for crabs and lobsters.

6454. Have they increased or diminished in quantity?—In some years we have a very good year; in other years they are not so good. We have plenty of small shell-fish, however.

6455. There has been no marked diminution in them?—No, very little. There are a good many more boats going now than used to be engaged in that trade.

6456. More boats go now?—Yes, a good many more.

6457. Are there a good many more crabs and lobsters brought in?—No, not so many as were brought in formerly. There used to be very few boats in the trade, and the quantity of shell-fish caught could not be consumed in those days.

6458. Are there not as many lobsters as there used to be?—No, not one quarter as many.

6459. Are there as many crabs?—There is a very fair supply of crabs.

6460. What is the reason the lobsters have fallen off?—I cannot say.

6461. Are they more closely fished than they used to be?—Yes, they are a great deal more closely fished.

6462. Do strangers come from a distance to fish on your lobster grounds?—No, I do not think that any strangers come to interfere with us.

6463. Is the herring fishery an important business here?—Yes.

6464. Do a boat's crew make as much money by the herring fishery as they do by the whole of the

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long-line fishing?—It will depend very much on the season.

6465. Has the number of herring boats increased during the last 20 years?—Yes.

6466. Can you tell us what the increase has been?—No, I cannot tell you that.

6467. Do they carry larger nets—a larger fleet of nets?—Yes, they carry more nets than they used to carry formerly; a great deal more nets.

6468. Have you more than one season for fishing herring?—Yes; they are going to catch the in-shore fish now.

6469. What is the principal season for the herring-fishing here?—They start about the 14th of July, and they end about September, in general. They are a few days later this season than they generally are.

6470. Do they fish only at that time of the year for herrings?—Yes; a few of them work in Bridlington Bay, off here, for in-shore fish.

6471. Is that during the month of October?—Yes.

6472. Do you find the herring at all in the month of January?—No, not here.

6473. Are they here in any other month than those that you have named?—They are here in October, and in part of November.

6474. Do the French boats come here at all?—No.

6475. You are not disturbed by any strange boats coming among you?—Not in-shore; sometimes they come off the Head here when we are in the offing, but there have not been many down here this season.

6476. Have you had many French boats here at all?—No.

6477. Have they given you great trouble in any other season?—Yes, a great deal sometimes.

6478. Was that when there was particularly good fishing?—Yes.

6479. Did they follow your boats?—Yes, and they covered the ground, and we might then go and do as we liked, because we dare not fish among them.

6480. Did they come within the three-mile limit?—Yes, they did.

6481. Are you aware that there is a three-mile limit?—There are different opinions about that. Some say that it is taken from a fair sailing scale, and that it includes the bays; for instance, that it is to be three miles north and south from the headlands. Now Hartlepool is a long way in; the fish are never inside that bay, but at other places they come inside; at Scarborough, for instance, they can come in quite close. The three-mile limit would be very little good in some places unless it is taken from the headlands.

6482. Are the principal shoals of fish generally outside the three-mile limit?—They are, in some part of the ground.

6483. I am now speaking of your coast?—Yes, they are generally outside the three-mile limit here.

6484. In the course of the herring season here you get more fish outside the limit than inside?—Yes, I am convinced of that.

6485. Outside the limit?—Yes.

6486. Are there any gunboats that ever come down here to look after the fishing, and enforce any regulations?—We have had gunboats here in some years.

6487. Were there any gunboats here last year?—Yes, I believe there was one.

6488. Do they do any good to you in protecting you from the interference of the French fishermen?—They will go out sometimes, but they have such a long route to travel from Hartlepool here, that if the French boats drop their nets in here they may take them where they like, and it is 100 to 1 against the gunboats ever finding them.

6489. Have you any regulation as to the size of your meshes, or the time of shooting your nets?—No.

6490. Does any authority come down here to point out to you that there are certain rules that ought to be observed?—Yes; as to the meshes, there are rules.

6491. Has there been any officer here to measure the size of your mesh?—No, not lately.

6492. Then practically you do what you like yourself?—Generally. We want to catch the biggest fish, therefore we use wide meshes.

6493. But nobody interferes with you in any way?—No, not lately.

6494. Can you recollect any time when they did?—Yes, they did when we had the bounty for salting fish. A Mr. McClellan, a Scotchman, used to look after the nets then.

6495. Is that some years ago?—Yes, it is 20 years since he used to come here and stamp the fish.

6496. Is there any advantage in having a regulation in regard to the time at which you should shoot your nets?—I do not think that that would make much difference.

6497. Would you desire to have a regulation enforced by authority that every one of the fishermen should not shoot their nets till a certain time, or would you prefer, as at present, not to be interfered with?—It takes some of the large boats a longer time to shoot their nets than it will take the smaller ones; we use the smaller boats, and therefore do not think that such a regulation would be of much advantage to us.

6498. Are the shoals of fish likely to be broken in consequence of the nets being shot too early in the day?—No, I do not think they will come up until night.

6499. Do the French shoot their nets earlier than you do?—Yes, a great deal.

6500. Does that break the shoal of fish?—I cannot say.

6501. You are not aware that it has done any damage to the fishing?—No, I cannot say.

6502. You are a buyer of fish, I believe?—I have been a buyer of fish, but at present I am a fish catcher.

6503. Can you tell us anything about the markets to which the fish are sent from here?—Yes, I think I can.

6504. To what markets do you send your fish?—To Manchester, London, Liverpool, Leicester, Nottingham, Birmingham, Northampton, and various other places.

6505. How long is it since you began to send fish to these large markets?—Ever since the railway was opened. It used to have to go by carts, and then it was generally two days in going. We had to cart it night and day.

6506. Then I suppose that there has been a great advantage derived from the opening of the railways in getting your fish earlier to market?—Of course there has, but there has not been so much caught. There used to be an immense quantity caught before the trawling commenced.

6507. From your experience as a seller of fish are you enabled to state what was the price you used to get as compared with the price given now?—The price is higher now, and that is in consequence of there being such small catches of fish in comparison with what there was formerly.

6508. Is the price higher in Manchester now than it used to be a few years ago?—Yes, it is for good fish, because there is not the quantity caught that there was formerly.

6509. Do you speak of your own knowledge?—Yes; when I used to send it I could sell it for 2*s.* a stone at Manchester, now I cannot sell it for anything like that price. Then they were getting 60 or 80 stone, whereas now they are only getting 10 or 12.

6510. What price did you get at Manchester some years ago?—2*s.* a stone.

6511. What price do you get now?—Not much more than that when the carriage and everything is paid. We used to get 8*d.* or 1*s.* a stone when there was so much of it caught.

6512. That was clear of all expense?—Yes, it used to be sold at that price.

6513. Was it sold at Manchester for 8*d.* to 1*s.* a stone?—No, it was sold here for that, not at Manchester.

6514. What was it sold for at Manchester ?—2*s.* a stone.

6515. What is it sold for at Manchester now ?—From 3*s.* to 4*s.* a stone; but the price depends upon the quantity that comes in from other markets.

6516. I want to get at the average price now as compared with what it was some years ago ?—There is no average price for fish, it depends very much on the catch, but the catch does not amount to what it did formerly by a long way and the prices are therefore higher, but we could get more money formerly when we sold the fish at 8*d.* to 1*s.* a stone than we can now when we get 3*s.* and 4*s.*

6517. Do many mackerel come off here ?—A few come with the herrings, but we do not catch many.

6518. Do you not follow mackerel-catching ?—No, it is not followed here, there is very little of it.

6519. Are there not sufficient mackerel to make it worth your while ?—We are generally away herring catching at that time.

6520. (*Professor Huxley.*) When you were a long-line fisher did you ever have your lines carried away by the trawlers ?—I have not, but there are persons here who have.

6521. Was that a common thing ?—Yes. They dare not put their lines down; they are obliged to keep them up. If there is a strong wind they would be sure to be taken away. I never had any taken away myself.

6522. What is the size of your herring nets ?—About 31 or 32, I think.

6523. Thirty-two meshes to the yard ?—Yes.

6524. Why do you make them no smaller than that ?—We want to catch the biggest fish we can; we want to catch the large fish.

6525. Suppose you wanted to catch small fish, and wished to make your mesh 40 to the yard, is there any reason why you should not do so ?—I believe that 36 is the lowest we could go to. They are all manufactured by steam now, and I believe they do not make them that size.

6526. Are you aware of the existence of any law against having the meshes 40 to the yard?—The fish we should catch with a net composed of meshes of that size we could not sell; nets of that kind would be of no use to us.

6527. But do you know that such a net would be against the law ?—Yes, it would be against the law of the land.

6528. What is the legal size of the mesh ?—I think it is the size of a shilling. It must allow a shilling to pass through it.

6529. Has anybody ever examined your net ?—Oh, yes.

6530. Within how many years is it that that was done ?—Well, it would be 20 years since anybody looked at them.

6531. How is it that the French interfere with you; cannot you shoot your nets among them ?—Yes, but they will most likely get their nets shot before we start from the shore.

6532. You have no room when you get to the ground to shoot your nets ?—No.

6533. Is their tackle as heavy as yours ?—Yes, it is as heavy again.

6534. Then that causes them to interfere with you more than they would otherwise ?—They have far stronger vessels, and they think that they have as much right to fish there as we have.

6535. Are yours open boats ?—Yes.

6536. Undecked boats ?—Yes, and our nets are as light and fine as possible.

6537. Are the French boats all decked boats ?—Yes, and some of them are of large tonnage.

6538. Have you heard of the existence of any regulations with regard to decked and undecked boats ?—Yes, we have had the Fishery Act here; we had it a number of years back, but there has been some alteration made in it, I think.

6539. Is there anybody here to see that you carry out the Fishery Act or not ?—No.

6540. You do pretty much as you like ?—Yes.

6541. Do you carry lights in your boats ?—Yes.

6542. How are they arranged ?—We only carry a lantern.

6543. Is that fixed to the masthead ?—We cannot put it on our mast heads, because we take the masts partly down, but we put it on a pole.

6544. Have you only one lantern ?—Only one.

6545. Do you know whether there is any regulation on that subject ?—No, I never heard of any.

6546. Do you find that the trawled fish coming to market does you harm with the fish salesmen ?—Of course it does us harm.

6547. In what way ?—The dealers have indifferent sort of fish, which goes into the market when it is scarcely fit for food.

6548. But how can that do you harm ?—Of course, if it can be sold cheap, it does harm to the fresh good fish.

6549. Would the people rather have trawled fish than yours ?—Some people will buy it if it is cheaper.

6550. Have you had your fish driven out of the market by trawled fish ?—Ours is always sold, but it has sometimes brought a less price in consequence.

6551. Then the result has been that the trawled fish has brought yours down in the market ?—The small fish would bring the price down in the market when there was a great deal of it, like anything else, but we should not think anything about the trawled fish being sent into the market if the trawlers did not destroy the spawn.

6552. Then you would not object to being undersold in the market ?—No, let every man have a fair chance in the market.

6553. You were speaking just now of the trawled fish being damaged and not fit for food, how is that ?—It may have been aboard several days. I have seen plenty sent to market that was not fit to be sold for food; some of it has been called a nuisance and condemned, while other portions of it have been packed off.

6554. If your hooked fish were kept for several days, would it not become unfit for food ?—Yes, it would.

6555. Does trawled fish become bad sooner than yours ?—No, I think that ours would become bad the soonest.

6556. How is that ?—The fish we catch is a softer sort of fish.

6557. You catch a different kind of fish ?—Yes, we do not catch so many of the fluke kind as they do; if we caught the same sort of fish the quality of ours would be so much better that it would keep longer. The fish that is caught with a hook always turns tight and stiff, but that caught in a trawl net always becomes soft and black.

6558. (*Mr. Caird.*) Where do you get your bait here ?—It comes from Boston Deeps.

6559. Have you no bait on your own shore?—There are a few mussels in the bay, but the trawlers tear them all away.

6560. Are they at present doing injury to the mussel beds you formerly used to get your mussels from for bait ?—We used to get them out of the bay; not all of the mussels we used, but part of them. I have known boats going to fetch them. There are plenty in the bay, but the trawlers tear them up with the trawls going over the beds when they are fishing for plaice.

6561. Do the trawlers trawl over ground upon which you used to get bait ?—Yes, there are mussel beds in several parts where they trawl.

6562. Were you ever in the habit of getting bait from those mussel beds ?—I never did personally, but I have known people who did.

6563. How did they get them ?—We dredged them up.

6564. Dredged them up ?—Yes.

6565. Then you were doing the same thing that the trawlers are doing now ?—Yes, just the same.

6566. I understand you to say that you do not depend for bait upon that supply ?—No, we used to get

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them from Holland. They took them all out of the Boston Deeps, but ultimately they were stopped. Boats now come down here and sell them at so much a bushel, and lay them on the rocks.

6567. Do you take them up fresh from the rocks?—Yes, just as we want them.

6568. Have you any difficulty in regard to getting bait at present to enable you to follow your trade?—The men bring them from Boston Deeps here.

6569. What sort of ground is there in this bay?—It is chiefly rock and clay, and so on; the rocks extend so far and then there is sand.

6570. Is it upon the rocks that they trawl for plaice?—Yes it is, and the mussels grow upon the rocks; it is only the rocks that they dredge upon for mussels.

6571. You say that some of the trawl-boats come very close in-shore here, are they large or small trawlers?—They are only small trawl-boats.

6572. Are they cobles?—Yes.

6573. What do they trawl for?—Plaice.

6574. Do they trawl for soles?—No, only for plaice, there are no soles.

6575. Have they long been trawling there?—Yes.

6576. Where do they come from?—They belong to the coast here; they come from Bridlington Quay.

6577. Have you none here at Flamborough?—No, we go and fish in places where we have a chance, but when they come trawling among us they take our lines away.

6578. Have they trawled long over that ground?—Yes, for several years now.

6579. Do they get a good fishing now?—They shift about as the mussels grow; the mussels afford the feeding ground; you will not find the plaice except where the mussels are; they lie there.

6580. From your own knowledge of those boats which come to trawl for plaice on this feeding ground, do they get as good fishing now as they did when they first began?—No, nothing like it, there is nothing like the quantity got now that was got some years back.

6581. Not by the trawlers?—No.

6582. Are the number of boats employed for that purpose increasing or diminishing?—I am unable to answer that question; they all come from Bridlington Quay.

6583. Then you do not know really whether they make a good business of it or not?—All I know is that the quantity of plaice is not so large as it used to be; years ago there were a great deal more taken than they take now.

The witness withdrew.

R. Major.

RICHARD MAJOR called and examined.

6584. (*Mr. Caird.*) Have you long been a fisherman here?—I have been here ever since I was a boy.

6585. Are you engaged as a fisherman now?—Yes.

6586. Do you practise all the kinds of fishing that are practised on this shore?—Yes; for the most part we practise herring-fishing, crabbing, and cod-fishing.

6587. Which yields the largest return in the course of the year? Does the herring-fishing or the line-fishing bring you on the whole the largest sum of money for what you take in the course of the year?—Generally the herring-fishing when we have a good season.

6588. In the course of your experience have you noticed any change in the quantity of the fish brought to the shore in the line-fishing boats; has it increased or diminished?—It has diminished, what I know of it. I cannot give you a better explanation, however, than the previous witness has given you. He has had more experience.

6589. Do you agree with him entirely in the statement he has made?—Yes.

6590. What do you think is the cause of the diminution, and why has the quantity of fish brought ashore in the line-fishing boats fallen off?—My opinion is his opinion. I believe it is owing to the trawling, and it is the trawlers who are hurting the cod-fishing.

6591. Is it the cod-fishing more than any other that has been hurt?—I believe that the cod and haddock-fishing has been most injured.

6592. Have you yourself ever been on board a trawl-boat?—No, never.

6593. Does the herring-fishing vary year by year, or has it diminished on the whole regularly?—It varies I believe, and there are now many more boats engaged in it than there were formerly. I believe there are three times the number of boats engaged in catching herrings as compared with what used to be engaged formerly.

6594–5. There are three times the number on your shore?—Yes, where we fish.

6596. Is there an increased quantity of herrings brought to the shore now as compared with what used to be brought?—I should say there is, because there are so many more boats engaged, but there is not for each so great a quantity of fish.

6597. On the whole there is more brought on shore?—Yes, but each boat does not bring so many as was brought by a single boat years ago. Each boat now scarcely brings half as many.

6598. Have you been at all interfered with in your fishing by the French herring fishers?—Yes, at times.

6599. Do you agree with the previous witness that the French fishermen do not respect the three-mile limit, but that they come within it?—I have seen them within it.

6600. Do they go where the fish are the same as you do?—Yes, they go wherever they think they can find the most fish; wherever the most fish are there we find them.

6601. Would it be an advantage to you to have any regulation established or enforced by which you would all be obliged not to shoot your nets until half an hour past sunset?—No, I do not see how that would do any good; the herrings do not rise until a certain time of the night. If you were to shoot the nets at 2 o'clock in the afternoon you would not find the fish until it was time for them to rise at night.

6602. Then it would not be of any advantage if the men were prevented from shooting their nets before a certain time so that all of them should be able to shoot at the same time?—No, I do not think that that would do much good.

6603. You would rather, as a fisherman, be left to take your own course?—Yes; the only advantage that I can see with regard to the French would be to keep them further outside altogether.

6604. But speaking of yourself and your neighbours, you would rather take your own course and shoot your nets where you think they would answer best?—Yes; sometimes we fish in small boats, and the French are able to shoot where we dare not shoot. They shoot their nets where we dare not go in our boats at all. They use boats much larger than ours.

6605. Have you had any protection from the English gunboats against the French fishermen interfering with you?—No, the gunboats have been lying about Scarborough.

6606. Do they not come on your ground about the time of your fishing season?—They run up and down at odd times by chance.

6607. They do not give you any active assistance?—They do not seem to interfere very much.

6608. Do you think that they could give you any useful assistance?—They might keep the French vessels further off sometimes than they are.

6609. They could only keep them outside the three-mile limit; would that help you much?—It would be

a little help, but I do not think it would help us a great way; still it would be something; it might occasionally keep them outside of where we might prehaps be fishing. The fish are very near the land sometimes. I have myself seen them not two miles off on our coast, and I have seen them this year not three miles off. I have seen them on the ground in the bay within the three-mile limit. Last year they were there too. Indeed, I am confident they were within the limit, but they were only there one night.

6610. Do the French fishermen fish for herrings on Saturday and Sunday when you do not fish?—I cannot say. We do not fish on Saturday or Sunday nights, and we do not know what they do if we do not happen to be at sea ourselves.

6611. Have you never observed them fishing from the shore?—No.

6612. Then you have nothing to complain of with regard to their disturbing the shoal when you are not fishing on those days?—I never saw them, and I cannot say what they do.

6613. Do you think that their mode of fishing has a tendency to disturb the shoal. Do they do much harm in heaving the refuse over, does it attract the dog-fish or disturb the herrings?—We reckon that it does.

6614. Have you seen it yourself?—I cannot say that I have. I have seen them throwing the insides of the herrings over.

6615. Does that do harm to your fishing?—Yes, it will feed the dog-fish.

6616. Did you ever know it do you any harm?—No, but it is our opinion that it does; we think that it feeds the dog-fish.

6617. Do the trawl-boats come on any particular ground off your shore?—Do you mean the big boats?

6618. Yes, the big boats?—I have never seen any within two or three miles of our Head.

6619. Did they come upon ground that you were in the habit of fishing upon with your long-lines?—Yes, at times.

6620. What length will one of your long-lines extend to when you have it shot?—Perhaps a quarter of a mile.

6621. Not more than that?—Perhaps a little more; perhaps half a mile, some of them will reach half a mile; and perhaps more.

6622. Have you ever lost any lines in consequence of the trawlers passing over them?—I have not, but some of our people have. I have had my lines broken by trawl nets.

6623. (*Professor Huxley.*) Do you lose much fish on your long-lines by the "dogs" and suckers?—Yes, at certain seasons of the year.

6624. At what time of the year?—Generally from Martinmas to Christmas. When the frost and hard weather sets in we find the "dogs" go into deep water.

6625. How much fish have you occasionally had destroyed on the lines by the dog-fish?—I can scarcely tell; sometimes we get a great quantity eaten, and sometimes only very few.

6626. Are you much troubled by the suckers here?—The suckers?

6627. Yes; do they trouble you much?—I do not know what they are.

6628. Did you never hear of the suckers?—No.

6629. A sucker is like a worm?—I never saw one that I know of.

6630. But the dog-fish do you a great deal of harm?—Yes; we have a large number of "dogs" on our fishing ground at times.

The witness withdrew.

Moses Smith called and examined.

M. Smith.

6631. (*Mr. Caird.*) Are you a fisherman here?—Yes.

6632. Have you been a fisherman here long?—I commenced in the year 1816.

6633. Have you been a fisherman ever since?—Yes, ever since.

6634. Do you remember how many boats were here in 1816?—I believe there were about 90 or 100 men in our place at the time I first went to sea.

6635. How many are engaged in the fishing now?—I think there are 160 men now.

6636. When did the numbers increase so much; When did they begin materially to increase?—They have been increasing ever since I commenced fishing.

6637. Has it been an increase in the people themselves, or has there been an increase in consequence of strangers coming here?—The increase has been chiefly among the people themselves.

6638. Can you tell us the number of boats there were here then, and the number there are here now?—There would be something like 30 boats then, with three men and a boy in each of them.

6639. And now how many would there be?—There are 160 men employed now.

6640. And you have still three men in a boat?—Yes.

6641. Then that would be about 53 boats?—Yes.

6642. Are the boats larger now than they were then?—Those engaged in the herring-fishing are open-topped boats, and are larger, but the small boats we use for fishing in-shore are no larger.

6643. Have you no decked boats?—No, but I spent 10 years in a decked boat when I first commenced to go to sea.

6644. You have had a long experience as a fisherman here?—Yes.

6645. Can you tell us whether the quantity of fish you can bring ashore now in a fair average day's fishing is much less than it was?—Oh, yes; it has diminished above half by a long way.

6646. When did that diminution first show itself?—The first time we saw any difference would be about the year 1844; we saw no difference until then.

6647. Was that when it began first to fall off?—That was when it began to fall off—in 1844. It would be about that time.

6648. Has it continued falling off from that time?—It has continued falling off ever since, gradually.

6649. Did you five years ago find that you were catching as many fish as in 1844?—No, not one fifth part.

6650. And every succeeding year since those five years has the take of fish been getting less?—Yes, there has been a gradual falling off during the last 20 years.

6651. Was that about the time the trawl-boats began to come on your ground?—I think it would be about that time. I believe they commenced about 1840. I think a few boats traded to Hull in 1840. I have carried many thousand stones of halibut to Hull from 1836 up to 1844. The fish I am now telling you about are the off-ground fish.

6652. How far off the shore?—25 to 30 miles.

6653. Is that as far as the Dogger Bank?—Sometimes we went as far as the Dogger Bank; that is a little more than 30 miles off.

6654. Upon that ground where you got good fishing has the falling off been considerable?—Yes.

6655. Has there been any particular fishing grounds upon which you have noticed the decline more than upon others?—Yes.

6656. Where are they?—The ground away from here has been falling off.

6657. Has that ground been fished more than any other?—Yes, it has.

6658. Where has it fallen off least?—Where the rock is hardest, where they cannot trawl.

6659. Do you get the most fish there?—Yes.

6660. Was it the case formerly that you got the most fish on that hard ground?—Yes; we got most young fish there, but the big fish would lie on the edge of the soft ground.

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6661. Do you not find the big fish on the soft ground now?—There are none at all.

6662. Do you not shoot your lines there?—No, we cannot. The trawlers have been little better than pirates on this coast.

6663. Have you ever lost any lines?—No; I have not been fishing there for the last 10 years.

6664. Then you cannot speak of it yourself?—No; I cannot speak to it exactly.

6665. Because you have not been there for the last 10 years?—Yes.

6666. Where have you been fishing for the last 10 years?—Along the shore.

6667. Has there been anything to interfere with you there?—Yes.

6668. What?—We cannot shoot our lines for the trawlers from Bridlington Bay.

6669. Where do you shoot them now?—On the off side. If we shoot our lines in Bridlington Bay we must take care of them, or they will tear them all away.

6670. Have you lost any lines?—No, but my brothers and companions have.

6671. How long is it since they began to fish inshore with these small trawl-boats?—Somewhere about 20 years. I cannot be positive as to a few years.

6672. Are they making a good business of it?—I am sure I do not know.

6673. You have had no opportunity of ascertaining?—No, I never was there, and probably I never shall go. We have always got our living with a hook-and-line, and by fishing herrings in the herring season.

6674. Do you not desire to follow any other mode of making a living?—No, ours is the most expensive way.

6675. Your way?—Yes.

6676. Then if theirs is a more profitable way and yields more fish, is it not a mistake seeing that you get fewer fish, to carry on your fishing at a greater expense?—We were brought up to nothing but hook-fishing and we cannot think of commencing anything else. We never did anything at this place but fish with a hook-and-line, and follow the herring-fishing and the mackerel-fishing a little.

6677. Do you follow mackerel-fishing here?—A little; we get them with a hook-and-line; after they have shot their spawn, if they will take the hook.

6678. Do you find that mackerel-fishing is a good paying business?—It is at times.

6679. Do you follow the crab and lobster-fishing?—Yes.

6680. Do you find that they are decreasing in number?—Yes, very much.

6681. In which kind is the greatest diminution?—There is a diminution in both sorts.

6682. What is the cause of that?—I think the cause is because they take the small ones.

6683. Do you take the small ones yourself?—Yes, what am I to do when other people take them.

6684. What do you do with them?—They go away and they are sold for anything or nothing.

6685. Do crabs of such a size as that sell in the market?—Yes, they will sell them half a dozen for a halfpenny when they go to the market. Good sized crabs are very greatly fallen off, but there are still large quantities of small ones, but in the course of a few years I think there will be nothing but small. We appeal to you to do something for us as we cannot do anything for ourselves.

6686. What would you like us to do?—We should like you to fix a proper size and have them well looked after.

6687. Do you mean a size below which lobsters and crabs should not be caught?—Yes.

6688. How do you catch them?—They are generally caught in pots, but we catch them in what we call a "trunk."

6689. What is a trunk like?—It is a piece of iron about 5 feet long, made round in a circle. We let it down with nets attached to it, and the little ones will get in.

6690. Is the net fixed upon the iron?—Yes, there is a net at the bottom.

6691. If the meshes were large enough would not the little ones get out?—No, they cling, and when we get them up they ought to be heaved away.

6692. You think the right thing to do would be for the Government to enforce a regulation that all below a certain size should be thrown into the sea?—Yes.

6693. Are they all brought up alive?—Yes.

6694. And would they live if thrown back into the sea?—Yes.

6695. Does that apply to lobsters as well as to crabs?—There are only a few small ones caught among the lobsters, but there is an odd one or two.

6696. What size would you take a crab?—I think the back should be 4 inches, the same size as they take them in Norfolk.

6697. Have they any regulation there?—Yes, 4 inches.

6998. Who made the regulation?—They agreed to it among themselves, I believe.

6699. They fix the size themselves and they throw all below that size back again?—Yes, that is what they do, I believe. They cannot bring any little ones in. If they bring in a little one they are fined 1*l.*

6700. How long is it since that change took place?—About 20 years.

6701. Have the crabs and lobsters increased since then?—Yes, abundantly.

6702. In consequence of that regulation?—Yes, they say so.

6703. And you think the same regulation ought to be imposed here?—Yes.

6704. Then why do you not do it?—We cannot get all into one mind.

6705. You think it would be a good thing if an Act of Parliament was passed to that effect that it should be enforced?—I should much desire it as an individual.

6706. In regard to the herring-fishing, is there any regulation you think it desirable to adopt in order to increase the catch of herrings?—There is only one thing that I know of in my experience, and that is that there are too many boats going out with small meshes, and they catch the herring when they are small. I do not know of anything else that you could do, except to put a stop to the small meshes.

6707. The law fixes the smallest size of the mesh at present; you think if the law were carried out it would be of advantage?—Yes, I am sure it would. When I was a boy I used to go to Yarmouth, and our nets were examined, and if the meshes were not right the nets were burnt.

6708. Would it be easy to enforce the law you refer to both with regard to crabs and herrings?—Yes, I believe it would.

6709. You would require to have an officer stationed here to see that the regulations were carried out?—Yes.

6710. Would one officer do?—We have two places where we come ashore, one on each side of the Head.

6711. Would the visit of an officer once a season be enough to see that the regulations were carried out?—Yes, I think so.

6712. Are the shoals of herrings off your shore increasing or diminishing?—They are diminishing.

6713. What is the cause of that?—I believe the cause is that they catch them before they get to a proper size.

6714. Are there many herrings caught here that are not of a proper size?—Yes, thousands and millions.

6715. Where?—All along the coast down to Whitby. We generally start in July, and I daresay our men have the proper nets. Our meshes are all 31 and 32 to the yard, but the Scotchmen come alongside of us, and their nets are 38, and some of them 40 meshes to the yard, so that while we are catching 200 or 300, they are catching 3,000 or 4,000.

6716. You find that the Scotchmen interfere with your fishing?—Yes, they carry too small a mesh.

6717. Is it the Scotchmen chiefly who have too small

a mesh to their nets?—I believe myself that the whole of the boats have nets with too small a mesh all round the island.

6718. All except yourselves?—I believe that at Filey, and Scarborough, and all along there, they have them all of one mesh. I think they all come from Musselburgh.

6719. What is the size of the mesh?—31 and 32 inches to the yard.

6720. You say the nets come from Musselburgh; that is in Scotland?—Yes.

6721. Do not the Scotchmen get their nets from Musselburgh too?—They come with much smaller nets than we have, and they gather thousands where we are only getting hundreds.

6722. Are you quite sure that they use a smaller net?—Yes.

6723. Do the French have a smaller net?—Yes, they do, and the West countrymen too.

6724. Do you think it would be an advantage if all were obliged to use a net with meshes 32 to the yard?—Yes, I would not allow a smaller mesh if I could help it.

6725. Do you think that the effect of enforcing such a regulation would be to increase the catch of herrings?—Yes, there are thousands and millions caught that are not half the proper size.

6726. (*Professor Huxley.*) Would it be advisable to regulate the time of shooting your nets?—It might in some cases, but the big boats want more time to shoot than the little ones. The French, however, will shoot much too soon if they are allowed to do so. I think if the herring nets were shot about an hour before sunset that would suit all persons, the big boats and the little boats as well. We do not want to shoot our nets before sunset, but the big boats want more time. I have known the French boats shoot their nets at 12 o'clock in the day, so that we could not get ours shot at all when we went out.

6727. Did that disturb the shoals of fish?—They got on the ground, and we could not get in.

6728. Then the injury was that they occupied the ground, not that they dispersed the shoal?—Yes, we could not get there.

6729. Do you think that the fish are disturbed by putting the nets into the sea in the daytime?—No, it is very rarely indeed that they rise before sunset.

6730. Then the object of restricting the shooting of the nets to a certain time before sunset would be to prevent strangers from coming upon the ground?—Yes, such as the Frenchmen. I have seen the French fishermen within a mile of Staithes and Hartlepool, within a mile of the shore, so that we could not get in at all with our small boats.

6731. In that case they would be within your limits and outside theirs?—Yes, but nobody goes there to protect us.

6732. Do any of your boats go upon the opposite coast, I mean the Dutch and French coasts, for fish?—No, we never leave home, except for about four months, when we go down to the North Sea. I have fished from Flamborough Head to Tynemouth.

6733. None of your boats cross to the other side of the Channel?—No.

6734. Do any Dutch boats come here?—Yes.

6735. Are they like the French boats in size and rig?—There are only a few of them.

6736. Is it chiefly the French boats of which you complain?—It is chiefly the French boats that bother us. We have very few Dutchmen here, not more than eight or nine sail, but we have about two or three hundred sail of French boats, and we have also the Hartlepool men and Staithes men, and others. The consequence of that is that we cannot get our nets in for them.

6737. You were speaking of the Bridlington trawlers, what kind of people are they?—They are a race of men brought up to the sea, who have served perhaps seven years to the sea, and then get on one of these boats and go trawling.

6738. What is the size of their boats?—From 5 to 10 tons, I think.

6739. Are they undecked boats?—They have no deck.

6740. How many men do they carry on board?—They have chiefly two men when they go trawling.

6741. Have you seen them trawling?—Yes.

6742. How many of them have you seen about?—40 or 50.

6743. What sized beam do they have to their trawl?—From 20 to 24 feet; I do not know exactly. I know very little about trawling, except that the trawlers have done us a very great injury.

6744. Where do they trawl?—2 or 3 miles off the land.

6745. Do they trawl all the year round?—Chiefly; there may be some times that they do not trawl.

6746. Do you think that they do you a great deal of damage?—Yes, the Bridlington Bay men used to do us a great deal of damage. For the last 15 years, which is since they commenced, we have neither got whelks nor mussels. Last winter we could not get bait, and we attribute that entirely to the trawling.

6747. Do they trawl the mussels up?—They trawl them up, and when the sea comes they wash ashore. Last winter we could only get 50 lbs. of whelks where formerly we used to get an abundance.

6748. Do you think they do harm to the fish besides destroying the bait?—I cannot say what amount of small fish they destroy. I have been in all occupations connected with long-line fishing, but I never was in a trawler.

6749. Have you never by chance seen the contents of a trawl?—No.

6750. How do the Bridlington trawlers rig their boats?—With one lug and a little bit of jib, the same as we do.

6751. You were talking of the trunk, I understood you to say that it was made with an ordinary hoop, and with a net at the bottom?—Yes.

6752. Is the net fastened to it like a basket?—Yes, it is fastened to the bottom of the basket.

6753. How long is the basket?—About half a fathom; the bait is in the middle.

6754. What bait do you use?—Generally plaice and dabs; anything we can get, but chiefly plaice.

6755. What size is the mesh?—I am sure I cannot say, it will perhaps be three inches.

6756. What do you fix the bait in the bottom with?—There is a band goes across, and we put the bait in the middle. We just make the mesh for a small crab to go through, but we can throw the small ones away if we are willing to do so.

6757. Have you a weight fastened to it?—There are two or three slung together.

6758. What depth of water do you fish in?—From five fathoms to ten.

6759. Do you fish on a rocky bottom?—Yes, it is all rocky.

6760. Have you a buoy on the top?—Yes.

6761. What sort of a buoy?—A cork buoy.

6762. Not a sheepskin buoy?—No; we have a big one at each end; we set them all in a line; there are generally 24 in a line, and they have a big buoy at the end.

6763. Are they made fast?—No, they are all separate.

6764. Does not the tide drive them about?—Yes; if we think the tide is going over strong we take them up and set them in another place where we believe the tide is right.

6765. Do you use fresh bait?—Yes, we always have fresh bait.

6766. How long do you leave them lying at the bottom?—They lie there all night long; we pull them up from one end and then start again.

6767. Do you shoot them at sunset?—Yes, it depends on the weather.

6768. Will they work in the day?—No, only in a rough sea.

6769. Will the fish not take the bait except at

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night?—When the weather is fine they will not turn up until night. We used to get an abundance of soles here when I was young; I have been catching from 40 to 50 pair of a night.

6770. Do you catch them with a hook?—Yes, and if we caught 40 pair of soles and 20 stone of haddock, and could realize 1*l.* for them we thought we had done a good thing. Now if we could get the same quantity we could get 5*l.* for them, the fish has got that scarce. I remember in 1832 bringing 600 cod on the shore in winter time, which is the best time for fish selling, and they did not realize 20*l.*

6771. Were there any railways then?—No, we got such a quantity of fish that there was no market for it.

6772. There was no market for it?—We could not get it to any market. I tell you the 600 cod I caught during the winter time in 1832 I sold for less than 18*l.* If I had them now they would be worth during the whole winter and the spring 4*s.* or 5*s.* a piece. If it were not for the advance in the price of fish we should not be able to live now. We have a bit of rock 4 miles square and if it were not for that we should not have a fish on this coast. The trawlers cannot come there, the rock is too hard and the tide is too strong. That is where we get our fish, and there is also a place we fish a little further from the land.

(*A crab net was here produced and its construction explained.*)

6773. Is that the trunk you were speaking of?—Yes.

6774. Do you get small crabs in a net of that description?—They get them also at Cromer and other places, but they throw them away.

6775. Did you ever see any herrings here in January or February?—No.

6776. Nor any appearance of herring?—No.

6776*a*. Not when you have been out long-line fishing?—No, there is a little bay-fishing, but it is done then and we go long-line fishing about that time. I think it has been the regular practice among our old fishermen—it has been so for ages—to set their long-lines over night. The greatest injury done to us has been in carrying our lines away. We have been accustomed to lay our lines with what we call two sets; we take one set with us and bring the ends back with us. We used to lay them from 12 to 18 miles in the spring in the months of February, March, April, and May; now we dare not go there. The trawlers gave the place the name of "California," it was so rich in fish, and now we dare not go there at all.

6777. Do the trawlers go on working there?—Yes.

6778. Do they get fish there?—The fish are about done there. I think they have got the ground all swept up.

6779. Have they been trawling there for years?—Yes, they chiefly begin in the month of February.

6780. But they would not trawl there if there were no fish?—No.

6781. Then how is it that they get fish with the trawl net and you get none with the line?—It is a different fish that they get; we do not catch the soles and the big whelks with a hook. They get soles and turbot; we get cod and ling and skate.

6782. They get fish that you would not catch there?—Yes, but they get what we should catch too and they have taken our lines away as well. One of our fishermen upon one occasion found his lines in a pawnbroker's shop at Hull.

6783. (*Mr. Caird.*) How did they get to Hull in a pawnbroker's shop?—Some of the smack people took them there and sold them; the man had to go and get them.

The witness withdrew.

R. Pockley.

RICHARD POCKLEY called and examined.

6784. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, I have been fishing here ever since I could fish. I was born a fisherman.

6785. Do you agree with the previous witnesses in the statements which they have made?—I agree with Smith in all he has said. I believe his statement is quite right as far as my knowledge goes.

6786. Does anything occur to you to add to his statement?—No.

The witness withdrew.

J. Woodhouse.

JORDAN WOODHOUSE called and examined.

6787. (*Mr. Caird.*) Have you long been a fisherman here?—Yes. I was born a fisherman.

6788. Do you agree very much with what has been said by the previous witnesses?—Yes.

6789. Is there anything you wish to add to what they have said?—I think that this trawling has been a great evil to our long-line fishing.

6790. Have you been in the habit of fishing on the Dogger Bank?—No, that is out of our limit; we do not go there in a small boat.

6791. (*Professor Huxley.*) Did you see that hook contrivance, the trunk for catching crab, here?—Yes.

6792. How far along the coast is it used? Is it peculiar to this place, or is it used all along the coast?—I believe it is only used here and at Cromer. I believe they use a pot in most cases.

6793. But here and at Cromer they use the trunk?—Yes; we think the pot does a deal of harm.

6794. How?—It takes a great deal of young fish; and they are set night and day, and if a fish gets into the pot it cannot get out again.

6795. But surely that is better for the fishing?—Yes, but they are always there, night and day.

6796. You catch the young ones with your trunks as well as they with their pots?—Yes, and I think that that is a great evil.

6797. If you both threw the young ones overboard there would not be much difference in the two ways of fishing?—Not so much.

6798. You think the trunk a better way of fishing than the pot?—It is a deal harder way of catching them.

6799. What is the advantage of using the trunk?—Why any tailor could catch them with a pot, but it takes an expert man to catch lobsters in a trunk.

6800. Can you catch more in a trunk?—I do not know that we can catch more than in a pot, but there is greater labour attending it.

6801. Then what is the advantage of using a trunk, which involves greater trouble, and yet catches very little more fish than a pot?—I think that the pots take all the young ones.

6802. But could they not be equally well put in the water out of the pot as out of the trunk?—Yes.

6803. Do you catch more fish in the trunk than you could in the pot?—No, I think they catch more in the pots, but they catch a deal smaller crabs in the pots than we can get in the trunk, because they only make the spout such a size.

6804. Then the object you have is to catch the larger fish?—Yes, the larger and more valuable fish.

6805. Do you let the trunks stay long on the ground?—From half to three-quarters of an hour; just as long as we think will give time for the crabs to stir as the tide suits.

6806. Do you sometimes give them a little more time to creep in?—Yes.

6807. Can you tell before you begin to haul the trunks up whether you have anything in them or not?—No, but we can tell when we are hauling them up.

The water is thick and we cannot get near in the daytime when the water is not thick.

6808. Are the trunks used anywhere else?—No, only at Cromer and Sherringham and here.

6809. They fish with pots in other places?—Yes.

6810. And do they get as large fish as you do?—No; not half the size; they are doing nothing at all.

6811. Is that because they catch a larger proportion of small fish?—Yes; it is only of late years that the have got their pots.

6812. Did they fish with trunks before?—Yes.

6813. And they have substituted pots for trunks?—Yes.

6814. Is that because they can get more fish?—Yes; they can get more fish half the season, and for the rest of the season, when there ought to be a good supply, it is all gone.

The witness withdrew.

Vickerman Mainprize called and examined.

6815. (*Mr. Caird.*) Have you been long a fisherman here?—Yes, about 40 years.

6816. How many boats were there here about 40 years ago?—I am not able to say.

6817. How many are there now?—I cannot tell exactly.

6818. Do you agree with the previous witnesses as to the falling off of the fish caught by the line fishermen?—Yes, I quite agree with them.

6819. Do you attribute it, like them, to the effect of the trawl-fishing here?—Yes, and I can prove it. There are places where we formerly caught large quantities of fish that we have been obliged to leave now altogether.

6820. What places do you refer to?—Both off Flamborough Head and to the southward of Flamborough Head.

6821. They are places that used to yield an abundance of fish?—Yes, an abundance of fish.

6822. Has that ceased to be the case now?—Yes; we have lost sight of those places now altogether.

6823. Because you cannot catch fish there?—Yes, we left them on account of the trawlers.

6824. Because they disturbed your lines?—They took our lines away and they disturbed the ground as well.

6825. Have you been fishing there lately?—No.

6826. When was it that the trawlers came first upon that ground and prevented you from fishing there?—I think it will be well on to upwards of 20 years since they first found it out.

6827. Is that the ground to which the previous witness gave the name of "California"?—Yes, it was called "California"; we have often got 100 stone of good fish a day, fine good fish weighing from 12 to 14 pounds a stone. They took our lines away and all the fish in them as well; they took our buoys and anchors also.

6828. Did you ever lose your lines?—Yes, more than once.

6829. Have you not been able to get compensation for them?—Not a bit.

6830. Did you not find out who the people were that did it?—Not exactly, we were not there to see them; we laid the lines in at night; we took fresh ones out the next morning to leave when we took the other ones in.

6831. Well, go on?—We went to fetch our lines and we found that the trawlers had taken them away. We could not find them, but there were two or three lots of boats about.

6832. Did you never find them?—We followed the boats up to Hull. We could not find the lines exactly, but we found some of our implements on board the small boats. There was a disturbance among the fishermen and smack owners at that time. Most of the men had struck and the smacks were lying up; we had no evidence as to who had done it, and the consequence was that we could get no recompense.

6833. Was it not evidence against them when you found the tackle in their boats?—The men had left the boats, and the lawyer told us that it would be a great expense to fetch them up. They had gone 400 or 500 miles away to their own homes.

6834. Then you got nothing for compensation?—No; we lost our lines, our fish, and our time also.

6835. In what year was that?—As near as my memory will serve I believe it is about eight or ten years ago.

6836. How many years did you continue to fish on this ground after the trawl-boats came there?—For several years after that.

6837. Did they continue to come in increasing numbers?—Yes, they have been increasing for many years.

6838. Do you think that on this particular ground there are more trawl-boats than there used to be?—Yes, it is only a few years since it was first found out.

6839. Is it a "California" still to them?—They do not still call it "California"; it is not so profitable to them.

6840. Do they not get fish on that ground now?—A little, but not so much as they did.

6841. In your opinion is the herring fishery fallen off?—Yes, I believe there are not so many caught now.

6842. Is there not, if we take into account the increased number of boats that come to catch the fish?—I think not. I do not think there are so many herrings as there were formerly.

6843. What is the reason of that?—I believe myself that the trawlers do a great deal of damage to the fish.

6844. In what way?—When the herrings go to the bottom to spawn, the trawl beam in going across the ground tears up the spawn and destroys it.

6845. Were you ever alongside a trawl-boat when the trawl was drawn to the surface?—No.

6846. Then that is only a matter of opinion?—It is a matter of opinion; but we know this fact, we have found the fishing much worse since they came on to the ground.

6847. Do you complain of any other fishermen interfering with your fishing here?—The French come and disturb us a good bit. They come and take our berths away from us. I have sometimes been prevented from catching lots of herrings in consequence of the French.

6848. Was that within the three-mile limit?—No, it was on the off-ground, but they often come a good deal within the limit.

6849. Do they do more harm on the off-ground than within the limit?—They do most harm on the off-ground. They come in there, they have stronger gear and everything far more powerful than we have, and they come in and shoot wherever they think there are most fish. They never stint themselves to the three-mile limit.

6850. Is there nobody to keep them within their limit?—There was a boat called the "Firebrand" down in Scotland that disturbed the French and took away their nets I believe.

6851. Did she keep the French at their proper distance?—They were always away then.

6852. Did you get any benefit in consequence of that vessel coming to look after your interests?—No, not much.

6853. Did she come here?—We have seen her here on this coast, but she never interfered much with the Frenchmen when here. They disturb us a very great deal at times.

6854. Do you think it would be a good plan if there was any restriction as to the size of the meshes used?—Yes, I think it would be a benefit to us.

6855. Do you think that every one should be obliged to conform to that restriction?—Yes.

6856. Would you like to see a fishery officer stationed here to look after these things?—I think it would be preferable to us.

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6857. Both with regard to the size of the mesh and the time at which you should fish?—Yes.

6858. Would you rather have some one to do that for you than be left to yourselves?—Yes; there might be a great deal of opinion on such a subject. Every man would wish to do as he liked.

6859. Would you like some one with authority to say what every man should do?—Yes.

The witness withdrew.

(*Mr. Caird.*) Is there anybody here who desires to offer any more evidence? We have gone through the list of witnesses with which we have been supplied, but the Commissioners would be happy to hear anything further that can be said by anyone interested in the fishing here.

There was no response, and the inquiry was adjourned to Saturday, October 3, at Hull.

Hull, Yorkshire, 3rd October 1863.

HULL.

W. I. Markcrow.

3 Oct. 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

WILLIAM ISAAC MARKCROW called and examined.

6860. (*Mr. Caird.*) Are you engaged in the trawl-fishing trade at Hull?—I am not engaged in that trade as a catcher.

6861. Then in what way are you interested in it?—I am interested in it as a smack owner.

6862. Have you long been conversant with the trawl-fishing trade here?—I have been in Hull for 18 years.

6863–4. During that time have you been connected with the trawl-fishing?—Very intimately.

6865. Can you explain the origin of the trawl-fishing here?—I think I can. With regard to the commencement of the trawl-fishing here it is now about 20 years since the trawlers first came here from Ramsgate and Brixham. They have been at Scarborough, however, for the last 30 years and upwards.

6866. I want you to speak only with regard to Hull at present?—The trawlers have been here about 20 years.

6867. Were there no Hull vessels engaged before 20 years ago in the trawl-fishing?—No, I think not; not more than one.

6868. Did the number gradually increase?—It has increased. When I came down here 18 years ago several others came at the same time with me, either from Ramsgate or Brixham. We then mustered about 40 vessels.

6869. Has that number progressively increased up to the present time?—Yes, it has gone on increasing up to the present time. I should say that at this moment we have about 300 trawl-vessels.

6870. Are the vessels now the same size and build as they were at the commencement of the fishing here?—The vessels themselves are nearly double as large; they were formerly about 40 tons builders' measurement, whereas we have now vessels about 80 tons. They generally run from 70 to 80 tons, builders' measurement.

6871. Are they manned now by the same number of men as formerly?—Yes, by the same number.

6872. Then the same number of men are now found capable of conducting vessels of double the tonnage of those employed formerly?—Yes.

6873. Has the increased size of the vessels been accompanied by any increase in the size of the trawl, or the capacity of it to take fish?—We have rather enlarged the trawl. It used to be made about 36 or 38 feet; now they make it 42 feet. The head irons are heavier now. The vessels are of such large dimensions that they would trawl a lighter net over the ground so rapidly that it would be unable to catch fish.

6874. Then the net has been made larger so that it may go more slowly over the ground?—Yes, we have had to put a heavier weight to it.

6875. What was the object of increasing the size of the vessels so much more largely than the net?—We found that by continually increasing the size of the trawl-vessels engaged in the trawl-fishing they became much handier vessels to work at sea. The men can work in the large vessels in very severe weather, which was not the case when the smaller vessels were employed.

6876. You have found it easier for the men to keep the sea owing to the greater comfort and safety afforded by the vessels themselves?—Yes, there is much greater comfort.

6877. And greater safety also?—Yes, and very much more comfort, as they all themselves admit.

6878. Will you describe the mode of fishing adopted now when the vessels go out; how long do they remain on the ground, and when do they return to port?—They keep out at sea for about a month or five weeks, but they send in their fish daily to the market, either here or at London. They have other vessels in attendance which take the fish from them. Latterly we have adopted an improvement, and the vessels carry ice, which enables them to bring the fish into market in better condition.

6879. Do the vessels to which you refer collect the fish from the trawl-boats stationed on the ground?—Yes.

6880. Do they take it to market daily?—Yes, if wind and weather will permit.

6881. Have you ever thought of employing a steamer for that purpose?—No, we fancy that our own boats do the work better. For instance, the trawl-boats are very often scattered, so that one steamboat could not pick up all the fish; but we have five or six smacks probably coming to the market in a day, each having fish from other vessels,—from some 20 or 30 vessels which have got scattered in all directions. One steamboat would have no effect at all in taking in the whole of the fish, inasmuch as the trawl-boats can't be kept close together when employed in the fishing.

6882. Do you find that, by the aid of ice, you can keep the fish perfectly fresh for the market?—Yes; we can keep it in very prime condition.

6883. Has it enabled you to increase the supply of fish for the market?—It is brought in in better condition than it was.

6884. Was it not formerly the case that when the vessels could not come ashore with the fish some of it became damaged and unfit for food?—Occasionally, when the vessels met with contrary winds, it had that effect.

6885. Have you any provision for salting the fish in such a case?—We generally catch fish that would not do for salting, such as plaice, soles, haddock, turbot, and brill. It would not do to salt those fish.

6886. Can you describe to us the mode of fishing adopted when the vessels reach the fishing ground?—They trawl with the tide from six to eight hours and then heave up.

6887. Do they shift their ground much?—That depends upon circumstances; they trawl first upon one piece of ground for a month at a stretch, as long as any of the fish remains there. They know certain spots of ground that they are in the habit of fishing on. They are still discovering new spots, especially in the North Sea. They will fish upon one particular patch of ground for a month, until it is found that the

fish are scarce, when they will remove to another spot of ground. We have here what is called two grounds, namely, the Silver Pits and Botany Gut, which are places noted for large quantities of fish.

6888. Have these grounds been long fished by trawl-fishers?—The off grounds have been fished for the last 30 years from Scarborough, and more particularly of late years the Silver Pits. The Silver Pits were not discovered till 10 years later.

6889. Where is the off ground?—Off Flamborough Head; it lies east north-east of the Spurn, off Flamborough Head about 30 miles.

6890. You say that the trawl-fishers have frequented it for the last 30 years?—Yes.

6891. Do they still frequent it and is it well supplied with fish?—Very abundantly at times.

6892. Has it fallen off in the quantity of fish it yields compared with 30 years ago?—No; there is just the same amount of fish now that there was then; but it is in better condition than it was, particularly with regard to haddocks and plaice.

6893. You spoke of the Silver Pits, what kinds of fish are caught there?—We catch there generally the kinds of fish we get on the off grounds, such as soles, brill, haddock, cod, ling, halibut, turbot, and other kinds of fish.

6894. Have the Silver Pits been long visited by trawlers?—Yes, about 20 years.

6895. Have you observed any diminution in the catch of the fish there compared with what it was 20 years ago?—It certainly depends upon circumstances. It depends in a great measure upon the severity of the weather. The Silver Pits were first discovered in a severe winter, and multitudes of fish were then caught. If we have a mild winter we don't get any large takes of fish, although we still get a sufficient quantity to supply the market; but when we have a severe winter this fishing ground, being in deep water, becomes much frequented by the fish. They fly to that spot in large numbers and we catch very large quantities. Three years ago extraordinary quantities of fish were found there.

6896. Have you found that by continually fishing that ground its productiveness in fish has diminished?—No, not in the least.

6897. Has it increased?—I should say that it has increased. I have my reasons for believing that the quantity of fish caught in the North Sea and German Ocean is more now than it was 20 years ago.

6898. Confining yourself to the Silver Pits, you say you have been enabled to observe, that instead of diminishing they are increasing in productiveness?—They increase according to circumstances. If we have a cold freezing winter, then fish are found there more abundantly than they were at the onset, when the ground was first discovered.

6899. Has the number of vessels fishing at the Silver Pits increased or diminished?—Increased.

6900. It has increased?—Yes; the vessels go there in cold weather knowing that they are sure to catch large quantities of fish.

6901. Is there any fishing bank here which in consequence of its great productiveness in fish is known as "California"?—Yes, there is a place known by that name near Flamborough Head, just off the land.

6902. Is that piece of ground not fished by the trawlers?—It is in the spring of the year, up to the months of May and June, but not so much as it used to be.

6903. Are you aware that that ground has been impoverished by the trawl-fishing?—I don't know that I may not admit that that little spot has been, but the number of fish that spawn there compared with the number in the deep sea is extremely trifling.

6904. Then if I tell you that we have it in evidence that the quantity of fish on the bank called "California" has greatly diminished of late, you agree that it is not beyond probability?—Yes, I think so, but it is only a small spot of ground.

6905. How do you account for the diminution?—Well, the fish being harassed have no doubt shifted, and gone to other parts to spawn.

6906. Then you admit that there the trawl-boats have diminished the power of the line-fishers to catch fish?—I don't think there was any fish there that the line-fishers could catch. I never understood that it was a particular spot of ground for line-fishing at all.

6907. It was stated to us yesterday that it was a ground very prolific to the line-fishers previous to the trawlers going there?—I never understood it to be so. The line-fishers—I speak of the Filey and Flamborough men—go more to the northward than California.

6907*a*. With regard to the Dogger Bank have you had any practical experience of the fishing there?—Yes; there is a great abundance of fish to be caught there at any time of the year.

6908. Have the trawl-vessels long been in the habit of going there?—No, they don't care about going there. They get so much fish when they go there that they are afraid of overstocking the market.

6909. Is it more prolific than any other place the trawlers frequent?—Yes, for plaice and haddocks.

6910. Is it really the case that fishermen don't go there because they are afraid of catching too many fish; is that really so?—Yes, that does occur. The reason is that they would over supply the market. They could catch as many off the Dogger Bank in 24 hours as would supply all England for 48 hours.

6911. Would not that be remunerative?—No; it would bring the market down.

6912. Then have you reached such a point that you can easily overstock the market?—We send fish now to London, Liverpool, Glasgow, Edinburgh, Manchester, and all the great markets in the kingdom, and we find at times that we have overstocked the market with soles, plaice, and haddock. We could overstock it invariably if we chose.

6913. In regard to the Dogger Bank you say the effect of trawl-fishing has not been in any degree to diminish the quantity of fish to be found there?—No; if anything, there are more fish there now than ever, and they are in better condition.

6914. Have you ever seen a line-fisherman on the Dogger Bank?—No, I have not.

6915. Can you give us a statement of the capital invested in trawl-fishing?—The cost of a trawl-vessel will vary from 700*l.* to 900*l.* I have known some trawlers cost as much as 1,000*l.*, but the cost generally runs from 700*l.* to 900*l.* I have paid 800*l.* and 850*l.* when materials were dearer than they are now.

6916. Does that include the cost of fishing tackle?—Yes.

6917. What may the fishing tackle cost?—A trawler will carry two nets, two beams, two pair of heads, two ground ropes, and a double set of several other things. I should think that at the present time the fishing tackle would cost, complete and fit for going to sea in the vessel, about 70*l.*

6918. Then the fishing tackle of a trawler is not so expensive as that of a long-line fishing boat?—Yes, they will cost far more than long-lines; I am satisfied that long-lines never cost the money the gear of a trawler will come to. There is no weight in the lines of a fishing boat.

6919. We have it in evidence that the tackle of a long-line fishing boat amounts to more than 70*l.*?—Never; you must have been misinformed. They have no weight of lines to cost that sum.

6920. But including the drift of nets it would cost that?—Yes, because they have a large quantity of the warp rope attached to the nets. That would be one consideration.

6921. Then to get all that together would cost more than the tackle of a trawl-boat?—So far as a herring-boat tackle is concerned a large boat with her herring nets and warp rope would perhaps run up to 200*l.* and even more.

6922. So that the fishing tackle of a line-fishing boat with herring nets will cost considerably more than the tackle of a trawl-boat?—Yes, I should think so.

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6923. In your estimation what capital may be invested in the business of trawl-fishing in the port of Hull alone?—That is a matter I have hardly taken into consideration. A few years back I did, but I have not done so of late. It must be something very enormous although I cannot give you any information with regard to the figures. It is a subject on which I have not thought much recently.

6924. You have stated that the number of boats at present is about 300?—I was speaking then of the Humber.

6925. But not including Grimsby?—Yes, I took Grimsby also.

6926. You included Hull and Grimsby?—Yes, I meant the Humber.

6927. Then taking the number of vessels in the Humber at 300, would it be fair to say that in round numbers about 300,000*l.* is invested in the trawl-fishing?—Yes, you may say that within last two years the number of vessels employed in trawl-fishing from this port has been greater than at any other period.

6928. Has an increase taken place particularly within the last two years?—Yes, particularly.

6929. Can you tell us the amount of the increase within the last two years?—If I was to take three years I should venture to say that there has been an increase of 30 vessels a year during that period.

6930. Thirty new vessels every year for the last three years?—Yes.

6931. That will be equal to an investment of 30,000*l.* outlay every year?—Yes, 30,000*l.*

6932. Have these vessels been paid for or are they under mortgage, as a general rule?—That is a point I cannot enter into. We have not the pleasure of knowing the depth of any gentleman's pocket here.

6933. I have no desire to be inquisitive. We are only anxious to get at the bottom of the matter in relation to statements which have been made to us at other ports. We have been informed that there has been a great increase in the number of trawl-vessels, but we are also told that it has been a purely speculative increase and that it has not proved remunerative. Now I should like to hear from those who have the best right to know what is really the state of the case?—I believe that many vessels have been paid for at the time they were purchased, but no doubt there are others which the parties were not able to pay for at the time they obtained them, and in which the assistance of friends was called in. I find the same thing has been done very extensively in France. The other day I saw 10 new boats on the stocks at Calais. They were all built upon the same principle. I was talking to a gentleman well acquainted with the circumstances under which they had been built, and he stated to me that they were provided entirely by the tradespeople and that the fishermen did very little towards paying for them. You will therefore see that the same goes on wherever fishing is practised.

6934. I presume that if people invest their money in boats of this sort they must find the investment lucrative?—It has been lucrative up to within the last year or two. I am sorry to say that there has been some falling off during that time, and that there have been several failures which have done considerable evil. They are attributable more to recklessness than loss in the fishery. People, when they get a friend sometimes to assist them in putting a vessel to sea, fancy that it is entirely their own and make very easy with their money, and when the day of reckoning arrives they find themselves minus. The people who have advanced the money find that it is not forthcoming, and they take the vessel instead. But this has arisen entirely from recklessness and not from any deficiency in the earnings of the fishermen.

6935. Is it the fact that the trawl-boats which go from Hull bring back as large catches of fish as they did when the business was remunerative?—Yes, I think the catches of fish are larger.

6936. Larger?—Yes, they catch larger quantities of fish.

6937. Can you give us any reference to figures by which you can show what the weight of fish caught now is compared with what was caught in previous years?—I can tell you this, that as far back as 16, 17, or 18 years ago, or even 12 or 13 years ago, which would be the first six years of my being in Hull, the railway carriage was so enormously high that we could not send fish to the market. There was a very large quantity of fish caught, but it was thrown overboard as soon as it was caught. Baskets of fish were sold for smoking, to be converted into what are called Finnon haddocks; that is a trade that is now almost extinct with us. All the time it was carried on we made 2*s.* 6*d.* a basket for haddocks, but now we can make 15*s.* or 16*s.*

6938. Have you any figures by which you can show us, on the average, the quantity of fish brought to the market at Hull, by the trawl-vessels?—No, I have not.

6939. Is there any record by which you can ascertain that?—I think not.

6940. Is there no person connected with the trawl-fishing trade at Hull who keeps any record of the quantity of fish brought into the port?—The Dock Company I believe take an account of all the fish per basket.

6941. Do you think they can give us an account as compared with former years?—I think not as compared with former years. The vessels did not go into the dock at all formerly.

6942. Why was that?—Because the dock dues were then 6*d.* a ton, and it was more than we could afford to pay. We petitioned the Dock Company to reduce them; they did so down to 2*d.* a ton, and we then all went into the docks. Since then we sent a further petition which induced them to reduce the dues to 1½*d.* a ton. From that time until the present I don't think we have had a single vessel lying in the roads; they all go into the docks.

6943. What time is it to which you refer?—About 12 years ago.

6944. Then do you think we can obtain a record for the last 12 years?—I think you may. The Dock Company are now in the habit of charging one halfpenny per basket in addition.

6945. Do you bring as many turbot ashore as in former years?—I think if anything there is an increase in turbot.

6946. Shall we be able to find that from the record you speak of?—Not from that; but I think the evidence you will hear to-day will convince you.

6947. Has there been an increase or a diminution in the haddocks caught by the trawlers?—There has been a very large increase.

6948. Has there been an increase in skate?—No; we don't reckon upon a deal of skate.

6949. Did you yourself come from the southern coast?—Yes, from Ramsgate.

6950. Did you find that the ground off Ramsgate had ceased to be productive before you came north?—I was at Ramsgate a few weeks back and I found that they were getting as much fish at certain seasons of the year as ever they did.

6951. Then that was not the cause of your shifting your residence to the north?—No; at certain seasons the fish move into different quarters of the world.

6952. It is alleged against the trawl-fishing system that it destroys enormous quantities of spawn?—I never heard a trawler state that he had caught spawn at all.

6953. Have you ever seen spawn in a trawl net?—No, I have never seen it; but I have heard the trawlers say that when they took out the inside of any plaice, haddock, or whiting, which they caught during the warm weather, they found that the fish had been full of spawn, and they got large quantities in that way. Considerable quantities have in point of fact been lying upon the deck that have come from the fish that have been gutted, but they have not brought it up in the trawl.

6954. Did you never hear of spawn being disengaged

from the bottom and brought up in the net?—No, never.

6955. Is it a fact that much of the fish brought to the surface in the trawl net is so mangled that it is unfit for human food?—I have never seen it. If any of the fish were mangled the fishermen would no doubt throw them away at once. No doubt it may happen occasionally in catching a large draught of fish that one or two may be injured, but if so they are thrown away.

6956. What I want to know is whether any large proportion of the fish brought up are in that state?—No, only a very small quantity.

6957. What quantity of fish is brought up at a single catch?—Sometimes we may get a ton and a half or two tons of fish.

6958. Then of that ton and a half or two tons, how much would be mangled?—There would scarcely be a small basketful.

6959. Do you also bring up large quantities of immature fish?—Not very large quantities. Occasionally there are small quantities brought up; that will occur at almost any time.

6960. Are these small fish quite unfit to be sent to the market?—They would not pay the carriage for them to send to market, but people consume them in the immediate neighbourhood.

6961. Then they are not thrown overboard?—Some may be, but the gurnets, dabs, and little skate are brought away and sold.

6962. Are those which are thrown overboard dead?—Yes, no doubt; but they go there as food to the other fish.

6963. I understood you to say that a small basketful of the fish may be mangled; what proportion may there be of small immature fish?—Perhaps what we call "half a pad." We have two sizes of baskets, pads and half-pads.

6964. Have you ever observed the gall bladder of the fish burst?—Never; and I have had the handling of the fish for some hundreds of times.

6965. Have you ever observed the scales rubbed off?—That might occur when we have had a strong wind, but the fish generally have them on.

6966. Are the fish alive when they are brought up?—I have seen them alive on the deck here, particularly plaice.

6967. We have been told that 400 vessels would destroy 400 tons of spawn in a short time; do you believe that statement to be a fact or not?—No, I believe it to be entirely erroneous.

6968. Is the spawn ever sold here for manure?—I never saw any spawn sold at all. With regard to manure, if by accident a vessel met with bad weather and the fish were kept until it became unsaleable, it is seized and thrown away. There is one thing I should like to mention, namely, that the fish from Hull is selected by all the principal towns in England in preference to the fish even from London and all other parts. A very large quantity of the fish brought to Hull goes to Bath, Cheltenham, and even to Exeter, Glasgow, and Edinburgh, and all the midland towns. They prefer the fish caught and brought into Hull to the fish they can get at the London market.

6969. Why is that?—They find our fish is generally in better condition, and another point combined with that is, that our fish is more moderate in price.

6970. Do you think that the fish here is more moderate in price than in other markets?—Yes, I consider so.

6971. Has the price of fish increased very much in the market during the last 10 years?—No, it has not increased in the direct market for consumption. But what has increased the price of fish here is, that the railway companies have reduced their charges so that fish now find a transit to all parts of the United Kingdom. They used to charge 12*s.* a basket for plaice, which had the effect of prohibiting the article from being sent away. The result was, that whenever we caught haddocks and plaice they were thrown overboard.

6972. Why was that?—Because the carriage was heavy and we could not send them away to make a profit out of them. I went, when Mr. Hudson was chairman of the York and North Midland line, to Derby, and remonstrated several times in reference to the charges for the carriage of fish. 14 years ago they reduced the charges, and we have continued to send fish to the markets. There was a time when we did not send offal fish (plaice and haddocks) to the market.

6973. Is the price such as to admit of the poorer classes consuming it?—Yes.

6974. Then the price has not increased so as to place it beyond the power of the poorer classes to buy it?—No.

6975–76. Are you able to send your fish to such large towns as Manchester at such a cost as permits it to remain at a price within the reach of the poorer classes?—Yes, I think so. But I have heard complaints at Hull that they don't get fish as cheap as they used to do. At the time they refer to they had only a few cod and skate brought to the town. They had no trawlers at all, whereas the trawlers now supply the market all the year round, and they cannot expect to have the fish given to them.

6977. Do the trawlers fish all the year round?—Yes.

6978. Without any intermission?—Yes.

6979. Is there no particular season for some fish?—No, we find fish in good condition all the year round. I believe the fish when they spawn are not on this coast at all.

6980. Where do you think they spawn?—I believe to the northward, in the North Sea.

6981. Is there any spawn found on this coast?—There is but a small portion of the fish that comes on this coast to spawn; the great bulk goes to sea. The haddock, ling, and cod go to the north, and the soles go southward. I have one great reason for saying this, and that is, that whenever the spring of the year comes an abundance of small soles are caught off the Dutch coast. They catch scores of tons in a night, and that induces me to believe that soles go to the Dutch coast to spawn.

6982. Have you ever fished there?—There are vessels which go there to fish during the spring.

6983. Do they fish among the Dutch fishermen?—Yes.

6984. Do the Dutch fishermen practise the trawl system?—Yes.

6985. Have they done so for many years?—Yes.

6986. Did they practise it before you did?—I should think that their trawling has been carried on for ages.

6987. Are there French trawling boats in great numbers?—Yes, I have seen 150 sail out of Calais alone. I have also seen large numbers at Dieppe, Dunkirk, and Boulogne. I have seen as many as 200 sail.

6988. Are they of the same build as your own trawlers?—They are luggers mostly with three masts.

6989. Are they generally of the same size?—No, they are about 40 or 50 tons, builders' measurement.

6990. Do they carry the same description of tackle?—They carry a trawl, but it is different from ours. The mesh of their net is different. The upper part of the net, which we call the "square" of the net, is smaller than the lower part of our net.

6991. Do they catch in consequence a larger number of small fish in proportion?—Yes, in Calais, on Sunday, Monday, and Tuesday last, I found that they were bringing a great deal of small fish into harbour, such as gurnets, dabs, and weevers.

6992. Smaller fish than you are in the habit of sending to market here?—Yes.

6993. Are there any line-fishers off their coast—are any of the Dutchmen or Frenchmen line-fishers?—Yes, Frenchmen are noted for line-fishing.

6994. Do they practise it among the trawl-fishers?—Yes.

6995. Do you ever have any complaints from them?—No.

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6996. Do you fish among them?—Yes.

6997. Do you never get foul of the line-fishers' lines?—No.

6998. Have no claims ever been made against the trawl-fishermen of Hull on account of having destroyed the long-lines of the fishermen?—I never knew of such a claim being made.

6999. Have you known any instance in which the general practice of fishing by the line has been superseded by trawl-fishing in the same port. Take Ramsgate, for instance?—Ramsgate was never noted for line-fishing.

7000. Do you know of any place noted for line-fishing that now practises trawl-fishing?—Scarborough is as noted a place as I am acquainted with; they still carry on line-fishing, but I don't know trawl-fishing practised anywhere more than at Scarborough.

7001. Does the trawl-fishing require different accommodation from line-fishing; does it require, for instance, a better harbour?—If they had no harbour to go into it would be impossible to trawl. The trawlers draw 9 or 10 feet of water, and if they had no harbour to fly to it might become awkward for them. A few years back I went down to Seaham to see what I could do there in the way of providing accommodation for trawlers. I examined the harbour, but I found it would not do. It was a dangerous harbour to approach, and it had no room in it. Of course I declined to go there.

7002. As a practical fisherman, can you tell me which is the best school for seamen, the trawl-fishing or the line-fishing?—The trawl-fishing.

7003–4. For what reason?—They are always learning the art of a seaman. There are no better seamen in the world. I have been acquainted with captains who have taken trawlers as part of their crew in preference to any square-rigged sailors. They are much more courageous; they will endure greater hardships, and they render great service to ships in distress. If they only see a ship in distress they will at once put off their small boats and do all in their power to rescue the crew, while the square-rigged sailors would not leave their ships.

7005. In practice, have you found that the trawl-vessels do very often aid vessels in distress?—Yes, they render assistance to a great number of them. Not a year passes in which they don't render a deal of service.

7006. Is it from their local knowledge of the coasts they fish upon that they are enabled to render special service to strangers?—It makes no difference whether they are strangers or not to them. They would not allow a ship or person to sink if it were possible for them to save them. They are always at sea, and they never run into a harbour in consequence of bad weather. Therefore they are always on the spot, and more or less ready to render any service that may be required.

7007. (*Professor Huxley.*) Have you been engaged practically, Mr. Markcrow, in the trawl-fishing?—No.

7008. You speak particularly as a smack owner?—Yes, and as a fish dealer. I have sent great quantities of fish all over England.

7009. You spoke just now of the French and Dutch trawlers; do they ever come over to the ground at the Dogger Bank?—Yes.

7010. Do the boats of different nations fish among each other?—Yes.

7011. Do they interfere with each other?—They don't interfere to the annoyance of the trawlers, but they do to others.

7012. The trawlers can, if they choose, keep perfectly clear of each other?—It is very rarely that a collision occurs.

7013. They ought never to come together, ought they?—One vessel being ahead of another may become fast to a wreck, or anchor, or something of that kind, and before she can alter her course another may be foul of her.

7014. You said a little while ago that the trawl beam of the trawl you use here is about 42 feet long?—Yes.

7014*a*. Why did you have it with the small boats 38 feet long?—They fancied it was necessary to have it that length for the purpose of catching a sufficient quantity of fish.

7015. Did you ever hear of any law on the subject?—I have heard that there is a law restricting the length of the beam, and also the weight of the head irons.

7016. You have heard of the Convention between this country and France?—Yes.

7017. Did you know that the Convention contained a number of articles relative to trawl-fishing?—Yes.

7018. And that some of those articles regulated the size of the net, the length of the beam, and other matters?—Yes.

7019. For example, there is the 18th article, which says:—"The length of the wooden yard or beam to "which the upper part of the mouth of each trawl-"net shall be be fastened shall not exceed 38 feet;" you say here, that all your boats are violating that law?—I suppose it was not thought at the time the law was made that there would be such fine vessels engaged in the fishing.

7020. I don't speak of the motives or intentions of the Government in entering into that Convention; I only refer you to the articles of the Convention itself, and they have been in existence since 1843?—Well, so far as I am concerned, I hope that that article will be rescinded.

7021. Have you ever been in the habit,—have the smack owners here ever been in the habit of paying any attention to this Convention and Act of Parliament?—I can't say that we have.

7022. Is there anybody to interfere with you and take notice of the size and length of your trawl beam; have you had any fishery officer to examine the length of your trawl beams and the size of your nets?—I cannot say that we have.

7023. Not only is the length of beam regulated in this Act, but also the size of the mesh. Can you tell me whether on the ground rope or foot rope you are in the habit of placing any weight?—No, we are not.

7024. Not at all?—No, it is merely bound round; it is rounded with a small portion of the rope it is made of. Part of the rope is put round and round it.

7025. What is the size of the smallest mesh used in your trawl net?—About $2\frac{1}{2}$ inches.

7026. Two and a half inches from knot to knot?—Yes.

7027. Have you none of the meshes smaller than that?—I think none are larger than that, and that would apply to the lower part of the net. The mesh is larger as it comes upwards.

7028. What is the weight of the head iron that you use here?—About 170 or 180 lbs. each.

7029. Then together they would weigh 340 or 360 lbs?—Yes.

7030. Did you ever hear of this article: "The total "weight of the two irons or head pieces of a trawl "shall not exceed 287 lbs"?—I can't say that I ever noted that in particular, but we have been compelled to use head irons of that weight in consequence of using so much heavier vessels in the fishing.

7031. I am only asking you what is the fact; you do use heavier head irons than the law sanctions?—Yes.

7032. In point of fact, these articles have been a dead letter here ever since you have been a smack owner?—Certainly we have taken no notice of them.

7033. If nobody calls your attention to the law, you think it is no business of yours?—We consider that the sea is free, and we invest our capital in it.

7034. Would you be pleased if these articles were enforced?—No, I think the weight of the head irons and the length of the beam as laid down in these articles would be most injurious. To use tackle of that description would make the gear so light that the large vessels we use now would swim their gear.

7035. Looking at these articles, it certainly strikes me that if these laws were enforced you are every-one of you here liable to fine and imprisonment?—I hope not.

7036. In point of fact, I presume the Act of Parliament has always remained a dead letter in this port?—Yes.

7037. Have your trawl-vessels been in the habit of fishing where there are boats engaged in the herring-fishing?—Our vessels fish on the ground where the herring vessels come. When they have made their season they go further off and our vessels take up their position.

7038. Have you ever heard of anything that obliges your vessels to keep out of the way of the herring boats?—I have heard that we ought to keep out of their way, but I think it is a very great hardship.

7039. Did you know of this article: "Trawl-boats "shall always keep at a distance of at least three "miles from all boats fishing for herring or mackerel "with drift-nets?" Are you aware of that?—Yes, I have heard of it.

7040. Have any of the fishery vessels on this coast ever attempted to enforce that law?—I never heard of them doing so.

7041. Is there a fishery vessel or gunboat on this coast?—Two years ago there was, but I never hear of it now.

7042. Have you ever heard of trawl-vessels being interfered with by a gunboat?—No.

7043. You never heard of such a thing?—No.

7044. If already trawling, you are bound by the convention to go away when the drift net boats come there. There is this article, for example, contained in the Convention: "Trawl-fishing is for-"bidden in all places where there are boats engaged "in the herring or mackerel drift-net fishing." Did you ever know drift-net herring or mackerel boats attempt to enforce that law?—No.

7045. Perhaps they know as little about it as you do?—I know nothing about that. I think it is a great hardship that if a trawler has taken up his position, with perhaps 130 or 140 fathoms of warp out, which it will take him hours to heave up again, that he should be obliged, if herring or mackerel boats come down upon him, to get out of the way. When he sets his net the herring fishermen may be driving with the tide, and, as trawlers don't go as fast, the consequence is that the herring boats come across the trawler, and 25*l.* or 30*l.* worth of injury is done before the trawler can get out of the way; yet they want compensation from the trawler for the damage done to their nets. Now I think it very hard that the trawler should have to stand both damages.

7046. But as the law stands, it says that trawlers must get out of the way if the drift-net boats come?—Well, all I can say is that I hope the matter will be looked into and altered.

4047. Do you think the enforcement of these laws would inflict any great hardships upon the trawlers?—Yes, the enforcement of that law would be a very serious hardship.

7048. We have it in evidence that the long-line fishermen complain a great deal of the carrying away of their lines by the trawlers at night. I understood you to say that you know of no complaint of that kind on this ground?—No, I know of none.

7049. Are you aware whether the persons in your employment have ever carried away bratt nets in trawling which have been set on any part of the coast?—No.

7050. Are you aware that the long-line fishermen have been driven off their ground on this coast in consequence of not daring to set their lines where your trawlers have been sweeping the ground?—No.

7051. Have no complaints ever been lodged with the Hull magistrates?—No.

7052. Have you noticed any diminution in the size of the haddocks caught of late years, comparing them with the size of those caught formerly?—During the last 20 years the haddocks we have caught have been finer fish than have ever been since we have fished on this coast.

7053. What is the average length of the haddock caught by your trawlers?—From 12 to 18 inches.

7054. Would not 18 inches be rather a fine fish?—Yes, but I believe there are abundance of those we catch that would measure 18 inches.

7055. Comparing your experience of trawled fish now with what it was 20 years ago, has there been any diminution in the size of the fish?—They are finer fish, they are better fed, and they are altogether finer.

7056. The general evidence we have had so far is that the haddocks have become smaller, and that they cannot catch them in such large quantities as formerly. They say that there are no fish to catch at all now. I ask you if you have noticed any diminution in the size of the haddock caught by the trawler, and you say no?—As far as the quantity is concerned we catch treble the quantity we caught 12 years ago.

7057. Can you give me any idea why, if the fish are there, and they are such fine fish, the long-line fishermen can't catch them?—I believe the fish shift their ground. I have known large quantities of haddocks caught at the North Foreland off Ramsgate and Margate, while in some places the fishermen have not caught a haddock. I have known, in some seasons, very large quantities of haddock caught in Rye Bay, while in other seasons they have not got a basketful. In some days they got 20 and 30 baskets-full at a haul.

7058. Then am I to understand that, in your opinion, even if the haddocks were left to themselves at times they would be plentiful and at other times scarce?—Yes.

7059. You explained the dearth of fish upon the so-called "California" bank by supposing that they had been driven away by the fishing operations?—I imagine that they don't find sufficient quietude for their spawning, and that they have consequently gone away; but the quantity of fish that came there to spawn was very small.

7060. Then you believe that constant trawling over a fishing ground may frighten the fish away?—Yes, for a time.

7061. Do you think they will return?—The fish are not caught there except in the spring of the year, but wherever the ground is stripped and barren for a time, I believe the fish will come again in great numbers.

7062. It is possible to strip the ground you think?—Yes; taking into consideration what is caught and what will remove.

7063. We have it in evidence that the trawlers have trawled over a spot of ground two miles broad and 20 miles long for eight weeks in succession, and that they have always found an abundance of fish there?—It is quite likely; the deep sea is continually supplying the fish.

7064. Do you think trawling might go on for a great space of time and not drive the fish away?—I know a little bit of ground off the North Foreland at Ramsgate on the south ground. They continue fishing there during the whole of the summer. There is very rough ground outside, and between that and the land they are continually fishing. The fish go in there to feed. As the trawlers plough up the ground, the lug-worm, shrimps, and other things are turned up, and the fish go in and take them as food.

7065. Do you think that any patch of ground is being constantly stocked by immigration or by some other means?—Yes.

7066. But if it was ground that was not good feeding ground might it not be permanently stripped?—No, not permanently; at least not for long. I don't think that the fish come into shoal water in the winter time. The largest quantity of fish caught in the Silver Pits is caught in the cold weather. I think that is a proof that the fish go into deep water in the severe weather.

7067. Do you catch many codfish in your trawls?—Sometimes we catch 20 or 30; sometimes only two or three.

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7068. What is the principal fish you take?—Soles, brill, turbot, haddock, and plaice.

7069. Do you catch soles and plaice when they are not caught by the long-line fishermen?—Yes, we catch soles and plaice that would never be caught by the hook.

7070. But the long-line fishermen can catch them, can they not?—If we had not more soles than are caught by them there would be a very scanty supply.

7071. I believe that soles are largely eaten in London?—Yes.

7072. Then, if trawling were put down and they were only allowed to be caught by the hook and line, do you think the supply would be less than it is now?—There would not be enough to feed Her Majesty's establishment, let alone the general public.

7073. Then putting down trawling would be a great benefit to the soles, but to nobody else? The long-line fishermen would never catch them?—No, the long-liners can only go to sea at particular times. Our boats go to sea at all times, blow high, blow low, whether it is freezing or snowing. It very rarely occurs that the London market is left without plaice, soles, or haddocks. When there is severe weather occasionally the codfish caught by the liners will fetch a guinea, while soles, brill, and plaice are abundant.

7074. There is a great deal of turbot caught by the bratt nets?—Yes, I believe so.

7075. Then the market might be supplied with turbot?—Yes, but it would be a very scanty supply. The further we go to sea the more we catch. We catch now what the Dutch used to catch.

7076. May you go as near the Dutch coast as you like?—Yes, we have never had any interference with us.

7077. Have you, as a fish salesman, had occasion to go to the same markets as those in which the hooked fish are sold, or to send to the same?—Yes, I have had occasion to send to the same.

7078. Have you found that your fish were driven out of the market by the hooked fish?—They always give the preference to trawled fish. If a fishmonger wants supplying, he will give a preference to the trawled fish on account of the many different kinds he can get. If he buys hooked fish only, he will merely get cod and haddock, whereas if he buys trawled fish he finds soles, turbot, and brill, which the cod catchers can't get at all.

7079. Do you mean that if a fishmonger wants to contract with a fish salesman, he would sooner contract with a man who gets a regular and varied supply than with one who only gets hooked fish?—Yes.

7080. But suppose you sent trawled turbot into the market at a time when hooked turbot is in the market, will the hooked turbot get a better price than your trawled turbot?—That is a thing I have very rarely tested. I have seen scores of Filey and Flamborough boats in Hull with their fish and there has rarely been a turbot amongst them.

7081. How is it with your trawled codfish; do you get as much for trawled cod as the line fishermen get for hooked cod?—We mix them with plaice, skate, and haddock. We always make a mixed basket; we think that suits the market in England better.

7082. Have you ever known the market for your fish interfered with by line fishermen on account of the preference given by the public to fish caught by the hook?—No.

7083. Have you on the contrary, been able to lower the price to the consumer?—I have no doubt that fish is sold at two-thirds less price than it would be if the markets were dependent entirely upon the hooked fish.

7084. Then do you drive the long-line fishermen out of the market?—They cannot expect to cope with our men in the quantity of fish they send to market. Our men deserve all they earn, inasmuch as they are always at sea. If there is a gale of wind the long-line fishermen dare not leave the shore. If in this country there was no more fish than what the long-line fishers catch, there would scarcely be enough for a half or even a quarter of the public.

7085. Have you ever heard that the fish consumers have complained to the people who buy the fish from you as to the quality of the trawled fish?—No, I never heard of such a complaint.

7086. Have you ever heard of people becoming ill in consequence of eating trawled fish?—Never. They might be ill, but it would not be the fish that would make them so.

7087. We have evidence of that fact?—Then it has been very bad evidence.

7088. What do the crews of your smacks live on?—They take a great deal of beef with them, and they eat a good deal of fish. They have fish to breakfast, meat to dinner, and fish to supper, and they look as hearty a race of men as you would wish to see.

7089. You never heard of their being laid up in consequence of eating trawled fish?—Never.

7090. I don't want to pry into the circumstances of the men engaged in your particular trade, but it is necessary that we should inquire how the capital is invested in the business. Can you tell me if the money put into the smacks here is put in by large capitalists who wish for a good investment?—No, I think not.

7091. Is it invested more by individuals who seek a good enterprize?—Yes. The large capitalists don't put any money in it at all.

7092. Has there been much speculation in the business; have there been many people who have put in money on the chance of getting a good return?—Those who have invested have invariably got five per cent. for the use of their money.

7093. Have they always got five per cent.?—There may have been exceptions, but money as a general rule is advanced to the fishermen at five per cent.

7094. Is it an easy matter to get money at that rate of interest in the smack trade?—I don't know that it is perfectly easy, but it invariably occurs that a man is first of all a fisherman, and that he must have a little capital of his own. When he has been fortunate enough to find a friend who will lend him a little money, by that means he gets a vessel, perhaps a secondhand one, but occasionally a new one.

7095. (*Mr. Caird.*) You mentioned in answer to a question from Professor Huxley that you sometimes carried away the herring nets to a considerable extent in your trawls?—It does occur sometimes that the trawler loses his gear.

7096. Could not some regulations be adopted by means of which the trawlers would be enabled to keep clear of the herring fishermen during the time the herring-fishing is going on?—The herring fishermen commence their fishing along the coast, and as the season advances they find the fish falling away to the deep sea. Wherever the trawlers go they follow them. Wherever the trawlers are there they will be, for it appears that the herring, when in deep water, will go at times down to the ground. The trawlers disturb the fish and they come up to the surface, and upon that account the herring driver will approach as near as he possibly can to the trawler, much to his annoyance, for the purpose of catching as much fish as possible.

7097. That is in the deep water?—Yes.

7098. Would it be any hardship to the trawlers to be excluded from in-shore fishing during the herring season?—I think our vessels fish but little in-shore during the herring season.

7099. If they were entirely excluded would it be a serious hardship?—I don't know that we should feel it a very great hardship; the herring-fishing only lasts for a short season.

7100. You stated that soles don't come in-shore much at all?—Only during the summer time.

7101. Are you aware that there is a very considerable sole-fishing carried on in Bridlington Bay?—Sometimes there is.

7102. Is that in cold weather?—No, they will not get soles there in cold weather; it is in the months of June and July.

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7103. In your experience as a salesman of fish, have the markets in the country been gradually extended?—Yes, very rapidly.

7104. Do you send larger quantities to the manufacturing towns than you did in former years?—Yes, very considerably. For the last 17 years I have been travelling all over England, Scotland, and Ireland at the expense of the North-Eastern Railway Company to open markets. In many of the towns I went to there was not a fishmonger's shop and never had been; and it was just a chance to have a few fish brought in by a hawker travelling with a donkey. There are now four, six, or seven fishmongers in such towns, all of them getting a living, and all of them taking their fish from Hull.

7105. Do you think they could be supplied if there were no trawl-fishing?—I am certain they could not be supplied if trawling was done away with. It is only during part of the year that the long-line fishermen would fish at all, and they would not care who wanted codfish or anything else when the herring season came on. They always leave the cod-fishing to go to the herrings. They then want a few weeks to spend what they have made, and they then commence again their long-line fishing. If trawling was done away with the country would sustain a serious loss.

7106. Then if the markets have been constantly extending in the interior of the country, has the price of fish increased in consequence of that increased demand, or has it been stationary?—It is ruled entirely by the supply.

7107. Is your supply equal to the increased demand?—Yes.

7108. I suppose that every new market would open up an increased demand?—Yes.

7109. Have you found that you are capable of meeting that increased demand by an increased supply?—Yes.

7110. And yet you have not found that that has made a difference in the resources of your supply?—Not at all. I was going to observe that I think there are many people who lose sight of the extent of the North Sea and German Ocean fishing ground. Many people imagine that the trawlers trawl over the whole ground, whereas, for every 100 acres of ground in the North Sea there is not more than one acre trawled over by the trawlers, so that out of 100 acres of ground in the North Sea and German Ocean 99 are left for the spawning of the fish and to enable them to multiply. When they come to maturity they run to different quarters seeking food. They come to the ground which the fishermen have already trawled over, and they find good food there, and there they will stop and feed and become better in quality. It is at such places that the trawl-fishers find them. If one man has a good catch he tells his friends and they continue to fish the ground until they find it is not sufficient to remunerate them. Then they go to another spot and they will trawl over that for a time without shifting, and probably they will go back to the old spot and find abundant fish again. I believe these facts are lost sight of in supposing that the trawlers destroy any quantity of spawn. In my opinion that supposition is a great mistake.

7111. (*Professor Huxley.*) I wish to know whether the trawl-boats are in the habit of carrying vanes of any particular kind at the mast head?—No.

7112. Are you not aware that they are bound to carry red vanes?—No.

The witness withdrew.

G. Winsor

Gregory Winsor called and examined.

7113. (*Mr. Caird.*) Have you been long connected with the fishing business at Hull?—Yes, for 16 years now.

7114. Are you a native of Hull?—No, I come from Brixham.

7115. Did you move from Brixham to Hull 16 years ago?—No, I came from Brixham to Ramsgate first.

7116. And then you removed from Ramsgate to Hull?—Yes.

7117. Were you then a trawl fisherman?—Yes, I was then about 12 or 14 years of age.

7118. Are you still a trawl fisherman?—No, I have left it for 12 or 14 years.

7119. Have you any property in the trawl-fishing smacks?—Yes. I used to go to Ramsgate in the winter reason.

7120. What was the reason you removed from Brixham to Ramsgate?—I removed because we were nearer to the London market. The land carriage was so great from Brixham; it entailed so heavy an expense upon us.

7121. Did you find as many fish at Ramsgate as at Brixham?—Yes.

7122. But you found greater facilities for getting to market?—Yes.

7123. Could the same facilities be got in coming to Hull?—Yes. We have more markets here to send to. We have found both more fish and more markets to send to.

7124. Before you removed from Ramsgate did the fishing banks off Ramsgate begin to show signs of being fished out?—No, there were still plenty of fish, and I believe there is more fish now than ever there was.

7125. Is there more fish here than at Ramsgate?—I never was fishing off this ground myself.

7126. What ground did you fish, off Hull?—I never went from this place at all.

7127. Then you can only give us information with regard to the fishing off Ramsgate and Brixham?—Yes.

7128. Did you find during that time that the trawl-vessels were increasing or diminishing?—They were increasing a great way.

7129. Were they larger in size?—Yes.

7130. Can you tell us what the increase was?—I cannot say exactly how many.

7131. Were you in the habit of trawling over the same ground repeatedly?—Yes, at Brixham and Ramsgate also.

7132. Had that been carried on for a number of years?—Yes, there were 60 or 70 sail of vessels when I was 12 years of age at Brixham.

7133. Did you not exhaust or impoverish the ground upon which you fished?—Only at certain seasons of the year.

7134. At these seasons would the line fishermen find the same impoverishment?—Yes.

7135. How do you know; have you ever been a long-line fisher?—No, but they could not go out in the winter with their small boats to try. These small boats, which are only seven or eight tons, can only go a few miles from shore.

7136. Did you ever see any spawn in your trawl net?—I never saw any in my life.

7137. Does not the trawl disturb the spawn?—I am sure it does not.

7138. Did you not bring up small fish in the trawl net sometimes?—Yes.

7139–40. What proportion of small fish?—Perhaps a half hundredweight.

7141. Were they bruised or mangled?—They were dead, but they were not bruised, and they were always fit for food.

7142. Were you in the habit of keeping them or of throwing them overboard?—Sometimes we kept them; if we could get them in fresh we could sell them.

7143. Did you notice any kind of fish becoming plentiful or scarce during the time you were engaged in the fishing; take turbot, for instance?—It became more plentiful.

7144. Did you catch more in the latter part of the fishing than when you first began?—More at Ramsgate, and more soles too.

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7145–6. How was it with regard to cod?—We don't catch many cod.

7147–9. Did you observe any improvement in the quality of the fish?—I did not notice much improvement in the quality.

7150. Have you ever fished in company with Dutch or French vessels?—Yes.

7151. Off the Dutch coast?—Yes, when I was at Ramsgate.

7152. Are they trawl-vessels?—Yes.

7153–5. Are they increasing in number now?—I cannot say now; they were 16 or 17 years ago. There were a good many new smacks then, and they were a good deal larger.

7156. Were both your boats and their boats fishing on the same ground?—At times; there were always some Dutchmen there.

7157. Is there any celebrated fishing bank on the Dutch coast?—No.

7158. Is there anything like our Dogger Bank or Silver Pits?—No; a great many of their boats come from Ostend. We fish more in deep water.

7159. They did not fish in such deep water as you?—No, sometimes in 23 or 24 fathoms, and sometimes in 18.

7160. Were there plenty of turbot and soles on that ground?—Yes, but there were not many plaice.

7161. Wherever you chose to drag your net, did you find plenty of fish?—Yes.

7162. Did you find that by repeatedly dragging over the same ground you impoverished it?—No; on the contrary, we found that we got more fish.

7163. With reference to a question put to the previous witness with regard to the herring-fishing, do you think it would be a hardship upon trawl-vessels if they were compelled during the herring season to keep their vessels outside the herring shoals?—That would depend upon how far the herring fishers went off the land.

7164. At what distance from the land in trawling do you in general find most fish?—I cannot say; perhaps from 40 to 60 miles.

7165. If, as we are told, the larger shoals of herring are found within six miles of the coast, do you think it would be a serious hardship upon the trawl vessels if, during the period the shoals of herring are in, they should be excluded from coming within a limit of six miles?—I don't think it would hurt the trawl fishermen much to be kept beyond six miles.

7166. Do you take many skate in your trawl?—No, I never caught any skate.

7167. Is there any particular fish you have found falling off in quantity?—No, none.

7168. Have you found any diminution in the quantity of haddocks?—No, none.

7169. If you were told that the haddocks are decreasing on the coast, would your experience lead you to say that was a correct statement?—No, they cannot but have increased. Seven years ago scarcely a basket of haddocks came here; now we get 10 or 12 in a haul.

7170. Has the quantity been increasing every year since the period you mention?—Yes, it has been increasing ever since.

7171. The quantity of haddocks has been increasing?—Yes.

7172–3. Have you as a fisherman ever been able to give aid to vessels in distress at sea?—Yes.

7174. Have you ever fouled any of the long-line fishermen's lines?—I never saw any.

7175. Did you ever carry away any herring-fishing nets?—No.

7176. Have you ever had complaints made against you for destroying their lines or fishing tackle?—No.

7177. Do you catch any shell-fish, crabs or lobsters, in your trawl?—Sometimes we catch some oysters.

7178. Do you get many oysters?—At times we do.

7179. On this coast?—Yes; I have seen the fishermen bring them ashore.

7180. Do trawl-boats generally bring in oysters when they are fishing?—Yes, sometimes.

7181. Are they good in quality?—Yes.

7182. Do they bring them in at all seasons of the year?—No.

7183. If they catch them in the season they are not considered wholesome, what do they do with them?—I cannot say, I have not been out at sea off here myself.

7184. (*Professor Huxley.*) Have you often had large quantities of the fish taken up in the trawl spoilt in consequence of being kept at sea too long by bad weather?—No.

7185. Not at any time?—If there was a gale of wind and we could not get the fish to land, it would be spoilt, and we would throw it overboard.

7186. Have you any reason to know whether any quantity of that spoilt fish gets to market?—No, it is condemned, it never goes to market.

7187. Is it the practice for each fleet of vessels to send one vessel ashore loaded with fish every day?—Yes, every day.

7188. Is it sent in one of the ordinary smacks or do you keep one specially for the purpose?—We don't keep any particular smack.

7189. One smack will take the fish on board from the rest and come in?—Yes, every day.

7190. Is it a common practice to find spawn taken by the trawl?—No, I never saw any.

7191. Have you ever seen any considerable quantity inside the fish?—No.

7192. You heard the last witness state that that occurred sometimes?—Yes, but I never saw any.

7193. Not inside the fish themselves?—No.

7194. Did you hear the regulations with regard to fisheries, laid down in the Act of Parliament, read?—Yes.

7195. Would you like to have them carried out?—I don't know that.

7196. Would it be injurious to your business as a trawler if they were carried out?—I think it would. It would certainly be injurious with regard to the mesh.

7197. Are you a fish salesman now?—Yes.

7198. Have you found any difficulty in getting rid of your fish when there were hooked fish in the market to compete with it?—No; but we don't make so much money.

7199. Suppose there is an equal quantity of trawled fish and hooked fish in the market, does the hooked fish fetch a higher price?—We don't get so much cod as they do, and the rest is a different kind of fish altogether.

7200. Can you get a higher price for the cod you get than they do?—We only get a very few cod.

7201. But you get some constantly?—Yes, but we never sell them by themselves; we put them in a basket with skate, plaice, soles, and other things.

7202. Are the fish you catch here fish which the long-line fishermen don't catch—soles and plaice?—Yes, they can catch them, I believe, but not in great quantities. I never saw them bring any to the market.

7203. (*Mr. Caird.*) Do the French trawl-boats come on your coast among your trawl-boats?—Yes.

7204. In the same way that you go among the French and Dutch trawl-boats on their coast?—Yes.

7205. Is that frequently the case?—Yes, about Ramsgate. I don't know whether they come here or not.

7206. Do the French sell their fish in the English markets?—I cannot say.

7207. Have you ever seen them bought in the English market?—No.

7208. While you have been fishing on the Dutch coast, have you ever taken your fish and sold them in the Dutch market?—No.

7209-10. Do you think it would be of advantage if you were allowed to do so?—No. It would not bring as good a price.

7211. Would you not get as good a price for soles?—No, nor for any other kind of fish; perhaps we might for plaice.

7212. Would it be of advantage if the law was altered to admit you to the French markets, when you get fish off their coast?—No, I think it is better as

it is; they bring no fish here and we carry none there.

7213. You would rather that the law as it stands should be continued?—Yes.

The witness withdrew.

JOHN DALTON called and examined.

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7214. (*Mr. Caird.*) Are you interested in the fishing business here?—I am at Grimsby, where I have both trawl-boats and well-boats.

7215. You have capital employed in the business?—Yes, to a considerable amount.

7216. Are you desirous of offering any observations to the Commissioners?—Yes, I have come to the conclusion myself that the cod boats must be entirely laid on one side, if some alteration does not take place. It has been gradually a losing trade for some years past. The boats I refer to are the smacks we employ in catching the cod on the Dogger Bank. We bring the fish into Grimsby in wells, and it is then forwarded to London for sale.

7217. Are they line-fishing smacks?—Yes, they are large line-fishing decked smacks, but they are very different from the line-fishing boats I have heard of before. I have prepared a statement to show the loss I have sustained by these boats.

7218. Will you be kind enough to read it; we shall be very glad to receive it?—It is a money statement in reference to five smacks which were engaged in fishing in one year. I have, however, taken an average of voyages over two or three years.

7219. Does that paper give an account of the produce of five smacks employed in cod-fishing on the Dogger Bank?—Yes, and a little off this coast.

7220. Are they smacks that have been engaged exclusively in cod-fishing?—Yes, exclusively in cod-fishing. I have taken the produce of the smacks for a couple of years, and I find that each smack has produced a gross sum of 834*l.*

7221. 834*l.* per annum?—Yes, that is the gross produce. Then there are the expenses to come out of that.

7222. Well, go on?—The expense of the working of each of these smacks amounts to 1,073*l.* odd, say 1,070*l.*

7223. Then there has been a loss on each smack?—Yes, I have lost 200*l.* per annum on each.

7224. Have you lost that every year for a period of five years?—No, only during the last two or three years, and of course I must put them by altogether and give up the trade. I cannot afford to carry it on at that rate.

7225. How does that loss arise? Is it in consequence of the quantity of cod you have been in the habit of catching having diminished?—I expect it is so. My impression is that the quantity of cod has been diminishing for several years past prior to my going into the trade. Several gentlemen put some thousands of pounds together and worked the cod trade for three or four years, and they came out of it with a loss of several thousand pounds. If I had known this before, I should not have gone into it. I have a ship yard at Grimsby and these smacks were built there with a view of selling them. Finding that I could not sell them, I worked them.

7226. Then you have gone into a trade which was a losing trade before you entered it?—Yes.

7227. Are you able to tell me whether before that time the boats were catching more cod than during the two years you have been engaged in the trade?—I think they caught more, but I do not know exactly. At one time, a few years ago, it was a paying trade.

7228. Has the price of cod decreased?—I can hardly tell you that; but something has, either the price or the quantity.

7229. The only statement you can make to us regarding the five vessels employed by you is, that you have found it a losing business for the last two years?—Yes, and I have inquired of other people, and I find it was the same with them for several years prior to my entering into the trade.

7230. Has the number of vessels engaged in the cod trade diminished?—They have not diminished, perhaps, but they have not increased. It seems to me that they are altogether stationary. Nobody will buy a cod boat now. I put one up to auction six or nine months ago, and the only offer I got was one of 300*l.*

7231. May not that arise from the fact that trawl-fishing is found more remunerative?—Not at all; but I think it may arise from the fact that the trawl-fishing comes into competition with the line-fishing.

7232. Are you acquainted with any facts in reference to trawl-fishing?—No, only such as this: I have reason to think that with the exception of a very few boats, trawl-fishing here is purely a speculative matter, and that the boats are nearly all mortgaged. Of late there have been several smacks for sale. One was sold about a month or six weeks ago, called the Odin. She was sold by auction for 285*l.* I sent my clerk to the Customs to ascertain the position in which she stood, and I found that she was mortgaged for 650*l.*, and so far from persons of small capital being the persons who lent the money, I found that it was one of our bankers, a man of some consequence. Then there was the Vulture, of 54 tons; she was sold by auction for 280*l.*, and I ascertained that she was mortgaged to the same party for 600*l.*

7233. Were these trawl-boats?—Yes.

7234. Do you know anything of the history of these boats?—Nothing, except that I know they were sold in order to realize the money that had been advanced upon them.

7235. We have heard in the evidence given to us that vessels of 40 or 50 tons are not so well adapted for trawl-fishing as larger boats?—That I cannot tell, but there are persons who can give evidence to the contrary.

7236. You yourself are unable to give us any more facts connected with the subject?—No, beyond this, that I know perfectly well that trawl-fishing is not remunerative. I have been told so by different people engaged in it, and any man who will carefully examine the accounts will come to the same conclusion. I should say that the remunerative nature of trawl-fishing is a mass of simple deception. The facts are easily ascertained; you have only to send to the Custom House and you will find how deeply the trawl vessels are mortgaged. The smack capital here has been estimated at 300,000*l.*, but it is very questionable whether the smacks are worth 100,000*l.*

7237. Are you now comparing the value of the smacks with the result of your own investment?—No, with the result of the absolute sales of boats. That is not a matter of assertion at all; any person may go to the Custom House and inquire for himself and he will find that all the smacks are mortgaged, as a rule.

7238. You stated that nobody is building a cod boat now?—No, nobody would touch them now.

7239. But do you know the fact that persons are building trawl-boats?—I do not think that any new trawl-boats are being built now; I believe that the building is almost stationary.

7240. Is it a fact that no cod boats have been built for some years past?—I would not tie myself down to a single boat or two, but as a general rule that has been the case.

7241. Are you not aware that there has been a considerable increase in the number of trawl-boats?—Yes, the increase of late years has been tremendous. I have been told that the number of trawl-boats in 1854 was only 40; in 1860 it was 143, and in 1862 it was 261.

7242. Does not that fact afford very strong evidence that it is an advantageous business?—I don't think so. People sometimes go wild upon a thing, and that

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has been the case here. They are not making anything out of their boats, and one-half of them do not know how they stand with their boats, that is my firm belief.

7243. (*Professor Huxley.*) Is there any large number of cod boats at Grimsby now?—About 40 or 50.

7244. Has the number decreased?—If there are any lost, they are not replaced.

7245. Do you mean that the number is less now than it was 10 years ago?—I cannot say.

7246. Is it about the same?—About the same, but I rather think it has decreased if anything.

7247. I believe you stated that you are a ship builder at Grimsby?—Yes.

7248. Therefore you would know if there had been any marked decrease in the number of boats?—I hardly should; boat building is only an incident in my pursuits.

7249. You think the number has slightly fallen off during the last 10 years?—I think so.

7250. Do you think the loss on each of these cod boats has been similar to the loss you have experienced?—If you will examine the parties themselves they will tell you "no." All I have done has been to show you the result of my experience. I have no doubt that if you question other people, they will say that my account is not correct.

7251. What I want to come at is this; I do not understand how your men of business at Great Grimsby can have been maintaining 40 or 50 cod smacks there during the last 10 years, and losing 200*l.* a year upon each of them?—I don't think there has been that loss. A good cod boat will cost about 1,200*l.* A smack owner will put his boats into a club where they insure them for 500*l.* or 600*l.* But if a man loses his boat he will lose his money, because in all probability the boat is mortgaged, and he never gets another. If you want to insure a cod boat properly, you will have to insure it at six per cent. A smacksman no doubt will tell you that an insurance of 20*l.* will do for that; they have no idea of the manner in which I make up an item of 333*l.* for sundries. If you were to put it to these men and ask them what they would put down for sundries, they would say that 80*l.* or 90*l.* would be enough.

7252. Surely the men who keep cod smacks must know whether they lose money or not by them. If a man loses 200*l.* a year on a vessel he cannot be long in ignorance of the fact?—That is the result of my experience. I have reckoned interest on capital.

7253. Then yours is not a positive loss, but a loss on what you think you ought to have earned?—What I mean to say is, that I am out of pocket by sending these boats to sea.

7254. But if all the other gentlemen who own cod boats are in the same position, they must have an odd idea of trade in Grimsby?—Perhaps they have not lost that actual amount in money. Some of them will run their own insurance, and do a variety of other things to save expense. I myself bought a cod smack two or three years ago; she cost 1,500*l.* or 1,600*l.* building at Sunderland, and she was sold to me for 500*l.* She cost me altogether nearly 700*l.* I ran her two or three years, and after paying for insurance and other matters, I found myself 300*l.* out of pocket. At length I sold her for 600*l.*, and I gave some years for the payment of the money. I was very glad to get quit of her. I am now endeavouring to run my vessels with a less number of men, but if everything is fairly stated and taken into account, I think the sum I have mentioned to you will be found pretty nearly accurate.

7255. How long did you keep your vessels after you began to find that you were losing by them?—I continued to run them in the hope that the trade would mend.

7256. Would it not be cheaper to put them down altogether?—I have been thinking of that long enough, but we always have our hopes that a better time will come. There is a great variation in vessels of this description. One of my vessels made 1,058*l.* in one year, and another only made 766*l.*, so that one naturally goes on in the hope that they will all make 1,058*l.* Nevertheless I have been trying all I can to get quit of them. I have tried to sell them by auction, but without success. If I were to build a cod boat now for 1,200*l.* and were to put her in the market, I should not get 600*l.* for her, fresh from the stocks. I believe if I tried to get 600*l.* for her after I had built her I should not be able to obtain it.

7257. Has that always been the case with regard to cod boats?—For a long time it has been a bad trade, and if you go minutely into a detailed account with regard to these boats, you will find that what I have stated is true.

7258. The fishermen in the cod boats fish with the long-line?—Yes.

7259. Then in your judgment, line-fishing is a bad speculation?—Yes, very bad.

7260. What is the cause of that?—I cannot tell you, further than I imagine that the immense quantity of trawled fish brought into the market must interfere with the price, or it may be that there has been a decrease in the quantity of cod caught. If you had any cod-smack owner before you and were to examine him thoroughly, I am satisfied he would convince you that he does not make anything out of the trade. Perhaps a cod man may go as his own master. He will make 70*l.* a year, or something of that kind by that means. He rests satisfied with that, and he goes on in the hope of better times coming. They are all poor men.

7261. Would you try to prevent poor men from making a little money?—No; and if this Commission would interfere in the matter and put down trawl-fishing it would be their salvation.

7262. How so?—They are ruining themselves at present.

7263. Do you think it would be a fit function for the Government to interfere in order to prevent people from ruining themselves?—I think if I were to break my leg I should be very glad if the Government would step in and mend it for me.

7264. What is the quality of the cod caught here?—The people of Hull don't know what cod is.

7265. The people of Hull don't know what cod is?—That may be an extreme remark, but it is so as a general rule.

7266. Do the people of Grimsby know what cod is?—I suppose they do; it is brought there alive and bought fresh.

7267. You have seen many cod that were not alive brought on shore from cod smacks?—There may be a few that die in the wells, but the remark that I made is perfectly right generally. The fish are brought in alive in the wells and sent to London. The people here never have cod except from the trawl-boats. I have no more to say, but I am satisfied that you will never get a fair statement of things until you investigate people's accounts. At this moment the supply of fish is falling off, and it is increasing in price. All persons in this room who have to go to market and buy fish are aware of that.

The witness withdrew.

J. Gidley.

JOHN GIDLEY called and examined.

7268. (*Mr. Caird.*) Are you connected with the fishing at Grimsby?—Yes.

7269. Are you a fisherman?—Yes.

7270. A cod-fisher?—No, a trawler.

7271. Are you well acquainted with the cod fishermen of Grimsby?—I am acquainted with the owners of the cod smacks.

7272. With the people who follow that business?—Yes.

7273. Is the number of boats employed in deep-

sea cod-fishing increasing or diminishing at Grimsby?—They are increasing.

7274. Do you mean in the line of fishing the last witness referred to?—Yes.

7275. They have wells, and go to the Dogger Bank?—Yes, and the cod owners tell me that they are now doing better than they have done for a long time; that is, they are now earning more money than they have done for a long time.

7276. You have seen the cod boats come to the harbour of Grimsby?—Yes.

7277. Have you had occasion to observe for some years the number of fish brought there?—Yes.

7278. Can you speak of the quantity as compared with what it was a few years ago?—I have been there five years, and I should say that more fish comes into Grimsby now in each smack than was ever brought in before to my knowledge.

7279. More codfish?—Yes; more codfish in number.

7280. Do you know of your own knowledge whether the cod fishing is really a profitable business at Grimsby?—Some people engaged in it get on, and others do not. It is the same in cod-fishing as in all other businesses. I am a salesman in the market, and I have been a fisherman. I am a smack owner. I stop ashore now and sell fish, and I hear them sell theirs, and therefore I acquire a knowledge of all these things.

7281. Do you buy the cod?—No, I do not; I am a salesman.

7282. Being a salesman, are you not also a buyer—No.

7283. Do you sell the trawled fish to buyers who take them into the interior of the country?—Yes.

7284. Have you any business transactions with the cod fishermen there?—No; only the same buyers who buy one fish also buy others.

7285. Have you occasionally any cod in your trawl-boats?—Yes, very often.

7286. How do they sell as compared with the cod caught with the long-line?—Better when they are dead. Our fish are better than theirs when dead. Their dead fish are drowned fish. They have been drowned in the well.

7287. Are they not considered as good as your trawled fish?—No, they are not.

7288. With regard to the live fish, do they bring a much higher price than the trawled cod?—Yes, their live cod will make a great price, but their dead cod, which has all died in the well, is not so good as ours. Ours is a quick death, but theirs is a very lingering one. Our cod die as they are caught.

7289. Does it take the cod boats long to come from the fishing ground to Grimsby?—That must depend upon where they are. The wind may prevent them from coming in quick. They come in when they get a good catch as soon as they can in order to get the fish in alive. They do not wish to have dead fish if they can help it.

7290. Have you yourself fished on the Dogger Bank with the trawl?—Yes, I have.

7291. Have you been near any of the cod-fishing boats you refer to?—No; but I have observed when they got fish the fish was very scarce, and that now there is an abundance.

7292. Are you speaking now as a trawler?—Yes; there are several poor men at Grimsby who are doing very well in cod-fishing. I know a cod man who has done very well indeed, and who has continued year after year to do very well on no capital whatever.

7293. Do you know the number of line-boats at Grimsby?—There are perhaps 50 or 60 altogether; probably you may see 20 come in to-morrow. Sometimes there are 100 in from other places.

7294. But with regard to Grimsby itself there are 50 or 60?—Yes.

7295. What is the tonnage of each boat?—About 70 tons will be the average builder's measurement—somewhere above that.

7296. How long have you known the port of Grimsby?—More than 20 years; I left Hull to go to Grimsby as it was nearer.

7297. Within your experience has the number of line-boats increased or diminished?—The number has increased more than treble since I went there. When I went to Grimsby there were only two gentlemen there. The railway company had a few vessels but they gave them up; having so many agents to pay out again, they found that they could get no money for themselves. But in working a boat yourself you can always get a little profit out of it.

7298. You do not think that the line cod-fishing in these boats has been a losing concern?—It does not appear so. All those who are engaged in it speak in praise of it the same as we do of trawling. They get good times and they get bad times, but they manage to live.

7299. In whose hands are the cod boats; do the skippers own the boats?—Some work them out themselves.

7300. Do the crews own them?—No, they have got owners on shore generally.

7301. Do the boats pay better when they are worked by their own owners than when they are worked for other people?—If their own owners work them right it is a great advantage, but if they do not go and work them properly it is better to let those who will work them. No doubt there is a great advantage in working a boat ourselves. You have always full charge of your own property then, and many an owner would benefit by the exercise of great care if he was there himself to see how things were going on.

7302. You heard the gentleman who was last examined state that he had been losing as much as 200*l.* a year by his boats. Do you think there are any other owners of cod boats in Grimsby who are in the same position?—I don't think there are many who have got that to lose.

7303. Do you think they would be finished up altogether long before they came to that?—Yes, a long time before they came to that.

7304. Are you aware amongst your own acquaintances whether there are persons who wish to give up line-boats in consequence of the injury done to them by the trawlers?—No, we are all friendly together. I am a trawler. I trawl with these cod men. They most of them think we do a benefit to them in stirring up the ground.

7305. Are the line men and the trawlers quite friendly at Grimsby?—Yes, like brothers.

7306. We have not found them like brothers further north?—I have been north, and have been stoned away from there, but at Grimsby we go hand-in-hand together.

7307. Do you work over the same ground?—Yes, we all work together over the same ground.

7308. Have you never heard complaints against the trawlers for carrying away the long-lines?—Not very often.

7309. Does it sometimes happen?—No, I think not.

7310. You have no quarrels about it?—There is not a more peaceable body of people than the liners and the trawlers of Grimsby, and there is not a place in England where they are more numerous together.

7311. Your evidence applies exclusively to the cod fishermen on the Dogger Bank?—We begin 25 miles from Spurn Point, and we fish right away to the Dogger Bank and the Botany Gut.

7312. Do you catch the same kinds of fish that they do?—We catch all that come to the net, and they catch all that come to the hook. They catch most halibut, and halibut is a valuable fish. They very often catch halibut, cod, haddock, skate, and ling.

7313. Then they do not confine themselves exclusively to cod?—No, they take anything they can get, and on the different grounds they will probably get different kinds of fish. Such a thing as a ling is not got at some places, whilst in others they are abundant.

7314. (*Professor Huxley.*) Are you acquainted with line-fishing yourself?—No, I am not.

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7315. Do you know the kind of tackle they use in their heavy decked boats?—Yes.

7316. What length of line have they?—At this time of the year they work hand lines over the side of the vessel.

7317. With sinkers?—Yes, just the same as you would do if you went out in a little boat.

7318. How long does the hand-line season last?—It will last about three weeks more.

7319. During the month of October?—Yes.

7320. Do they fish with hand-lines in September?—Yes.

7321. When does the hand-line fishing begin?—Some stick to it longer than others. Some think we had better go further to sea and take our long-lines aboard.

7322. Then with regard to the hand-line fishing, it generally begins somewhere about August?—Yes.

7323. And lasts until the end of October?—Yes.

7324. In that mode of fishing each line is separate, and has a sinker and hook?—Yes.

7325. And the line hangs over the side of the vessel?—Yes.

7326. Does long-line fishing go on during the rest of the year?—The Grimsby people do not go long-lining. There are only certain seasons that they go. They go codding in the summer as far as Faroe and Iceland, and then they come here to take their season catching cod with a salmon and mackerel bait. Now there are plenty to get they catch them.

7327. What time of the year do they set their long-lines?—They begin about the latter part of October.

7328. How long are their lines?—About 40 fathoms each.

7329. How many lines have they?—120.

The witness withdrew.

T. Ramster.

THOMAS RAMSTER called and examined.

7330. (*Mr. Caird.*) Have you long been connected with the fishing trade at Hull?—Yes, for these last 20 years.

7331. Have you, during all that time, been engaged in the business of trawl-fishing?—Yes.

7332. Are you yourself a trawl-fisher?—Yes.

7333. Do you now go to sea with trawl-boats?—No, I have not been to sea these two years.

7334. Going back 20 years, in your recollection, has the number of vessels engaged in the trawl-fishing very much increased?—Yes, very much indeed.

7334. Has it been a good business on the whole to the people engaged in it?—Yes.

7336. Does it continue to be a profitable business?—Yes.

7337. Is the quantity of fish brought to market here and sent into the interior of the country also very much on the increase?—Yes, very much.

7338. Has that been gradual during these 20 years?—Yes.

7339. Has there been any period during that time when it has declined?—There has been a little decrease in some years, but it has come round again.

7340. There has been no marked decline?—No.

7341. No continuous decline?—No.

7342. There may have been an unfavourable season, but it has been followed by a good season?—Yes.

7343. Would you say, comparing the quantity brought into the market now with what it was 20 years ago, that it is much larger now than it was then?—There was a good supply then and there is a good supply now.

7344. Does a boat bring as many fish to the market now as it did then?—Yes.

7345. A single boat?—Yes.

7346. Does it bring more?—Yes.

7347. Are the fish caught now the same kind of fish that were caught formerly?—No, there are larger fish caught now.

7348. Are they better in quality?—Yes, they are better fed fish.

7349. Has any particular kind of fish fallen off in quantity?—None at all.

7350. Do you get as many haddocks now as you did formerly?—Yes, and more.

7351. Are there as many turbot?—Yes. One vessel that was up here last week had 39 turbot in one haul.

7352. Would that have been considered an unusual haul 20 years ago?—No, they were catching quite as many then.

7353. Were they equally good fish?—Yes, they were equally good fish.

7354. Do you find that you get as many soles on the average as you did 20 years ago?—Not so many now, owing to our having had mild winters. The winters used to be more severe then than they are now. If we had a severe winter now there would be as many soles as we ever caught.

7355. How do you account for that?—The coldness of the winter sends the soles into deep water.

7356-8. The soles do not come upon your fishing ground in mild winters?—No, they do not go into deep water.

7359. Do you ever bring up any spawn in your trawl nets?—No, I never saw any in my life.

7360. Is a large proportion of the fish you bring up on deck mangled, or so damaged as to be useless for the market?—I have seen a little damaged if it has been blowing very hard, and we have had to heave our gear up, perhaps half a cwt. or a little more.

7361. Did you ever see as much as half the whole draught mangled and unfit for food?—Never in my life.

7362. Does half the proportion of the whole draught consist of small fish not worth bringing to the market?—No.

7363. Do you always heave over the small fish that are not fit to bring to market?—If we are at sea three weeks or a month we heave it away. Sometimes we drop it on board a vessel that is coming in, in order that it shall not be destroyed.

7364. Is that a large proportion of your whole fishing?—No, it is a very trifling proportion.

7365. Have you ever observed the gall bladder of the fish burst?—No.

7366. Did you ever see such a thing?—No.

7367. Have you seen the scales rubbed off?—They have been rubbed off a little in a heavy gale, but not else. The fish come up as bright as can be.

7368. Did you ever sell any spawn or broken fish for manure?—I never saw any spawn to my knowledge.

7369. Did you ever sell mangled fish for manure?—I have never known such a thing done, unless we have had bad weather, and the fish has been condemned by the inspector.

7370. Is there any regulation as to the size of the meshes of your trawl nets?—Any regulation?

7371. Yes. Does anybody enforce any regulation with regard to the size of the nets?—No; I never heard of such a thing.

7372. Do the fisherman adopt what size they think will be most advantageous?—Yes.

7373. Would it be advantageous to be restricted?—I don't think that it would.

7374. Do you think it better to leave every one to exercise his own discretion?—Yes.

7375. Have you ever fished on the Dutch coast?—Yes.

7376. Do the Dutch use a smaller mesh?—Yes.

7377. Do they catch smaller fish?—Yes.

7378. Is that advantageous to the fishery in general?—I don't know that it is, but such fish would be of no use in our markets.

7379. But they suit their market?—Yes.

7380. Does the taking of those small fish diminish the quantity of fish taken on the fishing ground?—No.

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7381. Have you fished much on the Dutch coast?—Yes; long before I came down here.

7382. Do the Dutch fishermen come on our coast?—Yes.

7383. Do you think it would be of advantage to be allowed to sell your fish on the Dutch and French coasts?—No, it would not make any difference.

7384. Would it not be convenient for you to get ashore to the nearest market?—No.

7385. Do you think you would not realize as much as by sending your fish home?—No, not by a good deal.

7386. Then you think it would not be of advantage to allow the Dutchmen and the Frenchmen to sell their fish here, and you to sell yours there?—Not at all.

7387. You think it would be better to allow things to remain as they are at present, each nation keeping to its own market?—Yes. There are a good many Dutchmen who fish off the Dogger Bank in the winter time, and if they were allowed to bring in their fish here they would spoil our market.

7388. Have you trawled on the coast when there have been shoals of herrings around you?—Yes.

7389. Have you ever been foul of herring nets?—Yes, I have been foul of them, but I always try to keep clear of them. It has generally been owing to a stress of weather.

7390. Was it far from the shore?—About 50 miles from the land.

7391. Do the open boats go such a distance from the land?—No, only the decked boats.

7392. You never saw one of the small boats there?—No.

7393. Did you ever trawl so close in-shore as to come in contact with the nets there?—No.

7394. Would it be a hardship to be excluded altogether from coming within six miles of the shore?—No, I think it would do us a great deal of good.

7395. In what way?—It would keep the sea open for the deep-sea fishery.

7396. It would not exclude the herring fishermen from going further out, although it might exclude you from coming further in?—It would exclude us from coming further in.

7397. But it would not exclude them from going further out if they chose to go further out, and take the risk of getting foul with their nets, beyond six miles? If they did, that would be their look-out?—Yes.

7398. Do you think it would be an injury to your boats during the time the herring are on the coast to keep you off six miles?—I think it would do us good to keep us six miles off if they would only give us room in the deep sea. They ought to be prevented from going beyond six miles.

7399. But suppose the limit should only be on you and not on them?—I think it would be a very hard law for one to have it and not the other. It would be very hard to allow them to do what they liked to us, and for us to do nothing at all.

7400. You would rather the matter remained as it is at present?—Yes; unless there was a law to protect us as well as them. I have been putting my gear and nets down many a time where there have been luggers lying close by; as soon as I have put them down they have shot their nets almost alongside. We have asked them many times why they did so, and they say they do it because they catch more fish. The result is that we are forced to get out of the way, or else if we torment them they make us pay for it. Now that is a very bad law for us. If we happen to get foul of them, then they go to law and make us pay for it, notwithstanding that they shot their nets as close to us as they could.

7401. Is it their practice to shoot their nets on the ground you have occupied?—Yes.

7402. And if they do so, is it necessary for you to lift your trawl and change your ground?—Yes, we are forced to go away, or if we do any damage they will enter an action against us and make us pay, notwithstanding that the damage may have been occasioned all through their own doings and neglect.

7403. Do you get any skate in your trawl-nets?—No.

7404. Have you observed whether the quantity is diminishing?—No; it has generally been about the same on an average—sometimes more and sometimes less.

7405. Then you cannot say in your experience of 20 years that you have observed any falling off?—No.

7406. (*Professor Huxley.*) You said you thought it would be very hard if the trawlers were obliged to get out of the way of the drift-net fishermen?—Yes.

7407. Are you not aware that that is the law now?—No.

7408. Did you not hear me read it?—Yes.

7409. Do you think it would be a hard case if that law was enforced now?—Yes, I should.

7409. Because it would oblige you to haul up your trawl and shift your ground wherever you might be, and whatever it might cost you?—Yes; after we have taken up our berth. I have sometimes gone to the masthead in order to ascertain if there was sufficient room for us, and yet they have come alongside and put their nets close to ours. We have been obliged to take our gear up, or else a good deal of damage would have been done.

7410. You have got out of the way because you did not wish to damage their nets, not because you knew of the law?—We got out of the way because we had no wish to injure them.

7411. Would you like to see a regulation established which would keep them as much out of your way as you are obliged to keep out of theirs?—Yes, of course we should.

7412. Are you the owner of a smack?—Yes.

7413. Have you any particular kind of vane at the masthead of your smack?—Yes.

7414. What is it?—A red one.

7416. Do you use it as a matter of your own choice, or because there is a law on the subject?—I do it as a matter of choice.

7417. You spoke just now of an inspector of markets. Is there any person here to prevent bad fish from being sold?—Yes, we have an inspector in Hull.

7418. What are his duties?—To come down and inspect the fish.

7419. Does he see every cargo brought ashore?—I don't know whether he sees all the fish brought ashore, but if the fish is bad, or in any way indifferent, he will condemn it.

7420. Is he what is called the "nuisance inspector" of the port of Hull?—Yes.

7421. He is not a market inspector?—No.

7422. Then if you chanced to keep the fish too long—until it became unfit for food—you could not sell it because you would be stopped by the inspector?—Yes.

7423. Then if the inspector does his duty, it is impossible that any quantity of bad fish can be thrown into the market?—Yes.

7424. How long has an inspector existed here?—I don't know.

7725. Has he been here ever since your time?—Yes, ever since I was here.

7426. Have you ever heard of fish being seized?—Yes, it has been seized at different times, principally owing to the vessels having met with bad weather.

The witness withdrew

HULL.

S. Decent.

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SAMUEL DECENT called and examined.

7427. (*Mr. Caird.*) Have you been long connected with the fishing business at Hull ?—I have been 20 years here last January.

7428. Are you still engaged in it?—I don't go to sea at present, but I am still connected with it.

7429. When did you leave off going to sea ?—About four years ago.

7430. In what way are you now connected with it ?—I am a smack owner and a fish salesman.

7431. Do you agree with the previous witnesses that there has been an increasing and profitable trade during the 20 years over which your experience extends ?—Yes, it has increased 5 to 1, I should say. The quantity brought here now, in comparison with what was brought then by each boat, is quite equal to that.

7432. The quantity brought by each boat ?—Yes.

7433. Then the quantity of fish has increased as well as the number of boats ?—Yes.

7434. Can you give us the figures ?—No.

7435. What would a boat bring ashore 20 years ago ?—20 years ago we used to heave some of the fish away because we had no markets for it inland, but since the railways have been opened we bring ashore all we catch.

7436. Then it is not so much that you catch more now than you did 20 years ago, but that the demand for fish enables you to bring more ashore ?—The demand for fish is five times as great as it was formerly.

7437. When you say it has increased five times as much, do you mean to say, that where you brought 1 ton ashore 20 years ago you now bring 5 tons ?—Yes, a boat will send five times as much fish away now in the same space of time.

7438. Are you speaking with full consideration of the difference between 5 tons and 1 ton ?—Yes.

7439. Has there been a great change in the price of fish during that time ?—It has not brought so much of late years, but I attribute that to the American war. They have no money inland now to buy fish.

7440. Do you find there has been a decrease in the price within the last 12 months ?—Yes.

7441. Had it increased before ?—It had not decreased ; it was just on a stand.

7442. Then if there is five times the number of fish caught now and the price has not decreased, it ought to be a profitable business ?—The vessels are bigger, and they take more money to keep up.

7443. But on the whole is it an improving and thriving trade ?—I believe it is in general.

7444. Have you observed in your experience whether the quality of the fish you catch is as good as it was twenty years ago?—I think in general we get better fed fish now.

7445. Have you gone over the same ground in trawling and found that the catch did not diminish in quantity ?—Sometimes we may trawl for a blessed week, or a blessed month, and we don't know where we are trawling.

7446. Have you ever brought up any spawn in your net ?—I never knew what spawn in the net was, but I have seen spawn in the haddock.

7447. Is there any particular ground you resort to ?—No ; it is according to the season. One season we go to the Silver Pits, at other times to the Well Bank, or to the off-ground.

7448. Have you confidence that you can get fish on any of the grounds you go to ?—Sometimes we go and do not find anything to answer our expectations. We then make sail again and we chase the fish about a bit until we find them.

7449. You always succeed in finding them ?—Yes, somewhere or other.

7450. Do you agree with the other witnesses as to the increased quantity of fish brought into the market by the trawl-fishers ?—Yes.

7451. (*Professor Huxley.*) You heard me read some rules and regulations just now ?—Yes.

7452. Did you ever hear of them before ?—Yes.

7453. Did you ever feel yourself bound to comply with them ?—No, but we have been compelled by the herring boats.

7454. Which clause ?—The one which requires us to keep three miles off. Sometimes we go and shoot our nets, and we cannot see a bit. They have got no lights up half their time. I believe that the Act states that they shall have two lights, one above the other.

7455. Quite so.—Well, two thirds of the time we can never see them at all, until we see the buoys come up alongside of us, yet by that law they have us under their power.

7456. Had you ever damages recovered against you under that Act ?—No.

7457. With regard to the regulation about the size of the beam, were you aware of that ?—Yes.

7458. Do you feel it necessary to pay any attention to it ?—Some of our beams are shorter.

7459. Did anybody ever examine your beams ?—No.

7460. Did you know the rule about the head irons ?—Yes.

7461. Did ever anybody examine your head irons ?—No.

7462. You spoke of offal fish ?—That is plaice and haddock ; the other we call prime fish, buts and such like.

7463. Does that mean that they are not of the same value as the other fish ?—No, it is just a name we give them. We say we have so many baskets of prime and so many baskets of offal.

7464. We have had it stated in evidence that dead men come up in the trawl occasionally; is that within your experience ?—I have been 30 years trawling, and I never saw a dead man come up in a trawl, and I never saw one in the water.

7465. Have you ever been trawling where the long-line fishers shoot their lines ?—Never.

7466. Has any complaint ever been made against you for carrying away the long-lines ?—Never. I should like to be allowed to make a reference to Mr. Dalton. He has offered to give anybody 10*l.* if they can do away with the trawlers. He has offered to make a present of 10*l.* to anybody who has the power to do away with trawling, and in respect to the two smacks which he stated just now were sold, perhaps everybody in this room don't know where they were built. They were built in a foreign country. They were never of any great value, and that is the reason why they were sold so cheap. Perhaps he don't know where they were built himself.

7467. Do you know a good many smack owners. I mean trawl-smack owners ?—Yes, every one in this town.

7468. Are they satisfied with their trade ?—In general they are.

7469. Are the numbers increasing ?—Yes, we have increased both smack owners and smacks during the last few years.

7470. Are you the owner of more than one ?—Yes, I have two.

7471. If you could get a third would you buy it ?—Not under present circumstances.

7472. Why not ?—Because I should wait until I got a little more capital. If I could get one I should buy it.

7473. You are not losing a couple of hundreds a year by your smacks ?—No, nor do I believe there are many people in Hull who are doing that. If they did I believe there would be many of them "over the left."

7474. Do you believe that the smack owners are steady working traders, or are speculating, in order to get their money by chance ?—There are many masters who will buy smacks, and there are others who get a little capital and take a smack, and then work their way up-hill. Those who have been to sea, sea-going owners, have to work themselves up by degrees.

7475. Do you think it a common case that men who commence life as fishermen save a little money and invest it in smacks ?—If they are steady, they do ; if they are drunkards they do not.

7476. Do you think that a fisherman can save enough money to buy a smack of his own?—Not often, without finding a friend; not in one case out of 50 or 100.

7477. But if he finds a friend, would he be able to redeem the advance made to him, or pay interest upon it?—He would pay interest upon it, and perhaps redeem the advance as well, unless he has a misfortune and loses his boat.

7478. Have you known that occur; have you known a man who began life as a fisherman, who gradually saved a little money, who got a little help, and then invested his capital in a smack, ultimately redeem the amount he had borrowed?—I need only look round this room to see several who commenced life in that way. There is hardly one in the room connected with smacks who did not begin in that way, and perhaps there is not one in the town.

The witness withdrew.

HENRY TOOZES called and examined.

7479. (*Mr. Caird.*) Have you long been connected with the fishing here?—I have been in Hull about 20 years. I have lived here entirely for the last 16 years.

7480. During that time have you been engaged as a fisherman here?—Yes.

7481. Are you still engaged in the fishing business?—I have not been at sea for the last three years. I went apprentice when I was 13 years of age, and I have never been at anything else.

7482. Do you agree with the evidence given as to the increase in the quantity of fish brought to Hull?—Yes.

7483. And also with regard to the profitable character of the business?—Yes.

7484. You have found it so?—Yes. I commenced with a smack of my own. I have two now. I took it, as Mr. Dalton referred to, with a mortgage on it, and I have cleared a great portion of that mortgage off, and as soon as I get the money to get another I shall do the same.

7485. Then, any capital you can make you prefer to invest in the same business, believing it to be profitable?—Yes.

7486. You have continued up to this day to do that?—Yes.

7487. Is there any particular kind of fish that has increased since you have been engaged in the trawl-fishing?—Yes, I think haddocks and plaice have, the haddocks especially.

7488. Have soles increased?—I cannot say that they have not, upon an average; but we have often found soles to be scarce at certain times of the year. In fine weather they resort to rough ground, where the trawlers cannot get at them. Our nets are of a delicate character, and they cannot get across rocky ground. The soles reside there in summer; but in cold weather they resort to deep water for warmth, and then we get great quanties.

7489. Have you ever destroyed spawn in the course of your operations?—I never saw any, except upon opening the fish. We gut haddocks and prepare them for the smokers, and we find spawn in the inside of them, but I never saw any anywhere else.

4490. (*Professor Huxley.*) You mean that you have seen it in the stomach of the haddock?—Yes. I have been trawling from the Land's End to the Coquet Island, and I never saw any spawn taken up in the trawl net.

4791. (*Mr. Caird.*) Do you injure any quantity of fish?—We get a few that have been washed about in the net sometimes, and perhaps we may come athwart a rock, which will push a few about.

7492. Take a month's fishing, will there be any large proportion of that so injured as to be unfit for food?—No; a very small quantity indeed.

7493. Do you bring up large quantities of small immature fish?—Not a great quantity; we may bring up a few.

7494. Have you trawled on the Dutch coast?—Yes.

7495. Do you agree with the previous witnesses, that the quantity caught there has not diminished, although the trawl system has long been pursued there?—I agree with the previous witnesses. I believe there is an increase both in haddock and plaice.

7496. Have you been in a boat trawling on the Dogger Bank?—Yes.

7497. Do you believe that the fish has increased there?—Yes, there has been a large increase.

7498. Are they going on increasing?—Yes.

7499. In what way?—There are more caught by the smacks that go there. There has not been quite so much brought into Hull this last fall as in other years. There has been a great quantity brought from the Dogger Bank, but owing to the distress in the manufacturing districts trade has not been so good. We can get a better price for the fish in the London market than by bringing it to Hull and sending it to the inland districts.

7500. For that reason so much of it does not come to Hull?—No, our own smacks have carried it to London.

7501. Have you noticed any falling off in the quantity of fish caught on the grounds you have been trawling on?—No, there has not been a falling off, but there has been an increase.

7502. In all kinds of fish?—Yes.

7503. How has it been with regard to turbot?—There were never any great quantities of turbot caught off the Dogger Bank, but there are as many caught now and even more than there was 10 years ago.

7504. During the time you have been at sea in a trawl-boat have you ever had the opportunity of rendering assistance to vessels in distress?—Yes, we have saved a crew when we have had only just time to get them from the sinking vessel, and we have hardly got them on board the smack before the vessel has gone down. I got a medal from the Dutch government in regard to the crew of one vessel I saved. The crew must have perished if we had not been there.

7505. Was that in weather during which the small line-fishing boats could not keep the sea?—Yes, they would not be able to get out of harbour; they are sometimes unable to get out of these harbours for a week or a fortnight together.

7506. Do you think the trawl-fishing boats are a better school for seamen than the line-fishing boats?—Yes, a great deal better. There is nothing to learn in a line-fishing boat, but on board a smack a man is learning as much as on a merchant vessel, except reefing topsails or steering by the wheel. These are the only exceptions.

7507. (*Professor Huxley.*) Does that include the heavy line-fishing boats?—Yes, the heavy line-fishing boats have not much rigging about them.

7508. Not so much as in your trawl-boats?—Not so much by a great deal.

7509. What is the rig of your trawl-boats?—Fore-and-aft rig.

7510. Are they cutter rigged?—Yes; the lug-sail boats have not as much rigging about them as there is about our boats.

7511. Are none of the long-line boats cutter rigged?—They are so out of Grimsby, Woolwich, Barking, and Gravesend.

7512. These would take as much knowledge to work?—Yes, we term them smacks. Some of them that have been long-line fishing have been converted into trawlers.

7513. How long does it commonly take to take your trawl on board when you begin to haul it up?—If there is nothing in it but fish it will take about an hour. It will depend much upon the state of the weather.

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Sometimes we can get it up in 20 minutes, but at other times it will take us two hours.

7514. Under what circumstances is it that you can take it up in 20 minutes?— When we have fine weather, and commence hauling in slack water, then we soon get the trawl in if there is nothing in it but fish.

7515. If you get the trawl in easily the fish do not get knocked about much?—No.

7516. If it is blowing hard do they get hurt?—They get knocked about a little. The scales are rubbed off, but if there is regular fishing weather few of them are damaged or bruised.

7517. How has the notion got abroad that the trawl-fish are knocked to pieces?—I believe it arises from the prejudices of the Northumberland men, who are anxious to prevent our going to fish there. I was at Hartlepool a few years ago and got my head broke with stones. We had a boat full of fish, but they would not allow us to bring it in.

7518. In what year was that?—It was about 14 years ago last summer. I was there for 11 years successively. It was from the prejudice of the line-fishers that the cry was raised against us. They tried to prevent the smacks coming there because they could not make the money we did. One of our boats would catch as much fish as all the boats about Hartlepool would in a week.

7519. Did your catch of fish tend to throw them out of the market?—It knocked the market down. I have known the fishermen come down when our fish was on the sands and throw it into the water.

7520. Had you no remedy?—None. We have appealed to the mayor of the town, and the men who have done it have come up and apologized and promised not to do it again; but they did it notwithstanding. The authorities of the place told them to get smacks themselves and do the same as we did, but they never have done so. They consider it too hard work.

7521. Have you experienced any hardship in consequence of drift-nets being shot too near you?—Yes.

7522. Do you agree with the other witnesses on that point?—Yes.

7523. Have you found the same inconveniences?—Yes.

7524. Has it occurred more than once?—Yes.

7525. Were you aware, by the regulations you heard me read, that trawl-fishers are bound to keep always three miles from the drift-net fishermen?—Yes.

7526. Do you think it should be carried out?—I don't see it is possible to carry it out. We sometimes put our nets down at night or before daylight when we can see perhaps for eight or 10 miles round. We put our head to westward and tow that way, when all at once a lot of drift nets come up on our side. They have no lights, and we have no warning until we actually see their buoys came up alongside of us. I think the law should be to keep both of us at certain distances.

7527. You would have both the drift-net men and yourselves kept at certain distances?—Yes.

7528. But the herring are often outside, are they not?—Yes.

7529. Then would you keep them away from the shoals?—No. I don't wish to do that. But in case we get foul of each other let each of us pay our own damages. There would not be as many smacks fishing at Hartlepool and Sunderland now if it was not for the herring-fishing being on the off-ground.

7530. Are you aware of the regulations existing with regard to decked and undecked boats, namely, that when decked boats arrive where undecked boats are, or *vice versâ*, then the one shall shoot his nets to the leeward, except they should prefer going to windward, to the distance of half a mile?—No.

7531. Do you think any regulation of that kind would be of service to the decked boats with drift-nets? Supposing a decked boat had her nets down and it was forbidden for undecked boats to shoot within a certain distance of her, or supposing that an undecked boat had her nets down and it was forbidden for a decked boat to shoot within a certain distance, would that be of use in preventing these collisions?—No, I think not, because they come down on each other so much in the night.

7532. You mean that they drift?—Yes.

7533. Would it be of any use if the regulations with respect to lights were enforced; you know that the herring boats are bound to carry their lights?—Yes; but they very seldom get them up. Sometimes they keep them at hand; and if at the boat's edge they can see a smack about half a mile or a mile from them, they pop the lights up. But by that time the nets are alongside the smack, and there is no possibility of clearing them.

7534. Supposing the lights were fixed, would not that prevent a collision?—It would be of some service, but it would not be all that is necessary.

7535. Do you drift with the tide?—Yes, generally.

7536. You don't commonly make much way?—No; two and a half or three miles an hour.

7537. Do you drift faster than the herring boats, or do they drift faster than you?—We drift to leeward faster than they do.

7538. So that if you were windward of them a mile or two you would drift upon them in the course of the night?—We should do so if it was a weather tide. We oftentimes don't go to the windward as fast as the tide is going, and thus the nets come right up under our lee.

7539. You think the best means to prevent a collision would be for the herring boats to be kept within a certain boundary, and for you to be kept outside that boundary?—Yes.

7540. What should be that limit?—The herring boats should not be allowed to come further than 10 miles from the land.

7541. And you should not be allowed to go within 10 miles?—No.

7542. That would not interfere with you on the coast?—It would not interfere with us if we were not allowed to go within 10 miles.

The witness withdrew.

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THOMAS HALFYARD called and examined.

7543. (*Mr. Caird.*) Have you long been connected with the fishing business in Hull?—I have been in Hull and Scarborough about 22 years altogether, but I have been living here stationary for about 17 years.

7544. What knowledge have you of the fishing business at Scarborough?—I have not been fishing there for 11 or 12 years.

7545. Is Scarborough a place important in the fishing trade?—It is a little in the summer time, but it is not of much importance to us. We used to go from Ramsgate to Scarborough, and from Scarborough to Ramsgate back again.

7546. Has Scarborough been increasing as a fishing station?—Yes.

7547. Within recent years?—Yes.

7548. Do you agree with the previous witnesses as to the increased quantity of fish brought to Hull by the trawl-boats?—Yes, I think I can give you with regard to my own vessels great satisfaction.

7549. Can you compare the quantity caught now with what it was at any former period?—I know that my four vessels have brought in much larger quantities.

7550. You have four vessels?—Yes, I have three cutters and one other vessel. They have brought to market, one at London on Monday, another on Tuesday, one on Friday, and another to-day here, altogether 500 baskets of fish.

7551. Out of how many vessels was that quantity taken?—Out of six vessels. It was all caught off the Dogger Bank.

7552. Were they all employed there?—Yes, they all joined as partners and they had ice cutters with ice in them to preserve the fish for the markets.

7553. Can you compare that catch with what was caught 10 years ago by the same number of vessels?—No.

7554. Can you compare it with what was caught five years ago?—I only know that we did not get as much five years ago.

7555. Have you ever made in the same time an equal catch with the same number of vessels?—I have at certain times when I have been fishing myself, but it is not the general case when we go on the Dogger. At that time we have occasionally made a whole haul and never seen a sole, now we get 20 or 30 pair at every trawl. One vessel has gone up with 100 beautiful turbot to London this week; another came with 80; another with 40; and another with 30.

7556. Were they all caught off the Dogger Bank?—Yes, and these vessels have brought trunks of soles.

7557. What do you mean by "trunks"?—They are boxes holding about 40 pair.

7558. Have you had a greater number this week than you had on any previous occasion?—I don't recollect such a catch since I have been at sea for the last 30 years.

7559. Is that the case generally with the fishermen of Hull?—It is not generally the case with them because they have not all been there.

7560. Has this been a good fishing season?—Yes.

7561. Not only on the Dogger, but on other parts of the coast?—Yes, in the pits at Well Bank, inside the Dogger, off Scarborough, there have been nice catches of fish, as much as we ever would wish to have. For myself I should not wish to see any more taken than are taken at the present time.

7562. If you caught any more, do you think it would lower the price?—Yes, if they went all on the Dogger catching the same quantity it would be too much for the market.

7563. What kind of fish did these 500 baskets contain?—Mostly haddocks.

7564. Is that what you generally get on the Dogger?—On the softer parts of the bank we get more haddocks, and on the harder parts more plaice.

7565. What kind of fish realizes the highest price per pound weight?—Soles and turbot.

7566. Which kind are bought chiefly by the lower classes?—Haddocks, skate, and plaice.

7567. Is the catch of haddocks increasing?—The haddock is more plentiful than ever. We get in four hours as much as we require at one time of plaice.

7568. What weight would you say is as much as you require at one time?—A ton.

7569. Where does it go to be sold?—It is gutted, packed up, and put into baskets and despatched to the best market.

7570. Do you make choice of the market according to the state of the wind?—Yes, we want quick despatch.

7571. What port do you generally make for?—Hull, because our agents are here, but if the wind is northerly we go to Lowestoft, and if we can't there then we go straight to London.

7572. Do you ever come into contact with the line fishermen on the Dogger?—No.

7573. Nor on the coast here?—No; I never was in collision with a long-liner in my life. Perhaps he may have had a few hooks adrift, but nothing more.

7574. Do you know whether the line fishermen make a good business on the Dogger Bank or not?—No; I have not been to sea for the last few years, but I think they do. One vessel has made 450*l.* lately. That was one of those vessels Mr. Dalton referred to when he spoke of it being a very losing business.

7575. Was it a cod boat?—Yes.

7576. With a well?—Yes.

7577. Do the Dutchmen who come on the Dogger get a great quantity of fish?—Yes.

7578. Do they fish with long-lines?—Yes.

7578*a*. Do they also trawl?—Yes.

7579. How many years have you fished on the Dogger Bank?—I have been fishing on the Dogger Bank about 18 years.

7580. What is the extent of the Dogger Bank?—It is 180 or 200 miles long.

7581. And how broad?—It is 50 or 60 miles broad, or more.

7582. In the period of time you have fished on the Dogger Bank can you say as a fact whether the quantity of fish you can catch has increased, and not diminished?—Yes.

7583. Is the quality of the fish as good as it ever was?—Yes. I intended to put some in a box to bring you. They are beautiful fish with the slime and scales and everything on them. There are turbots and brill in the same state, and although the quantity has been a large catch at a time, yet they came in better order than I have seen for a long time.

7584. What proportion of the fish you catch in the trawl is so mangled that you can't send it to the market?—Sometimes if we get out of our latitude we get a few icers which cut the fish, and perhaps we may get a few stones.

7585. Are you not sometimes prevented from communicating with the land?—Yes.

7586. Does the fish become stale then?—Yes; we will be prevented getting to land by a heavy gale of wind sometimes, and then the fish is wasted, and we heave it away and trawl for more.

7587. Do you get any large proportion of small fish unsuitable to the market?—I never saw a great deal.

7588. From your knowledge of the business you say that you yourself as owner of a trawl, and your neighbours who are also owners, have been making a profitable business of it?—Yes, I have turned my hand to it all my life. I was apprenticed, then became man, then master, and then owner. I began with half a smack, then I got a whole one, and now I have three or four clear of all the world.

7589. If you save any money would you prefer to embark it in this business?—Yes; I have no idea of embarking it in any other business, but I hope I shall be successful enough some day to get out of it altogether.

7590. Are there any improved modes adopted for bringing the fish in good condition to the shore?—We are now fitting up cutters at great expense and stocking them with ice, in order to bring the fish in better condition to the market.

7591. Do they bring a higher price on account of that?—At times they will do, but not in general. It is only when it is bad weather that we want it to keep the fish in good order. In the winter time the fish would make as much money without it as with it.

7592. You principally use the ice in warm weather?—Yes, to keep the fish from getting spoiled.

7593. Do you cure any of the fish on board?—No; they only cure them for their own use.

7594. Would you not find it of advantage to take salt to enable you to cure the fish on board when you find you could not bring it in fresh?—Not as a general thing. If they have any salt on board the men clean a few and salt them for their own families.

7595. Is no part of the shore you are acquainted with becoming unproductive in consequence of overfishing?—No.

7596. Do you know the place that is called "California"?—Yes, I believe I was pretty nearly the first person there.

7597. Do you think that piece of ground will ever recover itself?—I think it would, if these little shore boats that trawl all up from Bridlington Bay would not disturb it.

7598. Do they trawl over that ground?—Yes.

7599. Do you allude to the Bridlington boats?—Yes. As for the destruction of fish by trawling on California, they have been getting as good fish as were ever caught there. With regard to the fish being caught for manure, and having their gall bladders burst, there is not the slightest truth in it. I have often caught bird's eggs in the trawl, which have

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come up among the weeds on California, and they came up without being cracked.

7600. Had the eggs sunk to the bottom?—Yes; they had sunk to the bottom, and we took them up and cooked and ate them. Talk about mangling the fish, why, trawling would not break an egg.

7601. You say you have done that?—Yes.

7602. Have you done it often?—No; not very often.

7603. Does the trawl get entangled with the drift-nets?—Yes; I have become entangled occasionally, and I have cut away my nets because I was afraid of the law. Very often our master has been trawling all night and could not get fish, and when I have asked him the reason he has told me that he could not get his trawl shot for the herring men.

7604. On that occasion, were the herring men far out at sea?—Yes; we could not get clear of them for miles and miles around. Wherever he tried to shoot he found himself entangled with them, and the consequence was that he got no fish.

7605. As the herring fishermen only come for a certain season, would it not be possible for you to fish outside for a certain distance to be fixed, within which you should not fish?—Yes, that might be done; but the herring boats follow the smacks. They think the fish strike into their nets from the smacks.

7606. Do they follow the trawl?—Yes; if it is soft ground the herrings lie on the ground, and they consider when the trawlers come over it that it stirs the herrings so that they come to the edge of the nets.

7607. How far is that from the coast?—40 or 50 miles.

7608. Is a large proportion of the herrings caught at such a distance from the shore?—Yes, I think so; they are got as far as the Dogger.

7609. Do the French boats come among you?—Yes; but we don't like to get foul of them.

7610–1. How is that?—Because we should knock each other's vessels to pieces and sink to the bottom. Their boats are heavier than ours.

7612. They are stronger than you, and you keep clear of them?—It is not for that; it is because we should lose our labour and time.

7613. Have you ever seen assistance given to vessels in distress by trawl fishermen?—Yes, I have seen it myself.

7614. Have you seen lives saved in that way?—Yes.

7615. Have you often seen it?—Yes, often. I had one vessel that saved 23 lives in 14 days.

7616. Is that long since?—No, not very long since.

7617. Do you think that your trawl-boats are good nurseries for seamen?—They are the life-boats of the country. I know that it was only this week that a crew was saved and towed into Newcastle. The vessel had her foremast gone and also her main yard.

7618. Do you get salvage for that?—Yes.

7619. Do many of your crews afterwards become seamen; do they adopt it as a business?—Only a very few of them.

7620. Do they principally remain as fishermen?—Yes.

7621. Probably they find it answers better?—Yes.

7622. Have they any interest in the catch of the boat?—Yes, all go by share.

7623. Are no wages paid?—No, all go by share.

7624. Can any well-conducted fisherman, if he is sober and steady in his habits, generally succeed in realizing sufficient money to buy a vessel for himself?—Yes, generally so.

7625. Are many of the men employed in your fishing vessels part owners of the vessels?—Yes.

7626. Do strangers come here to employ their capital in trawl-fishing?—There may be an instance of that kind, but I do not know of any; I have heard tell of it.

7627. Is it chiefly the families of the fishermen themselves that are increasing; is it in that way the fishermen increase here?—Yes.

7628. Is there any particular kind of fishing you have noticed to be falling off and decreasing in quantity?—I have no recollection of any.

7629. All are as numerous as they were formerly?—Yes.

7630. (*Professor Huxley.*) Has the catch of skate in your trawls fallen off?—No; last winter I saw 20 or 30 skate in one vessel.

7631. The long-line fishermen complain that the skate has fallen off; do you think you catch as many as you ever did?—Yes; last year some tons of skate were brought up here.

7632. Where was that?—Away on the off-ground at the mouth of the Humber. The long-line boats principally catch it.

7633. Are there many long-line boats at the mouth of the Humber?—Yes, they come like we do where they think they can get the best fishing.

7634. What are the birds' eggs you spoke of?—Mur's eggs we call them; they are a large blue egg.

7635. How do they get there?—The birds drop the eggs in trying to get to the land.

7636. Is there much trawling and shrimping going on in the Humber with small trawls?—Yes.

7637. Have you seen it?—I have seen them engaged in trawling, but I don't know much about it.

7638. What kind of net do they use?—They are shrimp nets but they call them trawls.

7639. Do they bring up much small fish?—Yes.

7640. What do they do with it?—They send it to the market. One basket of this fish that they send to the market would make 20 of ours if they were allowed to become full-grown fish.

7641. You mean if they all grew up?—Yes, they would make 20 of ours according to the size we pack.

7642. Do they catch much smaller fish than you do?—Yes.

7643. Do you never get as small fish as they do?—We may get sometimes as small as their biggest.

7644. Do you know what size of mesh they have?—I can't get my little finger in.

7645. Do they catch sprats?—A very few. There are boats for spratting.

7646. Are there any boats of that kind in the Humber?—Yes.

7647. Many of them?—Not many; they go up to Boston Deeps.

7648. How many are there?—I don't know.

7649. Where do they principally work?—Mostly in the River Thames.

7650. Do they catch many sprats in the winter time?—Yes, some hundreds of tons.

7651. Do they catch much small fish?—Yes, of all kinds.

7652. Have you ever seen the fish they catch?—Yes, I have seen it in Billingsgate Market.

7653. Have you ever seen them hauling in the nets?—Yes, I have seen them haul the nets up and have noticed them big in the water like puncheons.

7654. Do you think that does harm to the fish?—I don't know with regard to the sprats, but it does to the small brill and plaice.

7655. Do they catch much brill and plaice?—I have seen hundreds brought to market not bigger than a penny piece. They have been induced not to bring them to the market for fear of being fined for selling them.

7656. Is there any regulation here to prevent that?—I think there must be by that.

7657. What do they do with the small fish?—They generally chuck it away as they catch it.

7658. I suppose in attempting to catch shrimps they must catch these fish?—Yes, they cannot help themselves.

7659. Do you think it is a practice that ought to be stopped?—I don't think that shrimping is as bad as the stow-boats.

7660. Do you think the stow-boats do much harm?

—We used to go on the Foreland abreast of the Kentish Knock. We often fished there; when we got further up between the Knock and the Longstone in 15 and 17 fathoms of water, then we found a great quantity of soles. We used to take them to Harwich. We called it the "iron foundry." We found lots of fish in the summer time there.

7661. But how does catching fish in the stow-boats affect that?—They go right among them and get the small fish.

7662. Have they had much fishing there?—They have made the best fishing this summer that they have made for 17 years.

7663. Then you don't think the stow-boats affect the fishing much?—Apparently not, if we may judge from that.

The witness withdrew.

JOSEPH POTTER called and examined.

7664. (*Mr. Caird.*) Are you connected with the fishing trade here?—Yes, I have been connected with it since I was 11 years old.

7665. Are you a trawl-fisher?—Yes.

7666. Are you engaged in that business?—I am on shore at present; I have been on shore for six months

7667. Have you been a fishermen all your life with the exception of those six months?—Yes, except in the winter.

7668. Do you notice that the quantity of fish you catch in the trawl-boat is increasing or diminishing?—I have found it increasing.

7669. Can you give us any particulars with regard to a season or a month's catch?—Now is the plentiful time for the Dogger Bank. We get most just at this time of the year, in October and November.

7670. Do you refer to any particular ground, or the fishing grounds you have been in the habit of frequenting?—I refer to all grounds.

7671. Can you tell us the quantity of fish you bring ashore now compared with what it was 10 years ago?—We bring more ashore now than we did 10 years ago.

7672. How much would you bring ashore 10 years ago altogether, on an average?—Formerly we did not work the Dogger Bank as we have done of late years. 10 years ago I used to be at Brixham, but during the last eight or nine years, since I have come to reside at Hull, I have begun to work on the Dogger.

7673. Then take the last eight or nine years?—I have found a much greater quantity during the last two or three years than before. It will be three years next month, November, since I noticed the increase.

7674. What would you have taken eight years ago?—At that time if we got 2 tons we thought it a great catch; now we don't consider a Dogger catch under 5 or 6 tons anything of a catch.

7675. You catch 5 or 6 tons in one catch on the Dogger Bank?—Yes.

7676. For what period would you be engaged in getting a catch of 5 or 6 tons of fish?—About 48 hours. We left Grimsby on Sunday morning and on Tuesday evening I was at anchor off Holme lights.

7677. What did you sell them for?—We had 107 baskets, and we sold them for 7*s.* or 8*s.* a basket.

7678. What did they consist of principally?—Principally of plaice, soles, haddock, and turbot; we had about 30 pair of turbot.

7679. When you first began to be a fishermen here, had you a vessel of your own?—No.

7680. Have you one now?—I have two; I started with one, and now I have got another.

7681. Had you any share in a boat when you first started fishing here?—No. I began to serve my apprenticeship from the time I was 11 years of age, and now I have got two boats of my own.

7682. You have been enabled out of your savings to become proprietor of two vessels?—Yes.

7683. Then you have found it a profitable business?—Yes.

7684. Do you find you interfere much with the herring fishers?—I have never caught any of their nets myself, but I have been stopped for some nights through them.

7685. Do you mean by getting foul of them?—I never was foul of them, but I have seen others who have been.

7686. Was that in consequence of the trawlers going upon them, or their coming upon the trawlers?—It was because it was a dark night, and in the morning we found them swimming among us. Then we took up our trawls and got away.

7687. Is it in consequence of your coming to fish nearer in shore that you have come across the herring nets?—No, they have come further off of late years.

7688. Is that because the shoals of herrings go further out?—No, but they find that by coming among us they are enabled to get more herrings.

7689. Do you find that the herring-fishers follow your boats further off to sea on that account?—Yes; they never used to come on our off-ground until within the last six or seven years.

7690. Do you find that the case off the Dogger Bank?—Yes, there are some there now.

7691. Do you fish within six miles of the shore?—No, I was never much off here. I never fished much in-shore; not within 20 miles at any rate.

7692. Then you would not think it a hardship to be prevented coming within six miles of the shore during the period the herring-fishing lasts?—No.

7693. It would not hurt the general body of trawl-fishers?—No, not on the Yorkshire coast, but away down south they fish much nearer the coast.

7694. Where about in the south?—At Brixham, and away down there.

7695. Do they find their fishing near the shore successful?—Yes, eight or nine miles from the shore.

7696. Have you had much experience of Brixham fishing?—I served my time to it from being 11 years of age until I was 21.

7697. How many years do you say?—From the time I was 10 or 11 years old until I was 21, and I used to go for pleasure before I went to sea altogether.

7798. Did you find when you were engaged in the fishing there that the quantity of fish was increasing or diminishing?—There were more takes last year than ever I saw in my life, but we used to go further off for them. We had craft superior to those who fished nearer the shore.

7699. Have the number of fishing boats increased?—Yes, rapidly. When I first came here there were very few vessels.

7700. Did you ever find that you drew up spawn in your trawl nets?—Never to my knowledge. I don't know what it is.

7701. Did you ever find a large quantity of fish so damaged as to be unfit for the market?—At certain times when it has been blowing a heavy gale of wind we have got one or two injured in our nets, but not at any other time.

7702. (*Professor Huxley.*) Do you agree with the previous witnesses that you find spawn in the haddock when you gut them?—Yes, when we are gutting the haddocks now we usually find 20 or 30 baskets of it. I don't know whether it is spawn or not, but we always put it down as herring spawn.

7703. Do you ever get herrings in your trawl?—Yes, sometimes 30 or 40.

7704. Thirty or 40 at one time?—Yes.

7705. Are they full fish with the roe and milt?—Yes, sometimes they are.

7705*a*. Do you think the herring spawn on the Dogger Bank?—I cannot say.

7706. If you get haddocks full of spawn is it not likely that the herring spawn there?—It is in the water, and they may suck it in.

7707. Did you ever see herring spawn so as to know

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what it was?—No, we say that this is herring spawn.

7708. Do you find it in other fish?—Yes, we find it in turbot and other fish.

7709. Then the turbot eat spawn?—Well, perhaps I am wrong. I never remember seeing it in them.

7710. Did you ever chance to get up any dead bodies in your trawl?—No.

7712. Did you ever hear of anybody who did?—I have heard of it.

7713. Have you known it of your own knowledge?—Yes, I have known smacks bring up dead bodies.

7714. Is it a common thing?—No, out of all the men who trawled last year we only took up one.

7715. Did you hear the regulations read just now?—No.

7716. According to this Convention it is the law that trawl-boats shall not come within three miles of drift-net boats, and that if a trawl-boat is trawling when the drift-boat comes near then the trawler shall haul up his trawl, and get out of the way?—We do that now.

7717. Then it would not be injurious if that law were enforced?—Not on this coast, but it might be further south.

7718. Would it be injurious to you if the drift-boats drifted down upon you when your nets were shot?—But we should not be within six miles of each other.

7719. The Convention says:—"Trawl-boats shall "always keep at a distance of at least three miles "from all boats fishing for herrings or mackerel "with drift-nets," have you ever had that law enforced?—No, I don't know that ever it was enforced.

7720. Do you think it would be a hardship if it were?—We cannot always tell whether they are three miles from us or not. If we see them we get clear of them, but they may get close to us in the night.

7721–2. The practical effect of this article is that they could order you away whether you liked it or not?—Then what is the law for them if they have their nets down all night and day. I have seen their nets down all day and night.

7723. The law simply provides that you shall get out of the way of the herring-fishers. I ask you whether you think it is fair on you that that law should be enforced?—If it was enforced there would be no chance for us at all.

7724. If the law were carried out the drift-boats, whether herring or mackerel, would have a practical monopoly of the fishing ground?—Yes.

7725. You think that would not be fair?—No, I think we ought to have a little fair play as well as them.

The witness withdrew.

J. Hill.

JOHN HILL called and examined.

7726. (*Mr. Caird.*) Are you a fisherman at Hull?—No, at Grimsby.

7727. Have you been long there. I have been there for the last six or seven years. I was born and bred at Barking, and so were my forefathers before me.

7728. Are you a line fisherman?—I follow all kinds of fishing, haddock and cod-fishing and trawling.

7729. Do you you go to sea as a line fisherman now?—Yes, since I left trawling four years ago.

7730. Do you go in those decked boats with wells that we have heard described?—Yes.

7731. Do you fish on the Dogger Bank?—Yes.

7732. How long have you been engaged in the business there?—Six years. I have been at sea for 42 years. I don't go in the winter time now. I go in the summer season, but in the winter time I have stopped at home for the last few years.

7733. Does your boat go to sea in the winter time?—Yes.

7734. Are you the owner of the boat?—Yes.

7735. Have you found, during the last six years, that the quantity of fish you take is increasing or diminishing?—It is increasing more than ever I knew with the hand-line off this coast.

7736. Do you fish only in particular seasons?—I fish at all seasons. We know when the fish shift and we shift after them.

6737. Do you fish along with the trawlers on the same ground?—Yes.

7738. Do you find they interfere with your fishing?—No.

7739. You can get the same amount of fish?—Yes, we go haddocking in the summer time, and we catch them with two hooks with a dip to them. 20 years ago we might go a fortnight or three weeks and not get more than 30 or 40 score of haddocks. Within the last four, or five, or six years we have got five times as many. Before this inquiry came on our men have said, "These "trawl men have done us a deal of good by working "their nets to and fro; they have disturbed the "ground and provided better food for the fish." I have frequently seen food picked up after the trawlers have been over the ground, and we know that if the haddocks don't find the food they will not frequent the ground.

7740. Do you always fish with the same kind of hook and bait?—Yes, we always fished with a small hook and mussel for bait. Lately we cannot find the haddocks unless we can get where the herring spawn is. At this time of the year unless we find certain soil at the bottom we cannot get fish.

7741. Wherever you go do you find plenty of fish now?—This last summer I have been at a particular place known as "East Hole", and this last year I have caught abundance of fish there. I can prove to you that it is not 20 years since there was not a haddock to be caught in that place.

7742. Then practically you find your business improving, particularly in regard to the catch of haddocks?—Yes.

7743. Do you, as a general rule, fish a good distance from the shore?—Yes; 42 miles from here northward is East Hole.

7744. Do you go there in open boats?—No.

7745. Is the ground quite unsuitable for open boats?—Yes, we go to the Well Bank, the lower deep water of the Well Bank, and the upper deep water of the Well Bank, and to Botany Gut. We go there very often.

7746. What kind of bait do you use?—Mussels for haddocks and whelks for cod.

7747. Where do you get it?—From Boston Deeps. I employed a vessel this week to go there for bait. By the permission of the Navigation Company I am allowed to lay them in the water.

7748. Do you ever experience any difficulty in getting a plentiful supply of bait?—No.

7749. Has there been no time when a supply of bait was difficult to be had?—Yes; before this season I have had occasion to go to Yarmouth and send the haddocks away from there, but it has been difficult to get bait there. That is not so here, however.

7750. Do you find this a better place to get your fish ashore?—Yes, it is quite straight across from the Humber.

7751. (*Professor Huxley.*) Do you know most of the cod-smack owners in Great Grimsby?—Yes, every one of them.

7752. Do you think most of them are losing money?—I hope not.

7753. Did ever any of them lose as much as 200*l.* upon a boat?—Yes, I lost more than 200*l.* in one year myself; I lost 500*l.*, but it was in consequence of a misfortune.

7754. How was that?—A vessel ran into my boat and ran her down.

7755. You did not lose that sum by fishing?—No.

7756. By working steadily you have recovered that

misfortune?—I always found means to keep my vessel going and to keep my family decent.

7757. From your knowledge of the other smack owners have they been enabled to do the same?—Yes, people who have been brought up to it. People who may not have been acquainted with it may not have done as well.

7758. Do you think this is a kind of business in which people who don't know much about it are apt to burn their fingers if they engage in it?—I should think so; I think they have found it so. I should fancy if I entered into anyone's business and knew nothing about it, I should do very little better myself. I hardly think I should know how to manage it.

7759. I understood you to say that the haddock feed on herring spawn?—I have seen vessels lie down where the spawn was supposed to be, and not leave the place because they knew the fish would come there. They have caught haddocks with their inside full and their gills full of spawn; but nevertheless they will accept the mussels.

7760. Do you think that every haddock you catch is one less to eat spawn?—Yes, I think so.

7761. Then you think you are doing good to the spawn rather than injury?—Yes, at this time of the year.

7762. Where do they spawn?—On the rough ground; if there is sandy ground then there is no haddock.

7763. What kind of food do they find on the ground?—There is always a kind of rough at the bottom. Sometimes we haul up stones with things all alive on them. I think that the ground being disturbed by the trawling vessels has given us leagues of ground to fish on where we had only miles before.

7764. In your experience of the haddock-fishing are the haddocks as big as they used to be?—Quite as big. On the Dogger they are much larger.

7765. Have you been fishing on the Dogger?—Yes.

7766. Do you fish with the long-line as well as with the hand-line?—Yes, my vessel does in the winter time.

7767. Do you fish upon the same ground the trawlers fish upon?—Yes.

7768. Do they carry away your long-lines?—If a trawler comes across the buoy it will carry it away.

7769. Do you think the trawling and long-line fishing can go on together?—I am satisfied that they can because I have seen them.

7770. Have you been fishing with the long-line and sustained any damage?—I never suffered any injury unless the trawlers happened to come athwart our buoys. In that case they might carry them away.

7771. Would not the ground rope of the trawl catch the anchor?—It might catch the hook and break the snood, but not the line; the snood is much smaller than the line itself.

7772. Would it not pull up the whole affair?—No, I have seen it repeatedly, and I should never haul up my lines for a trawler; I never did.

7773. Then in your judgment the two modes of fishing can go on together?—They do so at present. Occasionally they bring up a buoy, but they bring them to us again. Our names are all upon them, and they will come to me and say, "Mr. Hill, I have got a buoy "of yours," and of course I take it from them.

7774. No damage is done by them that seriously injures you?—I have not lost five shillings nor five pence either since I have been fishing in consequence of the trawlers.

7775. On what kind of ground do the haddocks swim?—The rougher the ground the more haddocks you will find.

7776. How do the trawlers contrive to work over the rough ground?—They have caused the haddocks to come there. We work at Botany and the Great Silver Pits where there is deep water. We lay in 24 fathoms of water and on the edge of the ground; if they trawl their nets they trawl them into shoal water. They make good fishing-ground for 50 sail of vessels if they have the wish to go.

7777. Is that the usual depth of water in which you fish?—Yes, from 20 fathoms; we go into nothing less than 19.

7778. Do you catch much cod?—One now and then by chance.

7779. Do you go out on purpose to catch cod?—Yes, in the winter time.

7780. With the hand-line or the long-lines?—The long-lines; the hand-lines only last about three weeks longer from now.

7781. Do you find the cod as plentiful as it used to be?—There has been more this season than ever I knew before.

7782. Are they as fine fish?—Yes.

7783. Then can you account for the fact that the in-shore fishermen cannot find any?—No, unless they are always trying over one piece of ground. If we go with our lines and don't find any fish, then we go and try another spot, and keep trying until we do find them.

7784. Are you ever inconvenienced in your fishing by the drift-net men?—I have been in former times, but not of late years. I have been foul of their nets, and they have been foul of mine.

7785. Was that in long-line fishing?—No, in trawling. If a herring man gets hold of my gear it is done for; they take it away with them. Drifting along, they are lying dormant as it were with the nets with no sail up, and if they get hold of our lines they will drive along with the whole lot, and take them all away.

7786. Have you ever lost lines in that way?—Yes.

The witness withdrew.

JOHN TIMS called and examined.

7787. (*Mr. Caird.*) Are you a trawl-fisher?—Yes, a smack owner.

7788. Have you been long engaged in that business at Hull?—For 18 years.

7789. How long is it since you became a smack owner?—Six years since.

7790. Had you previous to that been a fisherman on board a trawl-vessel?—Yes, I had been a fisherman on board a trawl-vessel.

7791. Did you save as much money as enabled you to become the owner of a vessel?—I saved part, and borrowed part.

7792. And so you gradually became an owner instead of remaining a fisherman?—Yes; that is what we may term "going in at the hawse hole, and coming out at the taffrail."

7793. You have not found any difficulty in getting over the taffrail?—I managed it at last.

7794. Is the business improving?—I have found it so.

7795. Can you give us any figures to show us the quantity of fish you used to catch, and the quantity you catch now?—I have no figures, but I can say from my experience that during the last two or three years the fishing has been much better than formerly.

7796. Does that apply to all the different kinds of fish you are in the habit of catching?—Yes, all kinds.

7797. Do you agree with the previous witnesses that the supply of fish is considerably increasing?—It is increasing considerably. I have been trawling at Plymouth, and have been going over the same piece of ground from the month of May to the latter end of November; I have seen 60 or 70 vessels trawling over the same piece of ground, which is only a mile and a half wide. In the first part of the season we catch very little fish, but in the latter part we catch far more than when we began.

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7798. Is that the case here also?—Yes.

7799. Is there no ground here to which you can refer, over which you have not trawled with continued success?—I know of none particularly; they are all good here.

7800. Are they all increasing in productiveness?—Yes.

7801. Have you fished much off the Dogger Bank?—Yes, there are more fish there now than ever there were.

7802. More than ever there were?—Yes.

7803. Is this the best time for fishing, then?—There are different seasons; at some seasons there are few fish there; in May, for instance, we catch very few then, but in the fall of the year we catch plenty of fish.

7804. Do you find you sometimes get foul of the herring-net fishermen?—We have got foul of them, and we have to get clear of them as we best can.

7805. Do you generally fish outside of them?—We should be puzzled to get outside of them; if we went 100 miles they would follow us.

7806. Why do they do that?—They say we stir the fish up for them. I have been out for a long distance, and there lay the herring boats all ready to berth themselves as soon as our nets were down; they would come after us.

7807. What did you do then?—We hove our trawl up and got out of the way.

7808. Do you agree generally with the previous witnesses that the supply of fish in Hull has very greatly increased?—Yes, it has very greatly increased.

7809. And that at present it is still a flourishing business?—Yes, to those who have the mind to look after it; no business will look after itself.

7810. (*Professor Huxley.*) You think if it is well looked after it will pay?—Yes.

The witness withdrew.

H. Cousins.

HENRY COUSINS called and examined.

7810*a*. (*Mr. Caird.*) Are you a fisherman here?—Yes.

7811. Have you been long engaged as a fisherman here?—About 24 years.

7812. As a trawl fisherman?—Yes.

7813. Do you agree with the previous witnesses as to the increase in the quantity of fish brought ashore here by the trawl-boats?—Yes.

7814. In your experience have all kinds of fish increased in quantity?—Yes, I believe they have.

7815. Has the quality improved?—It has improved in quality as well.

7816. Do you know in your experience any line fishermen who ever became trawl fishermen?—I don't know that ever I did.

7817. The line fishermen have been in the habit of being line fishermen, and have not changed their mode of fishing, and become trawlers?—I don't know that I ever heard of such a case.

7818. Do ever the trawl fishermen become line fishermen?—No, I think not. They shift about sometimes about Grimsby, and sometimes they go lining, and sometimes they go trawling.

7819–20. The same men?—Yes; they shift about from vessel to vessel.

7821. (*Professor Huxley.*) Have you been in the habit of long-line fishing yourself?—Not at all.

7822. You have been confined entirely to the trawl?—Yes.

7823. Did you ever find that the fish got by the long-line came into competition with your trawled fish?—No.

7824. Did you hear the regulations which I read some time ago?—Yes.

7825. Did you know that there were such regulations in existence?—Yes.

7826–7. Have you ever known in your experience anyone come to interfere with you, to find out whether you obeyed these regulations or not?—No.

7828. You have always done much as you liked?—Yes.

The witness withdrew.

R. T. Vivian.

RICHARD THOMAS VIVIAN called and examined.

7829. (*Mr. Caird.*) Mr. Vivian, you are connected with the fishing business at Hull, I believe?—Yes.

7830. Are you an owner of fishing vessels?—Yes.

7831. Have you at all been at sea engaged in trawl-fishing?—No; I have been out on two occasions for very short periods for my own pleasure, but I did not remain long enough to make me acquainted with the system.

7832. How long have you been the owner of trawl-vessels?—For three years I have been connected with the business, but for 15 years my father was owner of several vessels, and I carried on his business for him. I have been a fish salesman during that time.

7833. Then you have had 15 years' experience in Hull in connexion with the fishing trade?—Yes.

7834. In the course of those 15 years has the supply of fish increased or diminished?—I believe it has greatly increased.

7835. Can you tell us the extent to which it has increased?—No. It would be very difficult to get at anything like correct statistics as to the amount of the fish at any given place, because during certain seasons of the year, in consequence of the fluctuations of the market, it is considered better to send it to one market than to another. For instance, it may be thought best to send to the London market at one time, while at other times they think it better to take the fish to Hull. Therefore a great number of Hull vessels may go to London without the fish passing through Hull at all. That has been the case during the last two years, so that no statistics obtained here would give a correct estimate of the quantity of fish caught by the Hull vessels, inasmuch as a great portion is taken by the London cutters to London, and for the last 12 months by the Hull cutters as well.

7836. Do you think the quantity of fish brought into Hull has increased or diminished during the last 15 years?—Do you mean independent of that which is taken to other markets?

7837. Yes, independent of what goes to other markets.—Yes, I should say so, independent of the quantity which goes to London and which is caught by Hull vessels.

7838. Do you think each vessel has as good a catch of fish as it had 15 years ago?—Yes.

7839. Do you think it has a larger catch now?—Yes.

7840. From any knowledge of your own can you tell us the difference in the catch now, compared with what it was 15 years ago?—No, but I know there have been much larger catches off the Dogger Bank latterly than formerly. Vessels have been bringing 60, 70, or 100 baskets of fish at every catch. Such catches were very unusual 14 or 15 years ago.

7841. Do you know as a matter of fact whether any spawn is ever destroyed by the trawl net?—No, I don't. I have made considerable inquiries among the fishermen, as I know the whole of them. I think I must have inquired of scores, perhaps several hundreds of them, and they are all unanimous in their testimony with regard to spawn. They all say that they never saw it taken up in the net.

7842. Is it a fact that a good many of the south country fishermen come north?—Yes.

7843. Is that in consequence of the failure of their own fishing ground?—No, I think not.

7844. Then what is it caused by?—Adventurous men pushing out and finding other fishing grounds, others have been induced to follow them. Perhaps the grounds here are more productive than the ones they were in the habit of fishing, and that may have led to the migration—such migration not being occasioned by any falling off in their own grounds. I know that such has been the case at Hull. I know that some time ago some men went down to the Silver Pits, and there they found an enormous quantity of soles, which caused almost a total migration from Ramsgate to Hull, but the fish remaining at Ramsgate have considerably increased since then; so that I imagine there are as many trawlers there as there were 15 or 16 years ago.

7845. Have those immense takes at the Silver Pits continued to go on?—They have at different seasons. Sometimes there has been a great abundance of fish in heavy cold weather, but during a mild open winter I have not found such large quantities brought by the boats.

7846. Do you know whether there is a large quantity brought for the consumption of the poorer classes?—Yes, a great deal.

7847. What kind of fish does it consist of principally?—Plaice and haddocks generally.

7848. Has the price of that kind of fish increased?—I think not.

7849. Would that kind of fish have been supplied by the line fishermen in such quantity if it had not been supplied by the trawl fishermen?—I think not. We find a greater demand for that kind of fish. We sell all that kind of poor fish, whereas formerly we should not have brought it ashore. We had to make regulations as to the number of baskets to be brought ashore, nine or 10 years ago. For several years we had arranged among ourselves that the vessels were only to send away 10 baskets of that offal kind of fish every morning.

7850. What was done with the rest?—It was thrown overboard; we could not find a market for it that would remunerate us.

7851. When did you cease to have that regulation?—If my memory serves me rightly we have not had such a regulation for the last six or seven years.

7852. All that is caught now is brought ashore?—Yes; it is partly owing to the railway companies having reduced their rates of charges, and more particularly in consequence of the fish having been pushed out into other markets.

7853. Does the Hull market largely supply the other great towns with fish?—Yes.

7854. What markets do you principally supply?—All the principal places in England are supplied from Hull. Perhaps the greatest proportion of the fish sent away goes to London, Manchester, Liverpool, Leeds, Birmingham, Bristol, Bath, and even Glasgow and Edinburgh.

7855. How many tons may be sent away in a day?—Sometimes during the winter season from 60 to 70 tons.

7856. Can you give us any idea of the proportions of the different kinds of fish that are despatched in that quantity?—The haddocks and plaice form the largest proportion; they will be in about equal proportions. The soles perhaps would out of 100 parts represent one twentieth or perhaps one fifteenth.

7857. (*Professor Huxley.*) That would be six parts of the hundred?—Yes.

7858–9. (*Mr. Caird.*) Will you give us the proportion with regard to the other fish?—Turbot and brill would perhaps represent a fifth part. Turbot, brill, and soles are the prime fish. Then we have plaice and haddocks, and other kinds of fish—cod, ling, and skate. All those descriptions we catch in greater or lesser abundance at times, but we don't consider them a staple article.

7860. Do soles, turbot, and brill bring the highest price?—Yes.

7861. Are haddocks and plaice principally used by the poorer people?—Yes.

7862. What proportion of the 100 tons would be haddocks and plaice?—Five sixths of it.

7863. Five sixths of the whole?—Yes.

7864. Then a very large proportion is of that description?—Yes, a large proportion is of the commoner kind of fish.

7865–6. Has the price of that fish been much increased, or has it been stationary?—On an average of 10 years I think it is about the same. I think it will be difficult to give anything like figures in connexion with fish. On some occasions, according to the ground over which they have been fishing, there will be an equal proportion of soles and of offal fish, but on other grounds it will be as I have stated. It is so very irregular, in consequence of the variation of the grounds on which they fish, and also in the fish which frequent them.

7867. Do you apply the term "offal fish" because they bring a lower price?—I don't know the origin of the term. It was used before I came into the business. All are called "offal fish" except the soles, turbot, and brill.

7868. Offal fish is always got in larger proportion than other fish?—Yes.

7869. Probably that is the reason of its lower price?—Yes, perhaps it was literally offal fish when they first caught it, because they had to throw it away. If they could not send away their fish as they do now, and bring it every morning to land, they would not send any at all except turbot, soles, and brill.

7870. (*Professor Huxley.*) From your knowledge of the fishermen here, Mr. Vivian, as a proprietor of smacks, do you consider the business is one that is answering?—Yes.

7871. You are not of opinion, then, that the increase in the number of the smacks is owing to mere speculation, or recklessly running into a business that will not pay?—No. It does occur sometimes that in extraordinary seasons you will find a greater flush of vessels. It has been the case in prosperous seasons that persons have been induced to enter the business without sufficient knowledge to enable them to carry it on; and although it might be profitable then, yet when the fishing returned to its average they would find it unremunerative, because they would not be able to attend to it themselves.

7872. But that happens in any business?—Yes.

7873. In your judgment of the business of trawling, are you enabled to say that it is a thriving trade like anything else?—Yes.

7874. Have you been at all in the habit of buying hooked fish?—No.

7875. Is there any considerable difference in the quality of hooked fish, compared with trawled fish?—I don't know that there is.

7876. Is there any difference in the price given in the market for the one as compared with the other?—The hooked men don't supply the same fish as we do.

7877. They catch turbot on the hook sometimes?—But they don't supply the market with it.

7878. You don't catch cod in any quantity?—No.

7879. How then do you interfere with the markets of each other; the long-line men catch haddocks extensively, do they not?—Yes.

7880. Do they get a better price for them than your trawled haddocks?—No. I have had them here, and I find they don't fetch as much as ours.

7881. Then as to cod-fishing, you don't think the trawl-fishing interferes with the long-line fishing?—No.

7882. But in the haddock-fishing it does?—Yes.

7883. Then with regard to the haddocks the competition must tend to lower the markets?—Yes.

7884. They get a less price than they would do?—Yes, certainly.

7885. Is there any other kind of fish in which you compete with each other?—With the exception of haddocks, the fish in which we could compete is caught in such small quantities that it could have no effect on the market. I speak of such fish as cod, skate, and ling.

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7886. Do you catch halibut?—Yes, occasionally; but I have not seen one in Hull for a month or two.

7887. Do you know that there is a great outcry on the part of the line fishermen on account of the damage done to them by the trawl fishermen?—I have heard no complaints except by the Northumberland and Durham fishermen. The cause of their complaint is evident. Our vessels go into their markets and take beautiful fish, and that cheapens the whole supply.

7888. But that would apply chiefly to the haddock. If you don't catch a supply of cod how can you interfere with them?—We take a supply of soles, and probably the people who would otherwise eat cod will eat soles. If they only had the cod they would have no choice; they would take them at almost any price the line fishermen chose to ask for them.

7889. I believe you have paid attention to this subject?—Yes.

7890. This pamphlet I hold in my hand is yours, is it not?—Yes, it is my compilation.

7891. Do you know anything of the operations of the line cod-boats?—I know there are such boats in existence, but I have never been on board of them.

7892. Do you buy fish of them?—No.

7893. You hinted just now that within the last year cutters have been fitted up in Hull to carry the fish to London?—Yes.

7894. Do you find that better than sending it by railroad?—The more direct they take it from the sea to Billingsgate the better. The cutter is provided with eight or 10 tons of ice, and the fish are caught, gutted, and packed up in ice, and the cargo taken to London in better condition than if brought on shore and placed in railway vans.

7895. What is the size of the cutters employed in that way?—Those we have at present are only of the ordinary size, but our vessels have increased so much in size that many of them are adapted for cutter purposes. As a class they are fine splendid vessels, fit to go to any part of the world. When it was first determined to carry out this purpose the smack owners met together and offered certain vessels. We thought that 20 would do the work and 20 were decided upon to be fitted up as cutters. They were fitted up, and we agreed that the whole of the carrying should be done by them. It was necessary that we should have a stipulated number because the fitting up is attended with great expense. The ice has always been extremely dear, and we were in a manner forced to continue the vessels fitted up for the work after they were engaged in it.

7896. Do you send much fish by railway?—Yes, but there has been a great decline since we used the cutters. They take nearly all the fish that goes to London. Perhaps a man will say "Here is all the "day's fish going to London; it will be better if I "run my fish into Hull." Sometimes there is a gale of wind which scatters the vessels, and they can't find the cutters. The cutters then take what fish they can from the boats in sight and bring it away.

7897. How long will a stock of ice hold out and keep the fish?—It will keep it for a week.

7898. Is there any danger of losing the cargo from contrary winds?—No.

7899. How long does a cutter take to get from the fishing ground to London?—From three to five days, but it is not often so long as five.

7900. Probably if they had a south-westerly wind they might take any time they liked?—No, they can beat up against it anywhere. Five or six days is a very extraordinary and a very exceptional case.

7901. If you don't get a very heavy sea and the wind is off the shore it will be against you?—Probably so, but from my experience here whenever there is any stress of weather they are enabled to get in quite as soon as they are expected.

7902. (*Mr. Caird.*) How would they do in calm weather?—They could not get on then, but calm weather would not last so very long, and if they got anywhere near the mouth of the Humber there are steamboats in attendance to tow them right up.

7903. (*Professor Huxley.*) Would it not pay to have steamboats to carry them in?—No, there are several objections to that.

7904. What are they?—There would be great difficulty in preserving ice on board a steam boat. Unless it were a very large vessel the ice would melt away. To keep the ice room and the fish in the ice far enough from the boilers would require a large vessel, and also a regular supply of vessels. Of course the building of 20 large steamboats to take the place of our large cutters would be quite impracticable.

7905. Do you think it would be in any way possible to supply the market with the fish you now supply provided that trawling were stopped?—No, I do not.

7906. Do you think it practicable that the long-line fishermen could supply the markets?—No.

7907. Not if the number increased along the coast?—No, all the fish they supply would be of one character; they could not by any means supply the markets with sole or plaice.

7908. The demand for soles in London is very great, is it not?—Yes, it is more eaten in London than any other fish. I should say take it altogether it is the fish held in the highest estimation by the greatest number of persons.

7909. If trawling was done away with that supply of soles would be practically abolished?—Yes; there never was any large public market supplied by the long-line fishermen. For practical purposes it is impossible to catch soles by the long-line.

7910. One witness stated to us that there is an officer in Hull who acts as inspector of fish?—Yes.

7911. Do you find that system works well; is it a good regulation?—Yes.

7912. Otherwise would bad fish be thrown into the market?—Yes, no doubt.

7913. Is it practicable to make that inspection so efficient that no considerable quantity of bad fish can ever be thrown into the market?—Yes, I think so.

7914. What is the penalty for attempting to pass bad fish?—I think it is 10*l.*

7915. Has the inspector of the market any control over small fish?—I have never seen him exercising any such control.

7916. One witness stated that great quantities of small turbot used to be caught by the stow-boats, and are occasionally caught yet. Would the inspector have a right to challenge them?—I don't know.

7917. Do you think that his right only extends to bad fish?—I think so.

7918. Are you of opinion that the stow-boats do any harm to the fishing here about?—I don't find any perceptible difference in the supply of the fish, but it is reasonable to suppose that the catching of immense quantities of small immature fish—small turbot, brill, and soles, only the size of a penny piece, will be injurious, although we have not yet felt the effects of it.

7919. How long has that mode of fishing gone on here?—It is not so much practised in the Humber as in the Thames.

7920. But your small shrimp nets are worked pretty actively, are they not?—Do you mean here?

7921. Yes, do they not catch a good many small fish?—Yes.

7922. What do the small boats do with the small fish they catch?—I believe they throw it overboard.

7923. May not large quantities of it be thrown overboard alive?—Possibly.

7924. Is there anything like whitebait in the Humber?—Whitebait?

7925. You know the fish, I suppose?—Yes, I know the fish they catch in the Thames. We don't get it here.

7926. Do you get sprats in the Humber?—They are mostly got at Boston Deeps.

7927. Is there a good deal of other young fish mixed up with the sprats?—I don't know that there is a great quantity, and I can't say whether they select it out and throw it overboard.

7928. You have not noticed that it has had a bad effect on the supply of fish outside?—No; I don't

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know whether the trawl-boats that trawl in-shore feel the effects of it, but at any rate it does not disturb the deep-sea fishing.

7929. What do you mean by boats that trawl in-shore?—I mean the Bridlington Bay boats.

7930. They are quite small boats, are they not?—Yes.

7931. Do they do any harm to the fisheries?—They catch the same description of fish that we catch, but their general take is of a smaller character.

7932. Is their sale of fish principally local?—We have occasionally a few fish coming from Bridlington, which we send to Manchester; although small they are excellent fish.

7932*a*. What is the size?—They are about the size of your hand.

7933. Do the poor buy them largely?—I suppose so.

7934. Have you any suggestions which, from your study of this question, you wish to make to us?—One fact that has always struck me with regard to the immense quantities of fish is this: our vessels fish in fleets of from 70 to 150 in number on ground suitable for the whole of them to fish on when the weather is favourable. It is a remarkable fact that morning after morning, as they take their trawls on board, each boat gets pretty nearly the same quantity of fish. That shows that there is about an equal layer of fish over the whole ground, which is many miles in extent. It seems to prove that the fish must be there in great abundance when we find that the same boats have the same quantity of fish every morning. Any little irregularities that occur are generally easily accounted for by negligence in the use of the net or in the appliances brought to bear on the fishing. As a rule a large piece of ground trawled over by perhaps 100 sail of trawlers seems so equally spread over with fish that every one of the vessels gets an equal quantity.

7935. Does that take place day after day?—Yes. With regard to irregularity in the catch, I have been assured by fishermen who have been trawling one after the other, so that it would appear that the nets of the second vessel had gone over exactly the same ground that those of the first vessel had gone over, that when the last net was hove up it would have exactly the same quantity of fish in it as the net of the vessels that preceded it.

7936–7. Where is the place to which you refer?—Down in Rye Bay. It is a piece of ground adapted for fishing, which is very narrow. Fishermen tell me that they have had as many as seven or eight boats following each other, and it is often the case that the last vessel will have as much as the first. In talking to the fishermen on this subject they have instanced that as a fact. I have stated to them how extraordinary it is that with such a large number of vessels they should have an equal quantity, and then they have instanced the case of the fishing in Rye Bay to me.

7938. Does the supply of fish by the trawlers keep tolerably steady, or is it a fluctuating supply?—It is regulated by the seasons; in cold weather there is an increased supply of soles; in other seasons we find no lack of fish, but there is very often unfavourable weather for taking it. When we have open winters we have windy weather; when the winter is intensely cold we have not such heavy winds.

7939. Does it ever happen that you are ever a week without a supply of fish from your trawlers?—We have been nearly that time at some periods, but it has been very rarely a week that we have been without.

7940. Do you think the destruction of fish would be as great if the fishing was confined to line-fishing?—We think our vessels catch fish which the line-fishers don't attempt to catch.

7941. For what reason?—I don't think they could catch it if they were inclined.

7942. Is that in consequence of their vessels not being so well furnished?—They cannot keep the line steady enough.

7943. Suppose you fitted up one of your smacks for line-fishing, either with the hand or long lines, would she catch as much fish as the trawler, taking the whole year round?—No, I think not.

7944. Why not?—It is difficult to arrive at conclusions about that, because the difference in the fish they catch is so great that it is next to impossible to form an estimate. But I should say that a considerably greater number of tons of fish are caught by the trawler than by the liner.

7945. (*Mr. Caird.*) How many tons of fish do you generally send packed up in ice in one of the cutters?—Do you mean in one of the vessels we send to London?

7946. Yes.—There will perhaps be 20 tons.

7947. Would it at all facilitate your operations if you had a tugboat attached to the whole fleet, in order to bring the vessels more quickly to market; I mean the vessels in which the fish is packed in ice?—Do you mean a tugboat waiting on the fleet going to sea?

7948. I suppose you have more than one vessel going to London at the same time with a cargo of fish?—Yes, we sometimes have two or three going in the morning.

7949. Would it not be worth your while to have a tugboat to tow them up?—We have not seen the necessity for it yet. The tugs go down to the mouth of the river, and wait for them. There are always steamboats in attendance to take them to London. There would be great difficulties in the way of a steamboat going out to sea to attend upon the cutters, so much depends upon the weather. Such a system as that would be very difficult of management.

7650. Do you find that practically the system you have adopted answers your purpose?—Yes.

The witness withdrew.

(*Mr. Caird.*) We have now exhausted our list of witnesses. If any fisherman in the room is desirous of offering evidence we shall be glad to hear what he has to say.

James Thorpe examined.

J. Thorpe.

7951. (*Mr. Caird.*) Have you long been engaged in the business of a trawl fisherman?—Yes.

7952. Where?—I have been at Grimsby for about two years, but I have been at Hull and Grimsby for 22 years.

7953. Does your experience lead you to the same conclusions as those which have been arrived at by most of the other witnesses who have been examined?—Yes.

7954. Do you find the supply of fish increasing or diminishing?—Increasing.

7955. Do you find it a particularly good business to be engaged in?—Yes, I think so. I have found it so myself.

7956. Can you offer any suggestion to the Commissioners with regard to the supply of fish that has not already been presented to us in the course of the evidence we have heard to-day?—I do not think that there is anything I can add; we always find plenty of fish, and there is more now than there was before. I have known vessels trawl over one piece of ground regularly 28 years; they have been trawling there ever since, and there is more fish now than ever there was before.

7957. What piece of ground is that?—It is a piece of ground called the "Ridge."

7958. How far is it from the shore?—About 10 miles from the shore off Dover.

7959. Have you been there this summer?—I have been there, but not this summer.

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7960. Then have you heard that that has been the case?—Yes.

7961. Can you give us the history of that piece of ground?—It is a narrow piece of ground about a quarter of a mile wide. The vessels go down to trawl it one after another, and they will find as much fish next month as they can find to-day.

7962. Has it been long fished?—Yes, for centuries.

7963. And it is never found to be fished out?—Sometimes it will fail for a week or two, and after that there will be as much fish as ever.

7964. Are there plenty of fish there now?—Yes, there is quite as much now as ever there was. I have known 26 or 27 vessels fishing there three tides a day for a week, and the next you would get as many turbot and brill as you liked. The fish got there are principally turbot and brill.

7965. Then you do not find that your operations frighten away the fish?—No, I think the more the ground is stirred up the more the fish come.

7966. Do the long-line fishers fish there?—I have not seen them.

7967. Did you ever come into contact with the line fishermen?—Yes, plenty of times.

7968. Did they find fault?—I never heard them grumble.

7969. Have you drawn the trawls over them without damaging them?—Yes, except taking a hook off here and there.

7070. Have you never taken up their lines?—No, and I have been over them scores of times.

7971. (*Professor Huxley.*) Are you a Dover man?—No, I belong to Hastings.

7972. Were you in the habit of trawling over the piece of ground you describe before you came to Hull?—Yes.

7973. Do you keep up your connexion there?—Yes.

7974. I mean do you know a good many people there now?—No, I have not been there for 26 or 28 years.

7975. Are there many trawling boats that go there?—Yes.

7976. Are there as many as went in your time?—I think there are more.

7977. They have not fished out their ground yet then?—No, I have not been there these last two years. We used to go generally to Rye Bay to fish.

7978. Did you always find plenty of fish there?—Yes.

7979. Did you know many owners of well-smacks?—Yes, nearly all at Grimsby.

7980. Are they well to do, or are they all losing 200*l.* a year by each vessel?—I think they are all pretty well to do, or else they would not keep up their vessels very long. Perhaps if they got other people to do their business they would not manage it as well.

7981. Do you think if people were losing money by these smacks that they would soon get tired when they found they had burned their fingers, and give it up?—I think so.

7982. Have you been in the habit of fishing on the same grounds as the well-smacks?—Yes.

7983. Do you get on well together?—I never heard anyone find fault. I have been to Iceland with them. Those vessels have been there for many years past, and there have been more vessels lately than ever I knew before.

7984. Do you mean in Iceland?—Yes.

7985. How close to the shore?—It depends on the weather whether you have to keep far out at sea.

7986. Do you trawl about the Iceland coast?—No; we fish there with hand-lines.

7987. Then you have been hand-lining?—Yes; I have been engaged in it for four years.

7988. Do you use the same vessel for hand-line work and for trawl work?—Yes, the trawl-boats will do very well for salt-fishing.

7989. Do you ever use the long-lines?—No, only the hand lines. Our vessels are very badly adapted for long-lining, or indeed for hand-lining.

7990. (*Mr. Caird.*) Are there any trawl-vessels at Hastings?—There are some trawling boats, there are no smacks.

7991. Do you mean trawl-boats that trawl in-shore?—Yes; they go into the bay, or perhaps 16 or 18 miles out to sea.

7992. Are they undecked boats?—Some are decked boats, and some are open boats.

7993. What is the length of the beam they carry?—About 30 feet.

7994. What kind of fish do they catch?—Plaice, haddocks, turbots, and dorcys.

7995. Then they carry on with a smaller boat the same kind of business you do?—Yes.

The witness withdrew.

J. Johnson.

JAMES JOHNSON examined.

7996. (*Mr. Caird.*) Are you a fisherman here?—No, I am at Grimsby.

7997. Are you a line or a trawl fisherman?—A trawl fisherman.

7998. Have you been long in that business?—Yes, for four or five years.

7999. At Grimsby?—No, at different places. I come from Devonshire.

8000. Can you give us any different account from that which has been given to us by other witnesses?—No, not particularly. In 1835 I came down here in Yorkshire on an expedition in search of fish. We went to Scarborough to fish. We used to get something like 50, 60, and 70 pairs by our day's work, and we brought them in.

8001. Do you mean pairs of soles?—Yes.

8002. Was that with the trawl net?—Yes, and we got plaice also. There was generally a very few plaice and a few haddocks. We continued at that till the people of Scarborough drove us from their coast and would not let us fish on the ground where they fish any longer; consequently we had to go further away to what we call now the "off ground", and we used to get from there from 800 to 1,000 pairs of soles, with some plaice and haddock, and we brought them to Hull, and from that time I have been fishing here.

8003. Have you found during your experience there that the quantity of fish you can catch is increasing?—If we did not catch more than we did then we should do a very small matter. We catch now four or five times the quantity, but our vessels are larger and more expensive.

8004. Are the fish better in quality?—Yes, I think they are, if anything.

8005. Do you agree with the previous witnesses with regard to other matters?—Yes.

The witness withdrew.

H. Toozes.

HENRY TOOZES recalled.

8006. (*Professor Huxley.*) What is it you wish to say?—We should be glad if you would explain to us the size of the mesh, and how we are to measure it; I have a piece of net here and it would be satisfactory to all of us to know how to measure the mesh.

8007. I will read to you the regulation: "Trawls "shall be made with nets, the meshes of which shall "be made at least one inch and three quarters square "from knot to knot along the line."—That would be on what we term the "bar" of the mesh.

8008. Yes, it would be four times that round?—Yes.

Article 19 says: "The under part of the trawl "net from a length of 10 feet to its extremity may be

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" strengthened by rubbing pieces made of old nets, " but these rubbing pieces shall be so fastened that " they shall not cross or narrow the mesh of the " trawl net, which must always remain at least across " one inch and three quarters from knot to knot along " the line, open and unobstructed."

8009. Is that a new trawl net?—Yes. (*The witness produced a portion of a net.*)

8010. What is it along the line ?—I do not know exactly.

8011. I find it is $1\frac{1}{2}$ or $1\frac{5}{8}$ of an inch at the outside, that is not large enough according to the law ?—I believe it would be beneficial to our business at large if we were compelled to carry out the Act of Parliament. With regard to the beam, the Act says the beam shall be no more than 38 feet long, and that the trawl irons shall not exceed 287 pounds.

8012. (*Mr. Caird.*) Why do you think that would be beneficial ?—Because the length of the beam seems now to be very much growing; we have larger smacks than we used to have, and every one is trying to extend over another in the length of the beam, thinking that they will get more fish in consequence. Some of their beams are 45 or 46 feet long; others are 40 or 42 feet; now I believe they do not spread over more ground than a beam 38 feet long, but they are so long that they bend, and they are more liable to break. It is a very common occurrence for two or three to break during the winter time.

8013. But they are not compelled to have them longer than they like ?—No, but if we were compelled to work them 38 feet long no one would have one longer.

8014. They might have the beam 38 feet now if they chose ?—I think it would be very beneficial to compel them to have it that length.

8015. You think it would be very beneficial to be compelled to act according to your own interest ?—I believe so.

8016. Have you not sense enough to attend to your own interest without compulsion ?—Taking one time with another, I believe we should be better off with beams 38 feet long.

8017. But if other people think they would not be better off with that length why would you compel them to adopt it ?—The Act of Parliament says the beam ought to be a certain length, and I think the fishermen ought to be compelled to carry out the Act.

8018. You think it would be better for them if they were compelled to work with a certain beam ?—Yes, if the French and others had beams of the same length.

8019. (*Professor Huxley.*) This Convention binds the French, but I am not aware that it does the Dutch or the Belgians ?—We ought to act up to one thing. No person ought to work with a mesh smaller than $1\frac{3}{4}$ inch, yet I believe there are very few out of this port who have so large a mesh at the bag end of the net.

8020. I believe you do not wish to have the Act of Parliament enforced with regard to drift-net boats, namely, that you should clear out of their way for three miles whenever they come on the ground. Would you wish to have that clause repealed or enforced ?—I should like to have it repealed or they would drive us out of the sea altogether.

8021. Suppose there were no regulations of any kind whatever, would you sooner have regulations made, or would you prefer being allowed to follow your own inclinations ?—We act pretty much as we like now.

The witness withdrew.

The inquiry was adjourned until Saturday, October 10, at Brixham.

Brixham, Devonshire, 10th October 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

BRIXHAM.
W. F. Collier.
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WILLIAM FREDERIC COLLIER called and examined.

8022. (*Mr. Caird.*) You are the secretary of the fishing club here, I believe ?—Yes.

8023. What is the object of that club ?—The insurance of the different smacks belonging to the port.

8024–5. Is it a mutual insurance club ?—Yes.

8026. Are you well acquainted with the state of the fishing interest in this quarter ?—I am not particularly well versed in it, but there are other witnesses here who will give you every information you want. I can tell you the number of vessels insured in the club, and the estimated value, or anything in that way.

8027. To what period back does your acquaintance with this district extend ?—I have been living here all my lifetime.

8028. How long have you been the secretary of this club ?—Three years now.

8029. Can you tell us the number of vessels at present engaged in trawl-fishing, here ?—The number of vessels at present insured in this society is 152.

8030. Do they all hail from the port of Brixham ?—No; they all hail from the port of Dartmouth.

8031. What is the average tonnage of these vessels ?—The average tonnage is about 34 tons, I should think.

8032. Can you give us the largest size, the middle size, and the smallest size ?—Well, some are more than 34 tons, and the lowest, I should think, is 28 or 29 tons. Some are much larger than that.

8033–4. What is the size of the largest ?—I should say from 38 to 39 tons new measurement.

8035. Can you give us any idea whether the number and size of these vessels have increased during recent years ?—Yes, very much.

8036. Can you give us any facts upon that point ?—No, but I know that they have very much increased in tonnage of late years.

8037. Do you know what was the number 10 years ago ?—I cannot give you any information on that point.

8038. Can you say what the number was five years ago, or three years ago ?—They have very much increased; in fact, they are increasing every year. Vessels are being built much larger than they were in former years. That has been the case particularly during the last seven years.

8039. But you have no knowledge what the exact number was five or seven years ago, so as to enable you to compare it with the number now ?—No.

8040. Then do you think there is more capital being put into the business every year ?—Yes, very much more.

8041. Can you give us any idea of the amount of capital embarked in it ?—The amount of the estimated value of vessels insured in our club is about 72,000*l.*

8042. Has it increased within the last three years ? Yes.

8043. By how much ?—I can hardly say the exact amount unless I refer to the books of the club, but it has very much increased. The vessels are of considerably more value than they were. A much higher class of vessels is built now.

8044. Does 72,000*l.* represent the actual value of

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the vessels engaged in fishing ?—That is their estimated value.

8045. The estimated value of the whole number of vessels ?—No, only of those insured in our society.

8046. Does the number insured in your society include nearly the whole number engaged in fishing in Brixham ?—Yes, I should say so.

8047. Then we may take 72,000*l.* as representing the capital embarked in the fishing business here?—Yes.

8048. Is that for vessels alone, without including the tackle ?—It is for the vessels and the tackle ; the tackle is insured with the vessel.

8049. Can you tell us the number of men employed? —I cannot state that, but they average about five in each vessel, I believe.

8050. Do you know if the number employed now has increased compared with what it was some years age ?—I should think there has been a large increase, because the number of vessels has considerably increased.

8051. (*Professor Huxley.*) What is the average value of each of your vessels here?—From 700*l.* to 800*l.*

8052. Does that include the fittings ?—Yes.

8053. Do you keep any record of the number of vessels insured from year to year ?—Yes.

8054. So that on referring to your books you can tell us what the increase has been during the last three years ?—Yes.

8055. Do you happen to have your books here ?—No.

8056. Can you furnish us with an account of the increase by-and-bye ?—Yes.

8057. If you will be kind enough to send the details to the secretary we shall be obliged to you.—I will do so with pleasure.

8058. Are the vessels insured in your club mainly built by persons living in Brixham or Dartmouth ? —They are built by persons living in Brixham generally.

8059. Are they owned by the persons who work them ?—A small portion are.

8060. Are they owned by the crews ?—No, not by the crews generally ; by the masters.

8061. Are the persons who own them for the most part masters of the vessels themselves, or persons living on shore ?—There are a great many persons living on shore who own vessels, but occasionally there is a master who will buy a vessel.

8062. Then the practice is for some person on shore to equip a vessel and probably the master will have a part share ?—Yes.

8063. Have the men a part share ?—I do not know.

8064. Is that a favourite mode of investment with parties living ashore here ?—Yes.

8065. They put their money into these smacks?—Yes.

8066. Are you aware whether the value of the smacks has been falling off of late years or not ?—I am not aware of it.

8067. The increase of the capital invested in a business of this kind would rather prove the contrary, would it not ?—Yes, the increase of the capital invested has been much greater of late years. Much better smacks are built now than were built formerly,

8068. Have you yourself any knowledge of the rig. and the mode of fitting up the boats ?—No.

The witness withdrew.

E. Johnson.

Eliezer Johnson called and examined.

8069. (*Mr. Caird.*) Have you been long engaged in the business of a fisherman here ?—About 35 years.

8070. Do you still follow that business yourself ?— Yes.

8071. Do you go afloat now ?—No, I have not been at sea for the last two or three months, but I expect to go again soon.

8072. In the experience you have had here during the last 35 years have you noticed any considerable increase in the number of vessels employed in fishing ? —Yes, there is an increase.

8073. Can you tell us what the increase has been in your time ?—I have no idea. I remember when I was a little boy that I could count from 60 to 70 sail fishing out from here, but since then a great number of smacks which have been built here have gone away to different parts.

8074. So that the number given by the previous witness does not represent the whole interest of the fishing here ?—No.

8075. Many vessels built here belong now to other ports ?—Yes ; some insured here have gone to Hull, and some have gone to Ireland—to Dublin.

8076. How many are still engaged in fishing off this coast ?—About 80, I think.

8077. Has the number increased or diminished during the last 10 years ?—I think it is nearly about the same.

8078. Do these 80 vessels continue to fish very much on the same ground they did 10 years ago ?— Yes.

8079. Where is the fishing ground that is principally resorted to from Brixham ?—It runs from 30 to 40 miles from the land here.

8080. And how far east and west ?—About 20 miles east, and about 25 or 30 miles west.

8081. And within those limits has there been a fleet of about 80 boats working during the last ten or 15 years ?—Yes.

8082. Or for a longer period within your knowledge ?—Yes, for 20 or 30 years ; ever since I was a lad.

8083. Have you observed whether the take of fish in the same time by each boat has been increasing or diminishing on the average ?—In some kinds of fish I do not think there has been any decrease, but in other kinds there has been a decrease.

8084. In what kinds has there been a decrease ?— In such as hake and whiting.

8085–6. Do you not get as large a catch now of those fish as you used to get ?—We do at times, but in some seasons they fail. Last season we had a great quantity, more than we had seen for several seasons before.

8087. What kind of fish has diminished ?—Flat-fish and soles. I think they have decreased within the last 10 years.

8088. Has that decrease gone on gradually ?—Yes, I think there has been a decrease gradually every year. We do not seem to get as much year after year as we have got in years gone by.

8089. Have you observed that on any particular fishing ground ?—Yes, within our limits all over the grounds. I mean within the distance we fish in any part of the ground round about here.

8090. What do you think is the cause of that ?—I think it is caused by fishing in shallow water in the summer months.

8091. Do you mean by your trawlers fishing in shallow water ?—I mean by trawl-fishing and seineing together. Yes.

8092. What distance from shore is the damage done ?—Within the headlands, and all around the shore in the creeks in Torbay and Start Bay, and in the other bays round the coast.

8093. Do the trawl-vessels work in those bays?—Yes.

8094. What injury do you suppose they do by that means ?—They take up the small fish.

8095. Do the small fish stop in the trawl nets ?— Yes, thousands are thrown overboard that are not fit to be brought on shore.

8096. In what state are they when they are drawn to the surface ?—They are in a very good condition ; some are alive and some are dead. The fish look good, but they are so very small that there is no sale for them.

8097. When they are thrown overboard are they alive or dead ?—Some are alive and some are dead.

8098. Is any large proportion of your take of this small fish thrown overboard ? For instance, when you

drag up your trawl, suppose you have a ton of fish altogether in your net, how many hundred weight will be inferior fish and be thrown overboard?—I have been fishing in these bays, and I have seen as much thrown overboard as there was fit to be brought ashore.

8099. Is that commonly the case?—Yes.

8100. It is generally so among all the trawl-vessels engaged in fishing off this shore?—Yes, they all in turn come into the bays.

8101. Is it only when fishing in the bays that this destruction of small fish takes place?—I do not think that trawling in deep water does any injury at all; I think it rather tends to increase the fish, and no harm would be done if they would not come into the bays to trawl.

8102. What distance off the shore do you call deep water?—The water gradually deepens. What we call deep water is 30 or 35 fathoms, but we tow in these bays to within 3 or 4 fathoms at times.

8103. Do you not bring up any small fish in deep water?—We bring up a few, but not very many.

8104. Not nearly so large a proportion as you do in shallow water?—Nothing compared to it.

8105. When you bring up small fish in deep water do you throw them overboard?—We seldom get any to throw overboard in deep water.

8106. Is there any distinct difference in an average haul in deep water and in shallow water in regard to small fish?—Yes, when we get in shallow water we catch fish that are not saleable. In deep water it is very seldom that we get any small fish not fit to bring to the market.

8107. Then is it not a loss to the fishermen themselves to fish in waters where they are obliged to throw overboard a large proportion of their catch?—Yes.

8108. Then why do they do it?—I do not know; I am a deep-water fisherman. They get very little gain from it sometimes. I believe they think only of taking the large fish and do not bear in mind the destruction they occasion to the small.

8109. Do you ascribe the gradual diminution in the quantity of flat-fish to trawling in shallow water?—Yes.

8110. Did you ever see any spawn drawn up in the net?—Yes, a little sometimes.

8111. Have you ever seen it?—I have sometimes seen a little hanging about the net.

8112. Was that in deep water?—Yes, in deep water and in shallow water also.

8113. Do you get many turbot here?—Yes.

8114. Do you find them increasing or diminishing?—I think they are not as plentiful as they were a few years ago.

8115. Are they not as plentiful in deep water?—Sometimes, when we go a long way out at sea, we get a good many, but generally speaking we do not get as many all the year round as we did some years ago.

8116. With regard to cod, are they as plentiful as formerly?—We seldom get any in the trawl.

8117. Have you any notion what quantity of fish is landed here in the course of a season?—I have no idea what quantity there is.

8118. Are the fish much mangled at any time when drawn up by the trawl when you are fishing in deep water?—No.

8119. Are they when you catch them in shallow water?—No.

8120. Are they never so much bruised as to be unfit for food?—We may occasionally see one or two when we get a large quantity in the trawl. Sometimes we get so large a quantity in the net that we are obliged to put a rope round it to draw it up, and it may jam up the fish and bruise them a little bit.

8121. Have you never seen injury done by the rubbing of the trawl—I mean the scales injured or the fish otherwise damaged?—The fish caught by the trawl do not look quite as well as those caught by the hook and line, but still the fish are not injured.

8122. Is there any regulation here with regard to the size of the mesh of your trawl nets?—No; every man has his net as he likes.

8123. Is there any fishery officer, or other authority, who comes to speak to you with regard to regulating your nets, or the mode of your fishing?—There has been some one here, but I do not know whether he said anything about the size of the mesh. He ordered the boats to go out of the bays, and they did so, but soon after they came in again.

8124. What fishery officer was that?—He belonged to a cutter stationed at Dartmouth. I have heard the fact stated, but I never saw him.

8125. Was that in recent times?—Within the last five or six weeks. I have heard some of our fishermen say that the cutter sent on board and ordered the boats to go out of the bay.

8126. He ordered the trawl-boats to go out of the bay?—Yes.

8127. Do you know whether there is any regulation that might be enforced to prevent them coming into the bays?—Yes. I think the Act of Parliament says that we are not allowed to come into the bays, and we are confined also to a certain sized mesh.

8128. But you never met with anybody who endeavoured to enforce any particular size of mesh, or to prevent your fishing in the bays?—No.

8129. Do you think it desirable for the interest of the fishermen, and the consumers of fish, that some regulation of that kind should be established?—Yes, I do.

8130. What regulations do you think would be advisable?—I think we ought to be kept from the shallow water during the summer months, and we ought to have the mesh a little larger than we have it now.

8131. You say you ought to be excluded from shallow water during the summer months?—Yes.

8132. Why do you make that distinction?—Because that is the time the small fish are in the bay.

8133. Would no damage be done to the fish by trawling in shallow water in the winter months?—Not so much damage as in the summer months.

8134. But do you think there would be any?—No, I do not think there would.

8135. Then you would confine your objection to the summer alone?—Yes; say from March or April to September or October.

8136. Do any foreign vessels come here to fish?—I have seen French vessels on this coast fishing.

8137. Trawl-vessels?—Yes.

8138. Have you seen them in any great numbers?—I have not seen a great quantity. I may have seen about a dozen, or from that to 20 sail, at times, when I have happened to go a little distance off, and they have come a little nearer here in the winter season. The fish about here they come to catch are rays principally.

8139. Do they come in the bay?—I have never seen them in the bay.

8140. Do they interfere with your fishing?—Not in the least.

8141. Your fishing vessels keep the sea?—Yes, pretty nearly all weathers. We keep the sea in storms.

8142. How many men are there in each vessel?—The crew consists of four, but in many cases, where the vessels are large, and in the winter time, we go with five hands.

8143. And how long do you remain out at sea on the average?—That depends on our catch of fish. We commence on the Monday morning, and as we get the fish, we come in again, and we go out again to make the week until the Saturday. If we do not get the fish then we do not come in at all until the week is up.

8144. Do you always come in with your own catch of fish?—No, we send it in by others sometimes.

8145. And you keep at sea?—Yes.

8146. Have you a regular system of that kind?—No. One man may have a good catch of fish and think proper to go to market and the others who have probably not got so much will send their fish by him.

8147. Is there much line-fishing followed from this port?—Yes.

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8148–9. Fishing with long-lines?—There are not many long-lines; it is mostly by hand-lines.

8150. Have you had any complaint made against you in consequence of fouling the lines?—I never heard any from this place.

8151. Is there any herring fishery here?—Yes.

8152. Is it a successful fishing?—No, I think it does not amount to much.

8153. Do the trawl-boats take any part in it?—No.

8154. Is it followed by the long-line fishermen and the line fishermen generally?—Yes; I think when the season comes for herring they stop their line-fishing and go to the herring-catching.

8155. Has this catch been diminishing or increasing of recent years?—I cannot tell you much about it. I never had anything to do with it.

8156. Has it ever happened to you that you have been enabled to give assistance to vessels in distress?—Many times.

8157. Have you met them in the Channel?—Yes.

8158. Have many of the trawl-boats connected with Brixham been in a similar position?—Yes, many of them. Only last week one went up the Channel with a ship. Many cases occur in the course of a winter season. The ships are very glad to get the fishermen to come on board and take them into port and go up the Channel with them.

8159. Taking your long experience as a fisherman, and all the interest you have in the business, have you on the whole found that it is a paying business?—I have got a living out of it; I have not made a fortune out of it.

8160. Have you not increased and improved your circumstances?—Yes.

8161. You began by being the owner of a trawl-vessel?—No, I began with my two hands.

8162. Are you now the owner of a trawl-vessel?—Yes.

8163. Have you an interest in more than one?—Yes.

8164. Are there many men engaged in that business in the same position?—Yes, many.

8165. Do the fishermen's sons as a rule follow the business of their father?—Some do and some do not. Some go away in foreign-going ships.

8166. Are there many strangers who come here in order to go into the fishing business?—Not a great many.

8167. We have been told that a great many of the Brixham fishermen have left Brixham and gone further north in consequence of all the fishing grounds here being exhausted, is there any truth in that?—No; I was in the north many years myself and I came back to the south again.

8168. Why did you do so?—Because I can do better here than there in the summer season.

8169. Do you find as many fish?—I find as many as there were 30 years ago, but I do believe that there is a decrease in flat-fish and soles.

8170. How is the price of fish compared with what it was before the railways were opened in this part of the country?—That depends upon the quantity caught. Sometimes fish are at a great price, and sometimes they are very cheap.

8171. Take an average price for one season here?—I believe the fish bring as much now as they did then.

8172. Do they not bring more?—I don't think they do.

8173. How did you get your fish to market 20 years ago when you had large catches?—They used to go by waggons and stage coaches.

8174. Then you could not get it to the market fresh?—No.

8175. Did it cost you as much?—No.

8176. Was not the price of the carriage by waggons and stage coaches more than it is now?—I don't think it was; but we used to sell it to the buyers. We had not much to do with the carriage.

8177. But you would see the result of that in the price you got for the fish. Was the price then as good as it is now on the whole?—I think it was.

8178. (*Professor Huxley.*) What is the length of the beam of your trawls here generally?—It depends on the length of the vessel.

8179. What is the average length?—About 40 feet.

8180. Why does it depend on the length of the vessel?—A longer vessel will have a longer beam; we want the fore part of the beam to come to the after shrouds of the ship. If that were not so there would be great danger at times. The beam would tumble against the bulwarks and stanchions, and perhaps break them down.

8181. What is the average length of the beam?—About 40 feet; some are 42 feet, and some are only 38.

8182. What is the weight of the head irons?—That depends on the size of the ship. The average is about 220 or 230 lbs.

8183. Are there any much heavier than that?—There are some large vessels that have them 280 lbs., but I think 220 or 230 lbs. is about the average of the fishing boats out of this port.

8184. What is the size of the mesh?—The size of the mesh varies. I have a sample of a mesh in my hand which you may perhaps wish to see; that (*producing a piece of net*) is about the largest sized mesh we have.

8185. That is about $2\frac{1}{2}$ inches from knot to knot?—Yes.

8186. What is the smallest size?—That (*producing another piece of net*) is the smallest size for a trawl net.

8187. That is about one inch from knot to knot?—Yes.

8188. Do you use different sized meshes?—The large mesh is about the size at the largest part. We construct our trawls for about 40 feet of that size, and then we gradually decrease the size.

8189. Is the pocket made of that small size?—Yes.

8190. Does your trawl go to a single pocket at the end, or are there any side pockets?—There are side pockets.

8191. Are both the side pockets made with the small mesh?—It is formed out of part of the trawl. It is not a piece put in.

8192. Do you load the foot rope of your net?—Yes.

8193. Do you load it with lead?—No.

8194. What do you load it with?—We put other ropes round it; we do not load it with lead, or chains, or anything of the kind.

8195. Have you ever had anybody objecting to your trawl beam being 40 feet long?—No.

8196. Are you aware of the existence of a law on that subject?—Not at all.

8197. Did you ever heard of this law: "The length of the wooden yard or beam to which the upper part of the mouth of each trawl net shall be fastened shall not exceed 38 feet"?—I don't know anything about that.

8198. Have you never heard of it?—No.

8199. Did you ever hear of this: "The total weight of the two irons or head pieces of a trawl shall not exceed 287 lbs.?" Were you aware of that?—No.

8200. In your knowledge of this port, has anybody ever called your attention to the regulations which I have just read to you?—No.

8201. No one has ever attempted to seize your nets on the ground of their not complying with that regulation?—No.

8202. I suppose you carry on your trawling when the herring-fishing is going on here?—Yes.

8203. Do you trawl over the ground where the herring-fishing is going on?—The herring-fishing for the most part is carried on here in the bay.

8204. But supposing the herring-fishing was going on in that part of the sea where you are in the habit of trawling, would you trawl there?—If we saw the herring boats we should not put our trawl down among them.

8205. If they came down to you, would you get out of their way?—I don't think I should.

8206. Have you ever heard of any law on that point?—No.

8207. Did you ever hear of this article: "Trawl-boats shall always keep at a distance of at least three miles from all boats fishing for herrings or mackerel with drift-nets"? Was that ever brought to your knowledge here?—No.

8208. Did you ever hear of this article: "Whenever herring or mackerel boats shall commence drift-net fishing in any place whatever, the trawl-boats which may already be fishing in such place shall depart therefrom, and shall keep at a distance of at least three miles from the said drift-net, herring, or mackerel boats"? Have you ever heard of that?—No.

8209. Nor has there been anybody to call your attention to it?—No.

8210. Is there any superintendence over the fisheries here; does the Government cutter come into the bay?—I was never boarded by him, but he comes in and out of the bay.

8211. As far as the fishermen here are concerned, in all your experience these regulations have been a dead letter?—Yes, we get foul of each other sometimes, the drift-nets and the trawls; we get ourselves clear as we best can, and fish away again.

8212. Is there any circle net fishing here?—Yes, I have had some experience of that.

8213. What sort of a net do you use?—The seine net.

8214. Is that a long net with a pocket?—No, there is no pocket.

8215. There are no pockets in your seines?—No, only a bunt. It goes right round, and the bunt goes back.

8216. What is the length of your seine?—From 170 to 200 fathoms.

8217. What is the depth; how many meshes?—I don't know how many meshes.

8218. What is the depth?—About 4 fathoms.

8219. Is it as deep as that at each end?—No, it is not so deep at the ends.

8220. Does it go off shallow at each end?—Yes.

8221. What is the greatest depth at the ends?—It is about two fathoms deep at the ends.

8222. What is the size of the mesh?—I have a bit of the seine net in my pocket. That (*producing it*) is the size of the bunt of the seine.

8223. Are all the meshes of the same size?—No, they are larger at the ends, but this is the bunt.

8224. This is not much more than half an inch?—No. These seines don't injure the fishing in the bay; they are shot for shoals of mackerel.

8225. Well, then, your net having the structure you describe, how do you use it?—It is put into a boat. There are six men in the boat, and they are all ready on their oars. As soon as the fish rise they pull round the fish. They bring their nets as near into the shore as they can, so that the rope will soon reach the shore.

8226. Is the other end made fast?—Yes, the end of the net is made fast in the first instance before the rest of it is taken away in the boat.

8227. Then the boat takes the rest of the net and pays it out?—Yes.

8228. You make a circle and come round, bringing the other end to the place where it is fast?—Yes.

8229. And then you haul it into the boat?—Yes, There are two men at each end. We keep as close together as we can, and bring the bunt close up to the boat. When we are pretty near in, the net is hauled up quick, and the fish are in the bag.

8230. Do you take your fish on board?—Yes.

8231. You don't haul it to the shore?—No.

8232. Why not?—We could not do it. It would be too heavy. There is generally too much weight.

8233. Then you use the net only when you see large shoals of fish in-shore?—Yes.

8234. Do you use it for mackerel?—Yes.

8235. And for pilchards?—Yes.

8236. Is the ordinary tuck seine used for pilchards?—Yes.

8237. Just the same size?—Yes.

8238. Do you use it for pilchards here?—Yes.

8239. Are pilchards abundant on this shore?—Yes, they have been this season, but they have not made their appearance before for some time.

8240. Then you only use it when shoals of mackerel or pilchards come in-shore?—Yes.

8241. You are not in the habit of using it for sweeping the bays?—No.

8242. Is seincing of the ordinary kind practised on this shore; I mean where you haul the seine with a pocket ashore?—No, not in this part.

8243. Where is it practised?—At Paignton and Torquay.

8244. Are there many seines used there?—Yes, at Torquay.

8245. Do they use them in the summer principally?—Yes.

8246. And they just sweep the bottom of the bay or the shallows?—Yes, they carry out their seines with a length of rope, and they haul them ashore on the sands.

8247. In the ordinary fashion?—Yes.

8248. Do they get up all kinds of fish?—Yes, we have had a sample of it brought to this market.

8249. What is the size of the mesh of their seines?—It is very small.

8250. Is it smaller than that you showed me just now?—Yes.

8151. Have you a specimen of the mesh?—Yes (*producing it*). There is a specimen of the bunt of the sprat nets.

8252. May we keep these specimens?—Yes, and here are some of the fish caught with the small nets (*producing them*). They were brought here with some other fish. This is a little turbot. This is a sole. There are hundreds of them dragged ashore on Paignton Sands, and all round the coast, and in many cases they are allowed to lie and perish on the sands.

8253. Where were these fish sold?—They happened to come in a boat along with some pilchards. They were dragged in the seine with the pilchards.

8254. Where do the men of Paignton and Torquay get a market for these fish?—At their own towns, and sometimes they bring it here as well.

8255. It is bought by the poor, I suppose?—Yes, and by the fish buyers.

8256. You spoke of these nets being used by the sprat fishermen; are there many sprats here in the winter?—There are not many sprat seines here.

8257. Are there at Torquay?—Yes, there are at Torquay and Paignton. I have known as many as three or four vessels loaded here in a day, to carry away to Portsmouth.

8258. Were they loaded with sprats?—Yes, sprats caught at Torquay.

8259. When does the fishing go on?—About the month of November.

8260. Does it continue during the summer months?—Yes, they don't stop here long; perhaps a month, or five or six weeks, and then it is all over, but I never had much experience of the spratting.

8261. Is there any other mode of fishing here; do you fish here for turbot with nets?—Only the trawlers.

8262. No turbot nets are set?—No.

8263. What do the long-line fishermen catch?—Conger eels, ling, and codfish principally, and skate.

8264. Do they fish over the same ground as you?—No, they pick up rougher ground than we like to go over with our trawls, but we do sometimes get on the same ground.

8265. How many lines do the long-line fishermen carry?—A dozen or 14.

8266.—What kind of boats do they use?—Boats of about 4 or 5 tons.

8267. Are they open boats?—Yes.

8268. Have they no decked boats?—No decked boats for long-line fishing.

8269. You were speaking just now of trawling in shallow water; is that practised by the same persons as those who, like yourself, practise deep-sea trawling?—Yes.

8270. And with the same instruments?—Yes.

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8271. With the same vessels also?—Yes.

8272. Do you find that the large supply of small fish brought in in that way has a tendency to lower the price of fish in the market?—Yes.

8273. Does it damage the sale of large fish caught in deep water?—Yes.

8274. Does it lower the price?—Yes.

8275. Do you know what markets your fish here go to?—It is sent all over the country. A great part goes to London, Birmingham, Bristol, Bath, Exeter, and many other large towns. Then there are places round this neighbourhood, such as Totness and Taunton.

8276. Is that small fish sent round to the inland markets in the same way?—No, not much of that.

8277. Is it sold about here?—Yes.

8278. Is it hawked about by the hawkers?—Yes.

8279. Then I do not understand how it interferes with the market for other fish?—If it was not brought in they would be obliged to have larger fish.

8280. The larger fish are sold at a higher rate?—Sometimes it is very cheap, and sometimes it fetches a good price.

8281–2. Is not the small fish bought by people who could not afford to buy the large fish?—Very likely it is.

8283. Are the long-lines set in the winter time?—No, not in the dead of the winter. They are mostly set in the summer time. Their boats are not fit to stand the bad weather.

8284. Is that long-line fishing carried on by the same men as the hand-line fishing?—Yes.

8285. Did you ever hear of any complaints against the trawlers for interfering with the lines of the long-line fishermen?—No.

8286. Have they never been charged with carrying away the lines?—I never heard any complaint.

8287. Do you trawl over the ground where the long-lines are set?—No, they are mostly set on the rough ground, where we don't like to put our nets down, but we trawl among them when they are using the hand-lines.

8288. (*Mr. Caird.*) Would it be a hardship on the trawlers to be excluded from the shallow waters, where you say all the harm is done?—No, I think not.

8289. If a regulation of that sort were established you say it would be of no injury to the trawl-fishers themselves?—It would not injure them if they were kept out of in the summer time.

8290. Do you think it would benefit the line fishers very much?—I think it would benefit all of us.

8291. Would it lead to an increase of fish?—Yes.

8292. Is that because you would not disturb the ground where the young fish are?—Yes, we should not disturb the young fish, and in the winter time they would go out into deep water.

8293. You said that the seine nets which are used here destroy large quantities of young fish?—Yes.

8294. Then trawling is not the only mode by which small fish is destroyed in these bays?—I do not think the trawl-boats do as much injury as the drag nets.

8295. Would you put a stop to them?—Yes.

8296–7. On the ground that they are injurious to the supply of fish?—Yes, I would put a stop to the trawlers going in in the summer time, and to the dragging of the seines at the same time. There is another kind of net used over about Paignton which is also very injurious.

8298. What is that?—That is what is called a horse trawl, which is dragged by a horse. I have never seen it, but I have heard our people talk about it. They bring up a great quantity of small fish. They drag for shrimps with a horse and cart. The horse goes up to his belly in the water, and he drags the net after a cart, and you get many small fish. Thousands of them are brought in in that way.

8299. You say you have never seen that done?—No.

8300. Is there any witness here who can explain what it is?—Yes, I think there is.

8301. Are there many shell-fish caught off this coast?—Yes, a great many.

8302. Are they increasing or diminishing?—I cannot say that they are, because when we catch them we throw them overboard again. Sometimes we get a great many of them. At other seasons we don't get so many. On the whole the quantity seems to be much about the same as it was.

8303. You yourself do not fish for shell-fish?—No, they come up occasionally in the trawl with the other fish.

8304. And do you not keep them when you get them?—Not often.

8305. Are they not worth keeping?—We don't get any sale for them.

8306. Is there anybody who follows the business of fishing for shell-fish here?—Yes, there are people who go fishing for oysters in the season.

8307. Oysters, crabs, and lobsters?—There are crabs and lobsters as well. If we catch any we bring them ashore. But with regard to the other shell-fish, such as quins and the like of that we don't bring them ashore.

8308. Do you get many crabs and lobsters in your trawl?—Yes, at times.

8309. (*Professor Huxley.*) Is there any regular lobster-fishing about here?—Yes.

8310. Do they set lobster pots?—Yes.

8311. At what time of the year?—Mostly in the summer time, from the spring of the year up to about this time.

8312. Have you practised that kind of fishing yourself?—No.

8313. Is there anybody here who has practised it?—Yes, I think so.

8314. There is oyster-fishing here?—Yes.

8315. Are there oyster banks off here?—Yes, in Start Bay, but I don't know much about the oyster-fishing myself.

8316. Does any regular oyster-dredging go on here?—Yes.

8317. Are there many boats employed in it?—Not many.

8318. How many?—Five or six.

8319. Is there any other kind of fishing than those you have mentioned?—No, I think you have heard all about the different sorts of fishing except the shrimping.

8320. Is shrimping much practised here?—Yes.

8321. Is it practised by Brixham men?—There are different ways of catching them. Some will go with nets shoving them up and down. Others will go out all night setting traps for them and dropping nets down.

8322. With a hoop?—They set a net with bait for prawns.

8323. Have you used that sort of net?—Yes.

8324. What is the size of the hoop?—About 2 feet or 2½ over. The net gradually decreases as it goes down towards the bottom.

8325. How long will the bag be?—It is of no great depth, perhaps about 2 feet from the centre of the hoop.

8326. What is the size of the mesh?—That (*pointing to a net*) would be the size of the mesh at the bottom. I mean the sprat net. The upper part would be about the size of the next mesh to that.

8327. Is there a cross on the top to fix the bait upon?—Yes, lines go across the top to fix the bait, and they are fitted with a triangle to haul them up square.

8328. What depth of water is that net let down in?—5, 6, or 7 feet. It depends on the height of the tide.

8329. What do you bait it with?—Fish.

8330. Fresh or stale fish?—Fresh fish generally.

8331. Is it dropped over the stern of a boat?—No, they are put down in a row, about a dozen and a half of nets at a time. Two men go out with them. They put one down here, and another a certain distance off.

8332. Are buoys attached to the nets?—Yes, and they keep going along and hauling them up.

8333. That is the way they catch prawns here?—Yes.

8334. Do they catch crabs in that way?—Sometimes crabs will get in after the bait.

8335. Did you ever hear that called a trunk net?—No.

8336. What name do you give it?—We call it a prawn net.

8337. Is it not regularly set for crabs?—No.

8338. But sometimes you catch crabs in it?—Yes, and sometimes lobsters.

8339. What kind of net is used for catching shrimps?—They have a net they push before them. It is a kind of oval net.

8340. Do they catch many fish in that?—I never had any experience of it. I cannot say.

8341. Is there a large quantity of shrimps caught in the bay?—Yes.

8342. Do you think that shrimping does any harm?—I do not think it does in the way these men catch them, or by dropping nets on the rocks, and hauling them up. If any little fish get in, they are generally thrown overboard again.

8343. With regard to the other way, thrusting the net before you, does that do any harm in catching the small fry?—I have never seen them at work so as to know what they dragged up.

8344. Do you have any particular kind of vanes on the mastheads of your smacks?—Yes, we have generally a red vane.

8345. Do you use any colour you like?—We are not confined to colour. Some people fancy a bit of blue, others a bit of white, but it is principally red.

8346. Have you ever heard of any regulation upon this matter?—I think I have.

8347. At any rate you have not paid attention to it?—No, we don't pay attention to all we hear. Perhaps it would be better if we did.

8348. Are all your smacks numbered?—Yes.

8349. Who looks after that?—The Coastguard.

8350. The Custom House?—Yes.

8351. (*Mr. Caird.*) Have you ever fished on the French or Dutch coast?—I have fished on the Dutch coast.

8352. Did you meet any Dutch trawlers?—Yes, I have seen French, Dutch, and English trawlers all fishing together.

8353. Have you fished there for successive years?—Yes, for many years. I was fishing there right off for 20 years.

8354. Did you notice whether the number of boats was increasing or diminishing during those 20 years?—I think they have increased.

8355. Did they fish very much on the same ground?—Yes.

8356. Did you not find the ground giving way by being repeatedly fished over?—Some seasons we got plenty of fish, and at others we hardly got any. We were then obliged to shift about to other parts of the ground. If you cannot get fish, you take up the trawl, and go somewhere else till you find plenty. The fish change about. Sometimes they are in the Silver Pits, sometimes on the Dogger Bank, and at other times off the coast of Holland.

8357. Then you follow the fish about wherever you think there are most of them to be found?—Yes.

8358. Do the Dutch use a trawl the same as yours?—It is not quite the same, and it is smaller.

8359. In what does it differ?—The cod end of the trawl is larger, but not so broad.

8360. Is the mouth as long?—It is longer, but not so far down the rope as ours.

8361. Is the length of the trawl as great?—Yes, just about the same. It may not be quite as long as some of our big smacks have got.

6382. You have never been interfered with when you were fishing on the Dutch coast?—Not at all. I have been very near the Dutch coast, but not so near to the French coast.

8363. Has there ever been any collision between you?—No.

8364. You never came into collision or dispute with the foreign fishermen?—No.

8364*a*. Have you ever sold your fish in a foreign port?—Years ago I did, but a law was passed that we should not do so, and I have not done so since.

8365. Do you think it would be of advantage to you as fishermen to be allowed to do so if you chose?—Yes, I think it would be of advantage if we were allowed to sell our offal fish to the French boats.

8366. I do not mean to the French boats, but would it be of advantage to you to be allowed to sell your fish in French ports?—I was never in any port there.

8367. Did you ever sell any in any port in Belgium or Holland?—No.

8368. Do you think it would be of advantage if you were enabled to go to the nearest port, whether home or foreign, where you could sell your fish?—I should think it would.

8369. Do you think it would be of advantage if you were enabled to sell your fish to the French fishing boats?—Yes, the French fisherman used to come to buy them as fast as we could catch them.

8370. That was because they had a bounty for it?—I don't know why it was, but we used to get their gold and they had our fish.

8371. And that was put a stop to?—Yes.

The witness withdrew.

JAMES SALTER called and examined.

J. Salter.

8372. (*Mr. Caird.*) Are you a trawl-fisherman?—Not at present; I am a fish salesman, but I was a fisherman for 20 years.

8373. When did you cease to be a fisherman?—Nine years ago last August.

8374. Are you an owner of trawl-smacks?—Yes.

8375. Have you observed whether the number of trawl-vessels has been increasing or diminishing?—They have increased during the last seven years.

8376. Has the quantity of fish brought here for sale increased or diminished?—I should think that some classes have diminished.

8377. What classes do you think have diminished?—Flat-fish and soles.

8378. Have you noticed whether there has been any marked diminution in the quantity of flat-fish and soles?—I have not kept any statistical account.

8379. But by your own purchases and sales are you not enabled to answer the question?—There is a great decrease in flat-fish and soles.

8380. Within the last seven years?—Yes.

8381. Have the other kinds of fish, except flat-fish and soles kept stationary, or have they increased in quantity?—That will depend very much upon the season, but taking the average of seasons they are just near about the same.

8382. Amongst the flat-fish do you include turbot?—No, we include plaice, dabs, flukes, and flounders.

8383–4. And the soles have decreased?—Yes.

8385. Have the turbot increased or diminished?—They are about the same.

8386. To what do you ascribe the diminution in flat-fish and soles?—My conviction is that it is owing to fishing in the shallow waters in the bays within the headlands, and also using the drag seines. All up and down the shores where there is a creek or bay, there they shoot their drag nets.

8387. What do they get in these shallow waters?—A variety of fish chiefly of the flat-fish kind, and there are some small whitings among them.

8388. Do you think they destroy many small fish that are unfit for food?—Yes, an abundance of it. They drag them up, and I have seen them used as manure.

8389. Have you seen that yourself?—No, I have

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not been fishing at Paignton, Torquay, Dawlish, or Babbicombe. That is where they get them.

8390. You have never seen them get them yourself?—I have seen them taken for manure here.

8391-2. Was that because the fish were small?—No, because they could not get a sale for them.

8393. Has the trawl business been profitable here during the last seven years?—Yes.

8394. When you were a fisherman yourself and in the habit of going to sea, do you remember whether any large proportion of the haul consisted of small immature or damaged fish?—That would depend on what part of the coast we were dragging. If we were dragging in the bays between the headlands we would get large quantities which we were obliged to throw away.

8395. Were they too small for the market?—Yes.

8396. How is it in deep water?—We don't get small fish out in deep water. Sometimes in stormy weather the boats cannot come in-shore, and then the fish are necessarily damaged by being too long kept.

8397. Does that happen very often?—No, not often. It happens also sometimes in the summer when we have no wind to enable us to bring them to land fresh.

8398. Is that the time when you principally object to fishing in shallow waters?—Yes, within the headlands and in the bays.

8399. Is it equally objectionable in the winter time to fish within the headlands and the bays?—No, I think not.

8400. For what reason?—Because we should not then be able to go out into deep water to get a loaf of bread.

8401. But that does not apply to the destruction of fish?—What was the question?

8402. Would it be equally objectionable in the winter time to fish within the headlands and bays?—I do not think so, because I think the fish spawn chiefly in the summer time.

8403. Have you found in your experience of fishing within the headlands in calm weather that you do not get so large a proportion of small immature fish in the winter time?—There is no comparison.

8404. Have you found that yourself?—Yes. When the waters get cold, when there is snow and ice, the fish will leave the shallow water and go to the deep sea. We always experience that.

8405. Then you could not catch so many fish in the shallow water in the winter time?—No; most of our men can prove that.

8406. Do they not fish in shallow waters in the winter time?—They do occasionally.

8407. But not successfully?—No.

8408. Could they always make better fishing if they went out into deep water?—Yes, if the weather would permit.

8409. Then it is only on account of the weather that you fish in-shore?—Yes.

8410. Are there any other fishermen who fish in-shore?—There are no particular men that practise it more than another. I won't draw the line in that way. Perhaps some old gentleman may try with his boat, and pop into the bays; but there is no particular class of fishermen who use the bays for particular kinds of fishing.

8411. Then if you think that the injury is done by trawling in shallow water, why do you follow it?—There are a great many of us who don't like shallow-water fishing. Others do like it. They pop in, and at times they get a shoal of fish.

8412. You think that ought not to be allowed, and you desire to see all the fishermen put under the same restrictions?—I for one have a great desire that it should not be allowed.

8413. Do you think that by excluding the fishermen from the bays it would tend to increase the general supply of fish?—Yes, I think it would be of general benefit.

8414. Would you place any limit beyond which you would exclude the trawl-fishers from the shore?—Yes.

8415. To what depth of water, or how many miles off would you confine them?—I cannot say what depth of water. We have deep water close in shore.

8416. How many miles off would you keep them?—A mile and a half.

8417. You would not have them trawling closer in shore than a mile and a half?—No, that would be very good.

8418. If a rule of that kind were established do you think it would be sufficient to meet your objections?—Yes.

8419. Then in the summer months you would allow them to trawl a mile and a half outside the shore?—Yes, a mile and a half outside.

8420. But a mile and a half would bring them within some of the headlands?—Yes, in certain places.

8421. That would bring them within the headlands in Torbay?—But I mean outside the bay altogether.

8422. Would you draw the line outside the bay from the headlands?—Yes, I would take a mile and a half from the heads and draw a line from that up and down, and I would not allow them to come within that.

8423. Would that benefit the line fishermen?—I cannot say; there are hook-and-line fishermen here, long-liners and hand-liners, but I never followed it.

8424. Have you found in your experience as a trawl-fisherman that the fishing grounds you are in the habit of trawling upon are becoming exhausted of fish?—No.

8425. I mean out in the deep sea?—No.

8426. Have you found the contrary?—Not particularly.

8427. Have you found that if several trawl-boats follow each other over the same ground that each boat will get about the same quantity of fish?—Yes, if Jack gets a good load to-day Tom and Bill would like to be in the same place to-morrow.

8428. They would try to follow him?—Yes, right upon his heels.

8429. Is that attended with success?—If there are ten in a line we find that the last one will sometimes get as much fish as the first. It is all up-tiller for one and down-tiller for the other.

8430. What distance might they be trawling from one another?—Sometimes they are like as if they were in a line. There is a place we trawl over that we call "New Ridge"; we trawl there right through a gut, and we often find that the last smack will get as much as the first.

8431. Is that gut known to the fishermen?—Yes, it is very well known.

8432. How far is it from the shore?—About half a mile. It is just on this side of Dartmouth Harbour, between Dartmouth and Burnhead.

8433. How long have you been in the habit of fishing there?—My grandfather, I should presume, fished there.

8434. Speaking within bounds and without any exaggeration, can you tell me how long your experience of that fishing ground extends?—I have had nearly 20 years personal experience of it, but there are many men 70 years of age who have been at it all their lifetime.

8435. In your experience of 20 years have you found that you have caught as much fish in that gut during the last year as you did in the first?—At different times and different seasons we have got quite as much. The sea is just like the land, at some seasons there are poor crops and at others there are good ones, and so it is with the fish; in some seasons the shoals of fish come in and at others they don't.

8436. Has that place been very much fished?—Yes.

8437. And it is still fished?—Yes, every year.

8438. Do you get as good fishing there now as you did formerly?—Yes.

8439. There has been no marked falling off?—No.

8440. Do you get flat-fish and soles there?—Yes, right in the gut.

8441. Are they as numerous there as they used to

be?—There may have been a little falling off in flat-fish and soles.

8442. But with regard to the general take, is it as good as it was formerly?—Yes.

8443. Is there any other ground equally worked on which the fishing has been pursued for many years?—Yes.

8444. Where is that?—It is what they call the "in-ground".

8445. Where is that?—Just off the bay.

8446. How far from the shore?—About three miles.

8447. Is that deep water?—You may call it deep water; it is from 15 to 20 fathoms.

8448. Have you known that in-ground for many years?—Yes, all my lifetime.

8449. Is it being fished upon now?—Yes, every year it is constantly dragged.

8450. Are there as many vessels fishing upon it now as there were 20 years ago?—Yes, and more.

8451. Does it yield as good a take of fish now as it did 20 years ago?—Yes, at times and seasons.

8452. There has been no marked diminution?—No, except in the class of fish I have mentioned.

8453. Has there been any marked increase?—No.

8454. Then it remains stationary? — At certain times we get great takes of whiting there.

8455. You have 80 vessels engaged in the fishing trade in this place?—Yes.

8456. Then, according to your theory, if there were 80 or 100 vessels fishing on that ground would they all get fish?—I presume they would.

8457. There would be no chance of their exhausting it or running it out?—I don't believe there would.

8458. You have seen no signs of that?—No, and when I come to look at the quantity of smacks we have and the increase of capital put into the trade, I cannot help thinking that it must have been a very good business. We have got all sorts of trades here invested in it, the sailmaker, the blacksmith, the rope-maker, and the carpenter, so that there must have been something like made out of it.

8459. Are they all doing well?—Some are unfortunately bankrupt before they begin; there are a good many of that sort and that is a misfortune, but I think as an investment the thing would pay if we were to have it a little organized. I have made it pay myself.

8460. It depends a good deal upon management, like any other business?—Yes, nine-tenths of it.

8461. Is the quality of the fish you take now as good as it used to be?—Yes, it is quite as good.

8462. Is the size of the turbot as large as it used to be?—The turbot are quite as large and as good in quality.

8463. Does that apply to all the kinds of fish you have been in habit of catching?—Yes, last Saturday we had an immense show of fish in the market, of turbots and John Doreys especially.

8464. What quantity on the average will be brought ashore here in a good day's fishing?—You may put it down at 50 tons.

8465. Of that 50 tons what proportions are there of different kinds of fish?—I don't understand you exactly.

8466. Take the whole 50 tons, how many tons would consist of soles?—Soles will run to about three quarters of a cwt. for 80 smacks on the average, say 1 cwt. on the average.

8467. Is that for each smack?—Yes.

8468. That would be 4 tons out of the 50?—Yes.

8469–70. How much turbot will there be?—The turbot will average, when we have a good catch, about three fish a smack, say 20 lbs. a smack.

8471. That will be about three-quarters of a ton?—Yes.

8472. What proportion will there be of haddocks?—They are very scarce with us. We do not reckon upon having more than one or two in a boat.

8473. What is the next?—Hake.

8474. What will be the quantity of hake?—That will depend on the season of the year; will you take the average?

8475. Yes.—Put them down at about 5 cwt. a boat.

8476. About 20 tons?—Yes.

8477. What else have you?—We have gurnet.

8478. What would be the quantity of gurnet?—You may put them down at 2 cwt. a boat.

8479. What is the next kind?—Whiting.

8480. At about what do you put them down?—Half a cwt. a boat.

8481. What is the next?—Flat-fish and cod and ling. You may sum all that up together and put them down at half a cwt. on the average.

8482. But you have not got up to 50 tons yet?—But where are all the rays? We have abundance of rays here; we have not got the brills, the doreys, and red mullets.

8483. They will make up the rest?—Yes, then there are the rays and skate.

8484–5. How many of them are there?—We have great quantities of rays. I should say three dozen a boat.

8486. Are there as many skate as brill, doreys, and red mullet put together?—Yes.

8487. Then there would be about 3 tons of each?—Yes, there are more than that, but that is near enough.

8488. Are the skate falling off, or are they increasing?—I don't think they fall off.

8489. Are you quite certain upon that point?—Yes.

8490. In the northern fisheries they find the skate falling off?—We do not. I am sorry to say that we catch too many at times. We have not got a market for them.

8491. Have the haddocks fallen off?—We cannot account for the haddocks on this coast. There is no certain season in which we catch them here.

8492. It never was caught much here, was it?—It has been one or two seasons.

8493. But on the average the catches have not been great?—No.

8494. You do not notice any particular increase or decline in that fish?—No.

8495–6. Did you ever bring up any spawn in your drag net?—I have seen a little about my net in my day. It hangs about the meshes of the net. I cannot say what kind it is.

8497. Are you acquainted with the markets for fish?—Yes.

8498. I think you said that for seven years you have been a salesman?—I have not been a salesman for seven years, but I have been on shore that time.

8499. How many years have you been a salesman?—I have only been a salesman nine months.

8500. Then you cannot speak as to the comparative price over any long period?—I was a buyer previous to that.

8501. How long did your experience as a buyer extend?—About 15 years.

8502. Have you found during those 15 years that the price of fish has materially increased?—No, I think it is pretty much the same as it was 15 years ago.

8503. Fifteen years ago I suppose you had railway communication?—Yes. Perhaps you will allow me to say that I found the fish last year, in 1862, fetch as high a price as ever was known.

8504. How has it been this year?—It has fetched a high price this year too. Since the railway communication was opened we have had additional facilities for getting the fish into different towns and markets.

8505. In the course of your experience can you tell us on the whole what quantity of fish may come to this port in a year?—I cannot tell that exactly.

8506. Or whether on the whole it has increased or diminished?—I should think on the whole it has diminished, if you take all classes.

8507. Do you think there are fewer fish caught here by the larger quantity of boats than were caught formerly?—Yes.

8508. On the whole?—Yes, on the whole.

8509. What do you think is the reason of that?—

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I attribute it to dragging in the shallow waters about here.

8510. Do you mean the quantity caught here, or the whole quantity brought in?—I am taking it either way.

8511. But if you have more boats you may have as many fish brought in, although each may bring a smaller quantity?—If you go into figures you will find there have been larger nets, larger beams, that our vessels are larger in tonnage, and that we drag in a six hours' drag over two or three miles more ground during the time.

8512. Well, they ought to catch more fish, ought they not?—They ought, but I think there is not the quantity of fish that there was formerly on the whole.

8513. I think you said that you yourself had not practised line-fishing?—No.

8514. Do you know anything about the herring fishery here?—No, but there are men in the room who can tell you all about that.

8515. Do you know anything of the mackerel fishery?—No.

8516. Do you ever cure any of the fish on board at such times as you cannot bring them ashore?—Only just a little for present consumption and for our families.

8517. Generally speaking you can bring the fish ashore in a fresh state?—Yes.

8518. You have no wells on board?—No, we have no wells and no ice.

8519. Do you think it would be of advantage to have ice?—I think it would.

8520. The system pursued by the Hull fishermen is to have ice?—Yes.

8521. They have derived advantage from it?—Yes.

8522. Do you not think that you would have the same advantage here?—I don't know. We should have to organize the matter first.

8523. They have found it pay well at Hull?—The fishermen themselves objected to it years ago.

8524. Did they object to use ice?—Yes.

8525. Why did they object?—They thought the owners were going to usurp and tyrannize over them, and keep them at sea.

8526. Is that the feeling now?—Pretty much so.

8527. Is that the reason that ice is not used?—There is not so much necessity for it here as at Hull. We do not fish so far away from the coast. We can get the fish to the market at Bristol, Portsmouth, Plymouth, or somewhere.

8528. Have you ever considered the propriety of adopting that plan?—I have as an individual.

8529. Has it not been generally considered?—It has not been mooted generally, but two or three of us have privately considered it.

8530. (*Professor Huxley.*) Did you hear the regulations I read just now?—I did.

8531. Did you ever hear of them before?—Yes, but I am sorry to say that I never observed them.

8532. Have you had anybody to bring you to book?—I never have been brought to task for not observing them.

8533. Was your father a fisherman here?—Yes.

8534. Was your grandfather?—On my mother's side; but my grandfather on my father's side was a tailor.

8535. I think you spoke of your grandfather just now?—I did not mean my grandfather; I meant the old gentlemen who follow it.

8536. Have you any notion of the time when trawling was first practised here?—No.

8537. It is a very long time since it was first practised?—Yes, may be from the time of Moses. I question whether you could get any account of it. The Torbay trawlers have gone all through the world.

8538. Are you in the fishery club here?—Yes.

8539. There are about 150 vessels insured in that club?—Yes.

8540. About 80 of them fish off this coast?—Yes.

8541. Then what becomes of the rest?—In the summer season about a dozen of them will go to South Wales and Tenby.

8542. No more than that?—No, about a dozen or 15. Then about a dozen or a score will go up on the Kentish coast next month—to Ramsgate, and perhaps half a score will go to Hull.

8543. Do they come back in the winter time?—No, in the summer. The South Wales men are coming back now. They are now arriving.

8544. The north countrymen come down in the summer?—Rather in the spring.

8545. The South Wales men come back in the winter?—Yes, at the fall.

8546. How long do they remain at home?—All the winter, until the month of May.

8547. Cannot they catch fish in the Bristol Channel in the winter?—No, it is only a wild place for them then.

8548. Are there no harbours there?—No.

8549. Is Tenby the only harbour they have?—Yes.

8550. That is a tidal harbour that they cannot always get into, is it not?—Quite true.

8551. Then do they stop there?—A few remain there.

8552. Do they bring the money they earn aboard and spend it here?—Yes, a little of it as it were—what is called the overplus.

8553. When did the system begin of vessels going to other places for the purpose of trawling?—I do not know the date.

8554. Was it before your recollection?—Yes. Perhaps there are one or two old gentlemen here who can answer that question.

8555. Do you think the number of trawlers here has increased since they went away?—Do you mean the increase in the numbers and size combined.

8556. Has the number that fish off the coast here increased?—Yes, a trifle.

8557. Notwithstanding the number of vessels that have gone away?—Yes.

8558. Then they have not gone away because the fish were scarce?—We have more vessels now fishing here on this coast all the year round than we had formerly, taking the whole year through, summer and winter.

8559. Do the crews of the vessels live largely upon trawled fish?—Yes, chiefly.

8560. Did you ever hear of their being made ill by doing so?—No; we get it pure out of the water, and into the pan it goes.

8561. Did you ever hear of fish being rejected or account of being damaged?—I never reject any.

8562. All is fish that comes to your net?—Yes.

8563. When you were a fisherman had you ever occasion to throw much overboard on account of its being damaged?—No, unless we get a large rock or stone in our net that would mangle the fish if we had a strong wind.

8564. But under ordinary circumstances?—No; if we make a good haul there may be one or two.

8565. Are many dead?—No; we may get hold of a monk or a buffoon, or something like that.

8566. What do you call a buffoon?—It is a wide thing.

8567. Is it an angler fish?—Yes; we have no market for that.

8568. Then you do not care to get it?—We have no sale for it, or for the monks either. We may sometimes get a blind cod, or a fish that has been wounded, or a dogfish, or something of that sort.

8569. But from your answer I judge that the proportion of fish damaged in that way is very insignificant?—Quite so.

8570. Is any proportion of the fish you take in your trawl in the deep sea so small that you are obliged to throw it overboard?—Yes, we sometimes get a few little gurnets.

8571. Do you get any small turbot or soles?—No, never.

8572. How do you account for that?—We imagine they come to the shoals to spawn, and go off, when the cold weather comes, into deep water. By that time they are about two thirds grown.

8573. Then except gurnets and the like you have no proportion worth speaking of that you reject on account of their being small ?—No.

8574. Is there any difference in the quality of the hooked fish as compared with those caught in the trawl ?—There is a difference in the brightness of the fish at times.

8575. Can you as a fish salesman get a better price for hooked fish ?—No, only for hooked whiting.

8576. Why is that ?—There is a good deal of prejudice. Some people are tickled with a little fancy, and they like to see a thing bright.

8577. Can you tell the difference between a hooked whiting and a trawled whiting ?—Yes.

8578. Can you tell the difference between a trawled sole and a hooked sole ?—No. I never saw a hooked sole in my life.

8579. Can you tell the difference between a hooked turbot and a trawled turbot ?—No, I cannot.

8580. Do you agree with the previous witness that the quantity of soles is falling off here ?—Yes, I do.

8581. Can you account for it ?—I can only account for it by the fishing in shallow water in the bays and creeks, and by the drag nets dragging off our shores.

8582. (*Mr. Caird.*) Are they building as many vessels now as they have been in recent years ?—Not at present.

8583. What is the cause of the present suspension in building operations ?—There was a little failure in the business last year.

8584. Was it a failure occasioned by over-building ?—Yes.

8585. There were too many vessels built for the requirements of the trade ?—Yes, too many.

8586. And what was the result ?—They became bankrupt in the business ; the consequence of which has been that there have been no vessels built since. There has been two or three built, but they have not been purchased. They have been built on spec, not ordered.

8587. As one consequence of the bankruptcy, and the trade being overdone, there has been a pause in the increase ?—Yes, and it will remain so until it finds its level again.

8588. Are you aware whether, in consequence of the issue of this Commission, there has been any suspension of the building of vessels or the making of nets ? You make nets, I believe ?—Yes.

8589. Have you ceased to make nets ?—I have ceased to make nets for the last six months, ever since I saw a report of a meeting held by our Northumberland and Durham friends in regard to this trade and the deep-sea fishery. Instead of getting prepared, as I have done for seven years in the winter, with a stock of nets, I have now run out, and I am just keeping from hand to mouth.

8590. Did you apprehend that there was to be some regulation as to the size of the mesh ?—I apprehended there would be an alteration in the size of the mesh.

8591. Do you think that such an alteration is called for ?—I think it would be of benefit to the fishery.

8592. Did you think that this inquiry would lead to an alteration in the size of the mesh ?—Yes.

8593. Do you think the size of the mesh should be enlarged ?—Yes.

8594. To what size do you think it would be proper to enlarge it ; I mean the cod end of the net ?—That is the smallest scale.

8595. The present size of the cod of the net is about one inch from knot to knot ?—Yes.

8596. Do you consider that too small ?—Yes, it is too small.

8597. Why do you find it too small ?—We get the very small whiting and the very small red mullet, and it chokes as well, and prevents the net being drawn along lightly, as we wish to have it.

8598. Is that through the smallness of the mesh ?—Yes.

8599. (*Professor Huxley.*) The law as it at present stands is this : " Trawls shall be made with nets " the meshes of which shall be at least one inch and " three quarters square, from knot to knot, along the " line " ?—One inch and three quarters ?

8600. Yes. The net you have shown us is an illegal net ?—Yes.

8601. (*Mr. Caird.*) This net is smaller than the law authorizes it to be made ?—Yes, it is smaller.

8602. Are you aware that that is illegal ?—Yes.

8603. Do you desire it to be enlarged ?—Yes.

8604. To what size ?—1½ inches, I should think, would be sufficient.

8605. And so strong is your belief in the necessity of that, that when this inquiry was issued you suspended making nets until you could see the result ?—Yes.

8606. In the belief that some such regulation would be made ?—Yes.

8607. (*Professor Huxley.*) But the mesh you recommend would also be illegal ?—Yes.

8608. All the nets you have now might be seized ?—I believe there is not a trawler whose nets might not be seized.

8609. (*Mr. Caird.*) Do you believe that the existing law could be enforced ?—I think 1¾ inches is rather too large.

8610. Why do you think so ?—On account of catching the red mullets.

8611. Would large sized soles go through a mesh 1¾ inches from knot to knot ?—A fair-sized sole would. I presume you take the square from knot to knot.

8612. Yes, from knot to knot ?—What would that make round the hole ?

8613. (*Professor Huxley.*) Seven inches.—A large sole would go through that.

8614. (*Mr. Caird.*) Then you think 1¾ inches would be too large ?—Yes.

8615. What size do you think would be the proper size ?—1½ inches.

8616. Is it the case with other fishermen that they have also suspended the making of nets under the same belief as yourself ?—Yes, that is my conviction ; and I am in company with numbers more or less day by day.

8617. Were you aware that you were making illegal nets ?—I was aware of it.

8618. Do you think the fishermen are aware that that they are using an illegal net ?—Yes.

8619. Nobody having interfered they have pursued that system ?—Yes.

8620. And yet you believe that it is contrary to their own interests ?—Yes.

8621. Why is it contrary to their own interests ?—I may bring three baskets to your one, in consequence of my meshes being smaller than yours, and that will affect the price a little. It will probably only bring me one-third more for my day's take than you get.

8622. But you would get a much larger proportion of immature fish ?—Yes.

8623. You think it better for all concerned that so large a proportion of these small fish should not be caught ?—Yes, I think it would be better for all concerned.

8624. (*Professor Huxley.*) Instead of the law remaining a dead letter, as it has done, do you think it would be of advantage to the fishermen, and to the supply of fish, that the regulations laid down here should be enforced by some persons in authority ?—Yes.

8625. Suppose a Government vessel were here to look after your vessels, and see that the beam was not above a certain size, and the mesh was not below a certain size, do you think that would be good for the whole fishery ?—I think it would ultimately.

8626. You heard the rules I read ?—Yes.

8627. Perhaps I had better take them specifically. First, with regard to the size of the nets, the Act of Parliament says : " Trawls shall be made with " net the meshes of which shall be at least one inch " and three quarters square, from knot to knot, along

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"the line;" do you think it would be a good thing to enforce that regulation?—No, that is rather too large; 1½ inch, from knot to knot, along the line, would be enough.

8628. The next article says, that the length of the beam shall not be more than 38 feet. The words are these: "The length of the wooden yard or beam, to "which the upper part of the mouth of each trawl-"net shall be fastened, shall not exceed 38 feet;" do you think that that is a good rule to enforce?—That would depend considerably on the length and size of the smacks.

8629. In point of fact, if that were enforced it would prevent you from having smacks above a certain tonnage?—Yes, it would.

8630. You think that would not be advantageous to your fishing?—No, it would be rather against it.

8631. Then there is another rule: "The under "trawl net, to a length of 10 feet from its extremity, "may be strengthened by rubbing pieces made of old "nets; but these rubbing pieces shall be so fastened "that they shall not cross or narrow the meshes of "the trawl net, which must always remain at least "one inch and three quarters from knot to knot, along "the line, open and unobstructed." Are you in the habit of fastening rubbing pieces of this kind?—Yes; they are what we call "false bellies". We only lace them on, that is all, and we let them fly like wings.

8632. Then, in fact, you comply with the law?—Yes.

8633. Have you any supplementary nets added to your trawls?—No.

8634. The article says: "The size of the meshes "of any supplementary nets which may be added to "trawls shall be at least two inches square, from knot "to knot, along the line." You say you don't use them?—No.

8635. Another article says: "The total weight of "the two irons or head pieces of a trawl shall not "exceed 287 lbs." Do you think that is a good rule to enforce?—Yes, I do.

8636. Why?—Because I think that above that weight they have a tendency to work against us.

8637. Why?—With the pressure of the weight, and the size of the smacks, we should be dragging everything to pieces.

8638. Then you think it would be well to interfere with that matter by law?—I do.

8639. Why do the fishermen use heavier head irons than they want?—Because Jack wants to run ahead of Tom sometimes.

8640. But why should he use heavier head irons, that would keep him astern?—We go by our own judgment. I, with my smack of 60 tons, may require heavier irons then you with your smack of 40 tons, because I drag my heavier irons with a little more speed than you, and my heavier irons will keep down if I am running ahead of you. It is to my advantage to drag up more than you.

8641. So that the larger the tonnage of the vessel, the heavier the head irons you can use with advantage?—Yes, in proportion. That is the rule.

8642. Then does it not follow, with the weight of your trawl and the length of your beam, that that would act as a limitation on the speed of the smack?—No.

8643. If you use lighter head irons would not the net drag faster through the water?—Yes; but we want to know at what rate we are dragging, and what fish we are getting at the speed.

8644. Suppose you have a smack of 60 tons, will you not drag faster through the water with the same head irons than a small smack?—Yes.

8645. Then will you not want heavier head irons?—Yes.

8646. Then, if you are not allowed to use for a smack of 60 tons heavier irons than a smack of 40 tons, would not that interfere with you?—Yes, considerably.

8647. Then, under these circumstances, would you like to see that rule enforced?—I am not one of those who go to the north.

8648. But suppose it were enforced in the south?—I believe that having large smacks is against us. I believe that a smack of 45 tons is quite large enough for this port.

8649. Then why would you enforce the regulation on other people?—They are quite at liberty to use heavier head irons, but they will run themselves out in the course of time.

8650. Do you think it would be right for the Government to interfere with the size of the plough a man may use?—No, not in the least.

8651. Here is another rule: "The total weight of "iron chains or leads used for loading the ground "rope of a trawl shall not exceed 110 lbs." I understand that you use no weight on your ground rope?—No.

8652. Then that does not matter to you?—No.

8653. What do you think of this rule: "Trawl-"fishing is forbidden in all places where there are "boats engaged in herring or mackerel drift-net "fishing"?—If I understand the drift-net fishery, the herring and mackerel boats heave in at sunset, and heave out at sunrise. Is not that the case.

8654. Yes, half an hour before sunset?—We should not interfere with them then.

8655. Don't you trawl at night?—Yes.

8656. Then how would you not interfere with them?—We get out of the way of them.

8657. You do that as a matter of preference?—Yes.

8658. But should you like this regulation to be enforced if it would keep you away from the ground?—Yes; I should not object to it.

8659. Why not?—Because then they have a chance of getting a livelihood as well as us. Why should we want both night and day. We have got all day to work in, but it is of no use to them.

8660. Then there is another rule: "Trawl-boats "shall always keep at a distance of three miles from "all boats fishing for herrings or mackerel with drift-"nets." Would you like that to be enforced?—Yes.

8661. You would not mind, supposing you were trawling, and had got your trawl down, and the herring nets came upon you, taking up your trawl and going away?—We should haul up, and get out of the way.

8662. You would not mind that?—No, I should not myself.

8663. On what ground would you not object to it?—For instance, they may be drifting off the Start, and we are there trawling. We can get a chance of catching fish by day as well as by night, though we like night best. Now these men only get the night. Then why should we monopolise the ground by night as well as by day. We like to give Jack a chance as well as Jim. Live and let live, I say. And then we can trawl when it is not weather for them to drift. We have there another advantage in the weather. Then again there are only certain months in the year for their drift-net fishery on the coast.

8664. Quite true. Then, in fact, you have no objection to this rule which obliges you to give way to the drift-nets?—Not the slightest.

8665. And if your trawl was down, and they shot their nets near you, you would not object to take it up again?—I should haul it up, and get out of the way.

8666. There is another rule about trawl-boats here, that they shall carry vanes at their masthead. Is that the practice here, commonly?—No, it is not practised.

8667. The British trawl-boats are to carry red vanes; do they do that?—No. Some of them may.

8668. They do just as they like?—Just as they like.

8669. Then am I to understand that generally you would rather prefer to have a fishery officer to look after you, and see that you obey the regulations, than be left to yourself?—Yes, I should.

8670. You do not think that you understand your own interests sufficiently to be left alone?—No; we want a school to teach us. I do, for one, I know.

8671. (*Mr. Caird.*) Do you find that the herring fishermen follow the trawl-vessels ?—They do, at times.

8672. Is that in the expectation of getting on the ground where the herrings are, in consequence of the trawl-vessels being there ?—No.

8673. In what way then ?—If we are fishing out in the bay in their season they come there.

8674. But do they not come because you are there ?—No.

8675. Do they not expect to find more herrings where you are ?—No.

The witness withdrew.

HENRY SALISBURY called and examined.

8676. (*Mr. Caird.*) Have you been long engaged in the trawl-fishing ?—Yes ; 29 years.

8677. Are you still engaged in it ?—Yes, up to this day.

8678–80. Both as a fisherman and as an owner of a trawl-vessel ?—No, not as an owner.

8681. What size is your vessel, the vessel in which you fish ?—35 tons new measurement.

8682. In your experience has the general size of the vessels employed in the trawl-fishing increased?—Yes, I think it has.

8683. And has the size of the trawl been increased ?—Yes, decidedly it has.

8684. Do you remember what it was 20 years ago ?—Yes.

8685. What was it ?—From 30 to 33 feet, and now sometimes it is 43 feet ; it has increased in some cases more than 10 feet in length.

8686. With regard to the size of the mesh, has that diminished ?—No, it is about the same.

8687. There has been no change in the mesh during that period ?—Not in my recollection.

8688. The increase in the size of the trawl has gone on I suppose along with the increase in the size of the vessel ?—Decidedly it has.

8689. And it corresponds with it ?—It corresponds with it.

8690. Do you find that you get a larger haul with these larger nets than you used to get 20 years ago with smaller nets ?—At certain seasons of the year we do.

8691. Have you observed in your experience a considerable increase in the number of vessels fishing on the same ground ?—Yes.

8692. Is each vessel as successful now as it used to be in former times ?—I do not believe that they have been as successful within the last three or four years.

8693. Has there been a falling off in the last three or four years ?—Yes, there has.

8694. Has that been among all kinds of fish caught?—Only some portions.

8695. What kind particularly ?—The soles and the flat-fish.

8696. Has the falling off been considerable in that kind of fish ?—Yes, it has within the last five years past.

8697. What do you think has been the cause of that ?—The only cause of it, so far as I can imagine, is the trawlers fishing in the bay.

8698. Did they not fish in the bay previous to five years ago ?—Yes, they have fished here off and on ever since I have been fishing here.

8699. Was there no perceptible decrease up to five years ago, notwithstanding that they fished there ?—I can mind the time when there was a great deal of fish caught in the bays ; double the quantity compared with what is caught now.

8700. Do you think that by constant trawling in the bays the quantity has decreased ?—Yes.

8701. You say you only observed the decrease about five years ago ?—Yes.

8702. The decrease only began five years ago ?—The decrease in the deep fishery has only been during the past five years.

8703. Then you have observed a decrease in the deep-sea fishery ?—Yes, greatly.

8704. Can you say the extent it has decreased compared with what it was formerly ?—I cannot say to what extent, but in the last five years what we call the "in-ground" fishing here has greatly diminished ; there has not been so much fish caught by one third as there was before.

8705. Do you ascribe that to the trawling in the bay and in-shore ?—Yes.

8706. In what way does the trawling in-shore injure the fishery ?—By taking the young fish. I believe the mother fish goes in there to spawn.

8707. Have you ever seen any spawn in the trawl nets ?—Never.

8708. Then do you think it is by injury to the spawn that the damage is done ?—No, I think the fish comes to perfection before it is hurt.

8709–10. You think the damage is not done to the spawn itself ?—I think not.

8711. And that the injury is done by catching the small fish ?—Yes.

8712. Have you trawled much in-shore?—I trawled as much for two years running at one time as any man going, but I have not done so during the last three years.

8713. When you were in the habit of trawling in-shore did you catch a great quantity of fish ?—Yes, a great quantity.

8714. How many baskets of fish would you, on an average, catch in a day's fishing ?—Sometimes I have had four or five baskets, sometimes three or four.

8715. How many would be small fish ?—On an average about one out of five.

8716. About one fifth of the whole catch ?—Yes.

8717. Were these small fish unfit for the market ?—Decidedly they were, and they were chucked overboard.

8718. Were they dead ?—Some were dead, and some were alive.

8719. When you are fishing in the deep sea do you find that you get as large a proportion of small fish ?—No, not a quarter.

8720. Have you found that the quantity of turbot caught here is decreasing ?—No.

8721. Is it as good in quality ?—Yes, it is as good in quality as ever.

8722. Is there any other fish except flat-fish and soles that you have observed falling off in quantity ?—No, there has not been so much falling off in any fish except flat-fish and soles.

8723. How do you think that could be remedied ; what would be the plan to adopt for preventing that decrease ?—I think if the Government were to establish a regulation keeping all the trawlers out of the bays for eight months in the year, and likewise the drag seines, there would be an increase in the quantity of fish.

8724. You would keep the trawlers out of the bays for eight months in the year ?—Yes.

8725. What eight months?—From April to October.

8726. Then from October to April you think no damage is done in the bays by the trawlers?—No, not from October to April.

8727. In the cold weather ?—Yes.

8728. Is it because there are very few young fish there then ?—Yes, I think the small fish go to the deep sea when the cold weather comes.

8729. You think it would not injure the fishery if the fishermen were allowed to trawl in the winter months in-shore ?—I do not think it would.

8730–1. But in the summer months you think they should be excluded from trawling in-shore ?—Yes, this summer I have been fishing at Rye Bay between Dover and Hastings ; there is shallow water there and deep water also; it runs from 18 fathoms to 4 fathoms. It is not often that we do go into shallow water if we can help it, but we are sometimes

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compelled to do so, and then we get a tremendous lot of fish that is not saleable at all; we heave it overboard as fast as it comes on board.

8732. Is that in consequence of its being too small?—Yes, as soon as we get in deep water we get fish that is saleable in any market; the ground there goes off gradually from 10, 11, 12, and 14 fathoms, up to 18, all within four miles and a half of the shore.

8733–4. Then you think that the destruction principally takes place in shallow water and in the warm months of the year?—Yes, it is about the warmest time of the year.

8735. Would you think it any hardship to exclude the trawlers from coming in-shore to fish during those months?—No. I would not let them fish in-shore during eight months of the year.

8736–7. You would exclude them for eight months?—Yes, I think that would be a great benefit to the whole of the fishermen.

8738. Is the quality of the fish you catch now quite as good as it used to be in former times?—Yes, quite as good.

8739. Is the size of the fish as large as it was formerly?—Yes, it is quite equal.

8740. Have you observed any particular fishing ground that you have been in the habit of resorting to for many years, which has been constantly fished over by the trawlers without injuring it?—Yes.

8741. Is there any fishing ground you can name?—The only place I can name is here at Brixham. I have not been away a great deal.

8742. Is that a place called the "Gut" to which a former witness referred?—No.

8743. Is it the in-ground off Dartmouth?—Yes.

8744. Is that the ground to which you refer?—The in-ground is just off here.

8745. I thought you meant the ground off New Ridge, but it is the in-ground off here you speak of?—Yes.

8746. Have you observed any decrease in the quantity of fish except flat-fish and soles, which you say have fallen off?—Not as a general rule.

8747. You do not think that you have fished out that in-ground?—No.

8748. It has shown no signs of being fished out?—No, we go out on a Monday morning and we fish that ground and find as much on Friday night as we did on Monday morning, and we are fishing all over the same ground the whole of that time.

8749. You have not observed that you have nearly fished the ground out?—No; I think the fish at times have a great deal to do with the tides.

8750. In what way?—When the tides run strong we catch more fish than when the tides run weak.

8751. Is it from a variation in the tides and other circumstances that there is an occasional difference in the quantity of the fish, and not from the fact that the fish have disappeared altogether?—Yes; the variation of the tides has a great deal to do with the quantity of fish we catch.

8752. Have you fished on the Dutch coast?—Yes, for four years.

8753. Is that lately?—Seven years ago.

8754. Do you find that the fishermen there use much the same kind of trawl that you do?—Yes, it is about the same length and size as ours, only it is of a different shape; that is all. The trawl irons have a different shape.

8656. But do they use a trawl?—Yes, they use a trawl like ours.

8756. Do you know whether the meshes of their nets are smaller than yours?—That I cannot tell.

8757. Did you find any complaint on that coast that the fish had gradually fallen off in consequence of the use of the trawls?—In some seasons you may find a scarcity, but in others there is an abundance of fish.

8758. Have you ever used ice in packing your fish, so as to preserve them and enable them to be sent ashore fresh?—No.

8659. Do you often lose fish from the want of the means of preserving them in bad weather?—That does not occur once in twelve months on this coast.

8760. Have you been on any coast where there has been a greater risk of damage?—Yes, in the North Sea.

8761. Was there such a difference in the risk as to make it necessary to use ice?—Yes, in the spring time of the year.

8762. You have not had the same difficulty here?—No; it has not occurred here at all.

8763. Have you ever fished on the Dogger Bank?—No.

8764. In the Silver Pits?—No; I have never been so far down as that. I have only been down off Yarmouth and Lowestoft.

8765. Are you paid by the share?—Yes.

8766. Is that system of payment by share the common system practised here?—Yes, right through the whole fishery.

8767. There is no such thing as paying wages to the men?—No, not at all.

8768. Does the share give you a good livlihood?—Yes it does. It has been sufficient for me, although it has been very slack lately.

8569. Do you know that it is a fact that within the last year there has been an increase in the number of vessels here?—Really I can hardly tell.

8770. Have there been any new vessels built?—Yes, decidedly.

8771. Has the number been increasing in the same proportion as during the preceding five years?—Yes, it has been nearly about the same.

8772. Has there been a stop at all in the increase?—There has been no stop at all in the building, not as yet.

8773. Has it been on the whole a prosperous business?—I believe it has with three parts of the people engaged in it.

8774. There have been some exceptions?—Yes, there are a great many who meet with misfortunes, and then they cannot go a-head like the others. They lose their craft, and so on.

8775. You heard the evidence of the previous witness with regard to the size of the meshes of the cod of the net?—Yes.

8776. Do you agree with him that the present size should be enlarged?—Yes, in a certain part of the net the smallest mesh should be enlarged.

8777. What size do you think would be the proper size to adopt?—Two and a half.

8778. Two and a half inches from knot to knot?—No, not from knot to knot, I would have one knot between.

8779. That would be $1\frac{3}{4}$ inch, the legal size?—Yes, but they have them smaller than that now.

8780. Do you think it would be of advantage to the fishermen generally that the legal size of $1\frac{3}{4}$ inch should be adopted?—Yes.

8781. Do you think it would be of advantage to the fishermen, as well as to the general take of fish, that such a regulation should be enforced?—Yes, decidedly. I should prefer it for my own part, and I know scores of fishermen, nay hundreds, who would.

8782. Is there any other subject on which you think it desirable that some regulation should be enforced, as to the length of the beam, for instance?—No, if the beam were reduced there would be a great deal of danger to the men and the vessels at times. It would do considerable damage to shorten the beams that are carried by the large vessels.

8783. Then you think it right for every man to take what size of beam he thinks most advisable for his own vessel?—Yes.

8784. You would limit the regulation to the size of the mesh?—Yes.

8785. Do you ever come in contact with the long-line fishermen?—No, never.

8786. Have you never fouled their lines?—No.

8787. Are you at all engaged in the herring-fishing?—No.

8788. Did you ever foul the herring nets?—No, but

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I have been foul of the mackerel nets, and I think that is all the same.

8789. Have you done them much damage?—At one time I did a great deal of damage.

8790. Could that have been avoided?—Yes, i could have been avoided by the mackerel boat, or else they would have carried on a lawsuit against us.

8791. Did they sue for damages?—No.

8792. How did it occur?—The mackerel boats when they drift their nets, are bound to wear two lights; now, she had only got one up, and we thought it was a square-rigged vessel, and that is how we caught the nets. It was entirely owing to her not having two lights up.

8793. You were misled by her not having proper lights?—Yes.

8794. You were not liable, then, for the damage done?—No.

8795. If the mackerel boat had had proper lights could you have avoided it?—Yes, without heaving our net up; we could have turned our vessel about the other way.

8796. Then you do not think that any other regulation on that subject is required?—No, I do not think there is.

8797. Have you ever in your experience been able, when at sea, to aid vessels in distress?—Yes, many times. I have been the means of saving nine lives in the North Sea, floating on the water.

8798. Do you think the trawl-boats are often serviceable in that way?—Decidedly they are.

8799. Are they good sea boats?—There are none better.

8800. And they are easily managed at sea?—Yes, they are very easily managed.

8801–2. And in that way you render service in a time of danger?—Yes. I have been three times up the Channel with big ships,—the biggest kind of merchant ships. I have had to pilot them up.

8803. Is the catch of skate falling off here?—No, I think it increases of the two. At certain times of the year we get very large catches.

8804. Have you any knowledge of the crab, lobster, and oyster-fishing?—No.

8805. (*Professor Huxley.*) Do you catch many haddocks about here?—No, I hardly see a haddock in 12 months.

8806. Are they scarcer than they used to be?—I can hardly recollect any time since I have been fishing here that I have had any great quantity. There were two seasons in which I got some.

8807. They never seem to have been very abundant here?—No.

8808. Do you know a fish they call the "pollack"?—Yes.

8809. Do you get it in considerable numbers?—No, it is very unfrequent that we catch any.

8810. What was the average yield of a trawl-vessel 20 years ago?—That is out of my remembrance, I was only a lad then. I can only tell you what has occurred since I had my own earnings.

8811. How long ago is that, is it 15 years ago?—No, about 14 years ago.

8812. What was the average yield then?—It averaged during the first two years I was out of my time 1*l.* 5*s.* a week.

8813. Was that the average wage of each man in the summer?—Yes, barring the master.

8814. What is the average rate of wages now?—For my own part I know that I have not taken up myself during the last two years more than 15*s.* a week, and I have a master's wages too now.

8815. Of course, if you are paid by share, your earnings are regulated by the price of the fish?—Yes.

8816. Is the price of the fish lower than it was formerly?—It is better at times now than ever it was.

8817. So that the loss you have sustained does not arise from the decrease in the price of the fish?—No, not at all.

The witness withdrew.

JAMES BOWDEN called and examined.

J. Bowden.

8818. (*Mr. Caird.*) How long have you been a fisherman here?—I have been at it for about 19 years.

8819. Are you still employed as a fisherman?—Yes.

8820. Have you any share in the vessel in which you fish?—Not at all.

8821. In the course of your experience have you noticed whether the quantity of fish you catch here now has increased or diminished, as compared with what it was when you began fishing?—I think it is better now than it was 14 or 15 years ago.

8822. What would you consider a fair catch of fish in the course of a week 15 years ago?—I consider now that the money I make is more than it was 15 years ago.

8823. Can you tell us the quantity of fish caught then, and compare it with the quantity caught now either in the course of a day, a week, or a month?—It varies according to the time of the year.

8824. But in each case take the same time of the year?—There are more fish caught now in the winter time than there used to be.

8825. What would be an average day's fishing 10 years ago in the winter time?—Do you mean the money made or the weight of fish?

8826. The weight of fish?—Perhaps a dozen or 14 baskets.

8827. What do you get now?—Now we get sometimes 17 or 18 baskets.

8828. Then you think there has been a decided increase in the quantity of fish?—Yes, at times.

8829. But on the average, taking one time with another, do you think you can make a better living out of it now than you could 10 or 15 years ago?—Yes, I think I can.

8830. Tell us in money what the difference will be?—14 or 15 years ago I should average 8*l.* or 9*l.* a month, or perhaps 7*l.* or 8*l.*

8831. What can you average now?—We can average now from 8*l.* to 10*l.*, 10*l.* to 11*l.*, and 11*l.* to 12*l.* and on that way.

8832. Has that been in consequence of the increase on the price of the fish?—Perhaps there has been a little in that way, and a little in the extra quantity of fish caught.

8833. A little in both?—Yes.

8834. Are the quality and size of the fish as good as they were?—Yes, just about the same.

8835. Is there any particular kind of fish that has diminished more than another?—I cannot say, except perhaps a little of the flat-fish.

8836. You do not get as much flatfish as you caught formerly?—No.

8837–8. But with regard to all the other kinds of fish you think there has been an increase?—Yes.

8839. Have you been in the habit of trawling in-shore?—Not a great deal.

8840. Have you observed in your experience of trawlingin-shore that a large quantity of fish is caught there?—Yes.

8841. Small fish?—Yes.

8842. What is done with it?—It is thrown overboard.

8843. When you are out in the deep-sea trawling you do not find the same quantity of small fish?—No.

8844. Then you have no occasion to throw as much overboard in the deep sea?—No.

8845–6. Do you think it would be any hardship to the trawlers to exclude them during the warm weather from fishing in-shore?—No, not in the summer months.

8847. Would it be a hardship if they were excluded

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all the year round?—Yes, because there are times when we cannot go out to sea, and we are glad to get a shilling in-shore when we cannot go further off.

8848. Does that arise from bad weather?—Yes.

8849. In the winter months?—Yes.

8850. At that time you consider there is less injury done from in-shore fishing than in the summer months?—Yes.

8851. Do you get fewer small fish in the winter time?—Yes we get very little then.

8852. Not in the cold weather?—No.

8853. Have you been engaged in the herring-fishing here?—No.

8854. In no other fishing except trawl-fishing?—No.

8855. Have you ever fouled herring nets or mackerel nets?—No.

8856. Have you ever come in contact with the long-line fishermen's lines?—No.

The witness withdrew.

R. Pepperell.

ROBERT PEPPERELL called and examined.

8857-8. (*Mr. Caird.*) Have you been long engaged in the fishing in Start Bay?—Yes, more than 20 years.

8859. What kind of fishing have you followed there?—I am generally engaged in seine-fishing, in hauling the nets ashore; we haul them ashore in Start Bay.

8860. Can you tell us the size of the mesh of your nets?—The bunt of the mackerel seines is an inch from knot to knot.

8861. What other size have you?—For the arms of the net we have about $1\frac{1}{2}$ inches from knot to knot. Then we have other nets that we call "tuck" nets; we use them for catching flat-fish. They are put out at a distance of from 600 to 800 fathoms from the shore.

8862. What do you catch with them?—Flat-fish, such as plaice, dabs, and soles.

8863. What is the length of that net?—The nets are very short. We are obliged to go a long way off the shore The flat-fish do not come close in-shore. Our bay consists principally of large pebbles. We do not get any muddy ground till we get 200 or 300 fathoms from the shore. On account of the depth of the water, and the tides running so strong, we cannot shoot our seines for mackerel very close under the land. The average distance from the shore will be about 60 fathoms.

8864. How long in the course of the season do you follow the mackerel-fishing?—Generally we see the mackerel about the latter end of May, and not before that.

8865. Are they continuously on the coast from that time?—They are, up to the latter end of August, and sometimes in September.

8866. During the rest of the year what fishing do you pursue?—Some fish for crabs and lobsters, and others, during the summer time have the long rope nets and tuck nets for flat-fishing.

8867. Have you any long-line fishing or hand-line fishing?—Yes, we practise hook-fishing for whiting and bream.

8868. In your experience, has the quantity of fish fallen off or increased of late years?—The flat-fish has fallen off very much.

8870. Has any other kind?—No, I do not consider that any other kind has. The mackerel depends entirely on the season when it comes upon the coast, and so do the pilchards.

8871. You have them good one year and bad another?—Yes, sometimes we have an abundance, and at other seasons we have very little.

8872-3. Has there been any marked decrease going on gradually year by year?—Not a bit of it; there has been no decrease in anything except flat-fish.

8874. In flat-fish and soles has the size diminished as well as the quantity?—We catch a great deal of small fish in the summer season which I think we ought not to catch by using too small a mesh.

8875. What do you think is the cause of the falling off?—I think it arises from the trawlers working in the bays and using a small mesh.

8876. Then you think the evil arises from the use of a small mesh?—Yes from the use of a small mesh.

8877. Do you think if the trawlers used a large mesh in the summer time they would not do the same amount of damage?—I do not know how the trawl nets are constructed in comparison with our nets, but with regard to our own nets, I am satisfied that we catch large quantities of small fish, such as dabs, in the summer season, that we ought not to catch, and we catch them solely on account of the smallness of the nets.

8878. To what size should they be limited in order to avoid the destruction of these immature fish?—They should be what we call $3\frac{1}{2}$ inch; $1\frac{3}{4}$ inch from knot to knot.

8879. That is the legal size at present?—Yes, and it has been introduced in Start Bay already.

8880. Do you think it would be of advantage to everybody to use nets of that size?—I do.

8881. Would the fishermen like to see that law enforced?—Some of our common fishermen would fancy themselves injured, but I am quite sure that they would reap great benefit in the course of a couple of years.

8882. Have you ever observed spawn destroyed by the mode in which you fish?—No.

8883. Do you think any injury is done in your bay by destroying spawn?—No, we generally give up the tuck netting before the fish spawn. Flat-fish spawn about November, and we have finished then. We generally are not fishing till the month of March.

8884-6. With regard to fish, other than flat-fish and soles, is there as good a supply as there used to be?—Yes.

8887. Has the number of fishermen in your bay increased?—Yes, in some of the villages the number has increased, and in others it has decreased.

8888. Has the number increased on the whole?—On the whole it has increased, but in the crab fishery I think there has been a decrease.

8889. Are you yourself a crab-fisher?—No. Perhaps I may be allowed to say that in our seines we get no small fish except dabs. Our seines are 13 fathoms up to the bunt; it is necessary we should have them that depth on account of the deep water.

The witness withdrew.

G. Saunders.

GEOFFREY SAUNDERS called and examined.

8890-1. (*Mr. Caird.*) Have you been long a fisherman here?—Yes, for 50 years or upwards.

8892. Are you owner of a trawler?—Yes.

8893 5. Did you begin as a trawl owner?—No, I went as a servant after serving as an apprentice.

8896. But you have found it a good business, and have gradually become an owner?—Yes; the thing was that I had no other business to call my attention to.

8897. Have you found it a good investment?—I got my living out of it while I was obliged to work myself.

8898. Are you at this moment practising the fishing?—I do not go now, only occasionally.

8899. When did you cease to go to sea?—During the last three years I have been out a trifling time or so, but not as a fixed thing; I have been out very little indeed for three years.

8900. About three years ago you were fishing?—Yes.

8901. And you had constant experience of the fishing for many years previous to three years ago?—Yes, all my time.

8902. Have you during all that time been fishing continuously on the coasts in this bay?—Yes, and in the North Sea and the Silver Pits, and off here likewise at different seasons of the year.

8903. Have you observed in fishing in the North Sea and the Silver Pits whether the number of vessels has increased during that time?—They increase wonderfully.

8904. Have they increased on your own ground near home?—There has been an increase up to the present time since I was out of my time.

8905. Have you observed any falling off in the number of fish?—No, take it in and out it is apt to fall off some seasons, but we have not got the fish in our bay that we used to have.

8906. I am speaking now of the fishing ground in the deep sea, have you noticed any falling off there?—Not particularly; there has been no falling off equal to what there has been near the shore.

8907. Have you noticed a great falling off near the shore?—Yes.

8908. In what way?—We consider, as you have already heard, that the working of the bay in the summer time, when they catch the fish in its infancy, and where they drag every cove and creek and bay, that the fish has no time for rearing itself.

8909. Does it pay better to drag near the shore than to go out to sea?—They have no smacks to enable them to go out to sea; they only use those in-shore little coves.

8910. Do the trawlers who fish there fish the same as those who go out to sea?—Yes.

8911. Does it pay them better to fish in-shore?—They have a notion that they can get a night's work, when they do not care about going off.

8912–3. Is that in consequence of stormy weather?—No, frequently they have light weather, and they do not care about going off.

8914. Do you think it would very much increase the quantity of fish if the trawl fishermen were not allowed to fish in-shore during the warm months?—We have an opinion that it would.

8915. During what months of the year?—Six or eight months of the year.

8916-7. Do you think it would be of advantage that there should be some regulation as to the size of the mesh, or the net?—I think we have got them rather snug at present.

8918. Do you think they would be better a little larger?—I do not think it would do much harm if they were larger.

8919. Why do you consider them too small at present?—Because we take the small fish in the bay in our trawls.

8920. If your nets were made with a larger mesh would the small fish escape?—Some would, and some would not. Some of the small fish, if they got in the net and it had a large mesh, would get out, but if they were in for any length of time they would soon die, and would not be able to get out.

8921. Have you trawled much in-shore?—Yes, in turns.

8922. Have you ever found very small fish in your net?—Yes, at times.

8923. Was one-half of the fish you caught in the net small fish?—No, not so much as that.

8924. Was one fourth or one fifth?—Perhaps one third sometimes. If we have three baskets of fish we may pick up one of them very small at times.

8925. What do you do with them?—We chuck them overboard.

8926. Would they be dead?—Some would be dead and some would be alive.

8927. What do they consist of chiefly?—Little dabs or plaice, mostly dabs.

8928. Any soles?—Yes, we catch some very small soles sometimes.

8929. I understand you to say that the soles have decreased?—Yes.

8930. Do you think it necessary or advisable to make any regulation with regard to the length of the trawl beam?—No, not with regard to the beam, because that depends on the length of the vessel and the people who have the handling of it.

8931. Do you think it is at all necessary to regulate the size of the mesh?—Yes, I think it requires a little regulation.

8932. And you also think it desirable to exclude the trawlfishermen from fishing in-shore during certain seasons?—Yes.

8933-4. Do you think those two things would be beneficial generally to the fishermen here, and would lead to an increase in the supply of fish?—Yes.

8935. Have you had any experience of long line fishing?—No, I was never a long-liner.

8936. Have you ever been herring-fishing?—Not since I was 10 years old.

8937. Do you ever get foul of the herring nets?—No.

8938. Is there not much complaint on this coast of your boats fouling the herring nets?—I have known a little when the smacks have come in in wild weather in the nighttime.

8939. Do the French boats come on this coast to fish?—I have never seen them inside the edge of the land fishing. I have only seen them in the offing fishing in deep water.

8940. Do you meet with them there often?—Yes, in the winter season.

8941. (*Professor Huxley.*) You state that you have been fishing here for the last 50 years?—Yes, I have been fishing here for more than 50 years now.

8942. What would you consider a good take of fish for a week 50 years ago?—What would I consider a good take of fish for a week 50 years ago?

8943. Yes, a fair take for a week?—If we had fair weather for our fishing we might get from 8*l.* to 10*l.* worth's of fish during the week. Like everything else, it varies very much. One man may strike a few turbot more than another, so that you can hardly give an average for all the boats.

8944. I do not want to be very precise, I want a general average?—From 8*l.* to 10*l.* we should consider a good week's work.

8945. Was the price of fish higher or lower then?—It varied just as it does now, according to weather and the quantity of fish in the market.

8946. It was pretty much the same on the average?—Yes, I have known it dear when I was an apprentice and sometimes it is dear now-a-days.

8947-8. There has not been much falling off or rise in the price then?—No.

8949. What would you call a good average take of fish now?—If the boat takes from 8*l.* to 10*l.* worth now we call it a very good take.

8950. Then is the catch of fish pretty much the same now as it was then; has it remained pretty much the same from that time to this?—Yes, it is about the same in turns.

8951. But the kind of fish has rather varied; you say there have been less soles?—Yes, there are fewer soles in consequence of their being destroyed along the shore.

8952. Apart from the reason, is it the fact that there have been less soles?—Yes.

8953. Then that decrease must be made up by an increase in the take of other fish if you get the same money on the whole?—Of course, if there is less, if it is wanted, it will fetch the same in price.

8954. But you say the price is the same on the average, and that the quantity is the same, so that the falling off in one kind must have been made up by an increase in the other?—Yes.

8955. Do you recollect any of your forefathers, your father or your grandfather, talking of the time when trawling began here?—I have heard my father talk

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about it. He served his time to it, and his father before him, but I do not recollect my grandfather very well.

8956. Have you heard your father talk of your grandfather being a trawler?—Yes.

8957. Is there any tradition among you as to when trawling first began here?—No, I think not. The trawls have been greatly enlarged, and the nets increased to a greater length and spread than they were even in my time.

8958. But you have no tradition or saying as to when the people about here first began to trawl?—No, but years ago they had not any smacks to enter the water of the size our men have got now.

8959-60. What was the size of the smacks when you first began trawling?—There were some small ones, but the smack I served my time in was 42 tons builder's measurement. She is in the harbour now.

8961. She must have been a good boat, then?—Yes.

8962. What measurement would that be according to the new measurement?—I think it would be over 30 tons if she was measured now. I daresay she has been measured under the new Act.

8963. That is not much smaller than some of the vessels now?—No, there are some here now that are not bigger than she is.

8964. Do you recollect how many trawlers went out of the harbour at the time you were a boy, and first went trawling?—About 60 or 70. When they came from the other ports, where they had been fishing, there would be more.

8965. When you were a boy was it the custom for some of the smacks to go away to the Bristol Channel and other places to fish?—Yes.

8966. Did some of them go north?—They did not go down to Hull; no further than Dover or Ramsgate.

8967. But they used to go to Dover and the Bristol Channel?—Yes.

8968. Fifty years ago?—Yes, I went myself to Dover fishing the first year my time was up. Now I am 64 years old, and then I was turned 21.

The witness withdrew.

T. Hodder.

THOMAS HODDER called and examined.

8969–71. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, 66 years.

8972. What kind of fishing have you practised during that long period?—Everything, I believe.

8973. Was trawl-fishing carried on here when you began?—Yes.

8974–5. Was it very common then?—Yes. We had 60 sail of vessels engaged in it.

8976. Sixty years ago?—66 years ago there were 60 sail out of this port.

8977. Do you know how many there are now?—I should say there are 130 or 140 now.

8978. At that time were trawl-boats in the habit of going to distant parts of the coast, as well as fishing here?—They went from the Land's End to Portland.

8979. That was about the extent to which they went then?—Yes.

8980–1. When did they begin to go further afield?—About 10 years after that they began to go to Liverpool and Dover.

8982–3. Was there any cause for that; did they not find as many fish on this coast as they used to find formerly?—They went away on speculation.

8984. Did that system of going further away continue to increase?—Yes.

8985. Was it as a matter of speculation, or because they found the fishing becoming less productive?—There was no decrease in the fish; they went away entirely on speculation.

8986. Speaking of 60 years ago, did you then bring as much fish ashore as you do now?—Yes; five times as much fish.

8987. Five times as much then as you can catch now?—Yes. I could get more fish in a little boat, with a 14-feet beam, by myself, than they catch in one of their large vessels now.

8988. Were you engaged in a trawl-vessel 60 years ago?—I was.

8989. How many baskets of fish would you bring ashore then?—They were in the habit in those days of having baskets that would not hold sufficient fish for a family; they were so small. It would, therefore, give you no idea to tell you the number of baskets.

8990. Then tell us the weight?—I can tell you in a lump. We could get a boatfull in a few hours. By fishing six hours during the day we could get as much as a vessel's boat would carry.

8991. How long would it take you to get that now?—It would take a great deal longer to do it now.

8992. When did you notice the decrease begin?—It has been decreasing regularly.

8993. Has it always gone on since then; have the vessels been getting fewer and fewer every year?—Yes; and if it continues for the next 60 years, as it has been within my recollection, it will be of no use for any vessel to go fishing on this coast at all.

8994. You said the people did not leave this coast because the fish had decreased, but that they went away as a matter of speculation?—Yes.

8995. But now you tell me the fish are decreasing?—Yes, they are decreasing here.

8996. But you said before, and you have just repeated it, that the fishing boats did not go to distant parts on account of a decrease in the fish, but as a matter of speculation?—They went as a matter of speculation to try another part of the coast.

8997. How long is it since you have seen a boat-load of fish coming ashore from a vessel?—I see it frequently. Some of the vessels will be at sea three or four days, and then they will come in with a good cargo; but after six hours' fishing we could bring in sufficient fish to stock the market in my time.

8998. Did you make much more money by your fishing then than you do now?—We did at times.

8999. Did you get richer then than now?—Some people, who were owners of smacks then, are now living as gentleman on the property they have made. Nearly all the gentlemen in the parish first began to get their money by fishing.

9000. Have they made their money during the last 60 years?—Yes.

9001. Then they have found it a good business?—Yes.

9002. That is not exactly in accordance with what you stated just now?—I don't know that I have stated anything wrong in respect to that.

9003. You say that in former times they got a much larger quantity of fish than now?—Yes.

9004. But that the people engaged in the fishing business during that time have made a good business of it?—Yes.

9005. Then has the quantity of fish taken very much decreased as compared with former times?—Yes, wonderfully.

9005*a*. What kinds of fish?—There are three or four kinds of fish that are clean off the coast.

9006. What kinds are they?—There is first the haddock and then the pollack.

9007. Used there to be plenty of haddock?—Yes, plenty of haddock and plenty of pollack, and we had the megrim and marysole.

9008. Has the turbot fallen off?—According as the other kinds of fish have fallen off, they have fallen off.

9009. Have you noticed whether it is principally in the in-shore fishing or in the deep-sea fishing that the falling off has occurred?—No, but I think I know the way that it has fallen off.

9010. You are speaking of the decrease, are you not?—Yes; you have had it stated that the decrease is owing to the mesh of the trawl being so small, the consequence of that being that they catch so many small fish on the coast.

9011. Several witnesses have stated so?—Yes, I think so too.

9012. Is that in your opinion the cause, to a great extent, of the falling off?—It is the cause to some extent, but I call it only a little trifling thing.

9013. What is the larger thing?—I think the ground-rope is the evil.

9014. Tell us how that acts so injuriously?—Well you know that the spawn is laid on the bottom of the ground. This ground-rope weighing with the pair of irons to keep it down 250 lbs. is dragged over the ground; it goes over the ground at the rate of a tide, and for 20 miles it will scour the ground wherever it goes, and that, in my opinion, is where the destruction is caused. It destroys all the eggs.

9015. Have you ever seen the eggs brought up?—Yes, a number of times, in bunches. I have had to clean them out of the trawl.

9016. How long is it since you were in a trawl-boat?—I have not been in one for years now.

9017. When were you last in a trawl-vessel?—Twenty years ago.

9018. Then your experience of trawling has not been within the last 20 years?—No, but I am living in a place where there are trawlers, and a great many of my children are trawl fishermen, so that I know as much about it as they do.

9019. Do you live at Brixham?—Yes, I have been living here for the last 66 years.

9020. Do you follow the seine-fishing at all?—Very seldom.

9021. Have you ever done so?—Yes.

9022. Do you think the size of the mesh is too small?—They have been in the habit of catching different fish with the seine; sometimes pilchards, sometimes sprats, sometimes mackerel.

9023. Do you think that, on the average, they take too small fish?—It is very seldom that small fish will stop in the seine.

9024. Then do you think the seine nets do no damage to the fish?—I don't think the mackerel seine does.

9025. But do the other seines?—I think that as their meshes are so small they must take a large number of small fish.

9026. Have you seen these seines hauled on shore?—Yes.

9027. What did they do with the small fish?—I don't know.

9028. Did they throw it into the sea?—Most likely they did.

9029. Did you see them do so?—I have seen them lying on the beach.

9030. Where they hauled them ashore and left them?—Yes.

9031. Have you seen a great quantity lying on the beach?—Yes, fish of all kinds, such as whitings, dabs, plaice, and small soles.

9032. Have you seen that lately?—Yes.

9033. Do you think the seine net does a great deal of harm as well as the trawl net?—Yes.

9034. Do you think the injury done by the trawl net is chiefly in-shore or in the deep sea?—Mostly in-shore, I should say.

9035. (*Professor Huxley.*) You spoke just now of the eggs of the fish coming up in the trawl net, what were they like? I think you said they were in bunches?—Yes.

9036. What kind of looking things were they?—They were like a pin's point.

9037. They were in bunches?—Yes.

9038. Do you mean they were like bunches of grapes?—Yes.

9039. And that they were all hanging together?—Yes.

9040. Have you seen herring spawn?—I cannot say. I have no doubt I have, but I don't know whether my judgment is right or not.

9041. What time of the year was it that you used to see the eggs of the fish come up in bunches in the trawl?—Just before Christmas.

9042. How did you know they were the eggs of fish?—I did not know more than that I guessed at it myself.

9043. You spoke of the haddock having fallen off; used there to be plenty of haddock on this coast?—Yes, it has been so plentiful that it has been sold for about 6*d.* a bushel.

9044. How long ago is that?—About five or six years ago.

9045. Five or six years ago?—Yes, that is a fish that goes and comes. Some seasons there will be none, and at other seasons the fish will be very plentiful. How long they will be absent nobody knows.

9046. Five or six years ago, were there as many haddocks as when you began fishing?—No; there were more when I began fishing.

9047. There were more when you began than there were five or six years ago?—Yes.

9048. So that notwithstanding the abundance five or six years ago, there had been a falling off on the whole in the haddock?—Yes, and in all fish, in mackerel, herring, hake, and everything else.

9049. In mackerel and herrings as well?—Yes.

9050. Did you have many megrim on this coast formerly?—Yes.

9051. Is it got now?—No; in all my apprenticeship I never knew one to be got eastward of the Start, but I have seen an abundance caught at our very door in Torbay. Now they have clean gone off the coast.

9052. Were they as scarce in your apprenticeship as they are now?—Yes, the megrim were.

9053. How about the pollack?—We may catch one in 12 months now.

9054. Did you formerly get plenty?—I have been catching 40, 50, 60, and 70 in a day.

9055-6. Then, as I understand, you ascribe the diminution in the fish caught to the sweeping of the ground-rope over the bottom?—Yes, it disturbs the eggs.

9057. What remedy would you propose in order to remedy that evil?—I leave that to other people. I know nothing about that.

9058. Do you think it is beam trawling that is the great source of the mischief?—I think that it is the rope that does the mischief.

9059. You could not use the beam trawl without a rope, could you?—By no means. The trawl would be of no service without the ground-ropes.

9060. Then the only way to stop the evil would be to put down trawling?—No that would not do; if that were done all us poor fishermen would be obliged to give ourselves up to the Government.

9061. I want to understand clearly what it is you are saying; you told us that if things went on the next 60 years as they have been going on for the last 60 years there would be no fish to catch?—Yes.

9062. Then trawling will be put down if there is no fish to catch?—Yes, that is my belief if the fish go on scarcening as they have done since I remember.

9063. The scarcity has not been in one kind of fish but in all?—Yes.

9064. Then it does not matter whether the Government put down trawling or whether it is put a stop to in consequence of the fish going away; it would come to pretty much the same thing in the end?—It would not be of much conseqnence to me because I am getting pretty old now.

9065. How was your fish sent to market in your early days when you began fishing?—When I first went to sea as a boy the most of our best fish was sent to London. The greatest part we sent from here to Exeter, and it was then taken from Exeter to London.

9066. By what kind of conveyance was it sent?—By coach.

9067. Had you coaches running 60 years ago?—No, we hired carts then to take the fish into Exeter, and from Exeter it was sent to London in the coaches.

9068. Could you send any large quantity of fish to London in that way when the carts and coaches were used, so as to enable it to reach the London market fresh?—Yes.

9069. Could you send as much as you catch now in

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the trawl. You catch 50 tons a week now, do you not?—I don't know what we catch, but they caught brill, soles, turbot, and doreys, all of which used to be sent to London from Brixham by land, although they could not get the fish in then in less than three days.

9070. Had you as many vessels then as you have now?—We had about 60 sail.

9071. Then 60 sail would catch a great deal more fish than now?—Yes.

9072. I want to understand how in those days, with only packhorses and carts and coaches, you contrived to get three times as much fish sent to London as you do now by the railway.—I can't say, but so it was.

9073. Do you think you did get as much as three times the amount of fish sent to market that you do now?—Yes, I think so.

9074. I think you said it took three days very often to take your fish to market?—Yes, it took us three days to get it into London.

9075. Was that in summer as well as in winter?—Yes.

9076. Then the fish would be rather queer sometimes when it got to London?—Yes, in the summer time.

9077, Did you ever lose a large proportion when it got to London in consequence of its not being fresh?—Not at all, because the merchants who bought it specuiated in it themselves. The catcher had nothing to do with it when it got to the London market.

9078. But the merchants would not pay you a good price for your fish if it was spoiled?—We never had any complaint.

9079. Did you get about the same price for it as now?—It was much dearer in London. They had a greater supply from this place than from any other part of the country.

9080. Did you as a fisherman get a better price for your fish per stone formerly than you do now.—Yes.

9081. Then you must have been getting rich all of you if you got so much more fish into the harbour and sold it at so much a higher price?—During the time the great dearth in reference to fish lasted I was an apprentice.

9082. When you were a man earning your own money, do you recollect what your earnings per week were?—I cannot tell; we got sometimes 20*s*., sometimes 30*s*., sometimes 40*s*., and even 50*s*. and 60*s*. per share.

9083. Per share?—Yes.

9084. What would be your average earnings?—Do you mean yearly?

9085. No, for the week. What would be the average of a week's earnings taking week and week about?—I cannot tell you that; I am not scholar big enough for that.

9086. Would the average run about 30*s*.?—Yes, somewhere thereabout throughout the year.

9087. We have it in evidence that about the same sum is earned now; some of the witnesses have stated that to us?—Yes, at the present time it is very likely to be true.

9088. Then if you got a deal more fish and a better price for it, how is it that your share was not much higher than it is now. I find it difficult to reconcile your statement as to the great abundance of the fish and your statement as to the money value got for your share. The value of your share seems to be about the same now as it was formerly, while on the other hand you state you had a much larger quantity of fish and got a higher price for it in your early days than now. I want to know why, under these circumstances, your earnings were not a great deal higher than the earnings of the fishermen now?—When there was a scarcity of fish it would fetch a great deal more in proportion than it does now. If fish was ever so scarce now the fishermen would never get what they got in those days, because if it is scarce in one place it is sure to be plentiful in another. Generally it is plentiful all over the country; it is supplied by the whole country now instead of by a few places.

The witness withdrew.

J. Bird.

JOHN BIRD called and examined.

9089. (*Mr. Caird.*) Have you long been engaged in the business of fishing here?—Yes.

9090. For how many years?—I suppose for about 30 years on and off, or better.

9091. What kind of fishing have you been engaged in?—In the pilchard-fishing, in the herring-fishing, and in the mackerel-fishing. I have practised all those kinds.

9092. What kind of nets do you use for catching those fish?—We use the pilchard net, the herring net, and the mackerel net, which is a seine.

9093. Have you found that you can catch those different kinds of fish in as great abundance as formerly, or is it otherwise?—The mackerel have failed us for the last three or four years, but there are plenty of pilchards on our coast.

9094. How is it with regard to the herrings?—The herrings have fallen off. There is not as good fishing as there used to be in former times. The net-fishing is not attended to now as it used to be, the consequence of which is that they don't catch as much fish.

9095. Are there not as many people employed in that kind of fishing as there used to be?—Yes, but it is not so well attended to.

9096. In what way is it not attended to?—In not going out in the same season to catch fish.

9097. Is the fishing not followed with the same skill as formerly?—No, far from it.

9098. Do they not do as they used to do formerly?—Not in the pilchard fishery. It has almost gone out.

9099. I think you stated that pilchards are abundant here?—Yes, there are plenty of pilchards, but our boats don't go outside to catch them.

9100. Is that because they find other modes of fishing a better business?—No, they don't take much fish otherwise.

9101. Then why do you think there is not as much attention paid to the pilchard fishing as formerly?—I think there is a great deal of negligence.

9102. Is it not because the people themselves find better employment?—I don't think so.

9103. If it paid them as well as anything else would they not take to it?—No, I think not. Pilchard fishing is clean given up altogether. We used to go down to Hope Cove and Plymouth for many years, and we went pilchard-fishing in Start Bay.

9104. What are those fishermen doing now?—They are engaged in hooking, and now and then use nets.

9105. Do they make as good a business as they used to do?—Far from it.

9106. Do they entertain the same opinion as you?—Most likely; I think they do.

9107. Why do they not go to the fishing as they used to do?—They can't now because they have not got the pilchard nets they formerly had.

9108. Are pilchard nets expensive?—They are on a smaller scale than herring nets.

9109. Do you think a great quantity of fish might be caught here if the fishing was followed?—Yes.

9110. During what time does the pilchard fishing continue?—In the months of September and October.

9111. Have you any experience or knowledge of trawl-fishing?—No, I never was a trawl fisherman.

9112. Have you any knowledge of the hook-and-line fishing?—I have been with the hook-and-line in the whiting-fishery.

9113. Did you hear it alleged, by some of the witnesses who have been examined with regard to the seine-net fishing in the bays, that a great quantity of the fish caught is left lying on the beach, or thrown into the sea as useless.—Yes.

9114. Is that true?—We have two seines in Brixham, tuck seines which shoot round the fish, and

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mackerel seines. Whatever small fish we catch we capsize into the sea again.

9115. Then there is no loss in that?—No, not in using the mackerel seine.

9116. Is there no loss by any other kind of seine?—Yes, by the drag seine.

9117. Is a large quantity of small fish destroyed by that?—They tell me it destroys a great quantity.

9118. Have you seen it?—No, but there is much talk about it in Paignton.

9119. You can't speak of your own knowledge about it?—No, I can only speak from hearsay.

9120. Have you ever observed any spawn in your nets?—I have seen herring spawn in the herring season. There is a great deal about the herring nets in the season.

9121. You were speaking about the herring-fishing having diminished?—Yes.

9122. Has that fishing very much fallen off on this coast?—It used to be a great deal more than it is now. I think we have not as many nets here as we used to have, nor is the fishing as much attended to. We don't try the nets as we did formerly.

9123. Are the herring fishermen going trawl-fishing now?—No.

9124. What do they do then?—They go hook-and-line fishing.

9125. Is it not a reason that the herring-fishing is not practised so much now that the men have found better and more profitable modes of fishing for themselves; have they not discovered that they can make more money some other way?—I don't think they can make more money.

9126–7. Are the shoals of herrings as large as they used to be?—Yes, in the season.

9128. Then quite as many fish could be caught as formerly?—Yes.

9129. You don't think there has been a diminution?—No.

The witness withdrew.

William Webber called and examined. *W. Webber.*

9130. (*Mr. Caird.*) Are you an inhabitant of Brixham?—Yes.

9131. Have you been living here for many years?—Yes.

9132-3. Have you observed the quantity of fish brought into the market here?—Yes; and several of my friends have been engaged in the fishing for the last 21 years.

9134. Can you speak as a fact to the increase or diminution of the quantity of fish brought ashore here by the fishing vessels off Brixham?—My impression is that there is decidedly an increase here. I impute that to the improved mode of catching the fish, and also to the increased size of the vessels.

9135. You think that the improved mode of catching the fish and the larger size of the vessels have resulted in increasing the supply of fish to the market here?—Yes.

9136. Has that been to a large extent?—Yes. I think that Mr. Benfield and Mr. Winkle send away now more fish than all the rest of the buyers in Brixham, and there may be eight or nine.

9137. Can you tell us particularly, or give us figures, as to the increased quantity of fish brought into the market here?—I don't know that I can give you figures, but I can give you one fact which perhaps may be as satisfactory to you as figures. Seven or eight years ago it was found necessary to enlarge the fish market here, and it was enlarged to double the size to accommodate the owners of the fishing smacks, because they had not sufficient room then to bring their fish into market. They were compelled to carry it beyond the boundaries of the market in order to accommodate the buyers.

9138. Has that double-sized fish market been constantly well filled since?—Yes, from my own general observation, I should say that it has.

9139. It was not at all overdone?—No, it was not overdone.

9140. Has the quality of the fish within your knowledge kept as good as it used to be?—Yes, I observe that the quality of the fish is quite as good as it ever was. I was looking at a large number of turbots last week. There were about 100 here one afternoon, and I don't think you would get two bad fish among the whole lot.

9141-3. Were they trawled fish?—Yes, all alive. Many of them were alive, as we should say, so far as the freshness of the fish goes, and some of them were actually living in the market.

9144. Have you noticed in the course of your experience whether many of the fish brought to market have been mangled or damaged by the trawl?—Not at all. The greatest difference that I see in any one kind of fish is in the whiting. What we call "hooked whiting" are much brighter than those caught in the trawl. When they are brought up in the trawl the scales are gone and they never look as well as those which are caught by the hook.

9145. Is that remark confined to the whiting?—Yes.

9146. You don't observe the same difference in other kinds of fish?—No. Connected with that fact I wish to mention that so far as catching fish by the hook and the long-line here is concerned, I can give you the result of hooking at the present time. I made inquiry yesterday, knowing that you were coming here, in order to ascertain what had been the result of the catches made last week by the hookers. I found that one man named Snell had got 9*l.*, another man named Hull had caught what brought 6*l.* 2*s.*, and another man named Perrott realized 5*l.* 3*s.*

9147. In what period of time was that?—In their week's work. I don't think these figures have been equalled since Brixham was Brixham. 9*l.* was made in one week by one man for fish caught by the hook.

9148. Was that on the ground where the trawl-fishers were engaged?—Yes, upon the ground over which they pass regularly every time they go out.

9149. You say that in your experience you have not known a larger amount gained by fishermen; is that due to an increase in the quantity of fish or to an increase in the price?—I should say it was solely due to the increase in the quantity. Yesterday was a very fair day, and judging from the state of the market there was a fair average quantity of fish brought in.

9150. Speaking in the interest of the line fishermen do you say that trawl-fishing does any injury to them?—In my opinion it does not do them the slightest injury in the world.

9151. How many men are there to each hook-boat?—Two.

9152. Then they must have made very good wages?—Yes, very good.

9153. Do they make a very good living in the hook-boats?—I think I heard one of them say that generally speaking he had made a better living than the trawlers; throughout the summer he stated he had earned a sovereign a week, and that is better than the trawlers have done. I may mention that during the last two years we have had extraordinary seasons for fishing. We have had many storms and calms intermediately, which have caused great stagnation, not on account of the want of fish, but owing to the want of the means of catching it.

9154. Rather want of opportunity?—Yes; the wind would generally be against the fishermen.

9155. If there has been a falling off, you attribute it to the weather?—To natural causes entirely.

9156. You think there is no falling off in the quantity of fish?—I am perfectly satisfied that there has not been any falling off. I can give you one fact. I can recollect a time when all the fish was sent away from here by packhorses; they were afterwards sent away

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by carts supplied by two men named Shears; they took the whole of the fish away, and the principal market was Exeter. They used to carry about a ton weight in each cart, and they had 3*s.* a cwt. for carrying it. Beyond that it was sent to Bath, Bristol, and London; but very rarely then to London.

9157. How many years is that ago?—About 30 years.

9158. You have given us the packhorses and then the carts; what was the next mode of conveyance?—Then the railways came, and Mr. Winkle came here; he took means for opening a sort of conveyance from here to the railway station. He had first-rate horses and waggons; each waggon would take from 3 to 3½ tons of fish. He took it to the railway station and charged so much per cwt. for its conveyance to its destination.

9159. Were there only two carts employed 30 years ago?—There were three. There was Lorum from Exeter, Davy from Chudleigh, and Tucker from Chudleigh; and then the Shears had three. Generally speaking, one cart a night would be what they had to carry, and they had three or four horses.

9160. How many carts would there be altogether?—I have seen them start here at night in a line. The man Davy used to be called the Commodore, and there would be about 11 carts altogether.

9161. What are the quantities sent now?—I have seen Mr. Winkle come three times in a day, besides the carts from other places. There is a great deal of this, because Torquay absorbs a large quantity of our fish. They have no boats of their own, and therefore we send a great abundance of fish there.

9162. How much weight would each of these carts hold or carry?—About a ton.

9163. Then that would be about 11 tons in one night?—Yes; at times.

9164. Taking similar times now, how many tons go to the railway station on a fair average day?—I should say from 15 to 20 tons.

9165. Besides the quantity that is sent to places in the immediate neighbourhood?—Yes; in addition to what goes eastward; to Beer, Salterton, Budleigh, Exmouth, and other places.

9166. Then, besides the quantity that goes to the railway station there is a large consumption at Torquay and other places?—Yes, decidedly so.

6167. From these facts you consider there has been a great increase in the quantity brought to this market?—Yes, I do.

6168. What is the size of the vessels here?—The vessels here are from 50 to 60 and from 60 to 70 tons. They are nearly one-half larger than they were formerly, and they only carry four men, three men and a boy. They used to carry the same number of men; but they have also improved the machinery on board these vessels, which gives them greater power in working their gear. I have been out with these vessels several times and seen them worked.

9169. By means of mechanical labour they do a greater amount of work?—Yes.

9170. You have heard the evidence given this morning?—Yes.

9171. You have heard the general opinion expressed, that by the in-shore system of trawling the flat-fish and the soles had been decreased?—Yes, but that is not my opinion. I have heard those statements generally made, and I think a sort of stereotyped evidence has been given by a number of the men who were made conversant with each other's views last night; my own opinion is that that statement is not correct.

9172. You have not observed it yourself?—No, not in any way.

9173. They used to have different methods for packing up their fish?—They had pots or hampers of soles, each weighing 30 lbs. If a boat got six of these hampers it was considered a good catch. I have seen them make a guinea a hamper for 30 lbs. weight.

9174. Then you don't agree with the opinions expressed by other witnesses, that the quantity of flat-fish and soles has been diminished in consequence of trawling in-shore?—I don't; most decidedly not.

9175. Then you don't apprehend that any great injury is done to the fish by that system of in-shore trawling?—I agree with the men that on no account should boats be allowed to come into the bays at certain times of the year, or rather at no time of the year should they be allowed to come into the bays at all.

9176. For what reason?—For this reason, that I believe if the fish are allowed to be quiet there, as soon as they come to maturity they will go into the deep water. The spawn of the fish would, in that case, be continuous, and there would be a sort of nursery for the express purpose of supplying fish. When the late Lord Vernon was living at Churston Court, I have seen them bring ashore little haddocks and plaice, like ivy leaves, not larger than a five shilling piece. Lord Vernon argued with them, and pointed out that they were destroying their own commonwealth, and induced them to refrain from that mode of fishing. He left some of the men pensions, and took great interest in their welfare. He persuaded them to keep away from the bay; they did so for two years, the consequence of which, was, that the catch was nearly doubled.

9177. Would that increased catch be solely in consequence of the men not coming into the bays to fish?—The quantity of fish they thus caught was much larger than what they previously caught on the common ground.

9178. Would you prevent trawl-boats from coming inside the headlands altogether?—Yes.

9179. At any season?—Yes, at any season.

9180. Would that not in bad weather limit the labour of the fishermen?—No. I would rigidly enforce that rule, because I believe it will be beneficial to the whole of the fishermen ultimately.

9181. You would exclude them altogether?—Yes, from fishing within the headlands.

9182. Is there any limit outside the headlands to which you would confine them?—Yes, I consider that the common ground beyond the headlands should be limited. I agree with what the witness Salter stated, that a mile and a half or two miles would be a fair limit.

9183. How far is the common ground off the heads?—About three miles.

9184. Outside the heads?—Yes.

9185. Is there any other mode of fishing inside the heads that you think is injurious to the catch of fish?—I don't know of any. You have been speaking of the drift-nets. Now there is a certain description of net that they call here nets that are moored. They have an anchor; they are laid at the bottom; they are buoyed up at the top, and they stand perpendicular in the water. Now I think it is very important that they should be limited to a certain size of mesh for haddocks and mackerel only. That would give other smaller fish an opportunity of escaping, and the fishermen would then only take those fish that ought to be caught.

9186. Do you think they take many immature fish?—Yes, I think they do. That is one of the restrictions that ought to be imposed upon them; namely, that a certain size of net should be employed. Professor Huxley asked just now about the Convention between France and England. The fisherman to whom the questions were put said he was not aware of the regulations in regard to the length of the beam, the size of the mesh, the colour of the vanes, and the weight of the heads. Now, in my experience as clerk to the magistrates of this town, there have been several parties convicted for breaches of the law in those respects, so that I can hardly fancy that the fishermen can be as forgetful as they pretend to be. More than that, about three years ago an order came down from the Board of Trade to seize every trawl in the port. A kind intimation was given here in regard to what the intention of the Board of Trade was, and a memorial was got up. I think Mr. Henley was President of the Board of Trade at the time; it would be about 1859. A man named Cornish was brought

into Dartmouth and fined for having a small net. It turned out that the men had no proper supervision with regard to the size of their nets at all. They had no one to supervise them, and they went on pretty much in their own way. The consequence was that they had got a mesh which, as one of the witnesses said this morning, was very snug. That was complained of by the hook-and-line fishermen, and a message was sent down here to seize all the nets.

9187. In what way was that message announced to you?—I believe we heard it first from the collector at Dartmouth.

9188. Did he advertise it?—No; I think he sent to say that the nets would be seized and burned unless the nets were made of a larger size.

9189. Was that publicly announced?—No, I think it was simply stated that he had received an intimation, and that it was intended to send a person down to examine the nets. It was then explained how it was that the nets had got less and less, and that if it was really intended to burn all those that were not legal, the whole lot would have to be burned together, and that the vessels would have to be detained until they got other gear, which would be a loss to the fishermen of thousands upon thousands of pounds.

9190. Was the object of the message to let the fisherman know that their nets would be burned in consequence of their being too small?—Yes.

9191. Was that sufficient to frighten them?—It was sufficient to induce the president of the fishing club to call on me in order that we might get up a memorial.

9192. Were they conscious that the nets they used were too small?—Yes, one fisherman had been fined a week before at Dartmouth, in the Guildhall, and that had alarmed all the rest of them.

9193. Did anything follow upon the steps you were told would be taken then?—No.

9194. Did nobody come to look at the mesh?—No.

9195. Then nothing followed that announcement?—No.

9196. Was that in consequence of your memorial?—I think all the circumstances were represented to the Board of Trade, and a general notice was given that the present nets should be discontinued when they were worn out, and that in any new ones to be made the mesh should be larger. An understanding of that sort was come to and the law was not enforced.

9197. Has no Revenue cutter interfered with the fishermen?—I heard one of the fishermen who came here the other day say that he was off Paignton Head and had got his trawl down when a Revenue cutter came and ordered him off immediately, or else he would have been reported and prosecuted.

9198. What did the man do?—I believe he pulled up and went away.

9199. The Revenue cutter ordered him off?—Yes, off the Head.

9200. Was that on the ground that he had no right to fish there?—Yes.

9201. Then was it against the law?—I suppose so.

9202. Did he go?—Yes.

9203. Have any other fishermen been served in the same way?—That fact was mentioned in conversation when it was known that you were about to visit this place.

9204. Do you know anything about the system of horse trawling referred to by previous witnesses?—Yes, I have had reason to know that; I communicated the fact to the editor of the "Shipping and Mercantile Gazette." I went on purpose to see it.

9205. Where did you go to?—To Paignton.

9206. How long ago?—About three months ago. I went all along the shore to see these infernal machines, as I call them, on account of the destruction they do when at work; they were very much talked about, and I went to see the trawl at work. There was a horse in a pair of shafts drawing it, up to his belly in water; a man rode the horse, and they dragged the net alongshore; the water was rather shallow, and it was dragged along the shore one way and then turned and dragged along the shore the other.

9207. Is it like a large shrimp net?—Yes, a triangular sort of net. It was lashed to a yard, and it had two loops to bring it up to the cart.

9208. Did you see the size of the mesh?—Yes, it was very small indeed, it looked like a lady's purse.

9209. What did it bring on shore?—Shrimps, brill, soles, and all kinds of small fry you can fancy.

9210. Did you see them?—Yes, I saw them and handled them.

9211. What was done with them?—The fishermen took them out and threw them away; perhaps some of them might be brought here to Brixham market. Many men here can tell you that these men, when they have brought their shrimps here, have selected the largest of the small fish and have thrown them out upon the market.

9212. Is a large quantity of fish destroyed in that way?—It is the most destructive kind of fishing that can be, save and except the bunt seines.

9213. Between these two you think a great destruction of fish takes place?—The whole of the destruction is attributable to them.

9214. Do you believe in the disturbance of the spawn by the trawl net?—No, it is not disturbed the slightest bit in the world. I think, as a general rule, that fish, like land animals, resort to quiet places in order to spawn.

9215. Are there large quantities of these horse trawls used on this coast?—I have seen as many as three or four.

9216. Do they follow each other?—Yes.

9217. Do you think that the three or four did much damage?—Yes, and I think you would say so too if I brought you what they catch; scores and hundreds of pounds worth in a month.

9218. Did you ever see it used for manure?—I have seen sprats used for manure, but that was because there was a very large quantity caught. The quantity was so large that there was no sale for it, and it was therefore sold for agricultural purposes.

9219. Is there a large quantity of sprats caught in Torbay?—Yes.

9220. Can it be commonly depended upon?—The Torquay men will speak better to that. They have the nets which are adapted for that kind of fishing.

9221. (*Professor Huxley.*) Do I understand you to say that the only attempt which has been made to enforce the law has been by the Board of Trade?—Yes, so far as my recollection serves me. I am speaking now of a personal experience extending over more than 15 years.

9222. You are engaged in the administration of the law here?—Yes.

9223. You are familiar with this Act of Parliament?—Yes.

9224. Then you will be aware that it is perfectly competent for any person to bring up a fisherman for contravening the law?—Perfectly so.

2225. If I were to go and lay an information against your trawlers in the harbour, I could have every one of them convicted?—Yes; but I rather think there is no public prosecutor appointed.

9226. The Act says: "And be it enacted that all "offences against the said article, or against any rule "or byelaw made in pursuance of this Act committed "by any one of Her Majesty's subjects, may be heard "and determined upon the oath of any credible "witness or witnesses, or upon the confession of the "party accused, by any magistrate or justice of the "peace having jurisdiction in the county in which, or "in the waters adjacent to which, the offence shall be "committed, or to which the offender shall be brought, "and any such magistrate or justice of the peace shall "have power to award the penalties provided by the "said article, or by any such rule or byelaw, for the "offence of which the offender shall be convicted, and "whenever any pecuniary penalty and forfeiture shall "be imposed on any such offender and shall not be "forthwith paid, with the reasonable costs and charges

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"attending the conviction, the same shall be levied by "distress and sale of the goods of the offender by "warrant under the seal and hand of such magistrate "and justice of the peace." Does not that put me in the category of a credible witness, and make it perfectly competent for me, or any stranger, if I find the meshes too small or the beam too large, to summon the offender and have him punished?—You may be a credible witness, no doubt, but I doubt whether you could be a common informer. Under that Act, I admit that you could be a credible witness.

9227. The Act says: "All offences against the said "article may be heard and determined upon the oath "of any credible witness."—Exactly; but the great point is, who is to be the party to give the information. You could be called as witness, but who is to give the information.

9228. Do you consider that, under this Act, the only persons who can give information are officers in Her Majesty's service?—That is my opinion. I think that, in any future legislation, you should provide for preventing that evil by appointing a public prosecutor. There should be one person appointed who should look after everything of the kind, and rigidly enforce the law on the subject.

9229. There is no statement in the Act that no information shall be laid except by an officer of the Customs or Navy?—But when one party is appointed all the rest is considered to be negatived. If I understand it, the Act says that a Custom House officer is to be the party to give the information, and then it is assumed that any other person is exempted.

9230. Suppose I were to lay an information, would you advise the magistrates that that information should not be received because I am not named in the Act?—If you chose to lay an information, I should allow you to lay it in the first place, and then by and bye, when the question came to be discussed, not extra-judicially, but on the bench, I should give the magistrates my opinion on the matter.

9231. And your opinion is that I would not be the proper party?—Yes; but you would be competent to give evidence. On your testimony the offender might be convicted, but you are not the person to lay the information.

9232. Then you think that the information is to be laid by the party aggrieved, or by an officer employed in Her Majesty's Navy or in the Revenue service, or in the Coastguard service?—Quite so, that is my impression.

9233. Then I don't clearly apprehend how the Board of Trade came to act, because it is not one of Her Majesty's officers employed in either of these capacities?—But they have full power to put the Custom House officers in motion.

9234. Was that the way in which the thing was done?—Yes.

9235. Am I to understand from your experience of the way in which the Act is worked among the fishermen, that it is cumbrous in its operation?—Yes, I think so.

9236. That it cannot be put into operation?—No.

9237. Are there any Custom House officers here?—Yes, the commander of the Coastguard is now in the room.

9238. Of course it would depend upon the orders given to the Custom House officers and the Coastguard whether they could carry out the provisions of the Act or not?—Precisely; the Custom House officers at Brixham, or the Coastguard, would wait instructions from their superior officers or from the Board of Admiralty.

9239. Then there is no regular inspection exercised by the Coastguard or Custom House officers?—No.

9240. Do you think it would be a heavy addition to their other duties?—No, I think they would be willing to undertake if they were required, but how far it would be necessary to increase their salaries would be quite another thing.

9241. In walking round the town this morning we observed that a considerable new pier has been built?—Yes.

9242. How was the expense of that defrayed?—The construction of the pier was sanctioned by an Act of Parliament passed in the first year of Her present Majesty, and a schedule of tolls was annexed to the Act by which the expense was provided for.

9243. But who supplied the capital in the first instance?—The inhabitants themselves; some of them put in 500*l.*, others 200*l.*, and so on.

9244. Were they all Brixham men?—Yes.

9245. Then, the money came out of Brixham?—Yes, and is still coming out of Brixham as the work progresses.

9246. Where does the money of Brixham come from?—As far as my recollection goes, I think the Tyrers, the Weightons, the Terrys, and the Blakes, and all those men were originally fishermen. I believe they all had vessels. Mr. Bartlett's grandfather had three or four trawlers.

9247. Were they all trawl fishermen?—Yes; I believe they have made all that has placed them in their present prosperous circumstances from trawling. They have now some of the finest vessels sailing in the Bristol Channel.

9248. Is there any branch of trade or manufactures carried on here?—No; the only staple business in addition to fishing is mining; there is a little iron ore here.

9249. Is there a considerable quantity of iron ore obtained here?—We have two mines now working, and I think I heard them say yesterday that they would be able to raise 2,000 tons a month if they had the appliances.

9250. Have they been able to work that for any time?—They have had mines here for 20 years. At one time they shipped enough to increase the tolls of the pier from 600*l.* to 950*l.* in a single year.

9251. Do you consider that the iron mines here have added considerably or appreciably to the wealth of the place during the last half-century?—No; it was not known then. I think it has added to the prosperity of the town in a certain sense, by bringing a number of men who are earning good wages at mining.

9252. Still you would not consider it any way comparable, as a source of wealth to the town, to the fishing?—No, because we almost wholly depend upon that.

9253. I ask these questions because we have come recently from the north country, and strong assertions have been made to us that you Brixham people have been gradually ruining yourselves for years past, and are now in a very bad way. I want to know whether that is the case, or whether you have been making money all the time?—I will just show you how it is. A man may perhaps have 150*l.* or 200*l.*, and he has a new vessel built. He can find people who are ready to put the remainder of the money into that, and thus assist him. Tradesmen are ready to put their goods on board, if he is an industrious man, and they will give him credit for everything he requires. Now, that shows that the investment is a paying one, or it would not be so readily taken up.

9253. I suppose the security the fishermen give is a mortgage on the vessel?—Yes.

9254. I don't want to look inquisitorially into the matter, but only to ascertain the facts which are of importance to our inquiry. If I went to the Custom House here, should I find that a great number of the smacks are mortgaged?—Yes, for this reason, directly they get an additional 100*l.* saved they go and get another smack.

9255. But there is a great difference in the two things. If a man is ruining himself he mortgages that which was previously in his possession, but it is a legitimate sign of prosperity if a man sets up a vessel and obtains a mortgage upon it with the intention of paying it off. Are the mortgages here of the latter or former kind; are they mortgages made with the intention and almost certainty of paying them off

in after years ?—Yes, quite so; they are almost entirely upon new vessels.

9256. From your knowledge as clerk to the magistrates, who generally knows a good deal about people's affairs, you think that is the state of things ?—Yes, I do.

9257. I ask this particularly because assertions have been broadly made to us that the contrary is the case, and that the persons engaged in trawling here are mortgaging their property in order to raise money. You think it is the other way ?—Yes, in point of fact the tradesmen of Brixham know less of bankruptcies among themselves than almost any other town in the neighbourhood. The people here are pretty certain of getting their money whether they are hemp merchants, timber merchants, or hook manufacturers.

9258. What fish are caught by the hook ?—Whiting, ling, and cod.

9259. Do you agree with the statement of the previous witnesses as to the quantity of fish taken by the smacks on the average; do you think that on the average all the smacks engaged are bringing in 50 tons of fish a day ?—I think that statement was only a guess. I have tried to obtain information accurately, but have not succeeded. There was an old gentleman here about 16 years ago, who was examined before the House of Lords on this subject. He took the trouble to ascertain the weight of all the fish brought in here. I went some time ago and tried to obtain the book in which these calculations were contained, but I found that one of his sons, who is a Custom House officer at Bridgewater, has it with him.

9260. Probably you can get it for us by and bye ?—It is now in Bridgewater, in Somersetshire. But making a little allowance on the one side and on the other, I think the evidence of the witnesses generally is good evidence, and I think it will be amply justified by the facts.

9261. I don't conceive in what way it is possible that 50 tons of fish could be sent off by the old fashioned mode of land carriage ?—That puzzled me all through. The last witness talked of great quantities being caught 30, 40, and 50 years years ago, and yet the facilities afforded then for taking the fish inland were simply packhorses. We have now got the railways and many other facilities, and yet we don't send away any larger quantities. That is a kind of paradox that I scarcely understand.

9262. We were talking of the destruction of small fish just now. Your argument is that it is destroyed by the fishermen, but doubtless you are aware that it is also destroyed in prodigious numbers by other fish which prey upon it. Thus, in putting down the destruction of small fish by the in-shore processes, it does not appear certain to my mind that all the fish destroyed by the in-shore fishermen would ever grow up to be full sized fish ?—Your argument is no doubt very good. Last year it was most extraordinary that about the month of June every fishing smack took about a dozen and a half up to two or three dozen of hakes, for which they got from 6*s*. to 7*s*. and 8*s*. a dozen. Frequently after that the boats took 50 dozen a day, and only made about 1*s*. a dozen. I have no doubt that when that great increase of hakes took place in our bay a large portion of the fish here was destroyed by them. And so with regard to oysters. I recollect one year, about 10 or 12 years ago, that a number of smacks came down here from the eastward, oyster fishing. The whole of Torbay appeared at that time to be paved with oysters. I never saw such a quantity before and have not seen such a quantity since. This quantity of fish came in and remained four or five weeks, and after continuing that time they disappeared altogether, and the supply came to its old standard. Now, I take it that when they came here they must have had food. It would be about the same as an army coming into a town. No doubt they committed great destruction on the small fish.

9263. I express no opinion as to whether this destruction of small fish is good, bad, or indifferent, I only wish to know whether as a fact it takes place ?—I should think it does as a natural rule, but the same rule has always prevailed with regard to the destruction of small fish by large ones. It was the same 50 years ago as at present. The destruction in Torbay is not greater now than it was then by that means; I attribute the increased destruction of small fish solely to the causes I have mentioned to you.

9264. Then you have no doubt as to the decrease in certain kinds of fish ?—I am inclined to believe from my own observation that there has not been the slightest diminution in the quantity of fish caught here.

9265. Not in any kind of fish ?—No.

9266. Then where is the evidence of the harm having been done by fishing in-shore ?—I am speaking of the fish caught on the trawl-ground and not of the sources from which the fish generally come. For instance, with regard to the hake we find that it is generally caught first down at the Land's End; it is caught there and at Plymouth before it is caught here.

9267. But the two things don't hang together. The injury done by the small net fishing is considered by the other witnesses to be the occasion of the assumed decrease in the fish. You don't believe in that fact, and I want to know for what reason ?—I take it be a logical deduction that there is no more destruction now than there ever was. There has been a disturbance of the fish here for years and years. All the fishermen have been in-shore fishermen before they became deep-sea fishermen, and if that has been the cause of the destruction of the small fish then that has been a constant cause of that destruction since the fishing began.

9268. But if there has been no diminution in the quantity and size of the fish, what harm has been done ?—There may have been no harm apparently; that is the actual quantity of fish may not have diminished, but they might have had three times the quantity they got if the small fry had not been destroyed.

9269. That is simply a supposition ?—It is an inference, of course.

9270. As the facts stand there has been no decrease in the supply of large fish ?—I don't say that there has.

9271. Then as matters stand there is no proof beyond the supposition that there might have been an increase ?—There is no proof beyond this, that the fishermen did not commit the same damage in former times that they do now. I believe that there was always great destruction on the part of the Paignton and Torquay men.

9272. You think if they had not fished in the way you have mentioned there would have been more large fish ?—Yes; the trawlers would have been enabled to keep altogether out of the bays.

9273. But you draw a distinction between having that opinion and having proof of it ?—Yes.

9274. I think you spoke of some kind of nets that were anchored, what sort of nets are they ?—They are anchored with what they call a buoy at each end. The buoy is generally a keg. The head line is kept floating by corks, and they remain perpendicular in the water; they are quite steady, almost, in the water; the fish get entangled in them.

9275. What fish are caught in that way ?—Herring, mackerel, pilchard, and sometimes hake. They sometimes use what they call hake nets.

9276. Are the hake caught in that way ?—Yes.

9277. Where are these nets set ?—Along the shore and across the bay, from Berry Head to Torquay.

9278. They are not set outside the bay ?—No; if the mesh is too small the fish would be entangled when they ought not to be caught at all.

9279. Is there no record kept here in the port of the quantity of fish brought in day by day ?—No, none.

9280. Would it not be a simple thing to do that if there were a proper officer appointed ?—Yes.

9281. Would not that be the best way of settling these disputes as to the decrease and injury done to the fish ?—Yes.

9282. Is there no means of getting at that here ?—

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No, I don't think there is. The railway could not give a correct return, because they only get about half the quantity caught.

9283. Then there is absolutely no record kept in the port?—No; we take it as matter of opinion, every bit of it is guess work.

The witness withdrew.

C. Bartlett.

CHRISTOPHER BARTLETT called and examined.

9284. (*Mr. Caird.*) Do you fish for shell-fish—lobsters, crabs, and oysters?—Yes, for all kinds of fish.

9285. Have you found that the lobster-fishery is increasing or diminishing here in the yield?—It has been diminishing a great deal, especially in crabs.

9286. What is the cause of that?—I can give no account of it unless it is that the trawlers bring a great many ashore; but whether that makes any difference I don't know. I don't think it does make much difference for they catch them a great way off.

9287. Are there many boats employed in that fishery?—Yes.

9288. Are there more crabs brought ashore than there used to be?—No, not half so many.

9289. Not by the increased number of boats?—Not a quarter as many.

9290. What is the reason the crab-fishing has fallen off?—I can't give any account of it.

9291. Have you no idea in your own mind?—No, unless the trawlers take them up and don't allow them to come to land.

9292. Have you ever been a trawl-fisherman yourself?—Yes.

9293. Have you ever seen many crabs caught in the trawl?—Yes.

9294. What has been done with them?—They have been brought ashore and sold.

9295. Then they come to the market equally the same?—Yes.

9296. Then there is no smaller quantity brought ashore?—No, I think the quantity is larger.

9297. Does that apply to lobsters as well as crabs?—No.

9298. The trawl-boats don't catch lobsters as well as crabs?—No.

9299. Do you think the quantity of lobsters caught is increasing or diminishing?—I think it is diminishing a great deal.

9300. If they are not caught in the trawl, what is the cause of the diminution in the case of lobsters?—I can give you no account whatever more than that I know we don't catch as many. Perhaps they hide in their holes and won't come out.

9301. Do you get any oysters here?—A few sometimes.

9302. Are there no oyster beds on this coast?—Not a proper one. There is not a proper oyster bed inside of Torbay.

9303. Is the oyster-fishing followed here?—Not a great deal, it is only followed by a few small boats.

9304. Do you find that you get as many oysters as you used to get?—No, not quite as many.

9305. But there is no large oyster fishery here?—No, there is not a proper bed; there has not been since I went apprentice.

9306. (*Professor Huxley.*) You are a long-line fisher?—I fish all sorts. I can turn my hand to the whole of it.

9307. Trawling as well?—Yes.

9308. When you were a long-line fisherman did you find that the trawlers did you any mischief?—I don't know that they ever did me any harm.

9309. Did they do any harm to the long-line fishers generally?—It is not the long-line that we use.

9310. Do you use the hand-line?—No, not the hand-line. We have lines that are not one fourth the length of those they use in the north country.

9311. What is the length of your line?—We have about 300 hooks on a line, which are from 1½ fathom to 2 fathoms apart.

9312. What is the length of the snoods?—I should say about 6 feet. In the small boats we don't require these hooks.

9313. The snoods then will be about one fathom in length?—Yes.

9314. And the hooks are about a fathom apart?—No, from 1½ to 2 fathoms.

9315. Why do you not have longer lines?—We don't think it would pay.

9315*a*. Have you not sufficient room in your bay?—The fish don't come into the bay.

9316. Where do you place your long lines?—About the rocks, and about the Mudstone.

9317. On the rougher ground?—Yes.

9318. Then the trawlers can't work over you?—No.

9319. And for that reason they don't interfere with you?—No.

9320. Is that what you call a "bulter"?—Yes, that is what we call a "bulter."

9321. Is the mode which you have described the mode in which all the long-line fishermen fish here?—No, only a certain number of them.

9322. But it is the only kind of long-line fishing you have here?—Yes, about this part of the country.

9323. Then you have no reason for disliking the trawlers here?—There is no reason on the part of the long-line fishermen for disliking them.

2324. We find that the long-line fishermen, mostly, don't like the trawlers at all?—I don't see any harm in them. I think it is rare for them to catch the conger in the trawl, and that is what we mostly go after.

9325. Don't you catch cod-fish as well?—We like to see them come to the hook in the season.

9326. They are not abundant here?—No, we sometimes catch five or six.

9327. Do you catch any haddock?—I don't know that I ever caught one in my life bultering.

9328. How do you catch them?—By using the hand-line we may catch one or two in the season.

9329. Are the haddocks scarce here?—Yes, very scarce.

9330. How long have you been engaged in fishing here?—For the last 29 years.

9331. Have they been scarce all that time?—There have only been two seasons in which they were plentiful.

9332. Then there has been no regular diminution; except for the two seasons they have always been scarce here?—Yes, they were scarce before those two or three years, and they have been scarce since.

9333. Do you fish for herring with the drift-net?—Yes.

9334. Do you find that the trawlers interfere with you there?—Not often.

9335. Do they not get foul of you?—They never have done so yet.

9336. What is the length of your herring train?—We have about 200 fathoms.

9337. How many nets will that be?—Four.

9338. You have very short trains here then?—Yes; some have 15 nets, some five, some six, seven, and eight. They put out 500 and 600 fathoms, some of them.

9339. What mesh do you use here?—It is the proper herring scale.

9340. What is it?—Some of them are not larger than a shilling, some will be a shilling; that will be 36 to the yard.

9341. Does anybody look after your nets here to see that they are of the proper size?—I never saw anybody, but they are generally the proper size for herring nets. We have a different net for the pilchard net.

9342. Do you use a different net for the pilchard?—We ought to use a different net. The boats that went out pilchard fishing with the herring net have not got any at all. The fish go through the net.

9343. Through the inch mesh?—Yes.

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9344. Do you catch pilchard with the seine here?—Yes.

9345. Have you had a chance of catching them that way lately?—I did two seasons ago.

9346. Do they vary very much?—Yes.

9347. Do as many pilchards come here as did 20 years ago on the average?—Yes; if the herring netters had a proper pilchard mesh they would catch them as plentifully as they did 20 years ago.

9348. What do you call pilchard nets?—The proper pilchard scale is rather under the shilling scale.

9349. Then what has made the fishermen use nets of a larger size?—The nets they use are for herring, but the herring takes one size and the pilchard another.

9350. They use their herring nets for pilchards?—Yes, but they can't catch pilchards with them.

9351. You think they ought to have distinct nets?—Yes.

9352. How many meshes to the yard will there be in a proper pilchard net?—About 38, I think.

9353. Would that small difference in the size make all the difference in the catch?—Yes, it would make all the difference; because if the fish gets in above his gills he will go right through. This is especially the case in regard to the pilchard, which is a round fish.

The witness withdrew.

(*Mr. Caird.*) Is there any other fisherman who desires to give further evidence? We have now gone through the list of witnesses, but we should be glad to hear any additional evidence that may be tendered.

W. Calley.

William Calley called and examined.

9354. (*Mr. Caird.*) Have you any means by which you are able to tell us accurately the number of vessels employed in the fishing here?—Yes; I am president of the fishing club.

9355. Do you keep any record?—Yes.

9356. Will you tell us the number?—The number of vessels employed in Brixham at this time is 90. In addition to which there are five extra, making 95 that fish here the greatest part of the year. I find, by referring to the list, that there are about nine or ten that go to Tenby from May to September, and about a dozen that go to Hull and Ramsgate to fish from November to May; that makes an average of from 80 to 85 here throughout the year. The nine or ten which go to Tenby leave in May and return in September, and the 12 which go to Hull and Ramsgate go in November and return in May; so that the number generally fishing off here will be about 85.

9357. That is not the whole number of boats engaged here?—Yes, the whole number engaged here. We have 152 vessels insured in the society, but the condition is that they must belong to a Brixham man. Independent of the vessels which are at Brixham, there are 41 the owners of which reside at Hull, and fish from Hull altogether.

9358. Then the number of vessels you have given includes a greater number of vessels than hail from Brixham?—I don't know where they hail from; they don't fish here.

9359. Then the average number that fish here is between 80 and 90?—Yes.

9360. (*Professor Huxley.*) You said that 42 fish from Hull?—41 are at Hull, and there are 16 in Ireland.

9361. Permanently in Ireland?—Yes. There are three at Liverpool, one at Plymouth, and another at Ramsgate.

9362. (*Mr. Caird.*) That makes up the whole number to 152?—Yes.

9363. Have you any record which will show us whether these numbers have increased or diminished during the last few years?—They have increased considerably during the last six or seven years.

9364. Do you know the cause of that?—Five or six years ago trawling became very profitable, and there were a number of new vessels built. They were built of a larger size than formerly. Before they ranged from 26 to 30 tons new measurement, but now they go from 36 to 41 and 42 tons. The vessels of the present day will be from 60 to 70 tons builder's measurement, and they will range in length of keel from 48 to 54 feet.

9365. You say that trawling became profitable five or six years ago?—Yes.

9366. In what way did it become profitable; was it from an increase in the take of fish, or an increase in the price, or from both?—From both.

9367. Has it continued to be profitable in the same degree?—Yes, as far as I am concerned. I have no cause to complain. I am interested in two of the vessels.

9368. You find they continue equally profitable?—Last year they were not so profitable as the year previous and the year before that.

9369. Was there any particular cause for their becoming so profitable six or seven years ago?—No; perhaps the railway communication tended to increase the price of fish in the market by diminishing the price of carriage.

9370. It provided a better outlet for the fish?—Yes.

9371. Perhaps more people would buy it?—Yes, and if there were more buyers it would increase the price.

9372. Do you think it would increase the number of fish?—No, I don't see how it would do that, but it would increase the price.

9373. Did it not increase the number of vessels going into the trade five or six years ago?—Yes, certainly it would cause an increase in the number of the vessels. Being found to be a profitable investment, and that the fishermen made more earnings, there would be more vessels put in the trade.

9374. Then do you think the increase of vessels would increase the supply of fish?—The increase of the number of vessels would perhaps increase the supply of fish.

9375. You don't think the increase in the number of vessels would result in diminishing the fish?—Certainly not.

9376. That has not been the consequence of the increased number of vessels?—No.

9377. Has the increase in the number of the vessels caused a diminution in the price of the fish?—No, there has been no diminution in the average earnings of the vessels.

9378. Therefore there must have been an increase of supply, or an increase of price?—Yes.

9379. Then you think an increased demand would be met by an increased supply?—Yes, that will be met by an increase of vessels; there would be an increase at once.

9380. That was the case five or six years ago?—Five or six years ago the increase of vessels was considerable. You were asking just now some questions in reference to vessels being mortgaged. Now, all the mortgages upon vessels are registered in the books of the society and come under my notice. In fact, I am the only one allowed to see the book, but I may say that there are only a few mortgages of any amount recorded in our books at all. At certain times when new vessels have been built, a fisherman may have had 100*l.* or 200*l.* upon his vessel. There have been such things as 200*l.* or 300*l.* recorded, but with these exceptions the mortgages here are very few.

9381. You are talking now of vessels from this port?—Yes; all the vessels insured at Brixham, the whole of the 152.

9382. If there are other mortgages on the vessels the mortgagees must have great confidence in the men as they don't record them?—The advantage of recording a mortgage is that the society guarantees to the mortgagee the same privilege as to the owner.

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9383. Do you think in some cases it is not thought necessary to resort to that safe ground?—If they don't resort to it they must have great confidence in the fishermen.

9384. Do you find that such mortgages are frequently paid off?—Yes, frequently; I had a notice of one being paid off last week.

9385. Do you find that fishermen begin by not having a share in the vessels and that they gradually become part owners?—One half of the vessels that fish from Brixham now are owned solely by fishermen. When the Commissioners adjourned for a short time a little while ago, I took the trouble to go through the list, and I find that more than one half are owned by fishermen alone. Tradesmen have nothing to do with them.

9386. Does the greater part of that arise from the gradual increase in the prosperity of the fishermen, and not from their having inherited a vessel or a share of a vessel? Do you think it is solely from their own earnings?—Yes.

9387. Then it has been a prosperous business to the fishermen here?—I believe if the business is conducted as it ought to be, on good principles, it would be a profitable business, but any business may be neglected; on the whole it has been a paying trade.

9388. In what proportion are the mortgages recorded to the estimated value of the vessels?—The vessels insured in our society are insured for between 55,000*l.* and 65,000*l.*, upon an estimated value of between 70,000*l.* and 80,000*l.*, and yet there is nothing like 10,000*l.* recorded in the shape of mortgages. I think if I say 5,000*l.* I shall be within the mark. You may take it that three parts of the vessels insured by the society are owned by the fishermen themselves; some own one, two, three, or four, and there are some owned by fishermen who don't go to sea now.

9389. Are there many trawl-vessels lost at sea?—The average in the case of our society is very small.

9390. Is the average smaller than in the case of any other kind of vessels that keep the sea in rough weather?—Yes, our average this last year will not be more than 1 per cent., not since the 1st of January.

9391. Compared with other fishing vessels, do you suppose there is less risk of life by trawling than by any other means?—I should say there is.

9392. Have you any means of speaking accurately upon that subject?—During the last 12 years that I have been connected with the fisheries here the loss of life has been very small; last year, unfortunately, there was a large loss of life at Hull, and a good many vessels were lost at sea, but so far as concerns Brixham the average per-centage of loss upon the sum insured has been very small, not more than from 1 to 1½ per cent.

9393. (*Professor Huxley.*) Then from your knowledge of the affairs of the fishermen you can give an absolute negative to the statement that the trade has been falling off, and that in consequence your fishermen have been obliged to go north?—Yes, certainly.

9394–5. I have a reason for putting the question in that way?—I can certainly contradict it. If they were to fish here for the same number of hours as they do in the north, I think it would pay them much better than to go there. They get more money in the north, but they have to go out on the Monday morning and remain at sea all the week, coming in on the Saturday morning. If they did that here, I am satisfied that they would earn more than on the north coast.

9396. (*Mr. Caird.*) For what reason do they go north?—They go north because they fancy they can get more money. They do in the gross get more money, but their expenses are heavier. Here, instead of continuing to fish during the whole week, the vessels come in almost every night. There, when the vessels leave the port, they are sometimes bound to remain out at sea for a fortnight or three weeks, and they remain fishing the whole of that time. Here, they go out on the Monday morning, and they come in again on the Monday evening; they go out again on the Tuesday morning, and come in again on the Tuesday evening.

9397. From your knowledge of the business of the fishermen, is it your belief that the quantity of trawled fish caught here by the trawlers has increased or diminished?—I don't think it has diminished.

9398. Do you differ from the other witnesses who have been examined at the earlier part of the sitting, as to any kind of fish having diminished. Have soles and flat-fish diminished?—I think there has been a diminution in the soles. Taking the year throughout, they have not been so plentiful as they were; but with regard to the other fish, and especially the poorer kinds, such as the dabs and gurnets, they appear to me to have been greatly on the increase.

9399. Are they brought here chiefly by trawlers?—Yes; in addition to the trawl-boats we have about 20 open boats. They carry two men each, and their average earnings are about 16*s.* or 18*s.* a week each man, taking one week with another, during the summer. I have one myself, and I judge from my own profits. They will go away in about a month's time to Start Bay oystering, and they will remain there all the winter dredging for oysters, bringing them into Dartmouth, and letting them remain there until the vessels take them away in the spring.

9400. Do the hook men do that?—Yes.

9401. Do they find as good a business as they used to do, notwithstanding the trawling?—Yes.

9402. Do you find from your knowledge of the fishing, that the hook men and the trawlers can follow their business together without doing injury to each other?—Yes.

9403. There is no disadvantage caused to the one by the mode of fishing practised by the other?—There is no disadvantage at all, because they don't come upon the same ground.

9404. We have been told that they do?—If possible the hook men go on the rough ground, where they can get conger eels and whitings. They go after them in preference to any other fish. If they can get to rocky ground, or a place where there is rocky ground, they will be there in preference to any other place.

9405. Has the take of fish decreased at all in consequence of trawling?—No.

9406. Has it increased?—Their takes have been as great as they ever were before.

9407. Have they been as good both in quantity and quality?—Yes. I never saw finer fish than those in the market yesterday. Taking the average of the boats, I think they do as well and better than they have done for many years. It was mentioned some time ago that 38 feet was the length of the beam sanctioned by Act of Parliament. I only wish to state that there might be great danger to a vessel if the beam was not in accordance with the length of the vessel itself. As to the size of the mesh it appears to me to be misunderstood; I think the Act allows the mesh to be 3½ inches.

9408. Not 1¾ inch from knot to knot?—When the meshes are pulled together they will be 3½ inches from each external knot.

9409. The law here is quite distinct: "Trawls "shall be made with nets, the meshes of which shall be "at least one inch and three quarters square from "knot to knot along the line." You see it is never measured in the way you suggest?—No, it is from knot to knot; that is the precise definition of it.

The witness withdrew.

J. Milton.

JAMES MILTON called and examined.

9410. (*Mr. Caird.*) Have you been long stationed here with the Coastguard?—About four years.

9411. Was the paper you have handed in to the Commissioners put in during the time you were in the force?—No, before I came here.

9412. The witness who stated that the order came

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10 Oct. 1863.

down from London not to regard the size of the meshes, stated that it was in 1859. It appears from the letter which I hold in my hand that it was in 1858. Did you find this letter in your office?—Yes.

9413. Among the records of the office?—Yes.

9414. There was no other reason for suspending your operations than that which is mentioned in this letter?—No.

9415. I will read the letter:—

H.M.S. Blenheim, Sept. 22, 1858.

(Memorandum.)

The subject connected with restrictions imposed upon the fisheries being under consideration, the Lords of the Privy Council for Trade consider it desirable for the moment, strict observance with respect to trawl nets should not be observed with reference to the size of the meshes.

(Signed) James Scott, Captain.

Have you had any order or direction from your office as to interference in any way with regard to the size of the net, or any other regulations with reference to fishing?—I never had but one. About a month after I joined we found a French fisherman with a mesh much smaller attached to his trawl net than it should have been, and we reported the case to the Customs.

9416. Had you any instructions to regulate you in your proceedings in regard to the fishermen?—No, none at all.

9417. Did you hear it stated to-day that a Revenue cutter had ordered a fisherman outside of Start Bay who had been employed there in trawl fishing?—We have instructions as to the size of the mesh, but we understood the order contained in that letter to supersede them.

9418. It was stated that a Revenue cutter interfered with a trawl fisherman and ordered him out of the bay; have you any knowledge of that circumstance?—No. I believe my inspecting commander has been making inquiries and asking for some Act of Parliament more explicit and plain so that he could enforce the law.

9419. Do you believe that the Act as it stands is defective?—I believe that as the Act at present stands we have no power to prevent them.

9420. To prevent fishermen from fishing in the bays?—Yes, and we understood that the instructions contained in that letter were that we were not to interfere.

9421. You have had no instructions since that letter?—Not subsequent to that.

9422. Had you any instructions to examine the size of the mesh and the length of the beam?—Some years ago, but not recently.

9423. Are you expected to act on them?—No.

9424. Is it part of your duty to see that the fishermen use a certain size of net?—Yes.

9425. Do you examine their nets?—We see them on their beams. We generally see that they are about the size, about $1\frac{1}{2}$ to $1\frac{3}{4}$ inch, in the mesh. After that instruction came down I never concerned myself about them at all, except in one instance, when I reported that they were considerably too small.

9426. That was in the case of the French boat?—Yes.

9427. (*Professor Huxley.*) Do your instructions oblige you to make periodical inspections of the fishermen's gear?—No.

9428. Suppose you were to make a report to your commanding officer, would he notice the omission of the inspection of fishing nets?—No; we are expected to visit them if there is anything wrong, and then we report to our commanding officer.

9429. Do your instructions make it incumbent upon you to pay visits at any particular time to the fishermen's boats?—No; only in our rounds we may go onboard. We may go onboard if there is anything wrong.

9430. You would hardly see that anything was wrong unless you were onboard, would you?—We can see the nets when they haul them up in the harbour.

9431. But it would be difficult to find out whether the mesh was of the proper size unless you went onboard; is it part of your duty to see that the meshes are of a certain size?—Yes, but it has not been attended to in consequence of that order.

9432. Did you consider that order suspended your operations?—Yes.

9433. So that the whole Act of Parliament has been a dead letter since 1858?—That is so far as we understand the matter, but we don't know whether we have been right or wrong.

9434. If any person came to you and said "So and "so is fishing with a trawl-beam 40 feet long and a net "with meshes $1\frac{1}{2}$ inch from knot to knot," would you feel it to be your duty to go on board and see for yourself?—Yes, I should report the case to the Custom House.

9435. Would you not of your own motion go and examine the beam?—If I believed that anything was wrong I should examine it.

9436. But this order says you are not to be strict in your observance of the instructions; and though it does not say you are to pay no attention to them, that opens a very wide door?—I understood it to mean that I was to pay very little attention at all.

9437. Then, practically, that order does suspend the operations of the Act?—It has generally, so far as I have been concerned, except in the one instance I have mentioned.

9438. But notwithstanding if any person had brought a case under your notice you would have felt bound to act as the law directs?—Yes, I should have reported the case to the Customs.

9439–40. Would the Customs or the magistrate have received any intimation apart from you?—Do you mean apart from the Customs? I am ordered not to give it. I am bound to report to the Customs first. I cannot enter into civil prosecutions, that is done by the Board of Customs. I could only give my evidence.

The witness withdrew.

The inquiry was then adjourned until Monday, October the 12th, at Torquay.

Torquay, Devonshire, Monday, 12th October 1863.

Present:

James Caird, Esq., M.P. (Chairman). | Professor Huxley, F.R.S.

TORQUAY.

W. R. G. Palliser.

12 Oct. 1863.

Wray R. G. Palliser called and examined.

9441–2. (*Mr. Caird.*) You are a commander in the Royal Navy and inspecting commander of the Coastguard here, I believe?—Yes.

9443. Have you received any instructions from your department as to the conduct of the fisheries on this coast?—None, further than the Convention and the various papers which I now produce.

9444. Has a copy of the Convention been forwarded to you officially, in order that you may carry into effect its articles?—A copy was forwarded to my predecessor.

9445. Are the same instructions continued to you?—The same instructions are continued to me.

9446. Have you had occasion to carry the articles of that Convention into effect?—Yes.

9447. Can you give any instance or instances in which you have found it necessary to do so?—Yes.

9448. Will you be so good as to state them?—Upon

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one occasion a fisherman at Torquay, named Tucker, complained to me that a Brixham trawler had trawled away his mackerel drift-nets.

9449. How long is that ago ?—I think about three months ago. The man made a complaint to me that the trawlers came in, and that although he hailed them they still went on trawling, ultimately cutting through his net and destroying it.

9450. He had a mackerel net set at the time ?—Yes, he was fishing with a drift-net.

9451. And was his boat at his net ?—Yes.

9452. The trawler passed through his net ?—Yes, though he was hailed by the fisherman several times.

9453. Were the name and number of the trawler taken ?—Yes, the name was taken, and I believe the man got a few shillings as a recompense from the owner of the trawl-boat.

9454. Did he accept that as full compensation ?—He accepted it, but I heard him say afterwards that it represented nothing like the full amount of the damage which had been done to his net.

9455. That is an instance of damage done by a trawler to a mackerel net-fisher ?—Yes, in Torbay. I made a report of the circumstances to the Board of Trade.

9456. Have you any other instance you can bring before us in which you think there has been some breach of the regulations ?—On various occasions I have had complaints from the fishermen on this coast. For instance, the Start Bay fishermen state that the trawlers are constantly coming in on their ground trawling, and carrying away their lobster pots.

9457. Was the complaint that they came within distances beyond which you think they are excluded by the regulations, or was it that they had damaged the lobster pots ?—They were trawling in my opinion on ground where they had no business to be.

9458. Can you show us any regulation that excludes them from any particular ground ?—Nothing further than the Convention itself. My idea of the Convention was, that it prohibited them from trawling within three miles of the coast; but since I have been in this room I have been given to understand that that impression is erroneous.

9459. Will you be kind enough to refer to the clause which you think operates in the manner you have mentioned. You have no instructions other than those contained in the articles of the Convention, have you ?—No, none.

9460. I believe you construed the second article of the Convention to mean that you had a right to interfere with trawl-fishing within three miles of low water mark ?—Yes, but I find that I was wrong in that. If I had punished a trawler in any way it would have been under that article, and the construction I placed upon it. But with regard to trawling where drift-nets are, I think there is an article which says that the trawlers are not to fish within a certain distance of the drift-nets. On looking at the Act closer I find that I was erroneous in regard to the trawlers fishing within three miles of the shore.

9461. Let me refer you, Captain Palliser, to the 26th article of the Convention. That article says : "Whenever herring or mackerel boats shall Commence drift-net fishing in any place whatever, the trawl-boats which may be already fishing in such place shall depart therefrom, and shall keep at a distance of at least three miles from the said drift-net herring or mackerel boats." Was it under the 26th article that you thought it your duty to interfere with the trawler because he was at that time coming closer to the drift-net or mackerel boat than the law sanctions ?—Yes.

9462. It was under that article that you thought it your duty to interfere ?—Yes.

9463. Not that you thought it your duty to interfere to exclude him altogether from the three-mile limit, but because he was coming in contact with a mackerel boat ?—Yes, and because that was a breach of the 26th article of the Convention.

9464. Do you consider that you have no authority to order trawlers out of the bay, except when they come in contact with herring or drift-net mackerel boats ?—No, I have no orders that authorize me to do so.

9465. Do you know whether at any time trawl-vessels have been warned out of the bay under that belief, by yourself or any officer under your command ?—Yes, I have done so myself, and so has the commander of the cruiser here.

9466. You did it under the belief that you had such authority ?—Yes, we always understood that we had the power to send them away within a certain distance. The reason we took notice of the matter was, that we had had so many complaints from the other fishermen against the trawlers, and really what little fish they did get when they came close in-shore was not worth their while.

9467. You thought it was good for the fishery to order them out ?—Yes, certainly.

9468. And you believed that you were acting under some authority that you possessed ?—Yes.

9469. Did the trawlers leave the bay ?—No, though I warned them myself.

9470. Have the trawlers, in consequence of your warning, left the bay ?—No, they have refused, and have gone on trawling.

9471. They have never been forcibly expelled from the bay ?—No, I never forcibly expelled them.

9472. Has that occurred within a recent period ?—Yes, about two months ago.

9473. Have you any reason to know of your own knowledge that the trawlers do injury to the fishery by trawling in the bay ?—Yes, I think so.

9474. In what way do they do injury ?—I am almost certain that most fish come into shoal water to spawn on the mudbanks and the sandbanks; they deposit their spawn there in shallow water, and when the trawlers trawl over it they tear it up.

9475. Have you ever seen spawn drawn up by the trawl ?—No, I have not; I never examined sufficiently close to see whether spawn was there or not, but I have seen large quantities of very small fish brought up dead, sticking to the trawl net and entangled with seaweed; they were small fish, of no use whatever for the market.

9476. Or for human food ?—No.

9477. Were they thrown overboard ?—Those that I saw were sticking dead in the trawl; I have seen them in a dry trawl.

9478. Was it in the warm summer months or in the cold and winter months ?—It was about this time of the year.

9479. It has been stated to us by the trawlers themselves at Brixham, that they think it would be of advantage to the fishery that they should be excluded from the bays in the warmer months, but be allowed to fish in them in the colder months; they tell us that they would do no injury in the colder months, as there are then very few small fish to be found in-shore, and it would be a great convenience to them to be allowed to fish in the bays in stormy weather when they cannot get out to sea. What is your opinion upon that point ?—I think that they get a very small quantity of fish that is marketable in the bay—close in the bay.

9480. Do you mean in the cold weather ?—At this time of the year. I think they only come to trawl in the bays when it is blowing very hard outside, and not from being enabled to get more fish; they don't like to stop out in bad weather.

9481. You cannot from your own personal knowledge speak as to the difference of seasons; you cannot say whether in cold weather it might be less injurious than it would be in warm weather ?—My own opinion is that at this time of the year, namely, the cold season, the fish come in to spawn in shallow water.

9482. Do you think that in the cold season, by trawling in the bays, the fishermen destroy the spawn ?—I may be wrong, but I certainly think so. I think that the fish come at this time of the year in-shore to deposit their spawn.

9483. Have you had occasion to direct an examination to be made with regard to the size of the mesh of the trawl nets ?—No.

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9484. Has there been an instance of any interference by the Coastguard in enforcing the regulations of the Convention as to the size of the meshes?—No; it would be too great an undertaking once to begin that, because I believe there is scarcely a legal trawl in Brixham or Torquay.

9485. Have you any further instructions to guide you on that point?—None, further than the Convention.

9486. You are aware that in 1858 there was an official instruction given to suspend the rigid execution of these regulations?—Yes.

9487. And since that time I suppose they have practically been a dead letter?—Yes.

9488. With regard to the other details of the Convention, as to the use of distinguishing flags or vanes on the boats, is there anything of the kind observed here?—In Brixham and Torquay the trawlers seldom carry any flags. They have their numbers on their sails and vessels. We enforce that regulation if ever we see them without a number.

9489. (*Professor Huxley.*) The report I hold in my hand, Captain Palliser, was made by your predecessor here, Captain Hoblin?—Captain Hoblin was the commander of the cruiser, the predecessor of the officer here. That report was made before I joined. The Coastguard was then under another inspecting commander. I imagine that that is a copy of the report that was forwarded to the Board of Trade by the coastguard officer.

9490. The commander of the cutter is likely to know more about that report than you?—Yes.

9491. Is this a copy of the return sent in by your predecessor?—Yes.

9492. I observe that the date of it is 1858, but there is no month or day mentioned?—No.

9493. Then you do not happen to know whether this preceded or succeeded the letter sent to Brixham, which virtually suspended the regulations contained in the Convention?—No, I know nothing further about it than that I found it in the records of the office.

9494. I perceive that it contains a copy of the articles of the Convention, and a space for two answers under the following heads—first, "To what extent and within "what limits are the regulations enforced?" The second head comprises "observations and suggestions "including reasons where the regulations are not "enforced." On turning to trawling, I find that the commander states "the trawls of the Brixham trawlers "are not all made the required size, namely $1\frac{3}{4}$ inches "from knot to knot." Then, under the head of "observations and suggestions," including, "if the "regulations are not enforced, the reasons," I find the following: "When the treaty was made in 1839, the "Brixham fishermen memorialised and obtained per-"mission to use their trawl nets until they were worn "out, and the meshes have been made a little larger "since." Have you a copy of that memorial?—No.

9495. I find no remark in this report in reference to the length of the beam. The commander does not appear to have observed that the beam was too long?—No.

9496. Was any action taken on that report or not?—I think not, or I should have had a copy of the proceedings that were taken, or at any rate of the result.

9497. If the letter we saw at Brixham was written subsequent to this, it would seem as though the authorities had made up their minds to take no notice of any infringement of the law?—I cannot say how that was.

9498. (*Mr. Caird.*) You reported your having interfered with the trawl-fishing in the bay to your superior authority?—Yes.

9499. Did anything follow in consequence of that report?—I had no further instructions.

9500. You reported to the Board of Trade?—Yes.

9501. And you had no further instructions on the subject?—No; I applied for instructions other than the instructions contained in the Convention.

9502. And what reply did you get?—No reply was sent to me.

9503. How long is that ago?—It was within the last year, perhaps it would be this year; at any rate it was within the last 12 months. Perhaps I may be allowed to state in reference to interference with the trawlers trawling in Start Bay, that on account of several complaints we had received from other fishermen we thought it only fair that we should exert our authority in order to secure fair play between the different classes of fishermen.

9504. That was in Start Bay, not Torbay?—In Torbay also, but particularly in Start Bay. I was in that bay one day when it was blowing hard, but not too hard to allow the fishermen to work; I saw some 15 or 16 trawlers bear up and run into the bay within a couple of miles of the shore. I certainly thought that was something hard upon the other fishermen, who get their livelihood with their seine nets and lobster pots in shallow water. We told them that they ought not to be there, but they took no notice of us. That was in Start Bay.

The witness withdrew.

JOHN HUGHES called and examined.

J. Hughes.

9505. (*Mr. Caird.*) You command the Revenue cutter here, I believe?—Yes; the "Wickham."

9506. Have you been long on this station?—About two years or more.

9507. Have you had occasion to observe the mode in which the different kinds of fishing are practised on this coast?—I have.

9508. Can you tell us, particularly in regard to the trawl-fishing and the Brixham trawls, whether you have noticed the trawl drawn up to the surface?—I have.

9509. Have you frequently seen it?—Yes, frequently.

9510. In the deep-sea or close in-shore?—Both inshore and out at sea.

9511. Speaking first of the deep-sea trawling, have you observed whether many of the fish, when they are brought to the surface, are mangled or dead?—Plenty of times I have seen them dead. If the trawl has been trawling long on the ground one half the fish will be dead.

9512. One half of the whole number will be dead?—Yes.

9513. Chiefly the small fish?—Yes.

9514. Not one half in weight, but in number?—Yes.

9515. Have you observed a larger proportion of small fish brought up by trawling in the deep sea, or in shallow water?—More are brought up in shallow water.

9516. Has it been only when they have been trawling long in the sea or in stormy weather that you have observed a large quantity of dead fish?—It has been generally when they have been trawling for six or eight hours over the ground. Sometimes they have to trawl and heave up at short intervals, and then the fish are nearly all alive.

9517. Have you observed whether these small fish are thrown overboard?—Mostly they are; the very small fish are thrown overboard. After they have rounded Berry Head they generally clear the deck, and the small fish are then thrown overboard.

9518. What proportion of the take would be small fish? Can you give it to us in basketfuls?—Sometimes there is a basketful, at other times there may not be a basketful.

9519. What proportion of the take would be unmarketable fish and thrown overboard?—More than one half in number; perhaps two thirds would be small fish.

9520. How many basketfuls of fish have you seen taken up in a trawl net?—Sometimes six or eight baskets at a time.

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9521. Of these six or eight baskets what proportion would be thrown overboard as unfit for food?—They do not throw it overboard always when I am by, but when they come to their moorings at Brixham I have seen the small fish floating away.

9522. What proportion?—I can hardly say that.

9523. Would it be one basketful out of eight?—Yes, there would be quite that.

9524. That occurred chiefly in bad weather when the trawl was down for a long time?—Not always in bad weather. They sometimes catch a quantity of small fish in fine weather.

9525. You are speaking of the deep-sea trawling now?—Yes.

9526. With regard to the in-shore fishing, what proportion of the fish will be small fish in a take as compared with the large fish?—Not so much, because they do not trawl so long in shallow water as in deep water. I have often seen plenty of small fish, but I cannot say what they throw overboard. They get more of the small flat-fish near the shore than of any other kind.

9527. Are they in such a state as to require their being thrown overboard as unfit for food?—Yes, the very small ones.

9528. Do they form any large proportion of the whole catch in weight?—They are hauled up along with them. If they catch about three or four baskets in the bay, there may be half a basket of small fish.

9529. Have you observed any spawn drawn up in the trawl net?—I have not seen it drawn up, but I have seen it swimming about, particularly in a line with Berry Head.

9530. Had it been drawn up by the trawlers?—No; it was floating in the water. I have taken baskets of it up, and found life in it.

9531. Had it been disturbed by the trawl nets?—I don't know whether it had or not.

9532. You have seen it irrespective of the trawl-vessels?—Yes; I have seen that spawn floating in different parts of the Channel on the surface of the water.

9533. It has been stated that the nets in the bays disturb and injure the spawn, and drag it up?—Yes.

9534. Have you seen spawn in these nets?—I have seen fish two or three inches long, but not the spawn itself.

9535. Is it your belief that the spawn is disturbed by the trawl nets in the bays?—Yes.

9536. On what do you found that belief?—In consequence of the very small fish being taken up, particularly by the shrimp nets which are hauled in-shore. Small fish, not half an inch long, are got in that way, and when they are hauled ashore they are nearly all dead.

9537-8. Have you ever ordered any of the trawl-boats out of the bays?—Yes, I have, at different times.

9539. Within a recent period?—Yes, within the last two months.

9540. You were then acting on your understanding of the Convention as it was stated by the previous witness?—Yes.

9541. Did the trawlers obey that order?—No.

9542. They paid no attention to it?—No, they paid no attention at all.

9543. What answer did they make?—They said they would haul up directly, but they never offered to do so. On the contrary, they went as far as the tide and the wind would take them, when they hauled up naturally, and not before.

9544. Did they leave the bay then?—No, they would dodge about waiting for the tide to come the other way.

9545. Did they consider that you had no authority to give them that order?—They told me so.

9546. Have you ever observed any damage done by the trawl-vessels to the drift-nets?—No, except that the Torcross lobster boats have lost a lot of their lobster pots in consequence of having them taken up.

9547. Have you noticed during the two years you have been on the station whether the take by the trawl-boats has been increasing, diminishing, or stationary?—Sometimes they catch more fish than at other times.

9548. Have you observed whether, in trawling over the same ground repeatedly, the ground seems to become exhausted of fish?—No, I think it makes no difference. If they trawl on the same ground for a full week the fish will be as plentiful next week as ever.

9549. You do not think that the ground becomes exhausted by repeated trawling?—No, I do not think it does with regard to the large fish.

9550. From your practical observation of the matter, do you think it right that any regulation should be adopted to prevent trawling within the bays?—Yes, but outside the headlands I don't think any harm is done.

9551. Do you think that the same quantity of fish could be brought to market by any other means?—Yes.

9552. By what other means?—If they were not allowed to come within the bays I think they would get as many fish by trawling outside.

9553. But if trawling were put down altogether, do you think there are any means by which as many fish could be brought to market?—No.

9554. The same quantity could not be supplied by line-fishing?—Certainly not on this part of the coast.

9555. From your knowledge of the coast, you do not find that the grounds on which trawling is principally practised are giving way in the production of fish?—No.

9556. Have you observed the trawlers following each other in their fishing, one after the other?—Yes, I have frequently seen them fishing one after the other.

9557. Almost in the same line?—Yes, nearly in the same line.

9558. Day after day?—Yes.

9559. You have not found that the first boat got the best haul?—Not at all; very likely the last boat would get as good a haul. I have been on board several of them particularly on the ground outside Plymouth. There they trawl 30 or 40 in a line, and the last boat will come up full of hake. They are a fish that swim much faster than the turbot, sole, or brill.

9560. Is that one particular ground that has long been fished?—Yes, it has been fished as long as can be recollected.

9561. Is it a well defined spot of ground with which the people are well acquainted?—Yes, it is a very narrow piece of ground. The fishermen know it perfectly well. There is rough ground on each side of it.

9562. What is the length and breadth of it?—I do not exactly know, but they tell me it is very narrow.

9563. How many trawlers have you seen following each other on this piece of ground?—I have seen 20 or 30 of them in a line.

9564. Have you observed what quantity of fish they catch in a day on that ground?—Sometimes great quantities of hake. Each vessel will catch several scores.

9565. In the course of the two years you have been on this coast, have you observed whether there has been an increase in the number of vessels fishing on that ground?—No.

9566. Have you observed whether there has been a decrease?—I cannot say. I don't think there has been much difference.

9567. Did you see any French or foreign vessels come to fish on these grounds?—Not trawling. I have seen them long-lining off the Eddystone and the Plymouth grounds.

9568. Have you ever observed long-lining and trawling going on at the same time?—Not about here.

9569. Have you ever heard any complaint made by the long-line fishermen of the injury done to them by the trawlers in deep water?—No.

9570. All the complaints you have heard have been confined to the injury alleged to have been done in shallow water, within the bays?—That is all I have heard.

9571. Within what limit from the shore do you think it would be proper to exclude them?—If they were clear of the headlands, say two miles off the Berry Head, they could not do much harm then.

9572. You would draw a line two miles outside of the headlands?—Yes.

9573. That would exclude them from the bays?—Yes.

9574. Would that meet all the objections that could be reasonably entertained by the in-shore fishermen?—Yes. The trawl fishermen have told me themselves that they wished there was an order to keep them out of the bays. But there are several old vessels—they do not like to take to sea—which trawl and get a good catch, and if the others have not been similarly fortunate the owners find fault with them for not having been out trawling.

9575. (*Professor Huxley.*) You spoke just now of the spawn floating on the surface of the water. Do you know that it was fish spawn?—Yes, I have seen it for many years, particularly in Rye Bay, and on the Kentish coast. I have seen it picked up in buckets.

9576. But how do you know that it is fish spawn?—It was not birds' or anything else.

9577. But there are a great many things in the sea besides fish?—I have no doubt in my own mind that it was fish spawn.

7578. Have you seen any fish in it?—Yes, cuttle-fish.

7579. Young cuttle-fish?—Yes, like a bunch of grapes; but the other spawn was too small to make out much life in it. I have seen it alive however when it has been hauled up.

9580. But that was not likely to be fish. With regard to the tackle of the trawlers, if you went alongside of a trawler and found that her beam was 50 feet long, would you deem it your duty to take any notice of it?—No, if I had no orders to that effect.

9581. Are you aware what the rule of the Convention is?—Yes.

9582. That the beam is not to be more than 38 feet long?—Yes.

9583. Then if you observed a beam 40 or 45 feet long, would you not feel called upon to take any measures with regard to it?—I have not done so hitherto. I see from the Convention that they are not allowed to have their beam so long as that.

9584. My object is to ascertain how the Act works in practice. I want to know if you would feel yourself called upon to interfere or not?—I think I should.

9585. If you go into Brixham Harbour you will find all the beams more than 38 feet long?—Yes, I believe so.

9586. Have you ever intefered with any of them?—No.

9587. Then in fact you do not feel called upon to interfere?—No.

9588. Do you consider that your instructions call upon you to carry out the Convention, or do you think it is in abeyance?—I can hardly answer that.

9589. Practically, you do not carry out the Convention?—No.

9590. I understand that you never received any special orders, directing you to carry out the regulations contained in the Convention?—No.

9591. Was the letter which I hold in my hand received before your time. It is a document signed "Houston Stewart," and is dated the 10th of May 1847. It says:

"In consequence of directions from the Lords of the Committee of Privy Council for Trade, signified by Mr. Lefevre's letter of the 28th ultimo on the subject of enforcing the regulations referred to in the Board's general orders of the 17th February 1844, No. 14, and subsequent order for carrying into effect the Convention between Her Majesty and the King of the French concerning the fishermen in the seas between the British Islands and France.

"I have it in command to direct you and the several officers under your survey to continue to carry into effect the regulations now in force in regard to these fisheries.

"The aforegoing copy of a letter addressed by the Board to the collectors and controllers of the out-ports in England and Scotland is herewith transmitted for the information and guidance of the inspecting commander at Dartmouth.

"Houston Stewart,
"Coastguard Office, Controller General."
"Carlton House, London, May 10, 1847."

Now I take it that you would understand that to be an instruction to carry into effect the Convention?—Yes.

9592. Do you suppose that your predecessor here acted upon that; are you aware that any prosecutions were instituted by him or any seizure made?—No, I never heard that there were.

9593. Nothing of the kind took place?—No.

9594. You are doubtless aware of the existence of this letter?—Yes.

9595. Though you did not think it compelled you to enforce the regulation minutely?—No.

9596. Was that in consequence of any other document having made its appearance besides this?—No.

9597. Have you received any other instructions directing you not to carry the provisions of the Convention strictly into effect?—I have a copy of a letter in my order book.

9598. Is that the letter we saw at Brixham?—I think so. We have a copy of it in our order book.

9599. Then practically it comes to this—that at present the Convention is suspended here?—Yes.

9600. (*Mr. Caird.*) Speaking practically in regard to the length of the beam of the trawl, do you think it would be right to limit the fishermen to the precise length of 38 or any other number of feet?—I do not think that that would make any difference in taking out small fish.

9601. But does not the convenience of having the beam a certain length depend on the length of the vessel itself?—Certainly it does.

9602. Is it not necessary for the safety of persons fishing in a trawler to have a larger beam in a larger vessel than in a small one?—Yes.

9603. So that it might be checked in its motions backward and forward by the backstay of the mast?—Yes.

9604. Then it would not be practicable to enforce any particular length of beam except in accordance with the length of the vessel?—No.

9605. If you were to carry out your instructions and seize every beam that was above 38 feet long in Brixham would you not inflict a deep injury on the fishermen there?—Yes.

9606. An injury that would not be compensated by any corresponding advantage?—Yes.

9607. (*Professor Huxley.*) There are a great number of rules contained in this Convention, but here is one that I will read to you, namely, that "trawl-"boats shall always keep at a distance of at least "three miles trom all boats fishing for herrings or "mackerel with drift-nets." Is that a rule that can be conveniently enforced?—No, I don't think so. A trawler may be trawling in the night time when a drift-net boat may put off and shoot his net close to him. I don't see how that can be stopped.

9608. If you were called on to enforce these rules, do you think, as commander of the cutter here, that you could carry that particular rule out?—No, I think not.

9609. Is there much herring-fishing going on here?—No, I do not think there is on this coast; but after you get to the westward of Bolt Tail then the Plymouth and Cornish boats come in.

9610. Do the trawl-boats here have vanes at their mast-heads?—Some of them have a little bit of a flag.

9611. You are aware that there is a rule on that subject?—Compelling them to carry vanes?

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9612. Yes; they are bound to carry vanes of a particular colour?—No, I was not aware of that.

9613. That is not a regulation that is attended to?—No.

9614–5. There is another rule here with regard to herring boats, when the herring-fishing is going on, that "whenever decked herring boats and "undecked herring boats shall commence shooting "their nets at the same time, the undecked boats "shall shoot their nets to windward of the decked "boats, except they should prefer going to leeward, "to a distance of at least half a mile, to shoot their "nets." The next article says: "The decked boats "on their part shall shoot their nets to leeward of the "undecked boats, unless they prefer going to wind-"ward, to a distance of at least half a mile, to shoot "their nets." That is to say, that decked and undecked boats shall not shoot within half a mile of each other. Do you think these regulations can be carried out in practice?—I can hardly see how it is possible to carry them out. Very often it is dark before they begin, and it would be impossible to see which of the boats were decked and which were undecked.

The witness withdrew.

R. Slade.

ROBERT SLADE called and examined.

9616. (*Mr. Caird.*) You are harbour master here?—Yes.

9617. Have you been long in that position?—About nine years.

9618. Can you tell us the number of men and boats engaged in the fishing at Torquay altogether?—Yes; there are about 20 boats engaged in the hook-and-line fishing, and probably about a dozen more employed with nets and in the seine-fishing.

9619. Have you observed during the time that your attention has been directed to it, whether there has been any increase or diminution in the numbers?—There has been a decided increase.

9620. Have you observed whether the quantity of fish they catch is increasing or diminishing?—I should say that it increases.

9621. Does that apply to all kinds of fish, or to any particular kind especially?—I allude particularly to the hook-and-line fishing. I think it is rather on the increase, and that is the opinion of the hook-and-line fishermen themselves.

9622. They are making a better business of it?—Perhaps the quantity may not increase very much, but it pays them better than it did 15 or 20 years ago. The price is now much better.

9623. Is there a marked difference in the quantity that the boats bring ashore?—I think they bring more ashore now.

9624. Are the fish themselves as good in quality?—I should say they are pretty much the same. I cannot say, nor do I mean to say, that the number of fish in the bay has actually increased, but the tackle now employed by the fishermen is better than it was, and they catch more.

9625. Their success is greater in consequence?—Yes.

9626. Do they follow the hand-line or the long-line fishing?—The hand-line fishing.

9627. Is there any long-line fishing here?—No, except by gentlemen amateurs.

9628. Do they fish in the bay or outside?—Principally outside.

9629. In the same depth of water as the trawlers?—Yes.

9630. Do they go on the same ground as the trawlers frequent?—They shift according to the season, but they go on the same ground as the trawlers.

9631. Have you ever heard them complain that the trawl fishermen injure their fish?—I have not heard the hook-and-line fishermen complain, but I have heard those who use nets say that the trawlers interfere with their fishing, and that it is scarcely safe for them to leave their nets out at night now, as the trawlers are in the habit of trawling the bays and they frequently lose their gear.

9632. You say that the hook-and-line fishermen do not complain?—I never heard them.

9633. And they practise the largest proportion of the fishing here?—Yes.

9634. Are they on the whole the most successful class of fishermen?—No; I think the net fishers are.

9635. What kind of net-fishing is practised here?—Herring, and mackerel, and pilchard-fishing, but the herring is the principal.

9636. Is herring-fishing here a successful business?—I think on the whole it is.

9637. Has it been increasing or diminishing here?—It varies considerably. There may be one or two years very successful years, and then they may be followed by years of failure.

9638. There has been no marked increase or diminution?—No.

9639. In what months is the herring-fishing generally followed?—From October till the end of December is about the time.

9640. Is it within the bay that they fish or do they go outside?—In this bay and in Babbicombe Bay; they go to both.

9641. Do they come in contact at all with the trawl fishermen?—Yes, the trawl fishermen come in contact with them.

9642. Is that to the injury of their nets?—Yes.

9643. And is it that of which they complain?—Yes.

9644. They do not complain that the fish has diminished by trawl-fishing, but of the injury done to their tackle?—Yes; there is a class of small boats that use the bay for crab-fishing. I have heard them complain that the trawlers have been in the bay and have destroyed the small fish.

9645. But the net-fishers complain not that they fish in the bay, but that they foul their nets?—Yes.

9646. What kind of fishing is practised by the small net fishermen within the bay?—They are not small net fishermen, but they go in open boats, and either row or scull out. They complain that the trawls injure the ground upon which they catch flat-fish.

9647. Are there many boats engaged in that way?—Seven or eight, or perhaps half a dozen will be about the average.

9648. What kind of fish do they catch with the hook-and-line?—Dabs principally. I have known them get a good deal at times.

9649. Have you observed whether the quantity they now catch has diminished within recent years?—I cannot say I have.

9650. On the contrary, can you say they have not diminished?—I have heard complaints, but I have not noticed any difference in the quantity of fish caught by them.

9651. What is the nature of their complaints?—They complain that their fishery ground is broken up, and that the small fish are destroyed or killed by the trawlers.

9652. Do you know personally whether the number of people engaged in that business within the last six or eight years has increased or diminished?—I should say not; I do not know that there has been any alteration. It is a business that is mostly taken up by the old men who are not fit for deep-sea fishing, and who cannot go in the larger boats.

9653. There is still another system of fishing practised in this bay; there is fishing by seine nets?—Yes.

9654. What do they fish for?—They use them during the mackerel season; but the greatest number taken by them is during the sprat season. About Christmas time they catch immense quantities of sprats here; they use a very small mesh for that.

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9655-6. Are they all caught within the bay?—Yes, the fishing for sprats is limited almost entirely to this bay.

9657. Are there many boats engaged in the sprat-fishing here?—No, there are not many boats, because a sprat seine is an expensive article; there may possibly be four or five such seines belonging to the place.

9658. Have you any notion what quantity of sprats may be caught here in the season?—I cannot say; the seasons vary very much; but I have known as much as 400 tons caught in a season. I have known them to be several days,—two or three days,—dipping out a single seine.

9659. They have been two or three days getting the fish from one seine?—Yes; they had to let them lie from day to day before they could get them out.

9660. Has that particular fishing been increasing or diminishing in abundance?—I don't think it has.

9661. Has it been stationary?—Yes.

9662. Do they cure these fish, or do they sell them fresh?—I think it is a fish that was not known some years since; it has sprung up within the last 15 years. I have not been a minute observer of it, and I think you will get better information from the fishermen themselves.

9663. What is done with the sprats?—The early catches go to London, Bristol, and the large markets.

9664. Do they go fresh?—Yes, they are sent off as they are caught. Later in the season, they are frequently sold for manure. The price comes so very low that it comes within the range of the agriculturist; it would not then pay them to send to London.

9665. Is there any other kind of fish that is caught in these nets at the same time?—Occasionally they get hake, which follows the sprats.

9666. Do they get any large quantity of small immature fish?—I have never noticed that; I should think not.

9667. Is there any oyster fishery here?—Very little; it is very limited indeed.

9668. Has it being increasing or diminishing?—It diminished some years since; there were a great many oysters in the bay at one time, but boats came from Colchester and eastward, and they broke up the ground, and since that time we have had no fishery for oysters of any importance.

9669. Are there any good oyster beds in the bay?—I do not know if there are any at all at present.

9670. Do you think any regulation could be adopted for the protection of oysters that would lead to the increase of oysters here?—If the oyster fishers and the trawling were stopped the oysters might increase. I think the trawling interferes very much with the oyster-fishing.

9671. Do you mean the trawling in the bay?—Yes.

9672. Do the trawls get under the oysters?—Occasionally they do.

9673. Are the oysters of good quality here?—Yes, they are very good fish.

9674. Does anybody claim a property in them?—No, there is no royalty of any sort.

9675. Is there a good crab and lobster fishery here?—No, it is rather indifferent, and it has diminished of late years.

9676. Have you heard any reason assigned for that diminution?—No, I have not.

9677. Is there a prawn fishery here?—Yes, but it is very limited.

9678. We were told that an implement is used here called a horse-trawl?—It is not used here, but it is used occasionally on Paignton Sands.

9679. You use nothing of the kind?—No.

9680. (*Professor Huxley.*) Have you seen that horse-trawl in operation?—Yes.

9681-3. Can you tell us how it works?—I never examined it.

The witness withdrew.

(*Capt. Palliser.*) It is simply a drag with a horse in front of it.

HENRY NIAASS called and examined.

H. Niaass.

9684. (*Mr. Caird.*) Have you long been a fisherman here?—I have been at all sorts of fishing, trawling, netting, and all kinds. I have been for 61 years a fisherman, out and on at times.

9685. Are you at present a fisherman?—No, I just go out to catch a few dabs, but not as a regular fisherman. I have got too old for that.

9686. But you still go out occasionally in the bay?—Yes.

9687. In the course of your experience as a fisherman, do you think that the quantity of fish caught on this coast has been increasing or diminishing?—It has been diminishing a good deal since I first knew it.

9688. Do you think the whole quantity is diminishing, or that it is only diminishing in particular localities?—There is not one fifth part of the fish caught in this bay that there was in my early days, when I was a trawler.

9689. Have you been a trawler?—Yes, I was trawling for nine years.

9690-1. Did you then trawl in the bay?—Yes, but the trawls have very much increased in size since I was trawling. Our beams were not more than 28 feet in length in a 41 ton vessel. Now they have them 46, 47, and 48.

9692. Do you think that these larger vessels with larger beams catch more fish?—Certainly they do.

9693. Then if they do catch more fish, and the number of vessels has increased, how do you account for the quantity having fallen off to one fifth?—So much spawn is destroyed. When I have been trawling in the bay for two hours I have hove up as much spawn as we could turn out with double blocks.

9694. How long is that since?—Thirty or 40 years ago, when I went trawling regularly.

9695. Have the trawlers been trawling ever since in the bay?—Yes. Perhaps I may mention one thing. If you go out in the bay in the spring of the year you may catch a few flat-fish, and perhaps make 5*s.* or 6*s.* by them, when in come these great trawlers. They rake up the whole ground, and you catch no more. It is all done away with.

9696. Have you ever fished on the same ground that the trawlers have passed over?—Yes, hundreds of times.

9697. Have you found no fish there?—No, not after they have been there; they rake the bay all over. There are sometimes eight or 10 of these great vessels trawling over four or five miles of ground. They clear the whole ground.

9698. Do not the line fishermen go out to fish?—No, we don't. It would be of no service to us. We could catch nothing.

9699. Have you been a hook-and-line fisherman?—Yes, and a net fisherman.

9700. Have you been in the habit of fishing with a hook-and-line on the same ground as the trawlers?—Yes, but not latterly.

9701. Can you speak from your own experience as to whether the line-fishing has been injured by the trawl fishermen preceding you on the same ground?—I don't think so. But the hook-and-line fishermen, in the days I am speaking of, some years ago, were very different from what they are now. Where one boat goes hooking now there were 20 then. They catch more of one sort of fish, namely, the whiting, than ever I found in my days. But the fish have not accumulated in the bay as they used to do.

9702. You say there are plenty of fish on the off-ground; are they in greater abundance than they were in your early time?—Yes.

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9703. What kind of fish ?—Whiting, and there may be a few cod caught.

9704. Then are there more whitings caught now than there were in former times ?—Yes, but more fishing boats go out to do it, perhaps ten to one.

9705. Does each boat make as good a thing of it as it did 20 years ago ?—They make a better thing of it because the cost of carriage was then terrible. Since the railways have taken the fish, a better price has been got for it. But the town itself has very much increased since then. It was very small indeed at that time.

9706. Then I gather from what you say, that the decrease has occurred in the in-shore fishing, but not in the deep water fishing ?—Not in hooked fish.

9707. You do not think there has been a decrease in the deep water fishing ?—I do not think there has.

9708. It is only in-shore that the damage has been done ?—I don't think there has been any decrease in hooked fishing in deep water, but with regard to trawling there has been a great decrease.

9709. Do you mean that the trawlers themselves do not make as good a business of it ?—Nothing near so good a business as they did in my day.

9710. In your experience, what would a trawl-boat make on the average in a day's fishing ; how many baskets of fish ?—I have been trawling with a 28 or 29 feet beam in a 41 ton boat ; now they have them 60 tons. I have been catching 30, 40, and 50 baskets with 10 dozen hakes at a haul, and now the big vessels do not catch 10 baskets. It is only on very extraordinary occasions that they catch 30 or 40 baskets ; 20 baskets is considered a very good catch, whereas a a boat in my time would occasionally get 50 baskets.

9711. Are you speaking now of what you hear with regard to the trawl-boats of the present day ?—No, of what I have seen. I have been at Brixham, and I have bought a lot of fish, and I have seen what the trawlers have brought in. I have been there many days, and I have seen all that these great fellows bring in.

9712. Do you say that from your former recollection of what they used to bring in in small vessels, the larger vessels now do not bring in such good catches as they then did ?—I am sure they do not.

9713. Do you know anything about the sprat-fishing here ?—Yes.

9714. Do you yourself follow it ?—Sometimes.

9715. How long does it continue ?—Sometimes a month, sometimes six weeks, and sometimes only a fortnight. Occasionally you will only have one catch, and they will go right off.

9716. Does that fishery yield you a good deal of money occasionally ?—Yes, a great deal sometimes. I have seen a boat's seine take 876 baskets of sprats at one catch. That was only in one seine's catch.

9717. Did you send them to the London market ?—They were sent to London, Bristol, Bath, Taunton, Bridgwater, and many other places.

9718. Can you tell us yourself what quantity of sprats may be caught here in a season ?—No, I cannot.

9719. On the whole are they increasing or diminishing, or do they vary backward and forward ?—They vary backward and forward.

9720. There is no certainty about them ?—30 years ago they were not caught at all. There was no sale for them then. It is only within the last 15 or 20 years that they have been caught, and there has been no deficiency of them since we commenced catching them ; they come in in a body. Sometimes they will stop six weeks or a month, and sometimes hardly a day.

9721. Are they found in any particular part ?—They come in occasionally right to Torquay. They lie dead and quiet in a body. We shoot our seines round them and take them all up.

9722. Are they found nowhere else here ?—Round by Bridgwater and about there, they catch them at the Gore, and in other places as well.

9723. Do you salt them when you cannot get a sale for them ?—No, we sell them right off, or we sell them as manure.

9724. Is there a large quantity sold here for manure ?—Sometimes boatloads of them are sold as manure.

9725. What price do you get for them ?—6*d.* a bushel, and sometimes 1*s.* ; I don't know exactly.

9726. Have you any pilchard-fishing here ?—There has been more this year than has been known for many years.

9727. Then the pilchard fishery here has not diminished ?—No, there never were more pilchards this side of Plymouth than there have been this year.

9728. Is the pilchard fishery here a matter of much importance ?—No.

9729. Is the herring-fishing good here?—Sometimes it is very good.

9730. It varies ?—Yes.

9731. Do any French fishermen come here to fish herrings ?—Not that I have seen.

9732. What time do the herrings come ?—They catch them now, and they will remain till perhaps after Christmas, but it is a very uncertain fish.

9733. Do you fish for them whenever they appear on the coast ?—Yes.

9734. Do they come at any other season ?—Sometimes after Christmas, but not in the summer time ; they make off then.

9735. They do not come earlier than October ?—Sometimes they are in earlier and sometimes later. Sometimes we do not catch any till Christmas. It is all owing to the season. The fish strike in better one year than another.

9736. Have you been much employed in the herring fishery ?—Yes.

9737. Have you ever had your nets damaged or destroyed by the trawl fishermen ?—I never had myself ; but I have known others who have had trawlers trawling into their nets and tearing them to pieces. Some meet with a misfortune of that sort every year.

9738. You have had no occasion to complain of that ?—No, I never had any complaint to make with regard to my nets.

9739. Have you been much employed in the mackerel-fishing ?—Very little in the net mackerel-fishing.

9740. Is the net-fishing for mackerel practised here? —Not much.

9741. Is there any large quantity of mackerel caught here ?—No.

9742. Are any large quantities caught by the hook-and-line ?—At times, but it varies a good deal.

9743. Is the variation caused by the trawling ?—No, I do not think that any "flying" fish, such as the mackerel or herring, or anything of that kind, are interfered with by trawling.

9744. Do you think it would be an improvement, and likely to be beneficial to the fishing generally, that all the trawl fishermen should be excluded from the bays ?—I think if trawl-fishing were excluded from the bays, there would be four times as much fish caught as there is now. The fish would come into the bay and breed and rest there, and the trawlers would catch them again when they got outside.

9745. Then you think it would be beneficial to the trawl fishermen themselves ?—Yes.

9746. You have no desire to see trawl-fishing put down altogether ?—Not at all.

9747. Do you think that as much fish would be brought to the market by any other means ?—No hook fishermen could catch the quantity that is caught by the trawlers.

9748. Then, on the whole, you think they should only be excluded from the breeding grounds in the bays and limited to deep water ?—Yes, I think that would be beneficial not only to themselves but to others.

9749. (*Professor Huxley.*) Can you tell me what kind of net is used for sprat-fishing ?—It is a small bunt.

9750. How long is the net?—The seine they catch the sprats in is perhaps 150 or 200 fathoms long.

9751. How deep is it at the ends?—The depth in the bunt is from 28 to 30 fathoms.

9752-3. What is the depth of the wings?—From eight to ten fathoms, some of them.

9754. Is the head line corked?—Yes.

9755. Is the foot rope leaded?—Some are and some are not.

9756. Is there any pocket in this seine?—No.

9757. Explain how it is used. Do they look out, in the first place, for the shoal of sprats to come in?—Yes, they see the sprats, and they shoot the nets round the shoal.

9758. Is one end of the net made fast on shore?—They have an anchor there.

9759. Is the net taken out in one or in two boats?—In one boat.

9760. And one end is made fast with an anchor?—Yes.

9761. Then they pay out the net?—Yes.

9762. And they make a circle round the sprats?—Yes.

9763. Are two boats employed in this, or only one?—Perhaps three or four boats and 10 or a dozen men.

9764. They have the end of the net made fast at the place from whence they started?—They haul away from the foot to the head. They anchor the boats so that they cannot start, and they haul away at the head and foot, and they bale the sprats out into the boats.

9765. In fact, it is circle-net fishing in reality?—Yes.

9766. They don't take them on to the shore?—No, I have never known that done but once.

9767. What is the size of the mesh?—It is very small. You can only just shove your finger through.

9768. Is it half an inch?—No.

9769. Is it one-third. How many meshes are there to the inch?—I can hardly tell; two I should think.

9770. And how long do you say that sort of sprat-fishing has been going on here?—Sometimes it don't last two days, and sometimes it will last a month or six weeks.

9771. I mean how many years has it been practised here?—For 15, 16, or 18 years. Somewhere about that time.

9772. Every winter has there been a considerable quantity of sprats taken on this shore?—Some winters the fishing has been more prosperous than others. Sometimes the quantity taken has been very large indeed. I have known them catch from 10,000 to 20,000 bushels within three or four days. But that is not always the case. On the other hand, I have known the sprats come in here and we have got one catch; then the wind has been northward and they have all gone away directly.

9773. What is the cost of a sprat net?—The cost of a sprat seine is something considerable. I have a real good one, and it cost me 150*l*.

9774. Where are they made?—At Bridport in general.

9775. What are they made of?—Twine.

9776. Are they all sprats that are taken in this way, or are other fish mixed up with them?—They are nearly all sprats. They tuck them up.

9777. Are any young herrings mixed up with them?—There may be a few, but not many. Sometimes the herrings and the sprats come in together, but the herring does not mix up with them. What herrings we generally catch about that time are fine herrings, quite large.

9778. Does the herring fishery take place commonly in the winter time here?—It begins about now, and sometimes later.

9779. Does it last until January?—It does at times, but that is not certain.

9780. It commonly ends in December?—Yes.

9781. In what condition are the fish about December or January; are they full fish?—Do you mean full of spawn?

9782. Yes.—The herrings are full of spawn.

9783. At what time?—In a fortnight or a month's time they will be full of spawn. After they have spawned they are thin and poor.

9784. Do you know what a spent herring is?—Yes.

9785. When do you find them here?—Generally after Christmas they have spent themselves out.

9786. Have you seen spent herrings here in January?—Yes.

9787. Have you ever found full herrings here as late as February?—We might find a few, but not a great quantity.

9788. Is that because you don't fish for them, or because the fish are not here?—We get them in different seasons from Yarmouth, Scotland, and Ireland. Our herrings are a somewhat smaller fish. The Scotch herrings, the Irish herrings, and the Yarmouth herrings are larger, and they get them in greater abundance. We don't get them at the same season.

9789. Here your season is quite at the end of the year?—Yes.

9790. Do you ever get full fish in August?—We seldom catch them in August.

9791. Do you get none then?—A few; a dozen or two; but no great quantity.

9792. What is about the average length of the herrings you catch here?—I cannot say. I never measured them. I have caught some thousands, but I never measured the length of them.

9793. Are they as big as the Yarmouth herrings?—No; they are not as big. The Yarmouth herrings are a finer herring than ours are in general. We have plenty of Yarmouth bloaters here; but the fish we catch are not so large.

9794. What is the size of your herring mesh here?—It is a shilling scale.

9795. The same here as everywhere else?—Yes.

9796. What do you say will be the length of the herrings you catch?—About 9 inches.

9797. Are you catching any herrings now?—They caught some last night.

9798. Are there any to be got in the town?—Yes; you will find them hawking them about the streets.

9799. Is the herring that is being caught now the same as you get all through the season?—They will run finer yet; they are rather small now.

9800. You spoke of the spawn being trawled up. What do you call spawn?—The spawn I mean is regular spawn. I have caught it in the trawl as much as five or six cwt. at a time. It is spawn just as it comes from the fish.

9801. From what sort of fish?—From hakes and all sorts.

9802. Do you know what herring spawn is like?—Yes.

9803. Have you ever got it in your nets?—Plenty of it at times.

9804. Was the spawn you dragged up in the trawl like that?—Yes; I think the principal part of the fish come to land to rub the spawn out. That is the general case I think.

9805. Was the stuff you got up in the trawls like herring spawn?—It was like all sorts of spawn. It was real spawn. If you take it, and boil it, and put it into your mouth, you will find that it has just the same taste as if you were eating mackerel or herring. I have done that scores of times.

9806. (*Mr. Caird.*) What are the different kinds of fish caught in this place?—Dabs, plaice, whiting, and may be, turbot and codfish. When I first began fishing there were no whitings to be caught. Then we began to catch three or four baskets of fine large whitings, and now we hardly catch half a basket.

9807. They are caught in greater abundance outside?—Yes.

9808. What particular kind of fish is principally caught outside here?—Turbot, soles, ling, cod, hake, conger, brill, and all sorts.

9809. Are any salmon trout caught here?—No, They catch salmon in the seine. They come down

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the Teign, the Exe, and the Dart. We catch one or two in the season, but not as a general thing.

9810. Is there any salmon-fishing on the sea coast here?—No; not on the sea coast, but there is in the rivers, especially in the river Dart.

9811. Have you never practised any salmon-fishing on this coast by bag or stake nets?—No; not on this coast. We never catch any salmon unless they come down from the river Dart, the river Teign, or the river Exe.

9812. It is not practised here?—If it is practised at all it is practised in the rivers.

9813. But I am speaking of the sea coast fishery?—No; it is never practised here.

9814. Are there any John Doreys caught here?—Yes; several have been caught at the pier in our harbour this year.

The witness withdrew.

T. Harvey.

THOMAS HARVEY called and examined.

9815. (*Mr. Caird.*) Are you a fisherman here?—Yes.

9816. Have you long been engaged in the fishing here?—For 18 years.

9817. What kind of fishing do you practice?—I principally fish with a hook-and-line.

9818. Have you ever been a trawl fisherman?—Not in deep water. I have never been anything but a trawler, with my boat in the bay.

9819. Was that in an open boat?—Yes.

9820. A small trawl?—Yes.

9821. What was the length of the beam?—It was a 21 or 22 foot beam.

9822. Is that practised much in the bay?—Some boats use it.

9823. Have you fished lately with that trawl in this bay?—Not this season. I did last. I generally do every season for two or three months.

9824. And have you found that the quantity of fish you can catch in the bay with that trawl has been increasing or falling off?—It has been falling off.

9825. What is the reason?—I believe it is owing to catching the young fish.

9826. Have you ever caught young fish in your trawl?—Yes.

9827. In large quantities?—Perhaps half the catch in number, I should think.

9828. What did you do with them?—Some are dead, some we heave away, and some we bring ashore and sell; they are about the size of my hand.

9829. Can you find a sale for fish of that size?—Yes; people will buy anything.

9830. Anything sells?—Yes, pretty near.

9831. Do you think that in consequence of your bringing up these small fish the quantity of good fish has decreased in the bays?—Yes.

9832. When you first began what quantity did you get in a fair day's fishing?—I have not been many years at it.

9833. Go back as far as you can?—When we find there is nothing in the bay we don't work it.

9834. But you worked it last year?—Yes.

9835. Did you find anything in the bay then?—Yes, a little.

9836. Was it much different from what it was a year or two ago?—If we don't find fish that will pay us, we don't work it; but we always take up a quantity of small fish, full half the number of the whole catch.

9837. At all times?—Yes.

9838. Have you ever caught any spawn in your net?—I have never taken notice of the spawn myself.

9839. Only of the small fish?—Yes, I have seen them brought up by the trawl about the size of small ivy leaves.

9840. In the line-fishing, do you go on the same ground as the trawl fishermen?—Yes.

9841. Have you observed any increase or falling off in the catch on that ground?—I have not seen any difference.

9842. Do you think it continues much about what it used to be?—Yes, about the same, but I do not know whether it is because we follow it up more.

9843. Can you make as good a catch now as you used to do?—Yes, but I think the fishermen generally follow it up more than they used to do.

9844. Do they find that it pays them better?—They go out in worse weather.

9845. Have they got better boats?—The boats are rather better than they used to be.

9846. Have you for many years gone on the same ground upon which you have observed the trawl fishermen?—Yes, on the same ground the trawlers take.

9847. Have you observed any diminution in the quantity of fish in consequence of the operations of the trawl fishermen?—No, not in deep water.

9848. I am speaking of deep water. You do not find practically that it does any injury to you as a line fisherman to fish on the ground that is frequented by the trawl fishermen?—No.

9849. Have the particular kinds of fish continued very much the same as they were formerly, in your line of fishing?—Much about the same.

9850. You have now the same quantity of turbot and skate and so on?—We don't catch turbot, and we don't catch flat-fish with the hook-and-line; the fish we get are all round-fish—cod, whiting, bream, ling, and conger; we don't get flat-fish at all by the hook-and-line.

9851. Do you use the turbot net?—They catch turbot in the trawl.

9852. You don't use the turbot net?—No, they catch all the flat-fish in the trawl, such as turbots, soles, and brills.

9853. Have you noticed the trawl-boats fishing in deep water?—Yes.

9854. Have you observed what they bring up in their nets?—I never boarded them, but I have been alongside of them when they have hauled up their net, and I have seen them when they came to shoot their rubbish on deck; I have seen that they had a great quantity of small fish.

9855. Do they sell it?—No, they shoot it overboard; it would not sell.

9856. I thought you said that anything would sell here?—Yes, in small quantities, but they have too large a quantity.

9857. Does it appear to be damaged and rendered unsaleable?—Yes.

9858. By the trawl?—Yes. Sometimes they heave up a ton or two tons weight of mud and dirt in their trawl, and the fish are intermixed with that.

9859. Do you fish for sprats sometimes?—Yes.

9860. Do you ever get large quantities?—Yes, in the seines.

9861. Do you notice whether the sprat-fishing is increasing or diminishing?—At some seasons sprats are very slack, and at others they are very plentiful.

9862. It varies very much?—Yes.

9863. It does not depend upon any particular mode of fishing?—No.

9864. Do you practise lobster-fishing at all?—No.

9865. Oyster-fishing?—Yes, I have been oyster-fishing.

9866. Lately?—Yes, last winter.

9867. Do you find the quantity of oysters decreasing?—In point of fact there are not many here either one way or the other to increase or decrease.

9868. Have you noticed any great change within recent years?—Certainly there has been a great change; there was a large body of oysters at one time, until the country boats took them up.

9869. Do they destroy the fishing?—I consider that they have destroyed it altogether.

9870. Have they carried away the oysters altogether?—Yes, they take them all away.

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9871. Might there have been regulations established which would have enabled them to fish, and increase rather than diminish the supply of oysters ?—Yes.

9872. What sort of regulations ?—If they had not been allowed to take away the small oysters.

9873. Did they take away the small as well as the large oysters ?—Yes, the small oysters were what they wanted more than the large ones ; they wanted them to put in their own beds.

9874. Nobody interfered with them in any way ?—No.

9875. Do they come here now ?—No, there are no oysters for them to come for, but they go to Start Bay.

9876. Are there oysters there ?—Yes.

9877. Do you think they will ruin that fishery ?—No, they have not done so hitherto ; I think the quantity continues about the same. There was a large bed found at Dartmouth, and lately it has been much dragged up, but down at Torcross and Start Bay there have been oysters that are the same now as they ever were.

9878. Is the crab-fishing good here ?—No.

9879. Do you follow the mackerel-fishing ?—Sometimes, with the hook-and-line, and sometimes we catch them in the seines also.

9880. Do you get many ?—Sometimes we get a good catch of mackerel in the seines.

9881. Is there a good mackerel-fishing here on the whole ?—Yes, take it on the whole, it is generally a middling season. In fact it is the best of the fishery taking it together with the sprats.

9882. Do you think it would be an advantageous thing to have some regulation by which trawl-fishing could be excluded from the bays, and some regulation also with regard to the oyster beds ?—I think it would be beneficial both to the hook-and-line fishermen, and to the trawlers themselves if the trawlers were excluded from the bays.

9883. Would you desire to see Government officers come down here and regulate your modes of fishing ?—I should like to see it because I think it would be beneficial to us.

9884. You would like to see them come here and exclude the trawl-boats from the bays, and adopt regulations with regard to the oyster beds ?—Yes.

9885. Is there anything else you wish to have done ?—I don't see what they could do to the oyster beds, because there are no oysters for us to catch now. It would make very little difference with regard to the oyster fishery.

9886. Then you only want the Government to interfere with regard to the exclusion of the trawlers from the bays ?—Yes.

9887. Is there any injury done to the young fish except by the trawls ?—Yes. There is another kind of fishing practised here. I mean the shrimp-fishing along the shore. In the spring of the year, in the warm weather, the small fish are in-shore. They are little bits of things about the size of your finger nails. I have been shrimping in a boat along the sands, and I have caught from a quart to half a gallon of these little things, and by the time I have hove the net up they have been all dead.

9888. Did you drag your nets after you in the boats ?—Yes, at that time, but now they have horses to drag them.

9889. Have you seen these horse nets working ?—Yes, I have seen them working, but I have never been ashore with them. They work over the same ground we do in the bays.

9890. Are large quantities of young fish caught in these shrimp nets ?—Yes, they catch them the size of your finger nail. They are fishing there day after day, and they must kill a great number in the course of two or three months.

9891. Is there any mode in which they fish for shrimps without killing these small fish ?—I don't know that there is.

9892. Then to put a stop to it you must stop the shrimping altogether ?—Yes.

9893. Is there a large quantity caught here ?—The quantity is not very great.

9894. Are there many people employed in shrimping ?—No.

9895. How many ?—There are three or four horse trawls worked about Paignton, and there are one or two working from here, that is all.

9896. What is the size of the mesh of one of your small trawl nets ?—For what kind of fishing ?

9897. I mean your boat trawls—the trawl you use in your own boat ?—In the bay ?

9898. Yes.—About 21 or 22 feet beam.

9899. What is the size of your mesh ?—The same size as the other trawls.

9900. The same as the deep-sea trawls ?—Yes.

9901. You don't use a smaller mesh ?—No, it is about the same. But there is very little in the mesh. If you had a mesh about four or five inches it would be about the same, because when you are towing, the mesh draws quite close.

9902. And keeps in the small fish ?—Yes, and keeps in everything.

9903. Whether the mesh is large or small ?—Yes, but if the mesh is large in the back part it will make a difference.

9904. In the back part do you use a smaller mesh ?—Yes.

9905. In the cod of the net ?—No, in the back part from the beam. The back of the net is square. From that down as it tows it is always close, so that the fish that go in must stay.

9906. (*Professor Huxley.*) In your evidence just now you stated that you had not yourself seen much spawn brought up ?—No, but I have seen plenty of small fish brought up.

9907. You are aware that there are a great number of marine animals at the bottom of the sea, and floating on the top, that are not fish ?—Yes.

9908. Are the fishermen in the habit of applying the term "spawn" to a great many of these things ?—I do not know that they are.

9909. What do you think that floating substance is that was mentioned here to-day as spawn ?—I can hardly tell. It might be oyster spawn, because I understand that floats in a body.

9910. We are speaking of fishes in the strict sense of the word, and we should hardly call oysters fishes in that sense. Are you aware of any kind of spawn of the true fish that floats ?—No.

9911. One witness spoke of large quantities of spawn being brought up. What would that be ?—I think it would be cuttle or that blubber stuff. We call them here "Babbicombe squalls."

9912–3. Is it a jelly fish ?—Yes, the medusa.

9914–5. Do you know that what the witness described was the medusa ?—I don't know. I have seen it in large bodies, and I myself judge that it was likely to be that.

9916. Have you ever been herring-fishing here ?—Yes.

9917. You know a full fish when you see it ?—Yes.

9918. What time do full fish appear here ?—They come in roed fish until late in the season, and then they are spent out.

9919. What time do spawn fish come here ?—Sometimes it is later than others.

9920. Is it ever as late as January ?—We have very few herrings here then.

9921. In December ?—Yes, in December.

9922. You have spent fish in December ?—Yes. In January the herrings are pretty well gone. What few are left are all spent fish.

9923. Have you seen herring-fishing elsewhere than in this neighbourhood ?—No.

9924. Do you know the Yarmouth herring ?—I have seen the Yarmouth boats out fishing.

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9925. But do you know the Yarmouth herring?—Yes.

9926. Did you ever hear any suggestion that the herrings which are common here are different from those at Yarmouth?—No; but sometimes the herrings run larger than at others. Some nights we catch larger fish than we catch on other nights.

The witness withdrew.

C. Browning.

CHARLES BROWNING called and examined.

9927. (*Mr. Caird.*) Are you a fisherman here?—I have been for a good many years. I live at this fishery.

9928. What is your business now?—Fish buying.

9929. Have you been long acquainted with the fish trade in this quarter?—20 or 22 years.

9930. As a fisherman and a fish buyer?—Yes, I have been hooking for about 12 or 14 years.

9931. When did you cease going to sea yourself as a hooker?—About eight or nine years ago.

9932. As a fish buyer, do you find that the quantity of fish is increasing or diminishing here?—There is a question about their diminishing. Do you mean the sprats, or herrings, or all kinds?

9933. Yes, all kinds?—I see very little difference in them myself; very little difference indeed.

9934. Are more boats engaged in the fishing here than there used to be?—Yes, there are.

9935. Do you think that each boat gets as much as it did formerly, on the average?—Just as much.

9936. Or more?—Some seasons they get more than at others. It varies very much. Some seasons there are plenty of whitings, and at others none at all.

9937. Has there been any marked change in the quality of the fish brought into the market here or brought ashore?—Not in our line.

9938. Do you yourself send many fish to the markets at a distance?—Yes, herrings, sprats, and whitings.

9939. Do you sell your fish principally in Torquay, or do you send them to distant markets?—I send it away. I buy it out of my own boats as well as of other people.

9940. Is there as large a quantity of turbot caught here as there used to be?—There are no turbots here. Brixham is the place for turbots.

9941. Are there as many cod?—I have seen great quantities.

9942. Are they as fine as they used to be?—No. They used to be very good. They don't appear now to be either as many or as good.

9943. Has the quantity of whiting increased or diminished?—There is very little difference, taking a season's average.

9944. Can you tell us the quantity of fish that is sent altogether from here to distant markets?—I cannot tell that. Some weeks we may send 40 tons, and perhaps the next week not one ton. If the sprats come in plentifully, we send away a great deal both of sprats and herrings.

9945. Do you agree with the previous witnesses with regard to the exclusion of trawling from the bays?—I believe that if the trawlers were out of the bays it would be of great benefit to the fishing generally.

9946. Upon what ground do you form that opinion?—In the case of the herring fishery, the boats are disturbed in their drifting. I have been disturbed myself more than once or twice.

9947. But upon what ground do you form the opinion that trawling should be excluded from the bays?—I would take it beyond the headlands. It is not often that they are in except just at spawning time. They don't care about coming except when there are fish.

9948. Which do you think is the spawning time?—I think for certain that the winter season is. We very seldom do catch them in the bays except up to Christmas. Perhaps from about this time up to January.

9949. You do not think it advisable that the trawlers should be allowed to come in here then?—No, this is about the time they should be kept out.

9950. They think themselves that they should be excluded during the warm months and allowed to come in in winter?—That is just the time when they ought to be excluded. I think it would be beneficial to themselves as well as us if they were excluded, as they destroy all the small fish.

9951. Have you seen them taking up their trawls here?—I have not been on board many of them, but I have trawled in a small vessel.

9952. Did you destroy small fish?—Yes, we used to catch small fish. It is impossible to miss catching them.

9953. Is that the reason upon which you ground your opinion, that trawling has been the cause of the diminution in the quantity of fish in the bay?—There is a diminution, and I think it has been occasioned by the trawl-fishing.

9954. As a line fisherman in deep water, do you find that trawling does you any damage?—I do not think that it does us any damage whatever.

9955. Do you think there are as many fish in the deep sea as there used to be?—Yes, exactly the same.

9956. You don't think that the ground has been at all fished out?—No.

9957. Have you observed the trawl-boats in the deep sea?—Yes, daily.

9958. Do you find them fishing over the same ground repeatedly?—Yes, they are trawling right on our ground and catching our anchors at times.

9959. Trawling always over the same ground?—Yes.

9960. For years in succession?—Yes, just the same.

9961. Do they get as many fish as they did?—It appears that they do not get as much trawled fish as they used to do.

9962. Are you aware that the number of trawl fishermen has greatly increased?—Yes, perhaps that may be the cause of it.

9963. Have you ever fished for oysters in this bay?—Yes, a great many years ago.

9964. You have not done so lately?—No.

9965. Do you buy any oysters?—No, there are none caught here in any quantity to sell.

9966. Are there many crabs caught in this bay?—Only very few.

9967. Lobsters?—Very few.

9968. That is not a fishing that is of much importance here?—It is not of great importance. The little fishing here is principally hooking, netting, and seining. That is all in Torquay. There is no trawling.

9969. Is the mackerel-fishing of importance here?—Yes, the seining in the summer seasons.

9970. Does the quantity continue the same?—Just the same. In some seasons it is better than in others.

9971. No particular mode of fishing has disturbed that fishing?—No.

9972. Nor the herring-fishing?—No.

9973. Nor the sprat-fishing?—No; sometimes the trawlers have been here at the time our small nets have been at work, and I think they have been disturbed.

9974. That chiefly applies to flat-fish?—Yes, and to spawn of other sorts; the hakes come after the small fish, and the trawlers come after the hakes. They will have them if they can.

The witness withdrew.

FRANCIS STANSFIELD called and examined.

9975. (*Mr. Caird.*) Are you a fisherman here?—I have been in the habit of fishing in the bay for the last 20 years. I have been dab fishing here.

9976. How do you fish for dab?—With a hook-and-line.

9977. Has the number of boats engaged in that fishery increased or diminished within the last 20 years?—It has increased.

9978. Has the quantity of fish they can bring on shore in a day's fishing diminished or increased?—It has diminished a good deal. I have been out and I have made 12*s.* a day catching dabs with the hook-and-line, and now I may go 12 days before I catch 12*s.* worth.

9979. When did you notice that diminution begin?—For several years past.

9980. Has it been going on gradually decreasing?—Yes.

9981. Is it becoming less and less every year?—Yes.

9982. What particular kinds of fish does that apply to?—Dabs.

9983. Only dabs?—We catch very little else in this bay.

9984. What in your opinion is the cause of that decrease?—All the small fish are destroyed.

9985. Who destroys them?—The trawlers and the shrimp dredgers on this coast.

9986. Have you seen the trawlers destroy many of them?—Yes, I have seen hampers and hampers chucked overboard, and I have seen caught on the shore turbots and brill no bigger than my thumb nail.

9987. Is it long since they began their practice of shrimping?—About six or seven years ago.

9988. Is it long since the trawl-vessels began to trawl in the bay?—Ever since I can recollect they have been trawling.

9989. But it is only of late years that you have noticed the diminution in the quantity of fish?—Yes.

9990. Has the number of vessels trawling in the bay increased?—Yes.

9991. Have you practised line-fishing at all?—Yes, every year.

9992. In the deep sea?—Very little in the deep water; mostly in the bay.

9993. I am speaking of the deep water?—Very little there.

9994. Then you cannot say whether the quantity of fish caught in the deep sea is increasing or diminishing?—I think the whitings are about the same. I don't see much difference in them; but the flat-fish in the bay have diminished a great deal.

9995. (*Professor Huxley.*) Do you go herring-fishing at all?—I have been.

9996. You heard what the previous witnesses stated as to the time of spawning here. Do you agree with them?—Yes.

9997. Do you find full fish in January?—No, they are all spent at that time.

9998. After that they go away?—Yes.

9999. Do you ever get herrings here as late as February?—No, very seldom. We may catch some, but they are all spent out.

10,000. What do you say is the chief spawning time here for herrings?—November and December. The latter end of November and the beginning and middle of December.

10,001. Do you think that the trawls take up much spawn?—No doubt when the herrings come into the bay they spawn here.

10,002. In what depth of water do they spawn do you think?—We catch them at times in 3 fathoms of water, and sometimes in 6 or 9 fathoms.

10,003. Do you ever catch them when they are spawning; do you find your nets covered with spawn?—Yes, and our hampers are all choke full of spawn.

10,004. Do you find that they keep near the bottom, then?—Yes, we always notice them low down then, and if they are we haul them up.

10,005. Do you find when they are spawning that they keep close to the ground?—We consider that they do.

10,006. How long do you keep your head lines?—The prior lines?

10,007. How long do you have them when the fish are spawning?—About $2\frac{1}{2}$ fathoms.

10,008. Your net is about 3 fathoms deep?—Yes.

10,009. So that the bottom of the net would be nearly on the ground?—Yes; sometimes we lower the net on the ground.

10,010. Have you found that to be the case when the fish are full?—Yes.

10,011. So that they are all right inside the bay?—Yes; sometimes they are right choke on shore. I have caught them high and dry right in shore, sometimes.

10,012. Where do you find them hugging the ground?—In about 6 fathoms of water.

10,013. Is that usual at the end of November or beginning of December?—Yes.

10,014. You say that December is the great spawning month here?—Yes.

10,015. Have you ever noticed the young herring making their appearance?—Yes.

10,016. At what time?—At the beginning of February. There were a great many caught here last year.

10,017. How were they caught?—By the seine.

10,018. A regular shore seine with a pocket?—No; the same we use for catching smelts.

10,019. What sort of net is that?—It is a small net, 60 or 70 fathoms long.

10,020. How deep is it at the wings?—About a couple of fathoms. We never shoot it unless it is low water.

10,021. How deep is it at the bunt?—About three fathoms.

10,022. You say there is no pocket?—No.

10,023. Is it leaded?—Yes.

10,024. Do you sweep it from the shore the same as an ordinary seine net?—Yes, I never saw so many caught as were caught last February. We caught 100 hampers in fishing for smelts.

10,025. What did you do with the young herrings?—We sold them for sprats.

10,026-7. Did the people like them as well as sprats?—Not quite. There is a great deal of difference in the taste, there is just the same difference as there is in eating a beefsteak and in eating a piece of naked beef.

10,028. At what time are the sprats full?—In November and December they are full of milt and roe. I have seen them full of spawn; as full as they could hold.

10,029. Where do you consider they spawn?—I consider that they come in-shore to spawn, but no doubt there are a great number that spawn out in deep water.

10,030. Then according to that you cannot have the young herring and the sprat spawning together?—It is very seldom that we see the young herrings among the sprats. We can discern them in a minute. The head of the sprat is quite different from the head of the young herring.

10,031. Do you ever have any summer herrings here?—We had some 20 years ago, but it is very seldom that they come now.

10,032. Do you think that the herrings go on growing from the early part of the year to the end of the year, and that then they are grown up?—I consider that that is so. A herring is like the mackerel, a very fast growing fish.

10,033. Then do you think they are commonly one year fish?—The small herrings we caught last year are what we call harvest herrings.

10,034. Why do you call them harvest herrings?—Because we catch them in the summer.

10,035. Are they like this (*holding up a herring*)?—Yes, sometimes.

10,036. Is it what you call a "matey"?—It is very fat inside.

10,037. They are about eight or nine inches long?—Yes.

10,038. We call that a "matey"; you call them harvest herrings because you catch them in the autumn?—Yes.

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10,039. Do you think they grow to be full herrings in the winter?—I think it is very likely. Sometimes we catch small mackerel, and you can see them grow every week.

10,040. Do you catch small herrings now?—Yes.

10,041. What with?—With a hook-and-line.

10,042. What do you call them?—"Joeys."

10,043. Do you know the reason of that name?—No; it is only a nickname we give them.

10,044. Are the majority of the mackerel you catch of that size?—We catch them for bait for whitings now.

10,045. Do you find that they get bigger and bigger as the year wears on?—Yes, we can see them getting bigger and bigger every week.

10,046. When are they of full size?—About next May.

10,047. Then do you think the mackerel keep off this coast all the year round?—Yes; in the cold weather they get into deep water, but in the warm weather they come into shallow water. After Christmas we catch them with a ground-line.

10,048. Do you catch the big mackerel on your ground-lines?—Yes, when we are catching whiting. I have caught as many as a dozen in a day.

10,049. Are they full fish?—The roes are beginning to get in them.

10,050. The little mackerel have no roe in them?—No; the mackerel begin to spawn about February or March. They are getting full fish then.

10,051. They will not spawn until May, will they?—We don't get any mackerel till the latter part of May. We seldom see any roe in them, but this year we have.

10,052. Do you think the mackerel spawn before they are in a condition to be caught?—Yes.

10,053. Do you think the mackerel you catch are spawn fish?—Yes; in February and March they are full of spawn. They catch them in nets in February and March, and then there is spawn in them, but there is seldom any in May. This season I saw that was so.

10,054. Do the mackerel further on in the year contain any spawn?—No.

10,055. Are the large fish you catch in the summer fish that have spawned?—Yes.

10,056. And they are getting fat again?—Yes; I have seen them spawn later in the season.

10,057. Do you think the mackerel grows to its full size in the course of a year?—Yes. I think the mackerel is as fast a growing fish as anything.

10,058. What do the mackerel eat?—Mostly small sprats.

10,059. Do you find sprats in their stomachs?—Sometimes I have caught them with little sprats a few inches long all alive in them. They are sometimes after whitebait, smaller than that.

10,060. Whitebait?—Yes; but this time of the year the sprats are getting more in bodies, and they are following them up.

10,061. Do you get regular whitebait here?—I think that it is whitebait.

10,062. Where do you get it; at the mouth of the Dart?—No, in deep water. I have seen the stuff that the mackerel come after, and it is just like whitebait.

10,063. Do you not think that it is young herrings or sprats?—It is more like sprats than herrings. They may be young sprats; I have no doubt but what they are. But some of it is as small as whitebait, and you could hardly tell the difference.

10,064. Have you ever seen the horse trawls working?—No, but I have heard of them.

10,065. Do you think that the seine netting and the sprat-netting do harm to the fish in the bay?—No; I have been sprat-fishing, and I have not caught a ha'porth of small fish.

10,066. Do you think the sprats keep to themselves?—Yes, all in a volume. They are like the colour of this desk in the water.

10,067. Do they look red in the water?—Yes, as red as that desk. They make the water look as though it was red water.

10,068. What do you think the sprats feed upon?—I cannot say.

10,069. Have you ever examined them?—No; I cannot make out what they feed upon.

10,070. (*Mr. Caird.*) Do you ever get any salmon in your nets here?—Very seldom.

10,071. You get no great quantity?—No.

10,072. Do you get any salmon trout?—No. There has been about a dozen caught this summer, and they are the most we have ever caught as far as I have known.

10,073. Are there any smelts caught here?—Yes, but they are different smelts from the London smelts.

10,074. What is the difference?—They don't run so large.

10,075. Are they caught in any quantity here?—Sometimes we catch a dozen bushels right in the harbour.

10,076. Is that in any particular season of the year?—Yes, in February and March.

10,077. Do they come pretty regularly?—They come in some seasons more than in others.

10,078. Are they sold in the town here?—I have seen them sold for $1\frac{1}{2}d.$ a quart, and $9d.$ a dozen quarts.

10,079. How many are caught in a boat?—Sometimes more and sometimes less. If it is nice and calm and smooth water we catch a good many at times, but there is only one little seine that practises that work.

10,080. (*Professor Huxley.*) Have you any idea what the herrings feed upon?—No.

The witness withdrew.

The inquiry was then adjourned until the 17th of October, at Ramsgate.

Ramsgate, Kent, Saturday, 17th October 1863.

PRESENT:

JAMES CAIRD, Esq. M.P. (Chairman). | Professor HUXLEY, F.R.S.

RAMSGATE.

J. Gravells.

17 Oct. 1863.

JOSEPH GRAVELLS called and examined.

10,081. (*Mr. Caird.*) Have you been long engaged in the fishery here?—Yes, for many years.

10,082. What mode of fishing is chiefly practised at this port?—Trawling.

10,083. Is there any line-fishing?—Very little. There are a few hand-lines used outside the pier heads, but nothing more.

10,084. Has your experience extended over many years?—Yes, I have been fishing for 50 years.

10,085. Can you give us any account of the progress of the trawl-fishing during that period?—As regards the progress of it, many people have profited by it, and got many a smack out of it, and many a poor man has been enabled to save money out of it, and to buy a new smack.

10,086. Do you remember what was the number of vessels engaged in the trawl-fishing when you first became a fisherman here?—There were not more than three or four belonging to the place, to the best of my recollection.

10,087. Were they about the same size as they are at present, or were they smaller?—No, they were

quite small; there were two or three small smacks and luggers.

10,088. What was the size of the trawl at that time? What was the length of the beam?—The length of the beam at that time might be 28 or 30 feet.

10,089. How many men were there in each boat?—Four generally, and sometimes five.

10,090. Can you call to mind the quantity of fish you would take in an average catch at that time?—I cannot say what it would be upon the average; sometimes we caught more, and sometimes less.

10,091. Can you tell us about what quantity it would be in a fair day's fishing?—As regards the weight?

10,092. Yes, either the weight or the number of baskets full, whichever mode is most convenient for you to reckon by?—Perhaps 2 cwt. in a morning; perhaps there would be 2 or 3 cwt. every other morning, and so on.

10,093. What was the kind of fish principally caught at that time?—All sorts of ground-fish, soles, turbots, plaice, gurnets, and all sorts of ground-fish.

10,094. Any cod?—Yes, now and then.

10,095. Any whiting?—Yes.

10,096. You do not call cod and whiting ground-fish, do you?—Yes, they are ground-fish, although they are caught by the hook.

10,097. Were there any haddocks?—Sometimes an abundance, but not lately. There have not been a great many haddocks on this coast lately.

10,098. How many vessels are engaged here now in the trawl fishing?—There are about 50 here now.

10,099. What size are they compared with what they were at the time to which you have just referred?—They are now from 45 to 55 tons.

10,100. You did not tell us the tonnage of them in former times. What was the tonnage of the vessels formerly?—About 28 or 30 tons.

10,101. What is the average length of the trawl beam now?—Some have them 32 feet, some 34.

10,102. Not more than that?—I believe that is the extent—34 or 35 feet.

10,103. Are you at present engaged in the trawl-fishing?—No, I am engaged in netting the trawls for the trawlers now.

10,104. Are there no trawls here the beams of which are longer than 34 feet?—Yes, I beg pardon. I think I misunderstood you. The beam is from 38 to 40 feet or so. I will not speak to a foot or two.

10,105. I understood you to say that in former times it was from 28 to 30 feet long?—Yes.

10,106. And now it is from 38 to 40 feet?—Yes, and some are more than that.

10,107. How many men are there in each boat?—Five, altogether.

10,108. And what may be the average catch of fish now?—I cannot say. There is still an abundance in summer time, but a great portion of it is good for nothing when it is got. Where we are in the habit of working now there are hundreds of bushels caught that are not fit for human food.

10,109. Where is that?—Between the North Foreland and the Kentish Knock.

10,110. What do you consider a fair day's fishing compared with what it was at the previous time to which you refer?—I can hardly say. I can hardly draw a line. The vessels that belong here now do not stay all the summer through.

10,111–2. You mentioned 2 cwt. being brought ashore in the morning as a fair average day's fishing in former times; what quantity is brought ashore now?—About two or three or four baskets. It all depends on the wind and the weather. Perhaps two or three baskets may be brought ashore in the course of a morning weighing 80 lbs. or more.

10,113. Two or three baskets of 80 lbs. each?—Yes.

10,114. That is a smaller weight than you mentioned as having been caught by the boats in former times?—Sometimes they get more and sometimes less.

10,115. But is it the case that the larger vessels, with a larger and longer beam, and a larger net, and larger every way, make a smaller catch than the boats did in former times?—No, not the larger vessels; they are supposed to catch more.

10,116. I am now asking you about the larger vessels to which you referred?—They are supposed to catch more fish than the smaller vessels.

10,117. Can you speak of your own knowledge as to what they catch?—Not exactly.

10,118. You stated that a large proportion was not marketable fish; what kind of fish is it?—They are small plaice, not half so big as your hand. They are very small indeed.

10,119. Is that unusual; has there ever been a time when these small fish were not caught in large quantities here?—Small fish are generally caught every summer.

10,120. More so this summer than in former times?—Yes, I think there has been more taken this summer than there has been for many years.

10,121. Are they caught in-shore?—Between the North Foreland light and the Kentish Knock upwards.

10,122. Is there much fishing done by hand?—A great deal.

10,123. Do you think that trawling within the headlands has been injurious to the fishing?—Yes, that is our opinion. We think that the fish have not time allowed them to grow up and go into deep water before they are taken.

10,124. Is there much trawling practised off this coast within the headlands?—Yes, a good deal of it.

10,125. Is a large proportion of the fish caught in this way unmarketable?—Yes.

10,126. What proportion of the fish caught by the trawls within the headlands is unmarketable?—I cannot say. It is left about the decks and hove overboard by the shovel.

10,127. Have you yourself seen that done?—Yes, many a time. It would fetch nothing at all if it were brought ashore.

10,128. Has the proportion of small fish been increasing in this place?—Well, I think it has increased this summer. I don't think there ever was more taken than has been taken this summer.

10,129. Is the trawl-fishing chiefly practised near the coast, or in deep water?—In the summer time they fish near the coast.

10,130. Although they catch such a large proportion of unmarketable fish?—Yes.

10,131. Is that a profitable business for the fishermen to follow?—I cannot say that it is. In the summer time it is no good fishing when they get out into deep water.

10,132. Do you know the usual price of fish here?—No, it varies from day to day according to the quantity caught. Sometimes it is cheaper and sometimes dearer.

10,133. Are you yourself a salesman or a buyer of fish?—No, neither.

10,134. Do the Dutch or French boats come on this coast to fish?—A great number of French boats come.

10,135. Do they come near the shore?—Yes, and fish along with the English boats.

10,136. Do they fish within the bays?—Yes.

10,137. Have you seen them fishing within the bays?—Yes, I have been fishing with them before I left the fishery.

10,138. Do you speak of trawl-boats?—Yes.

10,139. Do you know what distance from the shore they have been in the habit of fishing?—Close upon the shore sometimes; in Rye Bay in particular, and in any other bay-water as well.

10,140. There are some particularly good fishing grounds off this coast, are there not?—Yes, excellent.

10,141. Is there any particular name for any of them to which you can refer us?—Yes, such as the Banks.

10,142. Which Banks?—The Falls Bank and the New Ground Bank.

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10,143. How far off the coast are they?—About a dozen miles.

10,144. You would call that deep-sea trawling?—Yes, there is deep water there, but they strike the Banks for the turbots.

10,145. Are these Banks outside the heads?—Yes, half way between this and Calais.

10,146. Have you fished on these Banks continuously?—Yes.

10,147. For a continuous number of years?—Yes, before I left off.

10,148. Do these Banks yield as large a quantity of fish to the fishermen as they used to do?—I do not think that the fish on the Banks are as plentiful.

10,149. What description of fish that used to be productive and prolific has fallen off?—The turbots in particular have fallen off from these banks.

10,150. They have fallen off in quantity?—Yes, I think they have.

10,151. Can you speak with accuracy about it. Have you lately been on these Banks yourself?—I have not been there for two or three years.

10,152. Do you remember a time when much larger quantities of fish were got on these Banks than are got now?—Yes, some years ago we were catching great quantities of fish on these Banks, but of late years the fish there have not been so plentiful.

10,153. Does that relate to all the Banks commonly fished off this coast?—Yes, I think it does.

10,154. What do you think is the cause of that?—We don't know what is the cause without it is owing to the lines. Some say it is owing to the vessels going so near these Banks with their lines.

10,155. What lines?—Fishing with long-lines and hand-lines.

10,156. Do you think that the quantity of fish taken by the long-lines and the hand-lines has diminished the quantity of fish taken by the trawlers?—Yes, some people think so.

10,157. Do you practise the herring-fishing here at all?—No.

10,158. Have you ever fouled the herring nets when trawling?—Yes, now and then when I had the misfortune to get hold of them.

10,159. Have you had to pay for the damage you have done in that way?—No, and I have never heard of any person who did.

10,160. Cannot the herring fishermen identify you afterwards?—Yes, they can.

10,161. Then, do they not think it worth their while?—We try all we can not to do any damage. They hinder us from our night's work as well as we hinder them, and we are glad to get clear of them if possible without doing any mischief.

10,162. Does it often happen that you do mischief?—We cannot help it if we come across them.

10,163. Do they not carry lights?—Yes, sometimes they do, but you are alongside of them before you know it.

10,164. (*Professor Huxley.*) Do you say that there are many long-line fishermen in this port?—No.

10,165. How many are there do you suppose?—I don't know that there is any one who goes out with long-lines off this coast.

10,166. Then where do the long-line fishermen of whom you speak come from?—They come from the river, from Greenwich, and off that way.

10,167. What do you consider your principal trawling grounds off this coast?—There is a spot of ground here we call the Foreland; that is the nicest trawling ground we have, barring the Banks we were talking about just now.

10,168. You trawl close off the Foreland?—Yes, between the North Foreland and the Galloper.

10,169. How far is that from the shore?—The Galloper is 28 miles from the North Foreland.

10,170. Then is it all soft ground between the North Foreland and the Galloper?—There is soft ground.

10,171. Not too hard to trawl upon?—No.

10,172. How wide is that ground which you say is 28 miles off the shore?—28 miles is the length.

10,173. How wide is it?—You can trawl right across to France.

10,174. You can go on trawling all over that space?—Yes.

10,175. Is that where the trawl-vessels from this place principally go?—No, they go principally into the North Sea.

10,176. What part of the North Sea?—Off Lowestoft; about 30 miles off Lowestoft.

10,177. Then do they leave this place and go down to trawl off Lowestoft?—Yes, for a month or six weeks.

10,178. Do they return then?—Yes.

10,179. Where do they send their fish to?—To London.

10,180. It does not come through Ramsgate?—No, only now and then.

10,181. Is it sent up by despatch vessels to London?—No, they simply get vessels to take it by way of Lowestoft to London.

10,182. The fish caught off there goes by way of Lowestoft?—Yes.

10,183. Is there any return of the quantity of fish caught here that will give us an exact idea as to the amount the trawl fishermen get?—Not in the summer time.

10,184. Is it only in the summer time that they go into the North Sea?—They go all the winter as well.

10,185. But they come here after five or six weeks?—They come here in the winter time. It all depends on the amount of wind; if it is southerly they go to Lowestoft with their fish.

10,186. How often do they come with their fish?—If they are out three or four days they bring in one another's fish.

10,187. What becomes of the fish brought in here?—It goes to London and to places round here.

10,188. I think you said that there are very few haddock caught here at present?—Very few indeed.

10,189. Has the quantity of haddock fallen off of late years?—We have not had a quantity of haddock for several years.

10,190. Within your recollection was there a time when you caught plenty of haddock?—Yes, both small and great.

10,191. How long ago is that?—Nine or ten years.

10,192. Did you catch them with the trawl?—Yes.

10,193. For the last six or seven years there has been a falling off?—Yes, there has been in haddock.

10,194. What do you think is the reason of that?—I cannot say.

10,195. You stated that the fishermen here were not particular to a foot or two as to the length of the beam of their trawl?—No.

10,196. What is the extreme length of the biggest trawl beam they have?—The largest?

10,197. Yes?—Some may have them 40 feet long.

10,198. What is the largest?—I cannot say. They try to outdo one another. It is who can have the longest.

10,199. Are you aware that a trawl beam 40 feet long is illegal?—No, I am not aware of that.

10,200. Do you suppose that any of the fishermen here know that?—I don't know whether they do or not.

10,201. Is there any person here who has authority to inquire into these matters?—Yes, there are several; plenty.

10,202. Does anybody trouble the people here?—No.

10,203. Does anybody examine the length of your beam?—No.

10,204. What is the size of the mesh of the trawl net here from knot to knot?—There are different sizes.

10,205. You make the nets, do you not?—Yes.

10,206. Do you fit them on?—No.

10,207. What is the size of the mesh?—What do you call the mesh?

10,208. The length from knot to knot?—3 inches, I should say.

10,209. Three inches from knot to knot?—Yes.

10,210. Do you mean to say that the mesh is 12 inches round ?—No.

10,211. The measurement I speak of is from this knot (*showing a net*) to that knot. Now what is that? —About an inch in some parts of the net.

10,212. What is the biggest mesh you make in your nets ?—I should say $2\frac{1}{2}$ or $2\frac{3}{4}$.

10,213. Two and three-quarter inches ?—Yes.

10,214. From knot to knot ?—Yes.

10,215. What is the smallest ?—That is as small as any we have got.

10,216. How long is that? What do you gauge your nets by ? You say you make nets ?—Only by my fingers.

10,217. You are a maker of nets ; are you aware of any law regulating the size of the mesh ?—No.

10,218. Did you ever hear of this : "Trawls shall "be made with nets, the meshes of which shall be at "least $1\frac{3}{4}$ inch square, from knot to knot, along the "line" ?—No.

10,219. Then you did not know that it was part of the law of the country ?—No.

10,220. Does anybody ever examine your nets ?—No. When they get the net we have nothing more to do with it—I mean we who make them.

10,221. Did you ever hear that any net you had made or supplied had been seized ?—No.

10,222. Do you make herring nets as well as others ? —No.

10,223. Have you used herring nets ?—No.

10,224. Have you yourself been a herring fisherman ?—No, never.

10,225. Do you make the trawl heads as well as the trawl nets ?—No.

10,226. Do you fit the trawl heads ?—No, that is blacksmith's work.

10,227. You have nothing to do with the trawl beams either ?—I have nothing to do with anything but the trawl net.

10,228. I understood you to say that you have been trawling for many years yourself ?—Yes.

10,229. You said that you were often in the habit of getting among the herring men, or that the herring men get among you ?—Yes.

10,230. Do you ever feel under any obligation to get out of their way ?—Yes, it is our interest to do so.

10,231. Supposing it had not been your interest, did you know that you were bound to get out of the way ?—We should do so if we could, but sometimes we are unable to do so.

10,232. Do you know that you could be punished for not getting out of the way ?—No.

10,233. Did you ever hear of this : "Trawl-boats "shall always keep at a distance of three miles from "all boats fishing for herrings or mackerel with a "drift-net." Did anybody ever endeavour to enforce that regulation ?—I think not.

10,234. Did you ever hear of this law : "Trawl-"fishing is forbidden in all places where there are "boats engaged in herring or mackerel drift-net fish-"ing." Did you ever hear of that ?—Yes, I have heard of it ; but I never knew the law put in force.

10,235. Is there anybody here about this part or at this port whose business it is to enforce laws of this kind ?—I don't know that there is.

10,236. Is there any cutter ?—There are two cutters.

10,237. Do they meddle with the fishermen ?—I believe not.

10,238. Did you ever know them do so in your experience ?—No.

10,239. I understood you to state just now that there has been some falling off in the catch of fish—that there is not so much fish caught now as there used to be, do you mean that ?—No, I cannot say that. I think there is more fish caught sometimes ; I don't see any falling off in it altogether.

10,240. I think you said that in olden times, when the boats were small and the beams of the trawls were not more than 28 feet long, they not uncommonly brought in two or three cwt. of fish in a morning. Did I understand you to say that ?—Yes ; but there are a great many more trawlers now.

10,241. At the present time you say they do not commonly bring in more than two or three baskets of 80 lbs. each, and yet the boats are much larger and the beams much larger. Surely that looks as if there was a falling off ?—A great deal of what is brought in now is not fit for human food. They catch it when it is not fit to eat.

10,242. (*Mr. Caird.*) You have said once or twice that a great number of small immature fish not fit for human food is caught ; does that apply to the fish taken within the headlands ?—Yes.

10,243. Do you think it desirable that any regulation should be adopted to prevent trawling within the headlands ?—Of course it would be a great advantage, I think.

10,244. Do you think it would be a benefit to the fishermen in general ?—Yes.

10,245. Why do you think so ?—Because the breeding of the fish is destroyed in shoal water by the seines.

10,246. Would you exclude the trawl-fishers from the bays altogether during the whole season or only part of the season ?—Only part of the season ; about four months in the year.

10,247. What four months in the year ?—May, June, July, and August.

10,248. Why do you specify these months ?—Because we consider that the fish are breeding about that time ; that they are good for nothing if they are got ; and that if they were not caught then they would have time to go into deep water.

10,249. At a later season in the year do you find that there are not as many small fish caught in the bay ?—There are not as many small fish caught then as are caught in the summer.

10,253. Are they large enough to be marketable then ?—Yes.

10,252. Then you think it would not be so destructive to the fish in the bays at a later season of the year ?—No, the fish would have had time to draw off into deep water.

10,253. Are the bays fished by the trawlers at a later period of the year ?—Yes.

10,254. Do they catch large fish then ?—Yes.

10,255. You say that a large proportion of the vessels which hail from this port fish in the North Sea. What is the proportion that fish here, and the proportion that fish in the North Sea ? Have you no trawl-vessels off here in the winter time ?—Now and then two or three stop here.

10,255*a*. A large proportion leave the shore and go to the North Sea in the winter time ?—Yes.

10,256. Are there any fish caught off this shore in the winter time ?—Not as much as would pay the fishermen.

10,257. Has that been the case long ?—Oh, yes, for many years.

10,258. It has not been a recent decline in the fishing off this coast ?—No.

The witness withdrew.

WILLIAM CLAPP called and examined.

W. Clapp.

10,259. (*Mr. Caird.*) I understand that you are an owner of trawl-vessels here ?—Yes.

10,260. Are you yourself a fisherman ?—Yes.

10,261. Are you at present engaged in fishing ?—Yes.

10,262. Have you had a long experience in the fishing here ?—About 28 years.

10,263. Has your experience been altogether confined to trawl-fishing ?—Yes.

10,264. Can you tell us with accuracy the number of vessels engaged in the business when you first began ?—There were about 15 or 16 belonging to Ramsgate, but a great many more came from other places from the westward.

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10,265. Did large numbers come from the westward at that time ?—Yes, in the winter season.

10,266. Do they still continue to come here ?—No.

10,267. Where do they go now ?—I believe they stop at home, they find it as well to stop at home.

10,268. What number of vessels do you suppose are engaged in trawl-fishing now ?—55.

10,269. Do you agree with the former witness that they are a larger class of vessels altogether and that they carry larger nets than formerly ?—Yes.

10,270. Has the trawling here in your experience been as profitable a matter of business as formerly ?—It has been profitable during the last two years ; it has been more profitable than it was before.

10,271. Are the fishermen the owners of vessels engaged in trawling ?—Yes, mostly.

10,272. Have those who sail in them mostly a share ?—No.

10,273. Do the owners of the vessels fish in them themselves ?—Yes, with the exception of one or two.

10,274. Can you tell us whether on the average the quantity of fish caught in former times was less or greater than it is now ?—It was less in former times, when I first went to it.

10,275. Do you think there is a larger quantity caught by each vessel now than there was before ?—Yes, a great deal larger.

10,276. What would be the average take 28 years ago, or say 20 years ago ?—The take is quite one third more now than it was then.

10,277. You think that each boat can bring one-third more ashore now than it could then ?—Yes, quite as much as that.

10,278. And you have all this increased number of boats at the same time ?—Yes.

10,279. Then there is a larger quantity of fish brought to this port than there used to be ?—They catch a much larger quantity, but it is not brought here. The vessels are only here for a few months in the year, they go to the North Sea, and they take their fish to the nearest port from which it can be sent to market.

10,280. Do you suppose that there is a much larger quantity of fish taken to the general markets of the country by the boats than was the case formerly ?—A much larger quantity.

10,281. Can you give us any estimate of the quantity ?—With regard to the soles, where they caught one formerly they catch three now.

10,282. Does that increase apply to all kinds of fish, or only to some particular kinds ?—To all caught in the winter season, to all the catch of offal fish, flat-fish, and turbot.

10,283. The previous witness said there was a great falling off in the catch of turbots ?—I don't agree with him in that opinion, I believe there are quite as many caught now as formerly ; but the smacks do not follow them as much as in former times.

10,284. Is there any great quantity of whiting, haddock, and cod caught ?—We don't catch a cod in the course of two or three weeks ; it is very seldom we catch cod.

10,285. There is not a large proportion of cod caught in the trawl nets ?—No, it is mostly plaice and white fish, and a few herrings at times.

10,286. What would you think a good average haul by a trawler ?—We cannot average it.

10,287. I don't want the best or the worst catch, but what would be an ordinary average haul ?—About 15 or 16 baskets, taking the average of the good and the bad.

10,288. What weight of fish does each basket contain ?—About half a cwt. I take the rough fish with the smooth, the best fish with the worst, altogether.

10,289. What different kinds of fish would these 15 baskets comprise, and in what proportion ?—They consist principally of soles, plaice, and other fish.

10,290. How many baskets of soles would there be ?—Perhaps two or three baskets.

10,291–3. How many of the 15 would be plaice?—10.

10,294. What would the others consist of ?—Whitings and turbots, and brill, taking the average.

10,295. Is there a very small proportion of haddocks ?—Yes, a very small proportion in the part where we go trawling.

10,296. Is any large proportion of these 15 baskets small and immature fish unfit for the market ?—No, not in the North Sea.

10,297. Do you ever fish within the headlands here ?—Yes, in the summer time.

10,298. Do you find that you catch a large proportion of small fish ?—Yes, if we get within a certain depth of water.

10,299. What depth ?—10 fathoms.

10,300. Within 10 fathoms ?—Yes, in the bay.

10,301. What proportion of your catch will be small fish then ?—We get a quantity of small plaice, whiting, and soles.

10,302. Will there be several basketfuls ?—Yes.

10,303. What do you do with them ?—We seldom go there, we keep without that small fish ; the English fishermen do not care to catch it, but the Frenchmen come there by scores every summer.

10,304. Do you not continue to fish when you find you are getting a large proportion of small fish ?—No, we keep further out, in deep water.

10,305. Is it common for your trawl-boats as soon as you discover you are taking small fish to change your ground ?—Yes, we go further out.

10,306. Are there no trawlers that practise fishing there ?—No large vessels ; there are small boats that do.

10,307. With a much smaller trawl ?—There are boats that are hauled up on the beach at this place.

10,308. When you are fishing in the deep sea, do you catch many of these small fish ?—No, we catch very few, seldom any. In the summer time the French from all parts of France come within half or a quarter of a mile of this coast to fish.

10,309. Do they come in great numbers ? Are there many boats ?—Yes, 20 or 30 sail in a day.

10,310. Are their boats the same size as your own ?—They are differently rigged. They are lugger rigged, while ours are cutter rigged.

10,311. Do they carry nets about the same size as yours ?—Yes.

10,312. Do they catch a large quantity of small fish?—Yes, a great quantity.

10,313. Do they take them to the French market ?—Yes, I think so, but we don't take ours to market.

10,314. They don't throw them into the sea again ?—No.

10,315. They do not object to fishing in shallow water, then ?—No, if they can get any quantity of fish.

10,316. Then do you think that a greater degree of injury is done by the French fishermen than by your fishermen ?—Yes.

10,317. Do you think it injurious to the fishing that these small fish should be caught ?—Yes.

10,318. Would you like to see some rule established by which this kind of fishing in the bays could be put a stop to ?—Yes, because I think the fish go there to spawn. I have been fishing for 10 or 15 summers about these bays. I have found a great quantity of small fish at times. These Frenchmen come and catch it up, and as long as they can get a quantity of fish they do not mind whether it is small fish or large.

10,319. It is only in the summer season that these fish are caught ?—That is all.

10,320. Then does your objection to fishing in the bays with the trawl net only apply to the summer months ?—There are very few fish in the bays except in the summer time.

10,321. Do you think that if any regulation were established it should apply to the whole year, or only to certain months in the year ?—I don't think it would hurt if it applied to the whole year.

10,322. You are of opinion that trawling in the bays should be put a stop to entirely ?—Yes.

10,323. What would be a proper distance to keep

the trawlers outside the shore?—I would keep them not within 10 fathoms of water.

10,324. Without regarding the headlands at all?—Yes.

10,325. You would not draw a line from headland to headland, and say there shall be no fishing within this line?—No.

10,326. You would go by the depth of water?—Yes.

10,327. Would it not be difficult to enforce a regulation that was not defined by a line?—No, there are plenty of fish that come within the headlands. We get a great quantity of large fish in the deep water now that are within the headlands.

10,328. Would the 10 fathom depth be considerably within a line drawn from headland to headland?—Yes.

10,329. Why do you particularly fix 10 fathoms?—I don't know what it ought to be within a fathom or two. That is only my judgment.

10,330. Have you had any experience that leads you to say that when you get outside 10 fathoms you cease to catch small fish?—Yes, outside 10 fathoms we don't get many small fish.

10,331. Then you think that if the restriction were limited to 10 fathoms that would be a beneficial regulation?—Yes, with regard to the fishing in the bays.

10,332. Do you yourself fish much on any particular grounds on this coast which are favourite fishing grounds?—Yes, in this very bay I am speaking of.

10,333. I do not mean in a bay, but outside the bays in deep water?—Yes.

10,334. Can you give us the name of any particular ground?—Rye Bay.

10,335. How far is that from the shore?—The fishing ground begins from the shore, and it goes off for three or four miles.

10,336. I wish to direct your attention to deep-sea trawling, not in-shore trawling. Is there any fishing ground here that is celebrated for yielding a large quantity of fish?—Yes, in the North Sea.

10,337. Not off this shore?—Yes, off this shore in the summer season.

10,338. How far off the shore?—20 miles.

10,339–40. What is the name of it?—What we call the Foreland is the nearest ground we have here.

10,341. Have you fished on that ground yourself for many years?—No, I have not.

10,342. Is there any ground of which you have any experience personally that has been long fished in deep water here?—Not here. I have generally been in the North Sea in the summer time, and in the winter time I have gone to Rye Bay. I have got my living there ever since I came to my manhood.

10,343. I want to ascertain from you whether there is any particular ground in the deep sea you are in the habit of frequenting, of which you have any knowledge and experience such as to enable you to say whether the quantity of fish now caught is increasing or diminishing as compared with what was caught in former years?—Yes, I can speak with regard to the Foreland.

10,344. How long is it since you began to fish on that ground?—I have not been there myself, but I have seen others there. I have not been there to put a trawl out myself, but I have been there and seen it done.

10,345. Is the quantity of fish caught there increasing or diminishing?—It has increased this summer. There have been better catches this summer than for years.

10,346. Do many boats go on that ground?—Yes, a great many.

10,347. Have they for years been in the habit of going on that ground?—Yes, in the summer season.

10,348. And this summer they have had larger takes of fish than in previous summers?—Yes, of the sole kind.

10,349. And a greater number of boats has been engaged?—Yes.

10,350. Then is it your conviction that the quantity of fish has not diminished in consequence of the ground being repeatedly trawled upon?—Yes.

10,351. You think that your boats trawling over the same ground do not diminish the quantity of fish you find on the ground?—I believe not.

10,352. Have you ever found upon any ground you have been in the habit of trawling over that the fish have become gradually worn out; have you found the fish after you have been fishing for a succession of years gradually diminishing in quantity?—Sometimes there has been a diminution for a short time.

10,353. What do you mean by a short time; do you mean a particular season?—No. Perhaps we may have been trawling in a particular place for a time, and then we shift if the fish decrease.

10,354. That was always the case, I suppose? Is it not always the case that the fish shift from ground to ground?—Yes.

10,355. What I want to know is this, have you ever found any ground which you have repeatedly been in the habit of trawling upon where the supply of fish is diminishing on the whole, in consequence of your fishing so much?—No, it has never decreased except for a time. The fish sometimes take flights and shift about from place to place according to the season of the year.

10,356. Has it long been the custom for the fishermen here to go to the North Sea in the winter time?—Yes.

10,357. Do the fish leave the grounds you frequent in the winter time to go further north?—Yes.

10,358. Then you follow them not because the fish have diminished in quantity as a whole, but because they change their ground in that way?—Yes, they are not so near the shore in the winter time, and yet we are obliged to be near the shore. We have heavy gales of wind at times, and we want to be near a harbour.

10,359. Then partly on account of the season, and from a desire to have more sea-room, you go to the North Sea?—Yes, and because we get a greater quantity of fish.

10,360. You stated that a large quantity of vessels come from the westward and fish here?—Yes.

10,361. Do they go to the North Sea?—No, they keep on their own ground, and they go further out to sea occasionally.

10,362. When you are fishing in the North Sea, how do you get your fish sent to the market?—We either go with it ourselves, or send it by another smack.

10,363. How long can the fish be kept fresh on board the smacks in which they are caught?—If it is cold weather they may be kept for a week.

10,364. At the present time do you carry ice in your fishing smacks?—Not in the winter time.

10,365. Is there any ice in the vessels that are employed by the fishing smacks to carry the fish to market?—Not in the winter time, but in the summer time they carry ice.

10,366. Is ice not necessary in the winter time?—No.

10,367. How long will a fishing smack keep the sea without coming ashore at all?—Sometimes four or five weeks.

10,368. Is it common to do so?—They don't come into this port above once in four or five weeks.

10,369. But do they go into any other port?—Yes, it is according to the wind. They always go to the first market where they can bring their fish ashore.

10,370. In the process of trawl-fishing have you ever observed whether you trawl up the spawn of fish?—I never saw any in my life; I don't know what it is.

10,371. In the deep sea do you get many fish so mangled that you are obliged to throw them overboard as unfit for the market?—No.

10,372. Does that never occur in stormy weather?—No.

10,373. Do you think it would be advisable to adopt any regulation as to the length of the beam of the trawl?—No, I don't think there is any occasion for that. There is plenty of fish for every man to catch. The more they trawl the more the fish seem to be

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W. Clapp.

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there. They keep stirring up the ground, and they are constantly going over different ground. The trawl takes the roughness off, and the result is that the fish can then get at the food. By that means I think the quantity of fish has been increased by trawling rather than diminished.

10,374. Then, as a fisherman, you do not object to any additional number of fishing boats coming upon the fishing ground.—No.

10,375. You do not find that that diminishes the quantity you take?—No, as long as they keep out of the shallow water in the summer time I think they do no harm.

10,376. That is your only objection?—Yes.

10,377. Do you think it desirable that some regulation should be adopted to prevent that?—Yes. If, for instance, the French boats come they catch more fish than the English, and they drive us off the ground.

10,378. Have you ever seen any bruised or small fish sold as manure?—No, never.

10,379. Are there any skate caught off this coast?—Yes.

10,380. Is the quantity of skate caught here increasing or diminishing?—It is just about the same.

10,381. Is the price of fish increasing or diminishing?—It is increasing.

10,382. Speaking of 20 years ago and comparing it with the present time, what might be the price of a basket of fish, say plaice?—Where plaice would have brought 2*s.* 6*d.* then it will bring 5*s.* now.

10,383. Then has the price of fish doubled?—Yes, with regard to plaice the price has doubled, and that is owing to the railways. The fish can now be got into the different markets in a fit state to eat.

10,384. As to soles, what was the price 20 years ago compared with what it is now? I am speaking of the price given to the fishermen, and not that paid by the consumer.—There is a rise in that of fully one third.

10,385. Then has the price of plaice increased more than the price of soles?—Yes.

10,386. How is it with regard to whiting?—The price is about the same. I don't see any rise in whiting, but we do not catch any quantity of them, and we cannot send them any great distance without great care.

10,387. Is that because they are a softer fish?—Yes, they are a much softer fish, and they will not keep as long as other descriptions.

10,388. With regard to turbot and brill, what are the relative prices of those fish now compared with the price 20 years ago?—I think there is also a rise in the price of turbot and brill.

10,389. Is there a rise equal to the rise in the price of plaice—has the price doubled?—No, but there is a little rise.

10,390. Has there been any line-fishing off this place?—Not that I am aware of.

10,391. Never within your remembrance?—No.

10,392. Do the foreign boats of which you spoke just now only fish with the trawl?—Yes, and with lines also. They come close off Ramsgate Harbour, the Downs, and different places, and fish close inshore.

10,393. They fish with lines?—Yes.

10,394. Do they fish both with lines and with the trawl?—Yes.

10,395. Do any of the trawl fishermen here belong to the coast volunteers?—Yes, I believe there are a few.

10,396. Are there many?—No, not many, I think.

10,397. Is there any objection made to them on account of their not having been accumstomed to square-rigged vessels?—No, I do not think there is.

10,398. (*Professor Huxley.*) What proportion of small fish is caught by the trawl in deep water. You always catch a certain number of small fish, I presume?—We catch very few in the North Sea.

10,399. You catch small fish when you fish in the bays off the shore?—Yes, if we get along the shore we catch a great many small fish.

10,400. Do you catch many small fish when you are fishing off the Forelands, out in deep water?—No, nothing to speak of then.

10,401. Do you think the catch of haddocks has fallen off of late years?—There are but very few haddocks caught off here now.

10,402. Were there more caught off here formerly?—No, there used to be a few caught in the North Sea a few years ago, but we have left off catching them now.

10,403. I am speaking of this coast. Were there many caught off this coast in former years?—No.

10,404. Why is it that you do not practice your trawling off here in the winter?—Because there is no room for us. We like to have plenty of room in the winter. When we can drift about in the North Sea we should be obliged to be in the harbour if we were here. When it blows a gale of wind off this coast there is no room for us at all.

10,405. Suppose you had a good harbour that you could run into, would you not run in here?—No, we have a good harbour already, but we cannot get a living by being in a harbour, we are forced to be at sea in all gales of wind. If we are not, it is impossible for us to catch fish.

10,406. If an easterly gale came on, you would get in?—We don't want to get in. We want to be at sea no matter how hard it blows; but if we are near the shore off the Foreland we must come in if a gale comes on.

10,407. You have not got sea-room?—No.

10,408. Is that why you leave these grounds in the winter?—Yes.

10,409. Do the Torbay men fish here?—Not now.

10,410. Were they in the habit of doing so?—Yes, some few years ago.

10,411. Did they come up in their smacks?—Yes, in the winter season.

10,412. Did they live here?—Yes.

10,413. In Ramsgate itself?—Yes.

10,414. They don't do so now?—No.

10,415. Why is that?—Some go to Hull, some stop at home. They found out the Silver Pits, and then they went down to the Yorkshire coast, and made their home there.

10,416. They thought they could do better by going to the Silver Pits and making Hull their port?—Yes, they found that that would be to their advantage, and Hull being nearer for them they live at Hull now.

10,417. Have you ever been engaged in the herring-fishing?—No.

10,418. You were speaking just now of the French coming within the limits here a good deal?—Yes.

10,419. Are there any cruisers off the coast; I mean Revenue cruisers?—I have known one or two here, but the protection they give us is very little.

10,420. Suppose they saw a French vessel within the limits, what would they do?—I have known them take them into the harbour.

10,421. Have there been any cruisers here of late years?—Not up and down the coast. Occasionally there may have been a Revenue cutter about.

10,422. Do not the Revenue cutters cruise up and down here?—They may have done so last summer, but they don't make a general thing of it.

10,423. How many Revenue cruisers are stationed here?—Two.

10,424. What do they do with themselves if they don't cruise up and down the coast?—I don't know.

10,425. Notwithstanding their presence here, you do not think the French are much interfered with?—No.

10,426. And the French boats make it a practice to come fishing on the coast?—Yes.

10,427. You are aware that they are liable to seizure for doing so?—Yes.

10,428. Did you hear the regulations I read from the Convention about the length of the trawl beams?—Yes.

10,429. Did you ever hear of them before?—No.

10,430. Did any body ever examine the trawl beam

of your net in order to see if it was of the right length ?—No.

10,431. Did any body ever examine the mesh of your net ?—No.

10,432. In fact, nobody ever seems to meddle with you at all ?—No.

10,433. You did not know that you were breaking the law in having your beam too long ?—No.

10,434. Do you ever find yourself interfering with the herring fishermen or they with you ?—They interfere with us sometimes.

10,435. Did you ever hear of that regulation which I read just now in reference to herring-fishing ?—Yes.

10,436. I mean the regulation that obliges you to go away from them ?—They put their nets in after dark, and then we cannot see them.

10,437. I am not talking about what is possible but what is the law. The law is that you shall get three miles out of their way ?—Yes, but we cannot do that in the dark.

10,438. Have they no lights ?—Yes.

10,439. Cannot you see them ?—We cannot tell if the lights are herring lights or any other lights.

10,440. What sort of light is it they carry ?—A white light.

10,441. Are these regulations carried out: "In "order that boats fishing with drift-nets may be "easily recognized at night, the masters of these "boats shall hoist on one of their masts two lights, "one over the other, three feet apart. All fishermen "are forbidden, except in cases of absolute necessity, "to show lights under any other circumstances than "those mentioned in the present regulations." Now, is it your experience that the herring fishermen do not carry lights of that kind ?—I never saw but one light. They only carry one light.

10,442. If these regulations are carried out, of course it would be practicable to recognize the drift-net fishermen ?—Yes.

10,443. But you say they are not carried out ?—Yes, and as it is, it is very hard for us to get out of their way, more than it is for them to get out of ours.

10,444. I will read you another regulation. Article 26 says: "Whenever herring or mackerel boats shall "commence drift-net fishing in any place whatever, "the trawl-boats which may be already fishing in "such place shall depart therefrom, and shall keep "at a distance of at least three miles from the said "drift-net herring or mackerel boats." You see that the practical effect of that is that if you have got your trawl net down and are fishing for the night, and the herring men come and shoot near you, you must at once take up your trawl and go out of their way for a distance of three miles. Now that regulation which I have just read to you is the law as it at present stands. Do you think that it is a regulation which can be practically enforced ?—Do you mean with regard to hoisting two lights ?

10,445. No; the other one, which requires the trawlers to take up their nets and get out of the way ?—The evil is this: if the herring fishermen see a fleet of smacks, they like to get as near us as possible. They say that the nearer they are to the trawl-boats the more herrings they catch.

10,446. Did you ever hear of a trawler being brought before the magistrates for not getting out of the way ?—No.

10,447. Do you think it would be a just regulation if it were enforced, or do you think it would not inflict much hardship upon the trawlers ?—I think it would involve a very great amount of hardship upon the trawlers.

10,448. You think it would not be just for the trawlers to be obliged to get out of the way ?—No, because the herring boats follow the trawlers, and they say that they catch more herrings when they are near the trawlers.

10,449. At any rate nobody seems just now to trouble himself about the law ?—No.

10,450. What is the weight of the head irons of your trawl ?—Do you mean each head ?

10,451. Yes. From about 120 lbs. to 130 lbs.

10,452. One hundred and twenty pounds each head ?—Some may be heavier.

10,453. That is 240 lbs. between them ?—Some are only 180 lbs. the two.

10,454. Are any of them heavier than the weight you mentioned just now ?—There may be some a little heavier, but I do not think they are as a general rule.

10,455. Are you aware of any regulation on that subject ?—No.

10,456. Did you ever hear of this: "The total "weight of the two iron or head pieces of a trawl "shall not exceed 287 pounds ?"—No.

10,457. If you had a mind to make the weight 300 pounds you would do so ?—No.

10,458. You would not do so ?—We should if we thought it would be of any benefit to our fishing.

10,459. Just so. Do you load the ground-rope of your trawl with any weight, such as lead, or iron chains ?—We do sometimes when we are going on hard ground.

10,460. Do you put any particular weight on it ?—Sometimes we may put a little lead on, perhaps 12 or 15 pounds.

10,461. If you were inclined to put 2 or 3 cwt. on, I suppose you would do so ?—Yes, if we thought it would benefit us.

10,462. Have you ever heard of this: "The total "weight of iron chains or leads used for loading "the ground-rope of a trawl shall not exceed 110 "pounds" ?—We never exceed that weight.

10,463. Did you hear the regulation which I read about the size of the mesh of your trawl ?—Yes.

10,464. Did you ever hear of it before ?—I heard a little talk about it some years ago.

10,465. Did anybody ever meddle with your nets or examine them ?—Not here.

10,466. Did you ever hear of any trawler being interfered with on that ground ?—No.

10,467. Does your trawl-boat carry any vane ?—Some of the trawlers do.

10,468. What sort of a vane ?—A piece of bunting about a yard and a half long on the stock.

10,469. Not a square vane ?—No, a piece of bunting about a yard and a half long.

10,470. Then yours is a kind of pennant ?—Yes, we call it a vane.

10,571. Are the vanes of the boats of any particular colour ?—No; some have them red, some white, and some blue. Sometimes they will have none at all.

10,472. Then I suppose you never heard of this article: "For the purpose of distinguishing by day "drift-net fishing boats from trawl-boats, both shall "carry at the masthead vanes which shall be at least "eight inches in height, and two feet in length. The "colours of these vanes shall be, for British trawl-"boats, red; French trawl-boats, blue; British drift-"boats, white and red; French drift-boats, white "and blue. It is understood that vanes of drift boats "shall be divided vertically into two equal parts, of "which the white shall be nearest the mast." In your experience you do just as you like with regard to this matter ?—Yes.

10,473. And you have been fishing for 28 years ?—Yes.

10,474. You never heard of anybody trying to enforce the regulations ?—No.

14,475. Have you ever been at the herring-fishing ?—No.

10,476. (*Mr. Caird.*) Then I suppose the regulations which have been read to you by Professor Huxley, as they are not enforced, do not operate injuriously against the fishing here ?—No.

The witness withdrew.

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P. Bartlett.

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PHILIP BARTLETT called and examined.

10,477. (*Mr. Caird.*) Are you a smack owner and fisherman?—I am.

10,478. Have you been long engaged in the business?—Between 30 and 40 years.

10,479. Have you a practical knowledge of the fishing?—Quite so.

10,480. Have you during most of that time acted as a fisherman on board a trawl-vessel?—I have just resigned the sea; I have now been two years away from the fishing.

10,481. Are you interested in more vessels than one?—Yes; I have two.

10,482. I will put a question which you may answer or not as you like. When you first began fishing had you any interest in the property of a vessel?—No, not one halfpenny.

10,483. And you have gradually become an owner of trawl-vessels?—Yes.

10,484. Is it common for fishermen to become the owners or part owners of vessels?—Yes, very frequently through their own energy and industry.

10,485. Then, on the whole, you will say that it has been a profitable business?—Yes, but it is a lottery, like many other things. Some years it may fail. But take the business as it is, I should say that it is more on the rise than it is on the fall.

10,486. In the course of your experience you no doubt have seen great changes in the number of vessels employed in the trawl-fishing here. Can you tell us with accuracy what the number of boats was when you first began fishing, and what it is now?—I have been fishing on the Yorkshire coast a great deal of my time. I left there 10 years since and I came back again. I was born in Devonshire, but I left there when I was eight years of ago. When I left there were not more than 13 or 14 vessels. The Silver Pits had just been discovered, and great quantities of fish were being got there. At that time this was the mother port.

10,487-8. Do you mean the Silver Pits on the Yorkshire coast?—Yes, in the German Ocean, between the Dogger Bank and the Well Bank.

10,489. Do you agree with the previous witnesses with regard to the number of boats that hail from this port?—Yes.

10,490. And as to the increased size of the vessels and the increased size of the trawl?—I do not exactly agree with them with regard to the net. There is a variation in the opinion different trawlers entertain with regard to the nets, heads, and beams.

10,491. Is it your opinion that the fishermen should be controlled as to the size of the net, or that every fisherman should adopt his own course?—I think it ought to be optional. I should not like to be confined myself to any particular regulation, although I do not exceed the size laid down by the law.

10,492. Are your trawl beams under 38 feet in length?—Yes, and I find that I can get as good a living and earn quite as much money as those who have their beams 42 feet long.

10,493. Are the vessels of the same size?—No; some are 30 tons and some are much larger. We have vessels out of this port that that are 80 tons builder's measurement. My largest is 52, and the next is 47.

10,494. You are of opinion that the legal beam is long enough to enable you to get a good haul of fish?—Yes.

10,495. But you would not prevent other people from following their own fancy?—No, I should not like to put any restriction upon anybody.

10,496. You do not think the length of the beam affects the increase or the dimunition in the quantity of fish?—No, I think it is a great lottery when a man puts his trawl overboard whether he will get a large catch of fish or a small one, on account of the great variation in the ground itself.

10,497. Do you agree with the previous witnesses, that the practice is to follow the fish here in the summer, and then go to the North Sea in the winter?—Yes.

10,498. That is the usual course of fishing here?—Yes.

10,499. The course practised by all the boats in this port?—Yes.

10,500. Can you speak of your own knowledge as to the quantity of fish when you first began to fish, and the quantity now?—I can state that it has increased to a great extent

10,501. The quantity caught by each vessel?—Yes.

10,502. The quantity caught by each vessel has increased, and the number of vessels has much increased also?—Yes.

10,503. Then you would say that the whole quantity of fish caught by all the vessels hailing from this port has increased of late years?—Yes, to a great extent.

10,504. Has it increased in a larger proportion than the number of vessels?—Yes. Taking the average catch of one vessel, I think it will be found that each vessel averages about one third more now than it did 10 years ago, of all kinds of fish that swim on the fishing ground. Our nets do not take any fish that do not swim on the ground, but all that go there are taken into our nets.

10,505. In your experience, have the grounds you have been in the habit of fishing, begun to fall off in the quantity of fish they yield in consequence of your having passed over them for successive years with a trawl net?—No; only two years ago there was a very great increase of turbot, brill, doreys, and whiting, on the Falls Bank. The quantity was very much larger than it was 10 years ago.

10,506. Ten years before that?—Yes, since 1851. There was a greater quantity of fish taken off the Falls Bank in 1861 than in any year since 1851.

10,507. Was there a greater number of boats employed in the fishing?—Yes. I had one that never left the ground for four weeks.

10,508. It was always fishing on the same ground?—Yes, on one ground. But you want a particular wind, or you cannot fish this coast. The tide runs repeatedly across you, and parallel with the Bank.

10,509. Did you find that the other boats followed in the same track as your self?—They either bore N.N.E. or S.S.W.

10,510. Were all the boats following each other?—Yes, or else they would not have been on the Bank.

10,511. Is the Bank so narrow as that?—Yes, the Bank is as narrow as that.

10,512. How many boats follow each other?—Ten, 12, and perhaps 14 or 15 sometimes.

10,513. Do you all go over the same ground?—I am satisfied of it, and our nets are not above 20 fathoms from each other.

10,514. How long will that continue without intermission?—For two months or more. The fish continued on the Bank all the season.

10,515-7. Was plenty of fish caught all that time?—Yes, plenty. There were whitings in abundance. My opinion is that the fish were there in great abundance, and that when our vessel passed along part of them would see what they did not wish to see. Our nets and trawls flight the fish, and some of them escape, giving us a chance to take them the next time. We put our nets down in 30 fathoms of water, and we drag them down into water as shallow as between 4 and 5 fathoms.

10,518. It has been stated by some of the witnesses we have examined that the agitation caused by the trawl net in passing over the ground disturbs the food upon which the fish feed?—I believe that our nets by trawling over the ground often cause a certain skim of the bottom. They remove the upper part of the soil, and then the fish are enabled to find better food.

10,519. Have you ever drawn up any spawn in your nets?—Never.

10,520. Have you ever, when out in the deep sea,

drawn up young fish that were not marketable?—No; all the fish are saleable we bring to shore.

10,521. Are you never compelled to throw overboard small fish that have been brought up in the trawl?—No; I never visited those fishing grounds near the shore, such as Rye Bay, where the witness Gravells represented that so many small fish were trawled up. I have not fished within the headlands on the Kentish coast, but nine miles at least from the coast.

10,522. Have you ever noticed that some of the fish you bring up in the net are occasionally much mangled and partially destroyed?—No; and I have had so many fish in the net that it has taken four hours to get them out and yet I never saw one defaced or injured.

10,523. Did you never see one that had lost its scales?—Some of them might lose a few scales, but I never found them so injured as to be rendered unsaleable.

10,524. You never found them seriously damaged?—No; never seriously damaged, but in proper condition for the market. As soon as we hauled them on board their insides were taken out, they were packed into baskets and placed on board the luggers and cutters by which they were conveyed to the market. I am speaking now of when I was fishing off the Texel five years ago.

10,525. Have you observed that the French fishing boats come off this shore in the summer time and catch many small fish?—Do you mean the long-liners?

10,526. No, I am speaking now of the trawlers?—They do not come into our Gull Stream with their trawlers as the ground is against them, but I have known them on the south ground where there is a superior soil. They have often come there, but we have been given to understand that we have no jurisdiction that enables us to drive them away from that ground.

10,527. That is more than three miles from the coast, is it not?—Yes.

10,528. The limit fixed by the Act of Parliament is three miles?—Yes, one league.

10,529-30. Did you not hear one of the previous witnesses say that the French fishermen are constantly in the habit of coming close in-shore here to fish?—Yes, but I have not noticed them. I have not been in the habit of fishing there.

10,531. On the whole your evidence goes to show that the system of fishing adopted by the trawlers of this place has no tendency to diminish the quantity of fish brought into the market?—Yes.

10,532. On the fishing grounds on which you principally fish you have observed no signs that would lead you to the conclusion that trawl-fishing, as now practised here, is resulting in a diminution of the supply of fish?—Not in the least. On the contrary, I believe that the supply of fish has greatly increased.

10,533. Does that remark apply to the fishing grounds off this coast as well as those you frequent in the North Sea?—Yes.

10,534. You were not obliged to leave your own coast either in Devonshire or here because the quantity of fish was falling off?—No.

10,535. It has been stated to us that the Ramsgate and other fishermen having fished out all their own banks are obliged to go north. Do you believe in that?—Certainly not. I was fishing off the Yorkshire coast 15 years ago, and the takes of fish were nothing equal to what they have been since; yet the fish off this coast has been quite as plentiful. Since I have been at sea it has become a custom for the vessels engaged in trawling to go further out at sea than formerly. The vessels are therefore built of a superior size and quality, and they cost nearly as much again as they did. We are satisfied that it was necessary to augment the size of the vessels on our coast, but surely it would not have been a very judicious proceeding to have incurred so large an additional outlay if there were no fish to catch.

10,536. Then it is not true that you have been obliged to leave your own fishing grounds in consequence of their having been fished out?—No; if they told you that they were exaggerating to all intents and purposes.

10,537. Is there any particular kind of fish you take that is increasing or diminishing in quantity?—Generally speaking, I should say that the sole is the principal fish that has increased of late.

10,538. Has it increased?—Yes, the sole has increased to a great extent. There have been more soles landed here on this shore and on the Suffolk coast than has been known for these 20 years. That is a fact.

10,539. What do you attribute that to? Have you any idea what is the cause of it?—I attribute it to our vessels exploring the sea more and more every year. The more they do so the more fish they find. They fall in with grounds which have never been disturbed before, and they find great quantities of first-class fish.

10,540. Then do you think that in the whole of the bed of the sea between this and the Continent there is a great deal of unexplored ground still remaining?—Yes.

10,541. Is there any ground still existing that has not been much fished on?—Yes.

10,542. Are you continually coming upon new ground that has never before been fished on?—Yes, I firmly believe there is a great deal of ground that has never before been fished. For instance, there is the Hinder Bank. If our vessels would make up their minds to explore that bank I believe they would find a great quantity of all kinds of fish, especially turbot, brill, and dorey.

10,543. Where is that bank?—The Hinder Bank is on the coast of Belgium. The Belgian government have lately placed a lightship there. It is about 40 miles east from the North Foreland.

10,544-5. Is it near the coast of Belgium?—Yes, it is nearer the coast of Belgium than the coast of Great Britain. The Belgian government claim it and they have laid a lightship down there. The Belgian boats go there and fish now.

10,546. Then the banks there are not unexplored?—They go in and out and over and across the banks, but they do not fish as we do, parallel as the bank runs.

10,547. Do they fish their trawl-vessels in a different manner from yours?—The vessels themselves are on the same principle.

10,548. Then why do they fish them in a different manner?—I think they have not got the same insight into the matter that we have.

10,549. They don't understand it?—I think not.

10,550. You can fish with greater effect?—Yes.

10,551. And you catch more fish?—Yes, we reckon ourselves as British fishermen to be A 1. We do not allow any other fishermen to surpass us.

10,552. Have you ever come into collision with foreign fishermen on the banks you fish?—No; I never did but I have heard of vessels getting into collision with them.

10,553. It does not often happen?—No.

10,554. The two countries do not interfere much with each other?—No; but as far as that goes they rather overman us, and for that reason we wish to keep as clear of them as possible. But if it came to the push I don't know that we should be in any way frightened of them.

10,555. You have not made any objection to their fishing close in-shore?—They have made great objections to us and they have driven our vessels away. They have told us that they would take our boats in and fine them.

10,556. Do you know of any instance in which they have done so outside the three-mile limit?—Not of late.

10,557. Are there any other fishing grounds which you believe to exist that have been very little explored?—Yes.

10,558. How do you happen to know that?—By studying the chart, by seeing the different grounds that have been laid down by the Government surveyors, and by the account they give of them, together with the fact that experienced fishermen have told us that

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there is plenty of food there. That is the way the great Silver Pits were found out.

10,559. Do you suppose there are as many banks still undiscovered as there are regularly fished?—I cannot answer that question satisfactorily. I believe there are banks that have not yet been discovered or fished, but I will not say that there are as many in number as those which have been found out.

10,560. Do you think it would be of any advantage to you as a fisherman to be allowed by an international law to carry your fish into a foreign market near where you catch them?—If they did not put a duty on it would be, but it would not pay us if a heavy duty is imposed upon the fish.

10,561. But how would it be if you were placed on the same footing as the foreign fishermen themselves?—If they would not molest us or illtreat us it would very often pay us to go into a Belgian port, or into a port in French Flanders instead of coming to our own ports. For instance, we may be caught by prevailing winds dead against us, and in the countries I have mentioned being Roman Catholic countries, we have reason to believe that our fish would fetch a much higher price than we could get for it in England.

10,562. Then you would not object to allow foreigners to come to our ports and sell their fish here?—As far as I understand the matter the foreigner, under free trade, can do so now.

10,563. Do you think that you ought to have the same privilege?—Yes. We know that 20 or 30 sail of Belgian boats go into the Lowestoft market, and that they also send their fish to Billingsgate market, or any other market they choose, leaving the English fishermen to take pot luck.

10,564. Do any foreign boats come here to sell their fish?—Yes; when the prevailing winds are against them and they cannot get home. There are always buyers for them, and when they bring their fish in they lower the price here. Their fish has been frequently sold here. They find it better for themselves to sell their fish here for half its value than to have it spoilt altogether. But the fish generally fetches more money in their own ports than in England, and it is only in consequence of stress of weather that they are induced to come here.

10,565. Is it not because they receive in France a bounty upon the fish they bring in?—I don't think that is the reason.

10,566. You believe the real cause is that the price of fish is higher in a Catholic country?—Yes.

10,567. Do you think it would be a boon to the fishermen of this country if they were placed on a footing of equality with the foreign fishermen, and allowed to carry their fish to any market they think best?—Yes.

10,568. You approve of that?—Yes; I think it is only fair that we should be placed on a level footing with the foreign fishermen. Englishmen should be allowed to go to their ports on the same footing that they are allowed to come here. That is not so at present. I know that one of our men, about two years ago, offered fish for sale in a French port, and he nearly lost his life in consequence. There was no one to protect him. He was part owner of the vessel; and he was towed out just as it was coming dark, yet stones were thrown on board his vessel by gallon measures full.

10,569. Where was that?—At Dieppe.

10,570. Was he in the harbour there?—He had been engaged to carry two cargoes of fish, consisting of salt herrings, from Lowestoft to Dieppe, and he was molested in that manner by the foreigners each time.

10,571. Did he complain to the authorities?—I believe he did.

10,572. Did the foreign fishermen not give him an opportunity for disposing of his fish?—No.

10,573. Does any thing of that kind happen to foreigners in our ports?—I never knew of such a thing, but on the contrary, I have been given to understand that they have been treated as well, or better, than our own subjects.

10,574. No objection is made by the English fishermen to their coming here?—It causes a little ill-feeling sometimes. They say, "Why should foreigners be allowed to come here and trade and have no "duty on their fish, while the English fishermen, "when they take their fish to foreign ports, not only "have to pay a heavy duty, but harbour dues as well?" I have been obliged to put into a port in Holland to refit, and I have scarcely been in the harbour many minutes before the harbour master has called upon me for the harbour dues. I have said to him, "This is "very hard. Your vessels are allowed to come into our "ports and are exempted from charges of this kind, "why should we not have the same privilege in your "ports?" Their only answer is, "It is nothing to "us what your Government do. It is not for us to tell "your Government what they ought to do; but if you "come here you must pay our charges." I have been to Flushing to refit, to the Texel, and to Dieppe, and I have had to pay harbour dues each time.

10,575. Do you wish to see any regulation adopted by which trawling would be prevented within 10 fathoms of water, or within the headlands?—I think 10 fathoms is a very limited depth of water. In my notion, and according to my experience, when trawl-vessels come under that depth they are in a position to destroy a great quantity of fish.

10,576. Do you think that 10 fathoms would be a judicious line to adopt?—I think it would.

10,577. Do you imagine that there would be any advantage derived from preventing trawling within 10 fathoms of water?—I believe that it would be an advantage to the ground-fishermen in general. The fish would stop there until they became of sufficient size to render them saleable fish, and as the water became cold they would go further out to sea, and by that means they would be of benefit to the country, whereas, when they are caught in shallow water now, they are so young and so tender that they no sooner get in the net than they are drowned.

10,578. (*Professor Huxley.*) I understood you to state a short time ago that you were in one of the vessels that discovered the Silver Pits?—I was one of seven who were pretty nearly the first to explore the great Silver Pits.

10,579. How many years ago is that?—About 20 years ago. I never kept an account of such things, but I should say that it will be about 20 years ago.

10,580 How was it that the ground came to be called the Silver Pits?—The Government surveyors laid it down in the charts by that name.

10,581. Was it on account of the character of the bottom; was it because the bottom was white sand?—I cannot tell you that.

10,582. Was it found by accident, or what led you to go there?—The Dogger Bank and the Well Bank were first explored, and then they found this deep water, and they laid it down in the chart. The vessels that take their departure for the Baltic go over it.

10,583. Have you ever been concerned in any other fishing except trawling?—No.

10,584. Do you ever get oysters in your trawl?—Yes, we bring up a quantity sometimes.

10,585. Upon what ground do you find oysters?—At the end of the Silver Pits, in 25 fathoms of water. They would soon fill the nets if we did not prevent it, and would be such a dead weight that they would break the net away. I have been fishing in the latitude of Heligoland when I have got nothing but a body of oysters.

10,586. Did you hear the regulations I read to the last witness in reference to the trawlers and the drift-net fishermen?—Yes.

10,587. Do you think that the enforcement of those regulations would be felt as a hardship by the trawlers?—No; if the drift-net men carried the lights they are bound to carry.

10,588. Suppose they did so, and that the trawlers could distinguish them, do you think in that case that it would be a hardship for the trawlers to have to get

out of the way ?—Not at all, because I think that all who follow the fishing trade should have an opportunity of getting a livelihood. If these boats carried their distinctive lights then the trawlers could say : " That " is not a sailing vessel, but a drift-vessel. We had " better get out of their way and go an hour's sail " from here, when, if there are any fish on the " surface of the sea, they will take them and go home " again."

10,589. How long does it ordinarily take to haul up the trawl net ?—All depends upon the weather. In fine trawling weather, when we can work the trawl easily, we allow ourselves an hour or an hour and a quarter to get up the trawl and put it down again.

10,590. Then it would not be any particular hardship for your smack's crew to have to do that in order to get out of the way of the drift-nets ?—No, I should agree with that rather than disagree with it. But if the drift-net men do not make their lights clearly distinguishable then it it shall not be sufficient for them to say " I was about to put my lights up when the " trawler got his gear down."

10,591. That is the point I want to bring you to. Suppose you have your trawl down, and have turned in and made yourself comfortable as I suppose you do occasionally, would you not think it hard to be compelled to get out of the way ?—We require rest at sea as much as on shore.

10,592. Suppose that under such circumstances a drift-boat on the look-out for herring drifts with her nets within a quarter of a mile of you, the law says that the moment she does so you must take up your gear and get out of the way. Would you like to see that regulation enforced ?—We have heard of that restriction from the Board of Trade. A vessel with a ground-net is supposed to be stationary, and as soon as our vessel is round we are bound to put up a globe light to reflect the horizon. If the ground-fisherman does not do that he lays himself open to get his net up again and go three miles off ; but if the light is exhibited, and certain drift-net fishermen will persist in putting their nets down so that they drift upon him, then I think they ought to be answerable for the destruction that may happen to their gear. If our vessels do not exhibit a proper light, and the drift-net fishermen come across us, then we should be answerable.

10,593. But what I want to show you is, that whether you show a light or not, as the law stands at present, if you have your trawl down or up, the moment a drift-net comes within a certain distance of you, you are bound, if the trawl is down, to take it up and go away for a distance of three miles. Would the enforcement of that regulation inflict any hardship upon you ?—Yes, if the drift men came upon us in the dark.

10,594. But this law is absolute ?—I knew a case, before I came from Yorkshire in which proceedings were taken against a trawler for fouling drift-nets. It was tried in three different courts. The Yorkshire fishermen swore that they had the lights exhibited on their boat, but the ground-fisherman swore they had not, and yet he had to pay all the costs and damages.

10,595. When did that take place ?—It took place, I think, in the year 1852 or 1853. One of the men on board the vessel is now sailing from this port. He has just gone out of one of my vessels to start for himself. The vessel to which he belonged at the time the nets were fouled is the property of Mr. Nichol.

10,596. How did the case arise ?—It arose in this way. The ground-fishing vessel was riding fast. The drift men drove across him and parted their gear, which it was impossible to avoid, as it was blowing heavily at the time. The drift men in the morning saw the vessel, and going up to the trawler said, "You have cut my nets adrift ; I am now the "loser of so many." They took his number and proceeded to the shore, where they gave information to the owner of the drift-nets. The owner applied to the owner of the smack for compensation, but he said he could do nothing in the matter until he had seen the master of his boat, but as soon as the vessel came in he would cross-question him on the subject, and if he found that the injury had been done wilfully or through negligence he would make compensation. When the boat arrived he had the master at his house and questioned him on the subject. He gave an account of his stewardship ; told how it happened and what was the cause of it. The owner then communicated with the owner of the herring boat, stating that he did not consider that his vessel was at all to blame, because there were no herring boats near him when it became dark. He also stated that unfortunately the vessel became fast with the net at the bottom, so that it could not be cleared, and that the herring boat then drove across and parted the ropes. It appears that the herring man belonged to a club which assists one another in prosecutions of this kind. He brought an action against the owner. I think the case was tried in the first instance at Bridlington, and it was given in favour of the ground-fisherman. The owner of the herring boat applied for a new trial, and it was heard in the High Court of Yorkshire, I think at Sheffield. There they gave it against the ground-fisherman.

10,597. When was that ?—That would be either in 1851 or 1852. One of the men now sailing out of this port was in the boat at the time.

10,598. Did you ever in your experience find yourself meddled with, or your nets and gear damaged by anybody ?—No ; I have been told that there was such an Act of Parliament as that from which you have been reading to-day, but I have always been given to understand that there was no jurisdiction in the hands of the Government outside of a bay, and that it does not apply to the deep-sea fisheries.

10,599. Then you may take it from me that it applies equally to the deep-sea fisheries.—I always understood that the Government had nothing to do with it unless we were caught in the bays.

10,600. You are quite mistaken. —Then why do they not interfere with the vessels that are right under their notice every day in Billingsgate ?

10,601. What vessels ? — The Barking vessels. They have a smaller mesh and everything than we have.

10,602. (*Mr. Caird.*) Are they trawl-boats ?—Yes. Barking was pretty nearly the mother port of this coast before the fishing grounds were found off the Yorkshire coast.

10,603. (*Professor Huxley.*) Do you mean that Barking is the place where trawling originated ?—Yes ; and the largest vessels that ever go out go from Barking. They are those splendid cutters that carry the fish from the North Sea to Billingsgate.

10,604. (*Mr. Caird.*) Do you find that there are any existing legislative restrictions that operate against the fishery here ?—Not in the least.

10,605. Nothing interferes with you ?—No.

10,606. No fishery officer interferes with the size of your mesh, the length of your beam, or in any way regulates your mode of fishing ?—No more than that the Customs interfere with the numbering of our vessels. We are bound to carry numbers on the bow of our vessel and on our mainsail.

10,607. Does that do any injury to you ?—Yes, it does us a great injury. I wonder we have not often had a great loss of life and property in consequence of their requiring the numbers to be painted on the sails.

10,608. How is that ?—The white lead used in the paint is of such a perilous nature, and the canvas is so pliable that it works and breaks up all down where the figures are painted.

10,609. Does the paint injure the sail ?—Yes.

10,610. Does it cause the sail to wear out sooner where it is painted ?—It always breaks away there before any other part, and yet we are bound by the collector of Customs to carry it on the body of the sail above the close reef.

10,611. Do you find that the sail gives way there first ?—Yes.

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10,612. What is that caused by?—By the white lead used in the paint.

10,613. Is there any other mode that could be adopted for numbering the vessels without injuring the sails?—I think the painting of the number on the bow of the vessel is quite sufficient.

10,614. Could not some distinguishing pennant be adopted?—I think not. But if the vessel were well numbered on the bow, and the numbers kept well faced, that would be quite sufficient.

10,615. Are the numbers on the sail and on the bow just the same?—Yes.

10,616. The same letters and numbers?—Yes.

10,617. One is a repetition of the other?—Yes.

10,618. You think if the numbers are plainly put on the bow there is no occasion to repeat them on the sail of the vessel?—Not in the least.

10,619. Have you heard other fishermen complain in consequence of being obliged to paint the numbers on the sail?—Yes, a great number laid themselves under the necessity of being summoned for not complying with the regulation. I did so myself. I submitted to be summoned and paid the expenses.

10,620. Is there any other substance that can be used?—The Act of Parliament specifies that they shall be painted with pure white lead on a tanned or black sail, and in black oil colour on white sails.

10,621. Is that as injurious as the white paint?—Yes, it causes the sail to become hard and harsh in the part where it is painted.

10,622. Are the foreign boats obliged to have their numbers painted on the sails in a similar manner?—They are not under such restrictions as we are. The Boulogne fishing vessels carry their numbers on the peak of the sail.

10,623. If you carried yours on the peak of the sail would it be less injurious?—I think so. It is very injurious as it is now.

10,624. You do not want your sails numbered at all?—No, not the sails. We appealed against the regulation, but we were not successful, and were obliged to submit. If there should hereafter be an instance of great loss of life and property occurring through this regulation being enforced, perhaps the Board of Trade will take the matter into their consideration and give us an exemption in future. There is one other matter I wish to mention. A friend of mine tells me that our vessels come under the Board of Trade now, and that we are subject to all their rules and regulations; if that is so, I should be glad if they will consider the propriety of exempting us in future from wearing a number on our sails.

10,625. You desire to be exempted from the necessity of wearing a number on the sail?—Yes, and that is the opinion of all of us, both owners and men.

The witness withdrew.

L. Finch.

LEWIS FINCH called and examined.

10,626. (*Mr. Caird.*) You are a fish salesman and buyer here, I believe?—Yes, I am a fish salesman.

10,627. You buy fish of the fishermen?—Yes, and I sell it by retail.

10,628. Do you send it to the London market?—Not at present. I used to do so years ago.

10,629. Do you find that you have a sufficient sale for it in your own neighbourhood?—Yes, I can sell quite as much as I buy.

10,630. Do you buy a large proportion of the fish brought here?—No.

10,631. How long have you been engaged in the business?—12 years.

10,632. Do you find that the quantity of fish brought to the market by the fishermen here is as great now as it was 12 years ago?—Yes, and greater.

10,633. Is it much greater?—The bulk is much greater, and the price is much higher.

10,634. How much greater is the bulk than it was 12 years ago? Is there twice as much fish?—I should say that there is without any exaggeration.

10,635. Has it been a gradual or a sudden increase?—There has not been a sudden increase, but as the smacks have increased more fish has been brought into the market.

10,636. During the experience you have had has there been any time during which the quantity has declined?—Never, if the wind has been at all favourable.

10,637. The average quantity has been increasing gradually?—Yes.

10,638. And at this moment it is greater than in any previous year?—Yes.

10,639. Has any particular kind of fish increased more than another?—I have not observed any difference.

10,640. The proportions of the different kinds of fish caught keep pretty much alike?—Yes.

10,641. And the large proportion is plaice?—Yes, in the winter, and there are a great many small plaice in the summer.

10,642. Is the proportion of plaice larger than of soles?—Yes.

10,643. There is a small quantity of whiting, turbot and brill?—Yes.

10,644. Are the size and the quality of the fish as good as they were formerly?—They are quite equal.

10,645. Do you ever get any fish here in this market that have been caught by the line?—No, nothing to speak of at all.

10,646. Have you ever observed any difference in the quality of the line-fish and the trawl-fish?—The line-fish used to be decidedly better some years ago. In fact it has almost dropped off altogether.

10,647. Has the line-fishing been given up?—Yes.

10,648. Was it ever practised here?—Yes, for cods in the winter.

10,649. Do the men by whom it was carried on go to the trawl-fishing?—No, they are principally boatmen.

10,650. I understand you to say that the quality of the fish caught by the line was superior. In what way was it superior; was it brought into the market in a fresher state?—Do you ask if the fish was superior?

10,651. Yes, you said so, did you not?—No, it was superior only in the quantity, not in the quality.

10,652. Have you ever observed any distinction in the quality of the fish caught by the line, and that caught by the trawl?—Give me trawl-fish to all intents and purposes.

10,653. Did you ever find when the fish was brought to market that it had been injured by the trawl?—Never.

10,654. Nor mangled in any way?—No.

10,655. You have never found that the fish have been unsaleable in consequence of being mangled by the trawl net?—No, never, not in any quantity. Occasionally a sole might have its head broken or so.

10,656. Has the price of fish much increased?—It has increased double.

10,657. Has the price of all kinds of fish increased?—For what I had to pay 10*s.* 12 years ago I now pay 1*l.*

10,658. Then the fishermen get more for their fish now?—Yes. The facilities for getting it away are much better now than they were formerly, and it now finds its way to many inland places that never got a piece of fresh fish formerly.

10,659. You do not send it away yourself; you confine yourself to selling it here?—Yes.

10,660. (*Professor Huxley.*) Do you buy the herrings that are brought in here?—Not to any large extent.

10,661. Is there any large quantity brought in here?—At times a very large quantity.

10,662. What time does your herring-fishing begin?—It is beginning now.

10,663. What condition are the fish in?—Very good.

10,664. Are they mateys, or full fish, or what are they?—They are nearly full fish.

10,665. When do they become quite full?—In November.

10,666. Do you ever get full fish here in January?—No, not on this coast.

10,667. Is there any herring here at all in January?—Never.

10,668. Do they disappear about December?—Even before then.

10,669. Before December?—Yes.

10,670. Do you get sprats here?—Yes, off Margate and off Ramsgate.

10,671. Do they fish for them?—No.

10,672. If they don't fish them they are not likely to get them?—They did years ago but they have given it up.

10,673. Is there no fishing for sprats in Pegwell Bay?—No.

10,674. They fish for shrimps there?—Yes.

10,675. Are you a shrimp buyer?—Yes.

10,676. Is there a large quantity of shrimps caught there?—At times.

10,677. How are they caught?—By a hand-net.

10,678. Do the fishers push the net before them?—Yes.

10,679. What is the size of the mesh?—It is very small. I don't know the size.

10,680. Do they catch a good many small fish in their shrimp nets?—Yes, a good many.

10,681. What do they do with them?—They fling a great number over. What they cannot take home they destroy.

10,682. They have no sale for fish of that size?—No, they are no bigger than a sixpence.

10,683. Are there any particular times when they get a great quantity of small fish?—Not being a shrimper I cannot answer the question, but I think there is no doubt that the brood of fish generally comes into shallow water.

10,684. Is there any oyster fishery off this part?—No, there is no oyster fishery.

10,685. None at all?—No.

10,686. Do you buy haddocks when you can get them?—Yes, when I can get them.

10,687. Have you long been a fish dealer here?—For 12 years.

10,688. Have you noticed any difference in the supply of haddocks here?—We get none now off our coast.

10,689. Did you get them 12 years ago?—No, it was before my time.

10,690. Are there any crabs or lobsters got off this coast?—Yes, small ones.

10,691. The shore crabs, you mean?—Yes.

10,692. Not the big crabs?—No.

10,693. Do you get any lobsters?—Only a few, not many.

10,694. Are they caught in lobster pots?—Yes.

10,695. Set round the coast?—Yes.

10,696. In rocky places?—A little outside the rocks in deeper water; but you cannot call it a lobster fishery here.

10,697. How are the shore crabs caught here?—They are also caught with the pots.

10,698. Are the pots baited for them?—They catch the crabs in the same pots as the lobsters.

The witness withdrew.

ROBERT COOK called and examined.

10,699. (*Mr. Caird.*) Have you been a long-line fisherman here?—I have been 48 years here and at Margate, which is not far from here.

10,700. Have you also been a trawl fisherman?—Yes.

10,701. All that time?—Yes.

10,702. Have you followed any other kind of fishing?—Yes; I have followed all sorts of fishing; sprat-fishing, mackerel-fishing, herring-fishing, and trawl-fishing. In my younger days we used to make four seasons of the sea. We were three months at sprat-catching, three months at trawl-fishing; then there was the herring season and the mackerel season, making in all 12 months. That was in my younger days.

10,703. The herring season and the mackerel season occupied the other six months?—Yes.

10,704. What three months of the year was the sprat-fishing?—December, January, and February.

10,705. And the trawl-fishing?—We used to begin the trawl-fishing about May, about the second week in May, and that would last for a week or two in July.

10,706. May, June, and July?—Yes.

10,707. Then the herring-fishing?—That used to begin about the first or second week in October.

10,708. Had you nothing to do in August and September?—We used to go trawling then.

10,709. I thought you said you went trawling from May until July?—We used to begin trawling as soon as the mackerel season was over, in July, and we kept on with that until September.

10,710. When did the mackerel-fishing begin?—In May.

10,711. That is the mistake you made. You followed that until July?—Yes, and then we went trawling.

10,712. And then in October the herring-fishing began?—Yes, and as soon as the herring season was over the sprat-fishing began.

10,713. When did any change in that fishing take place? You say that occurred in your younger days?—There were no smacks here at that time. We used to go trawling in the summer season.

10,714. There were no large trawl-vessels then?—No.

10,715. None that could go into the deep sea?—No.

10,716. You trawled in the bays in-shore?—No; off the Kentish Knock, up to 10 and 18 miles off; right off the North Foreland.

10,717. Were they open boats or decked boats?—Decked boats.

10,718. What was their tonnage?—They varied from about 20 tons up to about 35. That was according to the old measurement. They would not measure that now.

10,719. They never went into the deep sea at all?—No.

10,720. When you were fishing in the months of July and August in-shore with those boats, were you in the habit of catching many small fish?—We did not get many small fish. If we got close into the bays, we should catch small fish, but we used to go further off.

10,721. You did not desire to catch small fish?—No; now and then when it was blowing a bit, we got into the bays to make a week's work, and then we caught small fish.

10,722. Then afterwards you went to sea?—We followed the times, and went into bigger vessels.

10,723. You would not then follow sprat-fishing so much?—No; I have not followed that for 28 years.

10,724. Does the trawl-fishing find employment during the whole of the year for the trawl fishermen?—Yes.

10,725. So that if the other modes of fishing have to be carried on, they must be carried on by other fishermen?—Yes.

10,726. Do you agree that the number of vessels has increased very much in your experience?—Yes.

10,727. Do you find that the quantity you can take in each boat has increased or diminished?—Well; I recollect when I would go and toil all day and night in one of those vessels of 30 tons, and I could bring all the soles and plaice I caught ashore in a basket, and now going over the same ground for the same length of time we should require 20 baskets.

10,728. Are you quite positive in speaking of that as a fact within your knowledge?—Yes; it is a fact within my own knowledge. My father was a fisherman

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all his lifetime before me, and he never saw Yarmouth in all his life. He never saw Hastings but once. He lived until he was 82, and he was always fishing about this country with trawlers. I know that he came ashore once when he had had good luck, and had caught 20 thornbacks. He sold them for 20 crowns, and they are so plentiful now that I do not think my friend here would like to give me more than half a crown for them.

10,729. Then that kind of fish has much increased instead of having diminished?—Yes, very much indeed.

10,730. Have all other kinds of fish increased?—Yes; all the fish I know of. They have all increased on these grounds. I think this summer that more fish has been taken off these grounds than was ever known in all my experience.

10,731. Do they fish now on the same ground they did then?—They go fishing on the same ground that I was fishing on 48 years ago, and all the summer time you will see the trawlers trawling over a piece of ground not a quarter or the tenth part of a mile broad; day after day, day after day, away go the trawlers over this piece of ground, and they catch an abundance of fish.

10,732. They have done so this summer?—Yes, and they are doing so at the present moment.

10,733. In what depth of water do they fish?—It varies from 10 to 11 and 12 fathoms. It is off the banks, and we can go in 10, 11, and 12 fathoms up to 17 fathoms.

10,734. What distance is that from the shore?—About 11 or 12 miles.

10,735. Then it is not in-shore fishing?—No.

10,736. Not the bay-fishing of which we have heard?—Not a bit of it.

10,737. It is deep-sea fishing?—You may call it deep-sea fishing.

10,738. You have heard the evidence of the other witnesses as to the quantities of small fish caught by trawling in the bays in the summer time; do you agree with that?—I think it is wrong, in the summer time, to take the small fish that come in the bays to spawn.

10,739. Do you think it would be right to adopt a regulation that all trawlers should be excluded from the bays in the summer season?—Yes. I think it would be plenty nigh enough to keep them in 10 fathoms of water. They should not come in nearer.

10,740. You think it would be of general advantage if no trawling was allowed to take place within 10 fathoms of water?—Yes.

10,741. Would you apply that to the whole year, or only to part of the year?—I don't think it would make much difference in the winter season, because there are no fish there then. In fine weather the fish come into the bays to spawn, and when the water gets cold the same fish naturally take to deep water.

10,742. Then you think it would be better to enforce the regulation for the whole year, and make it applicable throughout the year?—Yes, I think so. They would not take the trouble to fish in the bays in the winter time, because there is nothing then for them to catch.

10,743. Do they catch much small fish in the deep water to which you have referred, where the trawlers are constantly fishing?—They have caught great quantities of small fish in the height of the summer.

10,744. What do they do with them?—They shovel them overboard as fast as they take them.

10,745. They are of no use for the market?—No; they will heave up in the trawl sometimes as much as half a ton of fish, and more than 5 cwt. out of that half ton will be thrown overboard again.

10,746. That is half the whole catch?—Yes, half the weight is sometimes thrown overboard.

10,747. Are the fish alive or dead when they are thrown overboard?—A great quantity is alive, but some are dead.

10,748. Do you think that much destruction takes place in that way among the fish?—I do not think the destruction is very great. The more we trawl the more the fish come.

10,749. Do you drag up again any of those you throw overboard?—I never saw anything to lead me to suppose so.

10,750. Could you discover it; would you know them again as the same fish?—Yes; now and then we may have trawled up such a thing as a thornback, or the bone of a skate that has been dead.

10,751. Do you ever drag up any spawn?—I never saw any. I should not know what it was if I was to see it.

10,752. Nothing of that kind is ever taken up by the net?—Nothing of that kind is taken up here.

10,753. Did you ever notice whether the fish were much mangled when they were brought up by the net?—No, they are not.

10,754. Not in any kind of weather that you experience?—No; except now and then when a sole has put his head through the mesh and has got a bit of a rub. In such a case we put the fish into the pan.

10,755. You cook it on board?—Yes.

10,756. Have you observed whether the French or foreign fishermen come in here and fish close in-shore?—I have seen them close in-shore about Rye Bay and Hastings, but there is not much trawling ground for them to come upon here. I have seen them here with their lines.

10,757. Do you think it would be desirable to adopt any regulations as to the size and length of the beam of the trawl?—No.

10,758. Or with regard to the size of the mesh of the net?—No; I think the fishermen can regulate those matters better for themselves. In a smack of 80 tons they want larger nets and a larger beam, and larger heads to keep the net at the bottom. I think it is better that they should be allowed to regulate their own nets.

10,759. Do you think it is necessary to regulate the size of the vessels?—No.

10,760. You think it would be better to leave the fishermen to regulate those matters themselves?—I think they are under very good regulations now.

10,761. That is because there is no regulation at all; is that what you mean?—There is no regulation now. One may have a vessel 50 tons, another 60, and another 70.

10,762. You desire to be left to follow your own opinions entirely?—Yes.

10,763. With regard to the size of the mesh of the trawl net, would you desire every man to exercise his own will about that?—With regard to the size they have had latterly, it has been the same sized mesh I have seen all my lifetime, and the same sized mesh my father learned me to use. It don't hurt anything.

10,764. You have not altered the size in any way?—Never, in my time.

10,765. Did you hear a previous witness say that at Barking they use a much smaller mesh?—Yes; I have seen their meshes. They are much smaller.

10,766. Do they derive any advantage from that?—I should think that they catch more small soles.

10,767. Would that be of no advantage to you?—No, we want to get good fish.

10,768. Do you think it would be an advantage to prevent the fishermen from using a net that would catch these small fish?—Along the bays I think it is very disadvantageous to catch them, but I think the size of the mesh used in the North Sea would make very little difference.

10,769. (*Professor Huxley.*) Perhaps you will be good enough to tell me about the mackerel-fishing; is the mackerel-fishing practised now?—Very little about here.

10,770. How was it practised, by the hook-and-line, or by net-fishing?—By net-fishing.

10,771. With drift-nets?—Yes.

10,772. Like the herring nets?—Yes.

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10,773. Is there no such fishing as that carried on now?—Yes, about the months of May and June we have a few boats that come up from Folkestone and Deal.

10,774. They do not fish from this port?—A good many of them come to this port; the Hastings fishermen come here.

10,775. The fishermen of this port do not practice that fishing?—No.

10,776. Why have they given it up?—I never knew any mackerel boats about here at all, but there were some at Margate, about four miles from here when I was a resident there.

10,777. I speak of Margate as well; do any mackerel fishermen go out from there now?—A few.

10,778. Are there not as many as there were formerly?—No.

10,779. Why not?—They could not make it answer, I suppose. They do not care about following it up like the Hastings men who have larger boats; I suppose they found other employment the same as we did with the trawlers, andtherefore they did not follow it up.

The witness withdrew.

S. E. Dixon.

Samuel Elgar Dixon called and examined.

10,780. (*Mr. Caird.*) You are the chief officer of the Coastguard here?—Yes.

10,781. Have you been long in that position?—I have been nine months at Ramsgate, but I was at Pegwell Bay for about five years.

10,782. Then I suppose you have had, from the observations you have made, some experience of the different kinds of fishing practised on this coast?—Yes, not only on this coast, but from the Shetland Islands to the Land's End. I have been engaged within those parts both on shore and afloat.

10,783. Have you observed since you have been at Pegwell Bay that the supply of fish has increased or diminished?—There are very few fish caught in Pegwell Bay; it is only shrimps that they catch there.

10,784. I do not wish to confine you to Pegwell Bay, but to that part of the coast to which your attention has lately been directed?—The quantity of fish will depend on the number of trawlers. They do not always stop exactly on one spot.

10,785. Do you think they are making as good a business of it now as they did formerly?—I think that they are increasing compared with what they were 10 or 20 years ago.

10,786. There is no doubt that they are increasing in number?—And in the fish they take as well.

10,787. You think that the quantity of fish they take is increasing?—Yes, I think so.

10,788. Have you been on the fishing grounds where the trawlers principally trawl?—Yes, I think I have been on every part over which they trawl, from the Shetland Islands to the Land's End.

10,789. There is no trawling in the Shetland Islands is there?—No, there is none there.

10,790. Where do you first meet with the trawlers?—20 years ago they got up as far as the Silver Pits, and now I think they have got as far as Flamborough Head.

10,791. They have got further than that, on the Dogger Bank?—They are the cod men, the long-liners; I have seen them on the Brown Bank, away on the coast of Holland; they are principally large Barking vessels with wells in them; they are in the habit of stowing their fish in trunks.

10,792. How long is it since you first saw the trawlers?—About 20 years ago.

10,793. Has your attention been directed to any particular ground upon which trawling has been practised during these 20 years?—The most smacks I have seen have been off Smiths Knoll.

10,794. Where is that?—Off Yarmouth, between Yarmouth and the Brown Bank.

10,795. How long is it since that piece of ground was first fished?—It has been fished for more than 30 years; I have not been there for these 10 years, and I think the fishing has somewhat fallen off, and that they now work further to the north.

10,796. You cannot speak of this piece of ground of your own knowledge within the last 10 years?—No, I have been ashore for 12 years.

10,797. Is there any ground in reference to which you can speak of your own knowledge up to the present time?—I believe that they catch the most fish away down at the Silver Pits.

10,798. From your own knowledge of the Silver Pits, do you know that that piece of ground is yielding a larger quantity of fish than when you first knew it?—When I was first in the North, Yarmouth was the station I was at, and there was no fishing there then at all.

10,799. When the Silver Pits were dlscovered did they begin to fish there?—Yes; and they caught great quantities of fish until I left the station 15 years ago. When I left I went round to Torbay.

10,800. During the time you were acquainted with the locality, had the fishermen been catching increased quantities or had the catch fallen off?—I should say that thesmacks got increased quantities. I judged that from the larger number of vessels that were taking part in the fishing.

10,801. Are you acquainted with any ground the history and gradual progress of which you can tell us, particularly whether the supply of fish has increased, diminished, or remained stationary?—I do not think it has diminished in that part.

10,802. In what part?—In the Silver Pits, Smiths Knoll, and the Brown Bank.

10,803. Can you speak of your own knowledge of any particular ground?—I cannot say what they have been doing within the last 15 years, because I have not been there.

10,804. Have you seen the French fishermen come off here to fish close in the bay?—If I was to see them fishing close in the bay I should put off directly and take them into the harbour.

10,805. Did you hear the evidence given to-day that they are in the habit of fishing in-shore?—Yes; I heard it, and I have taken notes of it.

10,806. You say that you have not observed them fishing in the bays?—No.

10,807. Should you think it your duty to order them off?—I should not only order them off, but I should launch a boat directly and take them up before the magistrates.

10,808. On what ground would you do that?—On the ground that they had committed a breach of the Convention between this country and France.

10,809. You feel that you are authorized to do so?—Yes; if they are within three miles of the coast.

10,810. Have you ever had occasion to do so?—No; but I think the cutters have brought in four this summer.

10,811. Off your station?—Yes, in this division.

10,812. On your station?—Between this and Dover and off the Foreland. They were not trawling. I have never seen one trawling here.

10,813. Did you not hear the witness say that they have been trawling here?—(*The witness Philip Bartlett.*)—They have not been fishing off this coast, not nearer than nine miles. They have been fishing off Rye Bay. There is no trawling ground here, or no doubt they would come close in. They shoot their lines in the full stream.

10,814. (*Mr. Caird to Dixon.*)—Have you interfered with respect to the numbers of the boats on the sails?—Yes; when these regulations first came out we did. We told the fishermen that if we found their boats unmarked we should bring them in.

10,815. Have you any occasion to enforce these regulations now?—No; I do not think there are any vessels out of Ramsgate that are not numbered.

10,816. You heard the last witness state that injury

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is done to the sail in consequence of being required to paint the number upon it?—Very likely he is correct. The paint would make the sail very stiff and hard, and as the rest of the canvas would be soft and limp, it is most probable that it would give way in the part that was painted, or between the painted part and that which was not painted. I think it would be very apt to give way there.

10,817. The French boats, he stated, have their numbers marked nearer the peak?—Yes. I think that would be better for our boats.

10,818. Do you require them at present to have the number painted on any particular part of the sail?—Yes; they are required to place the numbers about the third reef?

10,819. May they not put them nearer the peak; is there anything to prevent the fishermen from placing the number anywhere above the reef points that they like?—No.

10,820. If they choose to put it nearer the peak, there would be no objection?—No; I think it would be better and easier to see.

10,821. Speaking generally, when you are at sea, could you distinguish the numbers painted on the boat itself if they were not placed on the sail?—We could not see the number as far on the boat as upon the sail.

10,822. Then it enables you to see the numbers at a greater distance?—Yes; with a good glass we can see a boat for four or five miles.

10,823. Is there any occasion for that?—We know then generally what port or fishery they belong to. In addition to the number they have the first and last letter of the name of the port to which they belong. You can make out the number and name from the vessel's mainsail when you can scarcely see the hull of the vessel at all.

10,824. But for the enforcement of these regulations and in seeing that the fisheries are properly conducted, is there any necessity for that?—Not now. I think it was done principally to prevent smuggling. They adopted it at first to follow the example of the French.

10,825. What I want to know is, whether or not the regulations compelling the fishermen to paint the number of the boat on the sail might be departed from altogether without any inconvenience to those employed in enforcing the regulations with regard to the fisheries?—I think it may be departed from as long as the number is painted on the bow.

10,826. Would that be sufficient to enable you to establish the identity of any boat?—Yes, if the letters and figures were of a proper size.

10,827. If they were of the full size mentioned in the convention?—Yes, provided they were always kept well painted.

10,128. If that were done, you do not think it would be necessary to have them painted on the sails?—No, I think not.

10,829. Could you ascertain the number of a boat a mile off?—Yes, if it was properly painted on the bow and kept fresh painted.

10,830. (*Professor Huxley.*) Do you consider that your instructions oblige you to look after the size of the trawl beam or the mesh of the net?—When I first came up from Yarmouth and was stationed at Torbay we were required to go and look after them. But I think all that has dropped off now, and no notice is taken of them.

10,831. Was that in consequence of any definite orders from your superiors, or not?—No.

10,832. It simply dropped as a custom?—Yes, but we have very little to do with that. The Customs generally look after the beams.

10,833. You are in the Coastguard?—Yes.

10,834. Do the Customs generally look after the beams?—Yes, but it has dropped off gradually. I think no notice is taken now.

10,835. Are you obliged to make any report, stating whether you have examined the nets and beams?—No, we have not done so lately.

10,836. Suppose any person were to state to you that the beams of the trawl-boats here are all illegal, would you feel bound to inquire into the matter?—Yes, I should try to find out what Act it came under.

10,837. But you would not feel compelled to take any notice of it unless your attention was called to it?—No.

10,838. Would you report the circumstance to the Customs?—Yes, to the shipping master who is the collector of Customs.

10,839. But that has never been done?—No.

The witness withdrew.

J. Mitchell.

JOHN MITCHELL called and examined.

10,840. (*Mr. Caird.*) You are in the Coastguard?—I am.

10,841. Where is your station?—At Ramsgate.

10,842. Are you familiar with the different modes of fishing practised here?—Yes, I was brought up a fisherman.

10,843. Have you yourself practised line-fishing and trawl-fishing?—Yes, I served my time to line-fishing in the North Sea.

10,844. Are you familiar also with trawl-fishing?—Yes.

10,845. How long is it since you gave up the business of a line fisherman?—Nearly 30 years.

10,846. Can you tell us from your experience whether the quantity of fish caught now has increased or diminished compared with what it was then?—I am satisfied that there are a greater number of trawlers fishing now than in my time.

10,847. There is no doubt about that?—I am satisfied that they are three to one in number.

10,848. Do you think that each trawl-vessel catches as much fish?—They catch more. I have been in the habit of going aboard to get a mess of fish for a fry, and I know that they never had such quantities then as they have now.

10,849. Do you speak of the quantity they have had this year?—I will take the last 10 years.

10,850. Then within your knowledge there has been a gradual increase?—Yes.

10,851. Although the number of vessels has increased the take of each vessel has also been greater?—Yes, much greater than formerly.

10,852. Then the increase of fish to the general markets of the country must have been very great?—Yes, and it is gradually increasing.

10,853. Do you say that the greater the number of vessels the greater the quantity of fish?—Yes.

10,854. Do you think that the more the sea is fished the greater quantity of fish there is caught?—Yes, I think they go to different spots in great numbers. The fishing boats now go and seek grounds they never thought of going to at one time. There are a much greater number of grounds now fished on than the boats were in the habit of going to before.

10,855. You say that you have been in the habit of going on board trawl-vessels. Have you been on board of them lately?—Yes.

10,856. But you have not been on the fishing grounds lately?—No.

10,857. Have you ever seen a trawl hauled on board?—Some years ago I saw it.

10,858. Did you observe whether there were any dead or mangled fish?—There were very few indeed. Perhaps one might get partially through the net, and being unable to get right through it would be dragged over the ground with the weight of fish upon it.

10,859. But that would be an exceptional case?—Yes, there would only be one or two that would be injured in that way.

10,860. Did you notice any dead fish?—No.

10,861. Have you ever observed, in looking over a a trawl-boat now, that it brings any mangled fish ashore?—I never saw any.

10,862. Nor any unfit for the market?—No, unless

they have been caught in a calm and in the summer time. Then I have seen such little things as gurnets that would be worse for wear owing to the length of time they had been kept.

10,863. Have you noticed in the trawl-fishing inshore lately whether any large number of immature fish are caught ?—No.

10,864. Is there any mode of fishing practised on this coast that is destructive to young fish ?—Yes.

10,865. What is it ?—I think the shrimping causes great destruction. The nets of the stow-boats also destroy a great quantity.

10,866. Does shrimping destroy a great quantity ?—Yes, but nothing like the quantity destroyed by the nets of the stow-boats.

10,867. Is there much destroyed by shrimping ?—Yes, according to the nets they use.

10,868. Does that take place at any particular season of the year ?—In the summer season.

10,869. Is it only in the summer season that small fish are destroyed by the shrimp nets ?—It is more in the summer than in the winter.

10,870. Are the fish destroyed ; are they dead ?—They are of no size. They are not bigger than a halfpenny piece.

10,871. Are they thrown on the shore ?—There may be a part thrown over, but they are so tender that handling them kills them.

10,872. You say that that is not the most destructive mode of fishing ?—No.

10,873. What is the most destructive mode ?—The stow-boat fishing.

10,874. What is that ?—Some hundreds of vessels come down fishing in the Swin and in the mouth of the London river for sprats. They catch tens and hundreds of thousands. They use them for manure.

10,875–6. Do they fish for them ?—They fish for sprats, but hundreds of thousands of small fish get into the nets, the meshes being so small.

10,877. The sprats are very small themselves ?—Yes.

10,878. Then they must necessarily be caught by a small mesh ?—They might be caught by a drift-net.

10,879. A drift-net like a herring-net ?—Yes, with a smaller mesh. If they had a drift-net the small fish could pass through, but the stow-boat net is similar to a trawl. The meshes are drawn close, and a great quantity of small fish are enclosed in the net. They cannot get through the mesh, although if it was properly open they would be able to do so.

10,880. How long does the stow-boat fishing last ?—About three months. They begin about November.

10,881. Then they fish during November, December, and January ?—Yes, that is about it.

10,882. What kind of fish do they catch other than sprats ?—Various kinds of fish, such as brill and turbot not bigger than a halfpenny piece ; they also get whitings and some fish that you can hardly tell what they are.

10,883. Has your attention been much directed to the stow-boat fishing ?—I have often seen it, and I have remarked the destruction it causes.

10,884. Has it been practised for many years ?—Yes, but it is practised more now than it was 30 years ago.

10,885. Is the number of stow-boats increasing ?—Yes.

10,886. Could they not make more by sending the fish to market than by selling it for manure ?—They are not big enough to sell for food. Perhaps they may take the larger ones and sell them with the sprats.

10,887. Are the small fish all sold for manure ?—Yes, they are not fit for anything else.

10,888. Is there a large quantity sold for manure ?—Yes, there is a large quantity sold on the coast of Essex and in the London river.

10,889. Can you tell us any particular place where it is sold for manure ?—It is sold all up the London river and on the Essex coast. It is sold at Faversham and along the Essex coast right up the Thames.

10,890. Do you think much damage is done by that destructive mode of fishing ?—I think there is a wonderful sight of damage done.

10,891. Then how does it show itself, when you say that the catch of fish in the deep sea has not diminished ?—That I cannot account for ; but I think our coast is quite large enough to produce fish for the whole population of the country providing the breed is not destroyed.

10,892. Do you think the breed is to a certain extent destroyed ?—I do.

10,893. Do you think if this stow-boat fishing were put a stop to that there would be a larger quantity of fish ? —I do.

10,894. Could any regulation be adopted by which the stow-boats could be prevented from catching these small fish, and yet be enabled to catch those that are fit for food ?—Yes, I think it would be no loss to the public at large if the sprats were caught by drift-nets, the same as they are on this coast.

10,895. Would they catch as many ?—I don't think they would, but they would catch a great many.

10,896. Should the drift-nets have a certain specified size of mesh ?—Yes ; there are a great many parts where they do nothing but drift for them.

10,897. These stow-boat nets do not drift like the others, and the small fish can't get out ?—Yes ; they are drawn at their anchor. The mouth is open, and the tide runs all kinds of fish into them.

10,898. Then the fish are not meshed?—No, they are caught in a body. Sometimes they get so large a quantity that they cannot haul their net in. They will cut part of the net and draw the fish in and then fasten it together again.

10,899. Could they not catch such large quantities with the drift-net ?—They generally catch what we call "smig" of all sorts.

10,900. You say that the trawl-fishing has not diminished ?—No, there are a great number of fishermen ; they use greater exertion and they get larger quantities of fish ; but still I am satisfied that there is a great quantity of fish destroyed by the stow-boats.

10,901. Is there any other mode of fishing that you consider injurious ?—I know of no other.

10,902. (*Professor Huxley.*) Were you in the habit of fishing in your younger days off this coast for haddock ?—I have fished for haddock on the Scotch coast, and on the shoal grounds, and away by the Silver Pits.

10,903. Do you suppose that all the breeds of fish grow up to be full-sized fish ?—No ; I think the fish are cannibals, and live upon each other.

10,904. Then it does not follow that if the fishermen were not to catch young fish they would all grow up until they became full-sized fish ?—No, but they would supply food for the others.

10,905. They would feed the dog-fish, would they not ?—They might.

10,906. The dog-fish are not eaten, are they ?—We used to eat our cod livers when I was in the cod fishery, and I have heard it said that the liver of the dog-fish is quite as good.

10,907. A great many of the breed will be eaten by haddocks and other fish ?—Yes.

10,908. Are you at all acquainted with the fishery for whitebait ?—No, I know nothing of the catch of whitebait.

The witness withdrew.

Joseph Hennessy called and examined.

10,909. (*Mr. Caird.*) Are you in the Coastguard ?—Yes.

10,910. Are you stationed at Pegwell ?—Yes.

10,911. Have you observed the mode of fishing carried on there ?—Yes, the shrimping.

10,912. Is shrimping the only fishing carried on in

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Pegwell Bay?—Yes, except the fishing with small nets made fast to stakes. They catch a little flat-fish, plaice, and occasionally a mullet in that way.

10,913. With small nets made fast to stakes?—Yes, to stakes driven down in the sand, with about four or five feet left above. They catch small plaice, and occasionally mullets.

10,914. Do they catch much fish?—I have never seen much caught. They get about half a bushel sometimes.

10,915. Are the fish they catch in that way too small to send to the market?—No.

10,916. Does not that kind of net catch small fish?—No.

10,917. Is much destruction of small fish occasioned by the use of the shrimp net?—The greater part of the small fish they catch in the shrimp nets they heave overboard again.

10,918. They heave them into the sea?—Yes.

10,919. Is there a large quantity of small fish caught in that way by the shrimp net?—I have had no personal experience in the matter, but I have been told so. They say that they heave the greater part of them into the sea again. I never observed a shrimper bring up more than a dozen small fish, more or less, and he always throws them back again.

10,920. Do you think that the quantity of small fish caught by the shrimpers is large enough to injure the fishing here?—The quantity they catch certainly diminishes the brood, but there is no large extent of small fish caught.

10,921. The quantity caught is immaterial in regard to the general supply of fish throughout the year?—I believe so.

The witness withdrew.

J. Livick.

JAMES LIVICK called and examined.

10,922. (*Mr. Caird.*) You are, I believe, the superintendent of the police here?—Yes.

10,923. Have you been long in that position?—Nearly 24 years.

10,924. During the time you have held that office have you had many complaints made by the fishermen with regard to damage done to their nets or lines, or have you heard any complaint made against the trawlers for infringing any of the regulations laid down for fishing?—I have had a few complaints made by the mackerell and herring fishermen.

10,925. What has been the nature of their complaints?—They have complained that their nets have been destroyed by the trawlers.

10,926. Have there been many such complaints?—We have had very few convictions.

10,927. Have the complaints been inquired into and investigated?—Yes, they have been inquired into.

10,928. And has there not been sufficient evidence to justify a conviction?—There may have been one or two convictions. The last case we had, as far as I recollect, was in consequence of the number on the sail of the vessel having been obliterated or covered over with canvas. That was a case that occurred off the coast of Margate.

10,929. Was it a case in which a trawler was charged with having fouled nets?—Yes.

10,930. And the vessel could not be identified in consequence of the want of the number?—Yes, that was so.

10,931-2. Had she her number on her bows?—She had, I believe. The net men complained that she had no number on the sail.

10,933. Did he state whether any means had been taken by the trawlers to prevent the number of the boat being seen?—He said there was a piece of canvas over it.

10,934. Why did not the fishermen take means for ascertaining whether the number was not on the bow of the vessel?—I cannot say. They said they looked for the number on the sail, and could not find it. That is the only case in which, under such circumstances, it was found impossible to convict.

10,935. Have there been many convictions?—No, very few.

10,936. Have there been any this year?—No, none. We have had a conviction against a French fisherman for fishing within the limits, but that was not with a trawl.

10,937. Was that this year?—Yes; he was a long-line fisherman. Last year there was a similar conviction.

10,938. Was the offence committed off this coast?—Yes.

10,939. Who brought in the Frenchman?—Upon one occasion the boat was brought in by the Revenue cutter.

10,940. Was a fine inflicted?—Yes, upon each occasion a fine of 5*l.* was inflicted.

10,941. Was the particular act complained of that the vessel was fishing within the limits?—Yes, within three miles of the coast.

10,942. Not that the men were doing any other damage?—No; they were only fishing within the limits.

10,943. They were not trawl-fishing?—No, they were not trawl fishing. The mackerel and herring fishermen complain, the mackerel fishermen more especially, that there is very much damage done by the trawl fishermen. I remember one of them saying to the justices here "If we could only have six hours "we should do our work. If they would keep "away from us for six hours, we should ask for no "more but as it is, we are constantly hampered by "them."

10,944. (*Professor Huxley.*) Do you suppose that the mackerel fishermen here are not acquainted with the state of the laws, as laid down in the regulation I read just now, and which applies to the mackerel fishermen as well as to the herring fishermen, namely, that "trawl-boats shall always keep at a distance of "at least three miles from all boats fishing for herring "or mackerel with drift-nets?"—They did not appear to be acquainted with it.

10,945. Suppose that a herring fisherman or a mackerel fisherman were to make a complaint that he had been interfered with by a trawl-boat, now that you are acquainted with the provisions of this Act, would you feel bound to act upon it?—I should recommend him to take out a summons against the parties.

10,946. Do you conceive that anybody is competent to lay an information under the Act?—I cannot say; I have not looked at the Act.

10,947. Have you ever known any information laid except by an officer of the Customs?—Not as far as regards the distance within which foreign boats have been fishing.

10,948. But as far as regards other matters?—As far as regards other matters the parties have complained themselves.

10,949. Has any complaint been made as to the size of the beam or the mesh, or with regard to the head irons not being of a proper weight?—No.

10,950. You have had nothing of that kind?—No.

10,951. The complaints you have had have all arisen from actual damage done?—Yes, that is all. It appears to me that the fishermen do not think of the regulations unless they suffer damage.

10,952. The only complaint made by the officer of Customs here has been with regard to an infringement of the limit within which foreign vessels are allowed to fish?—Yes.

10,953. They have never laid any complaint against the trawlers respecting the size of the mesh or the size of the beam?—No.

The witness withdrew.

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PHILIP BARTLETT recalled.

10,954. (*Mr. Caird.*) You wish to add something to the evidence you have already given?—Yes; it appears to me that the inspector of police here has been making some remarks respecting the magistrates not convicting the trawlers for damaging drift-nets. Now I think that if the case had been justly represented and the trawlers had been confined as prisoners on that occasion they ought to have had compensation for their imprisonment. It is the drift-net men and not the trawlers who are to blame. For instance, if you will go down to the pier you will see a number of drift-net boats, and I will point out to you that they carry no proper lights. The light they carry is only one on a grating. It is all very well for the inspector here to bring these matters before this court of inquiry, but it becomes me as a ground-fisherman to protect myself. I do not find that he has spoken a word in reference to the lights carried by the drift-net boats.

10,955. (*Professor Huxley.*) But if the drift fishermen do wrong that is no justification for your doing wrong also?—No; but I have every reason to believe that the ground-fishermen would go three or four miles away from the drift-net boats if they carried proper lights.

10,956. (*Mr. Caird.*) It is not that you have any wish to get foul of the herring men, but that they do not carry the lights they ought to carry?—That is the point of view in which I look at the matter. If you will go down with me to the pier I will show you the drift-boats, and you will find that they have only one grating to put a small light on.

10,957. Don't they hoist lights on the mast?—No; because the foremast is lowered down. The mizen-mast is also put down, and then a grating is erected, and on one side of the boat you would not discern the light at all, because it is below the hoist of the sail. It is all very well for these drift men to come here and say "we had a light up," but according to the Act of Parliament they must show two lights. You may as well have no light at all if you only set it under a bushel. If the Commissioners go down to examine the drift-boats you will find that my statement is quite correct. Now if my boats fall into an error next Monday of Tuesday and get foul of the herring boats they will all swear that they had their lights up.

10,958. (*Professor Huxley.*) I will read the article again, it is this: "In order that boats fishing with drift-"nets may be easily recognized at night, the masters "of these boats shall hoist on one of their masts two "lights, one over the other, three feet apart. These "lights shall be kept up during all the time their nets "shall be in the sea between sunset and sunrise." The next article says: "All fishermen are forbidden, except "in cases of absolute necessity, to show lights under "any other circumstances than those mentioned in the "present regulations." Those are the two articles I read. As I understand your argument it is this: that in the first place the herring boats do not carry the two lights they ought to have, and that the light they do carry is placed where it ought not to be placed, and that therefore they have no right to complain?—Certainly. Two years ago when I was at sea there was a report here of a vessel being stranded, and of a great quantity of tallow being afloat. I took my vessel and proceeded to sea with her. I spoke to three drift-boats, and their lights were all in the position I have represented. I spoke to them in order to ascertain if they had seen anything of the drift tallow. They had none but the square light. I can show you as a fact that there are no less than 15 boats in the harbour, every one of which is rigged on that principle. Surely if they go fishing with insufficient lights and fall foul of a trawler, he should not be made to suffer for it.

10,959. (*Mr. Caird.*) What regulations are there as to the lights of a trawler?—We are bound by the regulations issued by the Board of Trade to carry particular lights. Every one of the fishermen belonging to this port belongs to a society—an incorporated mutual fishing society. As soon as one of our nets is overboard we are bound to exhibit a globe light reflecting the horizon. We are supposed to be stationary when the fishing gear is overboard, as we should be if we had our anchor down. We exhibit a light of that description, and if the herring boats will not exhibit the two lights they are bound to show, and have only a galley or a grating in which they put a square light, then if my vessel gets foul of their nets they ought not to be allowed to come here and sue me, and swear that they had their two lights up when it was only possible for them to put up one.

10,960. They would be obliged to prove that they had proper lights exhibited?—Yes; but they will say, in the first instance, that we were at fault, because we were bound to keep three miles from them.

10,961. The magistrates would not inflict a penalty unless they found that all the conditions were fulfilled by the person complaining?—Unfortunately, the strongest are sure to get the day, and they are stronger than we are; in addition to which, if they lose, the Fishing Society pays the damages.

10,962. Referring to what you stated previously with regard to the injury done by painting the number of the vessel upon the sail, do you think there is any part of the sail upon which the number could be painted with less injury to the sail?—Yes, it might be painted upon the throat.

10,963. You would prefer having the number placed near the throat of the sail?—Yes; unless we were exempted from numbering the sails altogether.

10,964. That would be quite as conspicuous as the the numbers in their present position?—Yes.

10,965. You would prefer to have them there rather than on any other part of the sail?—Yes.

10,966. Because, in your opinion, there is less pressure of wind there than upon any other part of the sail?—Yes.

The witness withdrew.

(*Mr. Caird.*) Is there any drift-net fisherman present who desires to offer us evidence?

J. W. Arnold.

JOHN WILLIAM ARNOLD examined.

10,967. (*Mr. Caird.*) You are a drift-net fisherman?—I am a Trinity House Pilot at present, but I have been a drift-net fisherman since I was nine years old.

10,968. From Deal?—From Deal, Walmer, and Kingsdown. They are all included in one port.

10,969. What season of the year do you practise drift-net fishing?—The mackerel season is from the beginning of May to the end of July, and the herring season from the beginning of October to the end of November.

10,970. And during the rest of the year what business do you follow?—The sprat business, and the cop line business in the winter time.

10,971. Is that hand-line fishing?—No, the long-lining.

10,972. You have been a trawl fisherman?—No, I never have.

10,973–4. Do you follow the line-fishing on the same grounds that the trawlers frequent?—Not from our port. We do not go as far to sea. We practise the line-fishing inside.

10,975. What is the length of your lines?—We have 20 sail of small boats, that hail from Kingsdown and Walmer, and they shoot lines about 2,000 feet long.

10,976. Have you found that the fish has been increasing or diminishing?—We find them diminishing, the codfish especially.

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10,977. Is the number of boats increasing or diminishing?—The number of boats is about the same as it was years ago.

10,978. And the number of men employed in the fishing?—About the same.

10,979. Do they frequent the same ground they fished on in former times?—Just the same.

10,980. Do you think that the average quantity of fish brought ashore is less than it used to be?—I think it is.

10,981. Particularly with regard to the cod?—Yes, the cod particularly.

10,982. Has there been any difference in the quality?—No, the quality of the few that are caught is about of the same standard that it was formerly.

10,983. What depth of water do you fish in?—The lines are shot in from 8 to 12 or 14 fathoms of water.

10,984. When did you first begin to notice the falling off?—There has been a falling off during the last 10 or 12 years.

10,985. Do not the fishermen make as good a business of it as they did formerly?—Not in the cod-fishing.

10,986. Putting all the fishing together, do they make as good a business of it?—Not the drift-net fishing, and if something is not done by the Government as far as the drift-net fishing is concerned they must abandon it altogether. The mackerel season produces very little now, and it will continue so while they allow the stow-boats and the trawlers to go into the bays.

10,987. Do the trawlers catch mackerel?—No, but they disturb the fish. I think the existing laws would prevent any evil if they were carried out. I think they are quite sufficient to answer every purpose.

10,988. Do you think that the trawl-boats should be excluded from the shallow waters?—Yes, I think so.

10,989. Are the mackerel disturbed in the shallow waters?—They are. In the month of May there are great quantities of mackerel in Rye Bay, but the trawl-boats are among them all day long to the great injury of the fishery. I think it is well known that these fish go in there to spawn.

10,990. You are of opinion that if the regulations contained in the Act of Parliament were enforced they would do good?—Yes, I think they would answer every purpose.

10,991. Have you found that the take of mackerel has decreased?—Yes, very much; and I am afraid we shall have to abandon the mackerel-fishing altogether unless some alteration is made.

10,992. When did the mackerel-fishing begin to decrease perceptibly?—Within the last seven years. The mackerel have been rapidly declining every season within the last seven years.

10,993. How many boats have you?—There are 35 large boats from Dover, Walmer, and Kingsdown, and 12 sail of small luggers.

10,994. Within the last seven years has the number increased or diminished?—They are about the same. There are no more and no less.

10,995. Are they not making as good a business of it now?—Not nearly as good as they did formerly.

10,996. They are not catching as many fish?—Not nearly so many.

10,997. You do not think that that is because the trawl-vessels destroy the fish, but because they disturb them?—I believe they disturb them in the summer time. They would not do any harm in the deep sea. I think the trawlers ought to be kept out of the way for a mile or two from headland to headland. They should be kept out there during the months of May, June, and July, and from all the grounds where the drift-net fishing is carried on. They should also be kept out in October and November when the herring season is on. A great deal of damage is done to the drift-nets, not by the English trawlers, because they know pretty well what to do with the drift-nets when they come athwart them.

10,998. When does the herring fishery begin with you?—In October, about this time.

10,999. Do you find herring also in the same limits?—Yes, in the same limits.

11,000. Within a distance of three miles from the shore?—Yes, I have seen them close in here at the mouth of the harbour.

11,001. Is the largest quantity you get caught within the three-mile limit?—Some seasons that has been so, but at other times the largest quantities we have got have been caught 12 or 14 miles from the land off the North Foreland.

11,002. In what way do the trawl-boats disturb the herrings?—I don't think the trawl-boats here disturb the herrings, but the fishermen by trawling among them injure the fishery. When the fishery is on you will perhaps have a fleet of drift-nets overboard which cost 150*l*. That is an immense lot of property to have there running the risk of being destroyed.

11,003. How many sail of herring boats are there fishing there at one time?—I have seen 150 from this harbour, and if the trawlers get amongst them they will cause 100*l*. worth of damage in a very few hours. I do not think that the English trawlers do much damage; when they find that they are in among the drift-net fishermen they heave their trawls up and go away. It is the French trawling vessels of which we complain most, we have the most trouble with them, they trawl through everything; they don't care for anybody's gear, and they make a pretty mess of us sometimes.

11,004. Does anybody interfere?—No; if our pilots send off for a man-of-war to keep them out, before the admiralty boat can get there a telegraphic message is sent across to Boulogne, and none of their boats come here that night.

11,005. Is that the only protection you have had?—We have petitioned the Admiralty for many years, but they generally send down their boats too late; there has always been a great deal of damage done before a boat has been sent in, but whenever we have had protection everything has gone on right.

11,006. Has much damage been done to your nets in that way?—Some hundreds of pounds worth are destroyed in a night every year; drift nets are very expensive things.

11,007. Are the shoals of herrings that come off here as large as they were formerly?—Sometimes I think the herrings are quite as thick as ever they were at certain seasons; some seasons there will be less than at others.

11,008. Generally speaking you have not observed any diminution in them?—No.

11,009. But with regard to mackerel you think there has been a diminution?—Yes, there has been a decided decrease in the quantity.

11,010. And also in your line-fishing?—Yes, and in the line-fishing as well.

11,011. To what do you attribute the decrease in the line-fishing?—I hardly know what the cause of it is except it is that the small fish are disturbed so near the coast in the summer time.

11,012. Do you mean by trawling in-shore?—Yes. In Rye Bay and Hythe Bay I have seen sometimes 50 sail of French boats right in along the shore close into Dungeness; they come in so thick that as soon as a fish pokes his head out of the sand he is raked up at once, and it does not matter how small he is.

11,013. Is that within the three-mile limit?—Yes, sometimes within one mile; you might almost stand on Dungeness Point and stone them, they are as close in as that.

11,014. Is there any other mode of fishing practised in the part you come from?—Yes, we catch large quantities of sprats with the drift-nets.

11,015. Do you use the drift-net for that?—Yes.

11,016. You do not use the stow-nets?—No.

11,017. Do you catch any small fish in your drift sprat nets?—No, they all go through, we only catch the large ones; our sprats are always worth more in the market than those caught at other places, but we have such large quantities of them sometimes that we are obliged to sell them for manure.

11,018. Is sprat-fishing profitable here?—Yes.

11,019. Is the sprat-fishing or the herring-fishing most practised here?—I think that at Deal, Walmer, and Kingsdown the sprat-fishing yields as much as the herring-fishing.

11,020. Does the quantity of sprats continue pretty much the same?—About the same.

11,021. The shoals come in in about the same strength as formerly?—Yes.

11,022. They do not seem to have been disturbed?—No.

11,023–5. What is the size of your sprat-nets?—The mesh of the sprat-net is the size of a shilling; it is the same for two knots as a shilling; a shilling ought to be between the two knots, it ought to pass through the mesh. An inch mesh is the mesh of the herring-nets.

11,026. Are you quite sure that you are correct when you state that a shilling will go through the mesh of your sprat net?—Yes, it ought to go through.

11,027. Is it as large as that? (*producing a net*)—Yes, and a halfpenny ought to go through a herring net from knot to knot.

11,028. (*Professor Huxley.*) When you go out herring-fishing how do you light your vessel?—How do we light our vessel?

11,029. Yes?—Where the step of the foremast is we generally stick up a spar about 10 feet long and display a light from that, and another light abaft, so that anybody coming end on to us would see the light at the fore highest, and the light aft lowest.

11,030. Do you think that that is a legal mode of lighting the vessel?—I think so.

11,031. This is the regulation: "In order that "boats fishing with drift-nets may be easily recog-"nized at night, the masters of these boats shall hoist "on one of their masts two lights, one over the other, "three feet apart. These lights shall be kept up "during all the time their nets shall be in the sea "between sunset and sunrise."—The way in which our boats are lighted generally answers the same purpose.

11,032. I am not speaking about that. I am telling you what the law is. Does anyone interfere with the mode in which your boats are lighted?—No, nobody interferes with us.

11,033–4. Nobody ever examines your nets either?—No; but in that respect we keep to the regulations pretty strictly ourselves.

11,035. What is the size of the herring nets which you use?—An inch from knot to knot.

11,036. Are your boats decked or undecked boats?—They are partly decked.

11,037. They are not completely decked?—No, only partly decked. They are built in that manner at Deal, Walmer, and Kingsdown.

11,038. Do you ever set your nets for taking herrings? Do you ever anchor them?—Never.

11,039. Are the mackerel nets made after the same fashion as the herring nets?—Yes, only they are larger.

11,040. What is the size of the nets?—I think about $1\frac{1}{4}$ inch from knot to knot.

11,041. Does anybody ever examine them?—I don't know?—I never had anybody to examine them.

11,042. Have you ever heard of any law with regard to that?—Yes; I have read the Convention all through, especially with reference to the trawlers.

11,043. Is the lower part of the mackerel net loaded, I mean the foot rope?—Never.

11,044. At what time do you consider that the herrings are full fish?—In the month of October. They are never better here than when they are caught then.

11,045. They are full then?—Yes.

11,046. Full of spawn?—Yes, they generally lose their spawn about the beginning of November.

11,047. When are sprats full?—About Christmas time, about the month of December.

11,048. Do they lose their spawn after that?—Yes.

11,049. Do you get any herrings here in January?—No.

11,050. Do you ever see the appearance of herrings then?—Not in January.

11,051. Are there none in the spring months?—Very few. Sometimes the boats may catch a few hundreds.

11,052. Are there none in August?—I have seen some fat herrings caught in August in the drift-nets.

11,053. Fat, not full?—No.

11,054. What is the average length of the herrings you catch here?—They will reach about 13 inches.

11,055. What time of the year do the mackerel spawn?—About the middle of June they begin to go, and from that up to the beginning of July.

11,056. In what depth of water do they spawn?—I I don't know that there is any regulation. Some spawn in-shore, and some off the shore, all round about the coast. I think the stow-boats are the greatest drawback to the mackerel.

11,057. Why do you think so?—Because they catch all the little fish, and do not allow them to come to maturity. They catch the spawn of the herring too after the herring spawn is partly matured. I think one half of it is caught in that manner by the stow-boat nets at the estuary of the Thames. We have got a great number of stow-boats fishing here occasionally. They pick out the sprats, and send them to the market, and all the rest of the smig they sell for manure to put on the land.

11,058. Do they fish here?—Not exactly here, but in the Black Deeps, the Swin, and up the Channel.

11,059. Do they hail from Margate?—There may be some there, but they mostly come from Whitstable, Faversham, Harwich, and Ipswich. It is a crying nuisance, and ought to be put a stop to.

11,060. (*Mr Caird.*) Could the stow-boats fish equally well with drift-nets?—I think so. Some of them do at Margate. They have knocked off the stow-boat fishing there.

11,061. Did they make that change themselves?—Yes.

11,062. Did they do so because they found it would be to their advantage?—Yes.

11,063. Do they catch more marketable fish in consequence?—Yes, and they are sold at a better price.

11,064. They gave up catching fish for manure?—Yes.

11,065. How long is that ago?—About eight or nine years.

11,066. Has that had any effect upon the quantity of fish caught at Margate?—Yes; there have been more sprats caught there since they adopted the drift-net fishing than were caught formerly.

11,067. Was there anything in the shape of the boat that necessitated a change of the net?—They would be required to change their boats.

11,068. Then a change of that sort must have been attended by a considerable sacrifice of capital?—It would involve some expense, but not a great deal.

11,069. Can they use the stow-boats for any other fishing?—Many of the small ones will be of service. I don't think the larger ones would do for drift-nets, but the smaller ones would.

11,070. You say that the Margate people have changed their boats?—Yes, from the smacks they used to have and luggers to small punts 20 feet long.

11,071. Do you get any herring in your sprat nets?—Very seldom. You catch one now and then, but not often.

11,072. Are they not caught at the same season?—In the latter part of the herring season you may catch a lot of sprats. When the herrings get to be shotten they come in. About Lord Mayor's day we expect to get the first lot of sprats.

11,073. They do not come together with the herring?—No; it is very seldom that you catch any during the herring season.

RAMSGATE.

Robert Cook examined.

R. Cook.

17 Oct. 1863.

11,074. (*Mr. Caird.*) You wish to make some remark upon the evidence of the last witness?—Yes, with regard to his hook fishery within a short distance of the coast. I have practised that, and I have hauled fish by the hook-and-line as fast as I could bait the hooks, but let a steamboat come near you and you may haul your anchor up and you may go home, for you will catch no more. I think that steam on the water does a great injury.

11,075. Do you mean that one reason why the line-fishing has fallen off is the number of steam vessels now running?—Yes, passing and repassing. I have been catching whiting off the North Foreland, within a short distance of the coast, and have been heaving them up as fast as I could bait the hooks, but let a steamboat pass me, and I should catch no more.

11,076. Where would you move to in that case?—I should go home.

11,077. Did the fish disappear altogether?—No; the next day on the same spot you would catch the same number until another steamboat came opposite. And at that time the steamboats were not half so plentiful as they are now.

The witness withdrew.

P. Bartlett.

Philip Bartlett recalled.

11,078. (*Mr. Caird.*) Are you desirous of making any further statement?—With regard to the failure of the mackerel season during the last five years, I think it has been in consequence of the long continuation of calms. When there is not much wind a man is as well in the harbour with his nets on board as at sea. Mackerel is a spurt fish that requires plenty of wind and water. There has been more mackerel this last season at Rye Bay and Hythe Bay than was ever known. I was in Hastings in the month of June when there was such an abundance of mackerel that they had their nets set on shore at low water mark. They put stakes in the sands and attached nets to them; one man if he could have saved his haul would have got five lasts of mackerel, and there was a continuation of that nearly the whole length of the season. The cause of that was the previous long continuation of calms. The fish struck in-shore and there was no commotion to drive them out. They laid there till they became unsaleable and unfit to eat. Yet there is a Trinity-house pilot who hardly knows what a mackerel is, who says that the trawlers disturb them. Why there were more last season than the Great Eastern could have carried away. They were so numerous that they sold for 8*d.* a hundred.

The witness withdrew.

The inquiry was then adjourned until Monday, November 16, at Yarmouth.

Great Yarmouth, Norfolk, 16th November 1863.

Present:

GREAT YARMOUTH.

James Caird, Esq., M.P. (Chairman).
G. Shaw Lefevre, Esq., M.P.
Professor Huxley, F.R.S.

S. Hewett.

16 Nov. 1863.

Samuel Hewett called and examined.

11,079. (*Mr. Caird.*) Mr. Hewett, have you been long connected with the fishing interest here?—Not here; I have only been eighteen months here myself, but I have had a few vessels here for the last eight or nine years.

11,080. Are you acquainted with the modes of fishing practised here and with the supply of fish brought to Yarmouth?—Yes.

11,081. What are the different modes of fishing practised at Yarmouth?—Trawling. There are also drivers for herring and mackerel.

11,082. Has Yarmouth been long famous as a fishing place?—Yes, for herring and mackerel.

11,083. But has it not long been famous as a trawling place?—Trawling has only been carried on here for about 20 years.

11,084. Was it a line-fishing place previously to the trawl-vessels coming here?—No, it was never a line-fishing place.

11,085. Then with regard to the white-fishing at Yarmouth does it date its origin from 20 years ago when the trawl-vessels first came here?—I was not speaking of the white-fishing but of the line-fishing at Yarmouth.

11,086. Was there any white-fishing carried on at Yarmouth before the trawl-vessels came here?—There was very little white-fishing before then.

11,087. How many trawl-vessels hail from Yarmouth now?—I believe there are more than 100 that hail from Yarmouth. Our vessels hail from London, but there are more than 100 that hail from Yarmouth. I don't know the exact number.

11,088. How many trawl-vessels altogether frequent the port of Yarmouth, including those which hail from Yarmouth and those which hail from London?—Perhaps there will be about 150.

11,089. One hundred and fifty altogether?—Yes, but I don't know the exact number.

11,090. Do you know whether that number has increased much within recent years?—Yes, it has increased very much; it increases now every year.

11,091. Can you give us any specific facts upon that point?—No, but I am positive that is a correct statement with regard to the trawl-vessels generally. There were only four or five belonging to the town 17 or 18 years ago, and now there are 150, or perhaps more than that.

11,092. Has that increase taken place principally within recent years?—Yes.

11,093. How many years ago is it since the greatest increase took place?—About eight or ten years ago the number began to increase very fast.

11,094. From four or five, did it jump up all at once to a considerable number?—It has been increasing very fast ever since.

11,095. It has been increasing ever since up to the present day?—Yes.

11,096. Do you remember how many there were five years ago?—No, I do not.

11,097. Has the size of the vessels increased as well as the number?—Yes, the vessels are larger now than they were 20 years ago.

11,098. Are they manned by the same number of men?—No, they are manned by more men.

11,099. Are the nets they carry larger?—Yes, the nets are larger.

11,100. What is the average size of the trawl-vessels fishing from Yarmouth now?—By the new measurement the size of the trawl-vessels will run from 30 to 50 tons. By the old measurement some would be as high as 60 tons. Between 50 and 60 tons the principal part of them would be.

11,101. What number of men do they carry?—Six or seven hands including men and boys.

11,102. How many men and how many boys?—Our own London vessels take more men than those at

Yarmouth. We take seven or eight; three men besides the master, and three or four boys.

11,103. Are those boys apprenticed?—Yes.

11,104. They are regularly indentured to you?—Yes; but I believe that the Yarmouth people do not take any large number of apprentices.

11,105. Do you pay the men and boys by wages, or by share on the fishing?—They are paid wages.

11,106. Do their wages in any degree depend upon the catch of fish?—Very little indeed; sometimes we give them a gift if they make a good voyage. We give them a few shillings by way of gift when they come home.

11,107. Have they no share in the ownership of the vessels; have any of the fishermen an interest in the catch of fish?—Only the captain.

11,108. Has the captain a share?—He receives five per cent. upon the earnings, but he has no share in the vessel itself.

11,109. He has no share?—No; he is only paid a per-centage upon the earnings.

11,110. Turning more particularly to the object of our enquiry, can you tell us whether the supply of fish brought to Yarmouth is increasing, stationary, or diminishing?—It is increasing fast; the supply of fish is increasing very fast, but at the same time the number of boats employed in catching fish is also increasing.

11,111. Can you compare the supply with any previous time, say five years ago?—When you talk of the fish coming ashore at Yarmouth, I know very little about that. All I can say is, that the fish caught by vessels from this port has increased wonderfully, and is still increasing.

11,112. That is the question I wish to put to you?—There was never so much known to be caught as at the present day, or, at any rate, a month ago. Our vessels have been fishing recently upon the Dogger Bank.

11,113. (*Mr. Lefevre.*) Do you land your fish here?—We mostly send it to London.

11,114. (*Mr. Caird.*) You say that you have been fishing recently on the Dogger Bank?—About three weeks ago our vessels were on the Dogger Bank, and they found more fish there than was ever known, or thought of at any previous period. They got over two tons after a two hours' haul. This, gentlemen, is a statement that I have received from four of our captains.

11,115. Do you put in that paper as part of your evidence?—Yes.

11,116. It is a certificate from four of your captains as to their catch during the last season?—Yes, they were going away this morning or they would have been here ready to be examined.

11,117. Do you agree with the statement, and believe it to be correct?—Yes.

The following document was then handed in:—

November 1863.

We, the undersigned, being masters of trawling vessels sailing out of Yarmouth, the youngest of us having followed trawling for 14 years, do state that in our experience we have not known so much fish as there is at this season. Within the last six weeks, while fishing on the Dogger Bank, we have frequently seen from 40 to 60 packages, weighing between two and three tons, taken by a single vessel for a three hours' haul, the most of them being very fine haddocks.

(Signed) William Brown,
Master of the "Enterprise."
George Tidman,
Master of the "Majestic."
Charles Dossett × his mark
Master of the "Choice Witness."
William Atherton,
Master of the "Unity."

11,118. Can you tell us from your own knowledge what is the quantity of fish that is taken on the average by a boat in the course of a week?—Do you mean the weight of fish?

11,119. Yes, the weight of the different kinds of fish taken?—That is all owing to where they may happen to be fishing. The kind of fish caught depends very considerably upon the ground fished upon; the bulk of the catch is generally haddocks, plaice, soles, and turbot.

11,120. You spoke of the Dogger Bank, do your boats chiefly fish upon the Dogger Bank?—They only fish there now and then.

11,121. Do they always get their largest takes on the Dogger Bank?—We never fished there before this year—at any rate, not so far north.

11,122. Your boats never went so far to sea as they have done this year?—No.

11,123. Do you know whether your boats went upon fresh ground that had not previously been fished, when they went to the Dogger?—I believe they did.

11,124. It was ground that had not previously been fished?—I think it has been fished before, but it has never been so well proved as it has been recently.

11,125. Do they get very much more fish on the Dogger Bank than they were in the habit of getting on the banks nearer the shore?—Yes, they get more fish there than was ever known or thought of.

11,126. Were the fish very fine in quality?—Yes, the haddocks were particularly fine.

11,127. Have more vessels gone to the Dogger Bank in consequence of that successful fishing?—The trawlers are a little shy of the weather in the winter time. That is the reason they don't go so much to the Dogger, but I dare say in the course of another year they will go more than they have been in the habit hitherto. About last October twelve months there were two or three vessels from Hull that were lost, and I think that deterred the fishermen from going to that distant ground. It is a long way from here in the latitude of Hartlepool.

11,128. Are there any boats fishing on the Dogger now?—No, not on the Dogger; but I believe there are some fishing at Botany Gut which is the southern end of the Dogger.

11,129. What distance may that be from Yarmouth?—About 80 miles.

11,130. Is that the ground you chiefly frequent?—Yes.

11,131. Is it down at the Silver Pits?—Yes, we trawl about the Silver Pits.

11,132. In what depth of water do you chiefly fish; in what number of fathoms do you put down your nets?—Generally in from 18 to 23 fathoms.

11,133. (*Mr. Lefevre.*) Whereabouts is Botany Gut?—It is at the south of the Pits.

11,134. Southward of the Outer Pits?—To the southwest of the Outer Pits.

11,135. How many boats have you belonging to you?—Between 50 and 60.

11,136. (*Mr. Caird.*) You have between 50 and 60 boats?—Yes, between 50 and 60 including smacks, cutters, carriers, and fishing boats.

11,137. How many people have you employed in the fishing?—I have been here for the last 18 months. The first year I paid more than 20,000*l.* in wages and victuals. Our supplies, such as clothes and stores, come principally from Barking. There is a gentleman now present who had the management of these vessels before I came down here, and I think he will tell you that from 200*l.* to 300*l.* was paid a week in wages alone.

11,138. Is your business carried on by a company?—Yes; there is only one of my sons in it now.

11,139. Is it carried on by yourself and your sons?—No, I am out of it now.

11,140. (*Mr. Lefevre.*) You have retired from business?—Yes.

11,141. (*Mr. Caird.*) You may object to this question, but I wish to know whether upon the whole, with so large an expenditure, you have found the investment a remunerative one?—Yes, I have no reason to complain.

11,142. Is that fact proved by other persons evincing a desire to go into the business?—I don't know; I am unable to tell you.

GREAT YARMOUTH.

S. Hewett.

16 Nov. 1863.

11,143. Are there others following your example?—A very few, I think; very few indeed now.

11,144. Is there any fishing in Yarmouth itself? Are there any natives of Yarmouth who have trawl-vessels and go and fish on their own account?—Yes, there are a few. I expect one here directly. There are a few, I believe.

11,145. Do the captains in your employment rise to become part owners of vessels?—Yes, a great many of them do. It was more so a few years ago than it has been latterly. We had a great many some time ago. There are several of them now at Grimsby. They originally had part shares in vessels and now they have got the whole of them into their possession. There are several of them at Grimsby at this moment and I believe there are also a few of them at Barking.

11,146. When you were fishing off the Dogger with that large fleet of vessels, in what way did you manage to get the fish sent to market?—We took ice to sea with us and took the fish direct to Billingsgate.

11,147. Had you special cutters employed for that purpose?—Yes, we had cutters on purpose.

11,148. Fast sailing cutters?—Yes.

11,149. Cutters carrying ice?—Yes.

11,150. What length of time may elapse occasionally before the fish reaches Billingsgate market? I mean what length of time may they be out at sea after they have been caught?—Sometimes three or four days.

11,151. Being packed in the ice, are they delivered quite fresh?—Yes, always. Sometimes, if the vessel has been out at sea for a week, the fish has been fresh.

11,152. Do the fish caught by the trawl sold in Billingsgate realize as good a price as the fish caught by the line?—They get quite as good a price, except with regard to very large cod fish caught by the line. That fetches more perhaps; but generally fish caught by the trawl sells as well as line-caught fish.

11,153. I asked a little while ago in what proportions are the different kinds of fish caught by your trawl-vessels; I shall be glad if you will give me that information as nearly as you can?—If we are on the Dogger Bank or at the Silver Pits our principal catch is haddocks and plaice.

11,154. In a good day's fishing you fish about six hours with the tide?—No; about four hours.

11,155. In a good day's fishing what will be the average take in weight?—Perhaps about a ton; but it all depends upon the wind and weather. If the weather is calm they get very little fish; if there is a smart breeze they will get a fair catch; but if it blows a heavy gale then they will get none at all.

11,156. Suppose we take the catch at a ton, in what proportion does that ton consist of the different kinds of fish you catch?—There will be about 3 cwt. of soles; perhaps from 10 to 11 or 12 cwt. of haddocks, and the rest will consist of plaice and whitings.

11,157. Do you catch any cod?—Only a few cod and a few turbot.

11,158. A few turbots?—Yes, and a few brill.

11,158*a*. Have you had a long experience of trawl-fishing elsewhere?—Yes.

11,159. Where?—Off the coast of Holland.

11,160. Have you yourself been fishing off the coast of Holland?—Yes.

11,161. Have you been fishing for some years?—Yes.

11,162. How long is that ago?—It will now be nearly 40 years since I was a regular fisherman.

11,163. Forty years since you were yourself fishing?—Yes; since I was fishing myself. I have been a fisherman over 50 years.

11,164. When you were in the habit of fishing off the coast of Holland, was there any particular reason that took you so far away from home? Did you find that you got more fish on the coast of Holland than at home?—It was all owing to the time of the year, and the season at which we were fishing.

11,165. Did you find that the fish changed their place according to the season?—Yes.

11,166. Can you tell us what, in your opinion, was the reason of that?—In cold weather fish go into deep water for warmth. In very severe weather the fish are always taken in deep water. In fine weather they generally get into shoal water, and then the turbots will be within a few inches of the water's edge. We found them in that way on the coast of Holland. I have often seen them there; they always go for warmth.

11,167. Was that in the summer season?—Yes.

11,168. Then in the summer season you went to the coast of Holland?—Yes, but they go there pretty nearly all the year round.

11,169. Did you trawl on that coast?—Yes.

11,169*a*. Were the Dutch fishermen trawling there at the same time?—Yes, they were trawling with us.

11,170. Were the fishermen of any other country trawling there—were there any French fishermen?—No, there were no French fishermen.

11,171. Have the Dutch fishermen long been in the habit of trawling upon that coast?—Yes.

11,172. Did you ever observe that there was any decline in the quantity of fish caught there?—No.

11,173. Did you ever hear any complaint that the fish were being trawled out?—No.

11,174. Are there any fishing banks nearer Yarmouth than the Outer Silver Pits?—Yes.

11,175. Are they frequented by your trawl-vessels?—Yes, but we don't fish as near Yarmouth as the Yarmouth vessels, generally speaking.

11,176. Why do you not fish as near the coast as the Yarmouth vessels?—We are in the habit of going further to sea. Our men are more accustomed to that sort of thing than the Yarmouth boats.

11,177. But surely you must have an object in that?—Yes, we get more fish, and our vessels have as good if not a better chance when they are a long way out at sea of getting into the London market direct. Perhaps they have a better chance than if they were nearer the coast, but that all depends upon the wind and weather.

11,178. They can make as good a run to London although they are a long way further out at sea?—Yes, if they have been hanging southward or eastward they can fetch a long way up.

11,179. When your trawl-vessels go out do they go out in a body altogether, or singly?—That is just as it happens. We have four going away to-day and in all probability they will keep together.

11,180. They will keep pretty close together?—Yes, until they join the fleet.

11,181. When will they begin to put down their trawls?—If it is a fine night they will probably put them down to night. If they think that they can gain anything by it they will certainly put them down to-night.

11,182. Before they do so will they arrive at what they consider to be the fishing ground?—Yes; they will not put it down anywhere. They will be on the fishing ground to-night if there is a gale of wind, although they will not be the entire distance they will have to go to join the fleet.

11,183. Is the fishing ground in any way marked by having a smooth bottom or particular banks; is it a particular bank, or what is it that specifically forms a fishing ground?—Of course we like to have smooth ground; if it is at all rocky we lose our gear.

11,184. Is any part of the sea that has a smooth bottom naturally formed for a fishing ground?—Yes.

11,185. Does any part of the sea between this and Holland constitute a fishing ground upon which you are pretty sure to catch fish?—Yes.

11,186. I mean without reference to the Dogger Bank, the Silver Pits, or any other well known place that is constantly fished?—Yes, it is all fishing ground between here and Holland. There is a little rough in some places but our men know where those places are by constant practice; they know very well by their lead when they come to the rough ground.

11,187. How far out at sea would it be prudent for them to begin to fish?—About 20 miles.

11,188. It would not be prudent for them to commence fishing before they get out at sea for 20 miles?—No. Perhaps they would fish just outside here in

summer time within sight of land. The Yarmouth vessels occasionally fish within sight of Yarmouth, but not often.

11,189. Do they not practise fishing here because they find that they can do better by going further out sea?—Yes decidedly.

11,190. Are there any open undecked boats fishing at Yarmouth?—I don't know.

11,191. Have you had anything to do with the herring fishery here?—Not anything at all.

11,192. Then you have no knowledge upon that point?—No.

11,193. (*Professor Huxley.*) Did I understand you to say that you began your business 50 years ago?—Even more than that.

11,194. How many years ago?—I was bound apprentice when I was 14 years of of age.

11,195. And have you been connected with the fishing trade either as fisherman or owner of smacks ever since?—Yes, ever since; and now I am 66 years old, so that I have been it a good long time.

11,196. You served your time in the first instance as apprentice?—I never served it quite out. I was put forward and made master of a smack before my apprenticeship was out. I had what we call a "nurse" with me to show me the abouts of the thing, but in the course of a year or two I had a vessel built for me.

11,197. How many years were you actually working in a smack yourself?—About six or seven years.

11,198. Then you are yourself thoroughly acquainted with all the practical details of the fishing?—Yes.

11,199. After you had been a fisherman for six or seven years you did not work the smack yourself but became a smack owner?—Yes.

11,200. I suppose from that you had something at your back besides the mere earnings you obtained as a fisherman?—Yes, certainly; my friends were born before me.

11,201. It did not all come out of what you got by trawling?—No.

11,202. I ask these questions from no desire to be inquisitive, but simply to ascertain whether the trawling business is of a profitable character?—I may say that it did all come out of trawling.

11,203. (*Mr. Lefevre.*) Do you mean that you repaid the capital advanced to you?—Yes.

11,204. (*Professor Huxley.*) Then it did come out of the business of trawling?—Yes, but not altogether from trawling, because I did and still do at present a little hook-fishing. I have now six vessels fishing off here for haddock and cod, but the principal part of the business I have been engaged in is trawling.

11,205. In what condition did you find that the fish came up when the trawl was brought up?—In what condition?

11,206. Yes, were they alive or dead, or how were they?—They were mostly dead.

11,207. Did that depend upon the time the trawl had been down?—Yes, to a certain extent. Of course the longer it is down the more likely the fish are to be dead. If there is settled fine weather we are able to make short hauls, and the fish in that case will be pretty lively.

11,208. What do you call short hauls?—Two or three hours. We generally go with the tide, and that would be about four or five hours. It takes us a little time to shift our ground and to take our gear up and put it down again.

11,209. If you have had moderately fine weather and have had the trawl down for five hours, will the majority of the fish be dead or alive?—Dead.

11,210. Is there anything peculiar in the make of your trawls, compared with the trawls used by the north country fishermen?—No.

11,211. What is the length of the beam?—The beam used in the north country is longer than ours.

11,212. What is the length of yours?—From 34 to 36 and 37 feet.

11,213. Did you ever feel yourself under obligation to use any particular length?—No.

11,214. In your experience as a fisherman and smack owner can you say whether you have been interfered with by government officers or other authorities, or whether you have had your trawls examined?—No.

11,215. Do you use any particular kind of mesh to your trawl?—No.

11,216. What is the size of the mesh you use?—I don't know the size.

11,217. Do you consider yourself at liberty to use any mesh you like?—Yes.

11,218. When you were a fisherman, were you in the habit of loading the ground-rope?—Loading it with lead?

11,219. Yes.—Yes, we did so.

11,220. Did you use any particular weight of lead?—No, it was all owing to our fancy. We use chains now a good deal.

11,221. In point of fact you did as you liked?—Yes.

11,222. When the fish came up in the trawl, were they at all damaged?—Sometimes they will be a little chafed, but nothing to speak of.

11,223. Were the fish ever rendered unsaleable in consequence of the injury they had sustained in being brought up in the trawl?—They were never rendered unsaleable, if they got to market in decent time.

11,224. I am not asking you about that; I am speaking of the effect produced by bringing them up in the trawl?—Exactly. I perfectly comprehend you.

11,225. Were they ever so damaged when you got them on deck that they were rendered unsaleable?—No.

11,226. Were any considerable proportion of them damaged?—No.

11,227. The damage you referred to arises from them being kept at sea and becoming spoiled?—Yes, in consequence of the vessel losing her market.

11,228. Have you in the course of your experience noticed any falling off in the size of the fish during the last 50 years?—No.

11,229. You think that the average size is about the same?—Yes. With regard to the haddocks they have increased in size; the haddocks are half as big again as they used to be.

11,230. The haddocks are larger?—Yes, I never saw such haddocks as we are getting at the present day.

11,231. Have you any idea of the length of the haddocks you get now?—Yes, about 18 inches and sometimes more than that.

11,232. Do you think that they are more abundant than they were formerly?—Yes, certainly they are.

11,233. I understand you to say that you employ five or six vessels in line-fishing?—Yes.

11,234. Have you done that for many years?—Yes.

11,235. What is the principal fish they catch?—Haddock, cod, and whiting.

11,236. Where do they fish?—In the north-east Knoll and the Well Bank.

11,237. Do they get as many haddocks as they were in the habit of getting formerly?—I have not noticed much difference. They have had a very fine voyage with regard to haddock and cod within the last few weeks.

11,238. Then you have not noticed any falling off with regard to the haddock and cod?—No, a week or two ago one of my vessels made a voyage and was engaged in the fishing for five days, and when she came back she had over 100 score.

11,239. (*Mr. Lefevre.*) Are the vessels you employ in the line-fishing decked boats?—Yes.

11,240. (*Professor Huxley.*) They are able to keep the sea?—Yes, they never go into harbour.

11,241. What is their tonnage?—*55, 56* and 58 tons.

11,242. (*Mr. Lefevre.*) They are much the same size then as the trawlers?—Yes, they engage in trawling in the winter.

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11,243. (*Professor Huxley.*) How many men do they carry?—From seven to eight hands.

11,244. And how many lines?—They all fish with hand-lines. They only fish with two hooks on a line.

11,245. For how many years have you employed these half dozen hookers?—We never had so few until lately. We used to have a great many more until a comparatively recent period.

11,246. Why do you not employ as many as you do in trawling?—We like the trawl work better.

11,247. Do you find that it is more profitable?—Yes.

11,248. You have not given over using the line-boats in consequence of the falling off in the quantity of fish they caught?—No, they occasionally have a great catch of fish.

11,249. Do you think that the whiting are as abundant as they were some years ago?—I do not think they are, but I know very little about them. There is a class of vessels that go on purpose to catch whiting. We do not use ours for that purpose; we never go specially for whiting.

11,250. Are the smacks that are employed now for trawl-fishing larger than they were formerly?—Yes.

11,251. Can you tell us what is the cost of a trawl-fishing smack with its fittings?—At the present day a trawl-boat will cost from 800*l.* to 900*l.* It used to cost more.

11,252. Does the trawling take place now over the same ground that it did 50 years ago? Can you tell us that from your recollection?—Yes, only we go further now than we did in my early days. They go now to the Dogger Bank.

11,253. Are you acquainted with any particular ground where trawling takes place now where it used to occur 50 years ago?—All about the Dutch coast the trawling was exactly the same 50 years ago as it is now.

11,254. Upon an average, is the quantity of fish taken by a boat the same now as it used to be 50 years ago?—I think so.

11,255. Am I to understand that trawling has gone on ever since over the same ground?—Yes.

11,256. And yet the yield of fish remains much about the same?—Yes, we used to carry them ourselves every day, and if we got from six to eight bushels of soles we called it a voyage; but then we had to get them up without any steam or ice or railroads or any of the facilities we now possess. That was a very different state of affairs. A vessel then was not in the habit of fishing for more than three or four days, and now we have them remaining out at sea for five or six weeks.

11,257. More continuous fishing goes on now than formerly?—Yes.

11,258. The ground is more worked?—Yes.

11,259. Do you find that there has been any falling off in the yield?—No.

11,260. Can an English boat fish within any distance she likes off the Dutch coast?—Yes, I have fished almost close in shore, so close that I could have thrown a biscuit on shore.

11,261. And the Dutch authorities have not interfered with you?—No.

11,262. Did you and the Dutch fishermen fish harmoniously together?—Yes.

11,263. You never meddled or interfered with each other?—We used to buy their turbot at that time.

11,264. Do the Dutch fishermen fish off here?—Yes, sometimes.

11,265. Can they catch fish off this coast within any distance they like?—I do not know; I believe not.

11,266. Have you any acquaintance with the herring fishery here?—No.

11,267. (*Mr. Lefevre.*) Do you meet the Dutch boats on the Dogger Bank?—Well, I think not. We have been with the Dutch boats in the latitude of the Dogger Bank, mostly to the east of the Dogger.

11,268. How many of your boats do you send out to the Dogger Bank; do you send your own fleet?—Yes, we have had the whole of them there, sometimes from 80 to 90 sail with our friends fishing with us. There are very frequently from 80 to 90 sail in the fleet.

11,269. It has only been within the last two or three years that you have gone to the Dogger Bank?—Yes.

11,270. Do you send smacks out in order that they may convey the fish to London?—Yes, we send out cutters.

11,271. How many cutters do you employ?—We have about 12 or 14 first-rate vessels, and a few of a middling character. Altogether we have about 18 carriers.

11,272. And besides that you have 50 or 60 fishing boats?—No.

11,273. Are the cutters included in that number?—Yes, and they fish as well as carry.

11,274. Do you find that you can get an increased price for the fish caught by the hook as compared with those caught by the trawl?—Only for the large cod. It is very desirable to bring in the cod alive, if possible; we want to crimp it if we can. If we do not crimp it we cannot get as good a price for it.

11,275. Then you get a better price for the line-cod?—Yes, sometimes we get double the price.

11,276. Do you catch any large number of small fish in the trawl?—What do you mean by small fish?

11,277. I mean small fish that are immature and unsaleable?—We get a few occasionally.

11,278. Can you state what is the proportion?—We do not get any large quantity.

11,279. Are they thrown overboard?—We throw a few overboard, and a few, in my time, we used to give to the boys in the shape of perquisites. They were quite saleable and eatable, but they were worth very little money.

11,280. What kind of fish would they consist of?—Dabs and small gurnets generally.

11,281. Were there any young haddocks or young soles?—No.

11,282. Your cutters take all the fish to the London market?—Yes, principally.

11,283. They do not come in here?—No, very seldom.

11,284. (*Mr. Caird.*) Is the London market the principal market to which you send your fish?—Yes.

11,285. Can you get the best price for it in London?—Yes.

11,286. Do you ever supply any other market besides London?—No, none.

11,287. You have had a long experience of trawl-fishing, do you know whether our system of trawl-fishing had its origin in this country or in Holland?—I am unable to answer that question. I have not the least idea.

11,288. Trawl-fishing has been practised as long as you have any recollection?—Yes, as long as I can remember, and my father before me was a fisherman.

11,289. Do you know any fishing ground in your experience that has been exhausted at all by trawl-fishing?—No, I do not.

11,290. Has any particular fishing bank been fished so closely that the catch has become diminished?—No, I think not.

11,291. Not within your knowledge anywhere along this coast?—No.

11,292. Do you ever with your trawl-vessels foul the long-line fishermen's lines?—Very seldom. We very seldom get near them. I do not remember seeing the long-line fishermen fishing with us in my experience.

11,293. (*Mr. Lefevre.*) You mostly fish outside?—Yes, quite out at sea.

11,294. (*Mr. Caird.*) Yes; but the long-line fishermen fish a long way out at sea?—Yes, they go on the Dogger Bank sometimes.

11,295. Is it not within your knowledge that the long-line fishermen's lines have been fouled by the trawlers?—I have seen the Dutch fishermen lining for turbots, but in my time I never saw a vessel lining for cod or haddock.

11,296. Did you ever bring up a large quantity of spawn in your trawl net?—No, I never saw anything of the sort.

11,297. Is any large proportion of the fish caught by the trawlers mangled, and in consequence rendered unfit for food?—No.

11,298. Is any large proportion of it ever thrown overboard as unfit for food?—No.

11,299. I think you said that there was no officer or authority to interfere with you as to the size of the mesh of your net?—Never to my knowledge.

11,300. Do you not act on any rule as to the size of the net, or do you adopt such size as you yourselves think best?—We adopt the size we think best ourselves.

11,301. (*Mr. Lefevre.*) Are you of opinion that there ought to be any regulation as to the size of the net, or the size of the mesh, or the length of the beam?—No, I think the fishermen ought to know best what size they like, and I think they ought to be allowed to act up to that.

11,302. (*Mr. Caird.*) You do not desire any Government authority or interference to come between you and your fishing?—Not in the least.

11,303. Do you complain of any foreign vessels coming upon your fishing ground?—No.

11,304. Then you desire to be left free to take any fishing ground you please, and let the foreigners do the same?—Yes. I think that if you put a stop to trawling you will raise the price of mutton and beef twopence a pound at the least.

11,305. Upon what do you ground that opinion?—Because if trawling is put a stop to there will be so small a quantity of fish sent into the market. At this moment we are able to send from 100 to 200 tons of fish into the London market every day from trawl vessels.

11,306. Do you believe that you furnish the larger supply of fish sent to the London market?—Yes, decidedly, so far as the bulk is concerned.

11,307. Have you any idea what the proportion is you supply as compared with that supplied by the line fishermen?—There is no comparison. Our season lasts all the year round. There is the cod season, the haddock season, the herring season, and the mackerel season. All these fish have their seasons, lasting only a few months, but trawling is carried on all the year round.

11,308. Do you happen to know whether there are more vessels engaged in trawl-fishing than in line-fishing?—Yes, I should say there are three, or four, or five to one.

11,309. Then, speaking of the whole of the east coast of England, you say there are more fishermen engaged in trawl-fishing than in line-fishing?—Yes, decidedly.

11,310. Is the number much larger?—Yes, considerably larger.

11,311. Have you any accurate statistics you can give us upon that point?—No; I only know that there are very few vessels engaged in line-fishing out of Greenwich, Barking, and Gravesend. They are the principal liners I know anything of. With regard to the cobles I know nothing of them. I have been round among them, but I do not know what their numbers are. This, however, I do know, that where there is one man engaged in a line-fishing vessel there are three or four men engaged in trawling.

11,312. Do the trawl-boats fish chiefly for the London market?—No.

11,313. Do they supply Manchester, Birmingham, and the large towns?—The Hull people principally supply Manchester, Birmingham, and the large towns about there.

11,314. South of Hull, do the trawlers chiefly send to the London market?—Yes, their fish goes off to London invariably.

11,315. And is it then distributed throughout the country?—Yes, sometimes.

11,316. With regard to the price of fish, in your experience has it increased or diminished within recent years?—I do not know that there has been much difference in the price.

11,317. Of late years there has been a gradual rise in the price of meat, has there been a similar gradual rise in the price of fish?—I do not think there has been so much difference. If the fish are scarce they fetch a good deal of money, but we would rather have them plentiful and have a middling price for them.

11,318. It pays you better to have a good supply of fish and a middling price?—Yes.

11,319. Does it ever happen that you overstock the market?—Very seldom. Now and then we beat the market with Dutch plaice, but it is not often.

11,320. That soon passes off?—It never lasts longer than a day.

11,321. You gave me the proportion of fish caught in a trawl, which of the different kinds of fish will sell at the highest price, soles, haddocks, or plaice?—Soles.

11,322. Soles bring the highest price per pound weight?—Yes.

11,323. What brings the next highest price?—Turbots and brill, and then haddocks, but they bring a low price, there is such a lot of them coming in.

11,324-5. Are the haddocks chiefly sold to the poorer classes?—Yes, and we make a great trade of haddocks by smoking them. That is our principal trade in haddocks.

11,326. With regard to plaice and whiting, are they still lower in price?—They are low in price.

11,327. Are they lower than the haddocks per pound weight?—No, about the same, but it is all owing to the supply.

11,328. (*Mr. Lefevre.*) How long do your boats remain out at sea?—Six weeks from here, eight from Barking.

11,329. How many voyages do the cutters make in that time?—Sometimes one voyage a week.

11,330. Do your boats go in numbers together, five or six, or many at a time?—Sometimes one goes alone, sometimes there will be three or four, it is just as it happens.

11,331. Do the cutters experience any difficulty in finding them?—No, they mostly find them pretty soon.

11,332. What is the proportion of the cutters to the fishing boats?—There are about 50, or 60, or 70 fishing boats in a fleet, perhaps 100 sometimes, and they will have 10 or 15 cutters.

11,333. (*Professor Huxley.*) Do you know a fishing ground called the "Brown Ridge"?—No, I never heard of it.

11,334. When you have been trawling, has it ever happened to you to be trawling over a long narrow piece of ground for some time?—Yes, at Smith's Knoll.

11,335. How long is that bank?—About 12 miles long.

11,336. And it is not above a mile or a mile and a half wide?—Not so much as that; it is only about three quarters of a mile wide.

11,337. And about 12 miles long?—Yes.

11,338. How many vessels have you seen trawling off that bank at one time?—I have seen a great many indeed trawling there in the height of summer.

11,339. How many fathoms apart?—50 or 100.

11,340. Have there been as many as 50 vessels drifting with the tide and back?—Yes.

11,341. For how many weeks together will that go on?—The season did not last long at that time, but now it lasts longer.

11,342. How long will it last, at a rough guess?—Some of the Yarmouth vessels are there all the year round off and on.

11,343. Were you ever there yourself?—Yes.

11,344. How many weeks have you been there?—We used to come in then on the Friday.

11,345. You went week after week?—Yes.

11,346. For how many weeks would you be doing that?—For six or eight weeks.

11,347. Did you ever notice any difference at the

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end of six weeks in the quantity of fish taken as compared with the quantity taken at the commencement?—Not in the least, but it all depends on the weather and the tide.

11,348. Did the sternmost vessel get a less quantity of fish than the foremost?—There might be a little difference one vessel with another, but it was nothing to speak of.

11,349. Then on the average of the vessels trawling there backward and forward for six or eight weeks together, they would all get about the same quantity of fish?—Yes, one might get a great many more than another in one take, but on the average there would be very little difference.

11,350. But that might happen as much to a vessel at the front as to a vessel at the stern?—Yes.

11,351. The vessels that went first would not clear the ground for the vessels that came after?—No.

11,352. (*Mr. Lefevre.*) What is the greatest depth that you can fish with advantage in trawling?—We have been fishing in 40 fathoms of water in the Silver Pits.

11,353. (*Mr. Caird.*) Do you find that your sailing cutters which take the fish to the London market generally make the run in time to supply the fish fresh to the market?—Yes, with the assistance of ice.

11,354. Did you ever employ a steamboat to do that?—We have had steamboats to meet them off the light on the Ness.

11,355. Did it never occur to you to employ steamboats instead of sailing cutters?—We tried it one summer but it did not answer.

11,356. They did not answer?—The expense was very heavy and the steamer was never where she ought to be. It required two or three vessels to do it properly. We tried the experiment once and it did not answer.

11,357. (*Mr. Lefevre.*) You say that you have a steamer to meet the boats at the Ness in the summer?—Yes, occasionally.

11,358. Is that when there are light winds?—Yes.

The witness withdrew.

C. Spashett.

CHRISTOPHER SPASHETT called and examined.

11,358*a*. (*Mr. Caird.*) Have you been long acquainted with the fishing at Yarmouth, Mr. Spashett?—Yes.

11,359. Do you belong to Yarmouth?—No, I belong to Gorleston.

11,360. Are you yourself a practical fisherman?—Yes.

11,361. Are you at present engaged in the fishing business?—No.

11,362. Are you an owner of fishing smacks?—No.

11,363. Are you connected with them in any way?—Not now.

11,364. Were you for some years engaged as master of a fishing smack?—Yes.

11,365. Then you have a practical knowledge of the mode of fishing practised off this coast?—Yes.

11,366. How long is it since you were at sea in a fishing smack?—About 14 or 15 years.

11,367. In your experience here has the number of vessels employed in trawl-fishing increased or diminished?—It has very largely increased.

11,368. Is that increase still going on?—Yes.

11,369. Within your knowledge has the quantity of fish increased also?—Decidedly.

11,370. Does that apply to all kinds of fish?—Yes, to all kinds of fish.

11,371. There has been no diminution of any kind?—No.

11,372. Neither in the size nor in the quantity?—I think not.

11,373. Do you agree with the previous witness that the size of the haddocks has increased?—I do.

11,374. Are there any fishing grounds off Yarmouth which in your knowledge were prolific of fish formerly, but have ceased to be so?—No, none.

11,375. Are all the fishing grounds off Yarmouth as productive of fish as they ever were?—The quantity of fish caught now is quite equal to what it ever was.

11,376. Are there any line-fishers here?—I think not, belonging to the port of Yarmouth.

11,377. Have there never been any in your time?—No.

11,378. There has been no change then in fishing from line-fishing to trawling?—No.

11,379. In the boats that you have been connected with had the fishermen a share in the catch of the fish?—No.

11,380. They were simply paid wages?—Yes, they were simply paid wages.

11,381. Had they no per-centage on the produce of the fishing?—Not the fishermen, only the masters.

11,382. Has that always been the custom among the fishermen here?—It has during my time.

11,383. (*Mr. Lefevre.*) Were you the owner of the smack you were in?—I had several at one time, but I have none now.

11,384. Were you the owner of the one in which you sailed?—I was owner and sailing master also.

11,385. (*Mr. Caird.*) Is it the case that the fishermen employed here in trawling have principally risen from being common fishermen to be the owners of smacks?—Yes.

11,386. Is that the case with many fishermen here?—Not perhaps in this town, but it is in the place I come from, namely, Barking.

11,387. But not here?—There are a few I believe.

11,388. Have you ever observed in fishing with the trawl net that many of the fish are mangled or injured by the trawl when they are brought on deck?—No.

11,389. Are there any small immature fish caught by the trawl?—No; the mesh of the net is so large that very few are caught.

11,390. But do not the meshes draw together and become filled with rubbish or weed from the bottom of the sea occasionally?—I never saw any quantity of small fish taken.

11,391. But are there not always small fish taken?—There are a few at times.

11,392. Does that depend on the depth of water you are fishing in?—Sometimes in deep water we get a few, and sometimes we get some when we are fishing in shallow water.

11,393. What proportion of the fish you take will be small compared with that which will be marketable?—The proportion is very trifling indeed, simply a handful; sometimes there may be a few dabs and gurnets and such like.

11,394. What do you do with them?—We throw them away or give them to the boys.

11,395. But I understand you to say that no large proportion of the fish you take is of that kind?—No, very few indeed.

11,396. What quantity in weight of fish altogether will there be in an average haul?—Perhaps from two to three tons.

11,397. That is beyond an average, is it not?—Yes, that is decidedly beyond an average.

11,398. What is the largest haul you ever saw?—I think I have seen three tons taken at one haul.

11,399. Is that the largest?—I think so; there were about 140 score of haddocks, besides other fish, and I think the take altogether weighed about three tons.

11,400. Could you make two such hauls in a day?—No, we could not do that and get ashore to market with the fish.

11,401. Do you ever salt any of the fish on board when you could not bring them away fresh?—Very seldom.

11,402. Do you carry ice now?—Yes, there is ice on board all the cutters that carry the fish.

11,403. Do the fishing cutters carry ice?—There is no ice in the fishing smacks themselves.

11,404. And does it often happen that you are obliged to throw the greater part of your fish over-

board altogether, because you cannot get it to market?—Not very often, but it has occurred.

11,405. In stormy weather?—Yes.

11,406. There is no great proportion of the whole fishing lost in that way?—No.

11,407. Has the number of men employed in the fishing vessels increased in your time, and also the size of the vessels?—Yes.

11,408. Has the size and the length of the beam and of the net increased?—Yes; they are larger than they used to be.

11,409. Have you altered the size of the net in your time?—Yes, the net is larger than it used to be.

11,410. And the mesh is larger?—Yes.

11,411. Why did you alter it to a larger size?—We fancied that if a quantity of fish got in the net and any sand too there was a possibility of the net parting in consequence of the weight.

11,412. And you found it of advantage to enlarge the size of the net?—Yes.

11,413. Does it frequently happen that the net is broken in that way?—Yes, if the shealing is too small.

11,414. What is the cost of a trawl net?—A trawl net complete will cost from 8*l.* to 10*l.*

11,415. How long will it last?—That depends upon the ground over which it is worked. If the ground is clear and nice for fishing it will last two months at certain seasons of the year.

11,416. Do you not endeavour to choose a clear ground?—Yes.

11,417. Can you not ascertain at once whether the ground is clear when you put the net down?—We can, generally, before we put the net down.

11,418. How do you ascertain that?—By putting down the leads; we always do that.

11,419. You always do that?—Yes; a good fisherman would do so.

11,420. Do you agree with the previous witness, that wherever the ground is clear you can find fish off this coast?—Yes.

11,421. Then you have no need to go to any particular fishing bank before you can find fish?—No; we can find fish 15 miles off this shore, and right across over to the Dutch coast.

11,422. Then anywhere from 15 miles off the land here to the opposite coast you can find fish?—Yes, up to within 15 feet of water on the Dutch coast.

14,423. Then there is an immense extent of fishing ground open to you between this and the Dutch coast?—Yes; there is an immense ground indeed.

11,424. Do you suppose with all the vessels that have been fishing with the trawl, that the whole of that ground has been covered?—Most likely the whole of it has been some time or other.

11,425. The trawlers fish from side to side?—Yes, within 15 miles off this coast they do. With the exception of those 15 miles they fish from side to side.

11,426. And in the whole of your experience you have not found any particular part of the ground that appeared to be exhausted in consequence of being over-fished?—Certainly not.

11,427. Have you ever fished on the Dogger Bank?—Yes, on the south-east part of it.

11,428. Do you find that that is a better fishing ground than any other part of the channel?—It is a very good fishing ground, but the distance is very great.

11,429. What depth of water do you generally find to be the best depth for trawling, or has the depth of the water any effect in trawling?—The best depth is from 22 to 24 fathoms. We generally find more fish in that depth, unless in the summer time, and then we find fish in the shallow waters.

11,430. What depth of water is there on the Dogger Bank, I mean in that part which you are in the habit of fishing?—I have not been trawling there, but I have been lining there. I have never been trawling on the Dogger Bank.

11,431. Is it about 20 fathoms deep?—About 17 or 18.

11,432. (*Professor Huxley.*) Are you a Barking man?—Yes.

11,433. Are the vessels that have come here of late years mostly Barking vessels, or are they vessels that have been built here?—They are vessels that have been built here.

11,434. Are no Barking vessels brought here?—No.

11,435. They are vessels that have been built in this place?—Yes, the whole of them.

11,436. Are you aware of what Mr. Hewett stated about Smith's Knoll. I mean with regard to the fishing up and down the ground there?—Yes.

11,437. Do you agree with that?—Yes.

11,438. Do you know a fishing bank called Brown Ridge?—No, I know a place called Brown Bank.

11,439. It is marked Brown Ridge on the chart; it is a great place for fish, is it not?—Yes, it is a very extensive ground.

11,440. Do the herrings gather there as well as other fish?—I have never seen any herrings there.

11,441. Are you a herring fisherman?—No, I am not.

11,442. Is there a great quantity of flat fish there?—Yes, a great quantity at times.

11,443. Have you any notion of the reason why fish gather on those banks and on such places as the Brown Ridge and Smith's Knoll?—We consider the reason to be that the ground is rich in food.

11,444. Did you ever examine the stomachs of the fish when you gutted them?—Yes.

11,445. What did you find in them?—Soft mud, shells, small fish, and so on.

11,446. Did you ever find spawn in the stomach of the turbot?—No, I never saw any.

11,447. Did you ever find it in the stomach of the haddock?—Yes.

11,448. What kind of spawn was it?—Herring spawn.

11,449. What time of the year did you find it?—We generally find it when we take it with a hook.

11,450. What time of the year would that be?—In October, and part of November.

11,451. Whereabouts did you find it?—Most likely in the north-east Knoll, about 36 miles from Cromer.

11,452. Do you think that is a place where the herring spawn?—They do spawn there no doubt.

11,453. Did you ever find herring spawn in the stomach of the turbot?—Never.

11,454. Do you agree with the last witness as regards the size of the haddocks?—Certainly I do, they are very fine now.

11,455. You do not think that there has been any falling off in the last 30 years?—I do not.

11,456. Do you think they are scarcer than they used to be, or are they quite as plentiful?—They are quite as plentiful; you can put your net down and get 150 score at a draught off the Dogger Bank.

11,457. Did you ever see spawn come up in the trawl?—Never on any one occasion to my knowledge.

11,458. You said just now that you had nothing to do with the herring fishery?—No, I am not a herring fisherman.

11,459. Have you ever had anything to do with the mackerel-fishing?—No.

11,460. (*Mr. Lefevre.*) How long is it since you came from Barking?—About nine years.

11,461. How long did you work there?—About 41 years.

11,462. What wages do the fishermen get here?—The common fishermen will get 16*s.* and the masters 18*s.*

11,463. Has there been any diminution in the wages of the fishermen?—No, they are the same now as they have been during the last 25 or 30 years.

11,464. Are they the same here as at Barking?—I think they are quite as good, they are certainly not less.

11,465. Have you any complaint to make of the number of trawlers off this port?—No, certainly not.

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11,466. You think there is plenty of room for them?—Yes, and for 500 sail more.

11,467. There is plenty of ground for the trawlers to go over?—Yes, plenty.

11,468. (*Mr. Caird.*) Did you ever trawl within the headlands in the bays along this coast?—Never.

11,469. We have had complaints made to us by the line fishermen that the trawl-vessels further north come in to the injury of their in-shore fishing in the bays; you say that you never did that?—No, I never knew a case of the sort.

11,470. Is it the practice for all the trawl-boats at Yarmouth to fish at the same distance from the land and not within the bays?—They all fish in the deep sea.

11,471. And never in the bays?—Never to my knowledge, always in the deep sea.

11,472. Do you think that any restriction could be imposed on your mode of fishing with advantage to you?—I think not.

11,473. You think it better that you should be left entirely to follow your own plans as to the size of the vessels, the size of the nets, and the size of the mesh of the nets?—I do.

11,474. (*Mr. Lefevre.*) Do many of the trawlers land their fish here or do they mostly send them to London?—The whole of the vessels belonging to this port land their fish here.

11,475. Do they send it here by cutters?—Mostly by cutters.

11,476. Is there any means of ascertaining the quantity of the fish landed on the beach here?—I think not.

The witness withdrew.

N. Apter.

NICHOLAS APTER called and examined.

11,477. (*Mr. Caird.*) Are you a fisherman here?—Yes.

11,478. Are you master of a fishing vessel?—Yes.

11,479. Have you been long engaged in that capacity?—From 15 to 20 years. It is 20 years since I first went fishing, I think.

11,480. Have you continued during those 20 years to be fishing off this place?—I have followed nothing else but fishing.

11,481. What is the size of the vessel you have charge of?—60 tons, according to the old measurement.

11,482. Have you any share in the vessel yourself?—Yes.

11,483. Have you observed in your experience during the last 20 years whether the quantity of fish has increased or diminished?—It has increased.

11,484. What have been the size and quality of the fish?—They have been a great deal larger in size and there have been more fish too.

11,485. Has there been no change made in the size of the vessels you have been in the habit of fishing in during those 20 years; is the vessel in which you fish now larger than it was formerly?—Yes.

11,486. Do you use a larger net?—No, it is not so big as it used to be.

11,487. What is the size of the net now?—16 feet goring and 16 feet bosom.

11,488. What is the length of the beam?—36 feet.

11,489. Is that larger than it used to be?—No, not so large.

11,490. What is the reason you have taken to a smaller net?—Because there is more tide here and when it runs strong it shuts the nets up.

11,491. Do you require a different kind of net in fishing different places?—Yes.

11,492. Where the tide runs strong do you require a smaller net?—Yes.

11,493. Does that apply chiefly to in-shore fishing?—No.

11,494. At what distance from the shore do you chiefly fish?—I have been about 150 miles from Yarmouth this time.

11,495. On the Dogger Bank?—Yes.

11,496. Is there any part of the fishing ground on this shore that you have been principally in the habit of frequenting during the last 20 years?—I have been off all parts.

11,497. Have you been repeatedly in the habit of going over the same ground?—Yes.

11,498. And at the same season?—Yes.

11,499. And you never found that you had exhausted the quantity of fish on that ground?—No, according to the different seasons of the year the fish take away. They may be found at one place at one season and at another another.

11,500. You follow them from one ground to the other?—Yes.

11,501. What is the reason that has induced you to go to the Dogger Bank lately?—There are so many vessels on this coast that if we were all to remain here there would not be a living for the whole of us. We are obliged to distribute ourselves, so that we may not get foul of each other.

11,502. Are there many vessels fishing close in-shore now?—No, not close in-shore?—I think the nearest the shore they come is Smith's Knoll.

11,503. How many miles is that?—22.

11,504. How many boats are there, now?—I don't know.

11,505. Have you not fished there this season?—No, not for two seasons.

11,506. Then during these two years where have you been fishing?—About Botany Gut, and the Silver Pits, and across to the other side—to Schelling and the Texel.

11,507. Do you find that you can make as good a run with your fish to London from those more distant places as if you were fishing nearer home?—We like it much better because we can find more fish.

11,508. You can find more fish?—Yes.

11,509. Has it always been the case that you can find more fish by going a greater distance?—When I first went to sea there was not one half or one quarter the quantity of fish caught that there has been caught during the last five years. I have been on the Dogger Bank and in a three-hours haul I have got as many fish as we could get on board.

11,510. When was that?—This season.

11,511. You have been there this season?—Yes.

11,512. And you got a good haul?—Yes; in four weeks during the season we caught 326 packages of fish.

11,513. What weight would there be in each package?—Three half cwts.

11,514. What kind of fish did the catch principally consist of?—Haddocks and plaice.

11,515. Do you agree with the previous witness, that the quality of the haddocks is as good as it used to be or is even better?—Yes, and I sincerely believe that more fish are caught every year.

11,516. Has there been any great increase of vessels fishing on the Dogger Bank lately?—There have been about 60 sail fishing here.

11,517. When you first went on the Dogger Bank was it much frequented by vessels?—Not when I first went.

11,518. Have you no idea of the increase that has taken place in the take of fish on the Dogger Bank as compared with five or six years ago?—No.

11,519. Nor upon any other part of the grounds that you are more familiarly acquainted with?—I can only say that the more smacks there are the greater the quantity of fish appears to be. I have never seen any scarcity of fish at all.

11,520. I think you said just now that the smacks were so numerous on the coast that you found it of advantage to go further out in order to get a living?—Yes.

11,521. But if you get more fish the more you fish

why should you go further out?—We always get more fish down to the northward. We get more soles at this part at Yarmouth, but more offal there.

11,522. What do you call "offal"?—Haddocks and plaice.

11,523. They are called offal in the trade?—Yes.

11,524. Is that because they are caught in the largest quantity and bring the lowest price?—I suppose so.

11,525. Do you get many cod and turbot?—Not many cod. We get one or two turbot, perhaps two or three in a haul.

11,526. Can you stay out in all kinds of weather in your vessel?—Yes.

11,527. Do you keep the sea in stormy weather?—Yes.

11,528. Do you ever render assistance to vessels in distress?—Yes.

11,529. Do you ever act as pilot?—Yes.

11,530. Do you ever come upon the long-lines of the long-line fishermen?—No.

11,531. Did you never foul any long-lines in your knowledge and experience?—No.

11,532. Do many of the fish come up in the trawl mangled?—I can't say.

11,533. I mean mangled and knocked about, so as to unfit them for being sent to the market?—There are not many unless we may jump upon one or two when we get them in.

11,534. Will they be so injured that they cannot be sent to market?—Sometimes we may jump upon some of them when we are hauling them in, and injure them.

11,535. What is the largest quantity of fish you have caught in one haul?—About 30 baskets, but more have been caught by other fishermen.

11,536. What is the largest quantity you have heard of?—Seventy baskets.

11,537. Seventy baskets, each weighing one hundred weight and a half?—Yes, but we don't get them all in at one time.

11,538. What do you mean?—We have to sweep the net and get them on deck at different times.

11,539. You don't lower the net again?—No, they are all in the net.

11,540. At the same time?—Yes.

11,541. Does it frequently happen that you don't get any at all?—Yes, when we have had a calm we have had the net down for 24 hours, and have not got enough for a single person to eat.

11,542. Does that often happen?—No, only when it is calm, and there is no wind to take us over the ground.

11,543. In such a case the vessel would be comparatively stationary?—Yes.

11,544. In short you would not fish the ground at all?—No, she has had her anchor down.

11,545. Do you find that you get the best fishing when you get a strong breeze, or a nice gale?—We get the best when we have a nice wind. In stormy weather we don't put the trawl down at all.

11,546. Not when it blows a heavy gale?—No.

11,547. (*Professor Huxley.*) Do you ever get fouled with the drift nets?—Never.

11,548. Never in all your experience?—Yes, I think I did once.

11,549. That was at night, I suppose?—It was in a thick fog.

11,550. In the night time?—Yes.

11,551–2. Do you carry any particular kind of lights?—Yes, the mast head light, as the club requires.

11,553. What club is that?—The club the vessels belong to at Hull.

11,554. Do you belong to a club at Hull?—Yes, and we are required to carry a light such as other ships have for anchor lights.

11,555. Suppose you were working your trawl, and you came across the drift men with their nets out, are you bound to get out of their way?—Sometimes we cannot do so.

11,556. Do you feel any obligation to get out of the way?—We do if we can.

11,557. Is that for any particular reason?—No.

11,558. Do you know that you are punishable if you don't do so?—I have heard so.

11,559. Were you ever punished?—No.

11,560. Have you ever heard of anybody that was?—I believe some have been punished at Hull.

11,561. Did it ever happen to any fishermen in this neighbourhood, or on this coast?—No.

11,562. Are there any vessels about here at the time the herring fishing is going on?—Yes.

11,563. I mean Revenue cutters, or Government vessels?—I don't take any notice of them.

11,564. Have you yourself ever had anything to do with the herring-fishing?—No.

11,565. You heard what the previous witness stated respecting boats fishing one after the other?—That was not here.

11,566. The question I put was this, whether in trawling a number of vessels can work backwards and forwards over the same ground, and within a short distance of each other. Have you found that to be the case commonly?—Yes.

11,567. In such circumstances, is there any noticeable difference in the quantity of fish one will get as compared with the quantity taken by others?—Sometimes one will get more than another.

11,568. Would it be the foremost vessel or the sternmost?—I never took any notice.

11,569. Then it can't make much difference?—No.

11,570. Have you ever been fishing on Smith's Knoll under such circumstances?—Yes.

11,571. It is a narrow bank, is it not?—Yes.

11,572. How many vessels have you seen fishing there?—Perhaps 30 at a time.

11,573. What distance will they be apart?—A very short distance indeed; they speak to one another at times.

11,574. They are engaged in working backwards and forwards with the tides?—Yes.

11,575. Did you ever know which caught most, the sternmost or the foremost vessel?—Sometimes the sternmost, and sometimes the foremost.

11,576. How many weeks have you known these vessels to be fishing backwards and forwards over that bank?—Not more than three or four weeks. They shift about and go elsewhere.

11,577. Why do they shift?—Because the fish take off.

11,578. The fish go away?—Yes.

11,579. Did you find that you caught fewer fish at the end of four or five weeks?—Yes; less were caught at the end of four or five weeks than at the beginning. Sometimes at the beginning of May we go there and find there are no fish there at all.

11,580. Do you believe that the fish go there at particular seasons?—Yes.

11,581. It is not the fishing that takes the fish away?—No, not the fishing, that has no effect upon them. I believe that every trawl that goes over the ground, the more it disturbs the bottom, and brings up insects, gives the fish a greater opportunity of obtaining food. In my opinion that is the reason why more fish are caught year after year.

11,582. Then you think that trawling is a positive benefit?—Yes; I compare it almost to a farm. If you plough the fields and cast out all that is bad, year after year you get a better crop; so it is every year with us, we disturb the ground at the bottom of the sea and by disturbing the ground the sile comes up and the fish get a better opportunity of feeding upon it.

11,583. Have you ever had anything to do with mackerel-fishing?—No.

11,584. (*Mr. Lefevre.*) How long have you been the master of a fishing boat?—12 years.

11,585. What share do you get of the take?—A share, a quarter, and half a quarter.

11,586. Out of how many shares?—Out of eight shares, that is the master's wages.

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11,587. Do you find that your share comes to more or less now than it did when you first began?—It comes to more, but I find that things are a great deal dearer to buy.

11,588. What are your wages, including your share?—I never reckoned up. Sometimes we don't get more than 10*s.* a week.

11,589. What are your wages besides your share?—I have nothing more. We sail differently in our vessels from what they do at Yarmouth.

11,590. You depend entirely upon the take for your wages?—Yes; if we don't get any fish we don't get any money.

11,591. Who does the boat belong to?—Partly to me.

11,592. Who owns the rest of it?—My aunt.

11,593. Is that the only vessel you have got?—Yes.

11,594. Do many of the boats here belong to single persons or do they mostly belong to companies?—Generally to single persons.

11,595. Then do they sell their fish to the cutters that come out to sea?—We send it by the cutters to the salesmen.

11,596-7. Do you pay the cutters for the carriage?—Yes.

11,598. How long is it that your boats have been fishing on the Dogger Bank?—For the last seven or eight years.

11,599. You yourself have only been there during the last two years?—No; it is six years since I first went.

11,600. How far out towards the Dogger Bank do you go, ?—About 100 miles from land? I don't go right to the Dogger Bank.

11,601. You don't go quite as far as the Dogger Bank?—Perhaps I may go for 15 miles upon it.

11,602. You don't go to the further end of the Dogger?—No, if we did we should never get back again.

11,603. The cutters don't go as far as that?—No.

11,604. Do you come in-shore to meet them?—Yes. Sometimes we come in sight of land before we meet them.

11,605-6. Is the quality of the fish caught on the Dogger better than that caught elsewhere?—No, it is according to the season.

11,607. Are the haddocks finer?—Yes, they are very fine fish.

11,608. But are they finer than the haddocks caught on other grounds?—No, I think not.

11,609. Then there is no peculiar excellence in the quality of the fish caught upon the Dogger?—No. They go according to the time of the year. At this time of the year they are very good. Perhaps in the middle part of the summer they will be a little worse.

11,610. What is the reason of that?—I don't know.

11,611. Do they fish on the Dogger Bank in the summer?—No, they are too far away from market.

11,612. The fish would not keep as well, I suppose?—No.

11,613. Do you agree with the last witness that there is plenty of room for all the trawlers on the coast?—Yes.

11,614. And for more vessels?—Yes.

The witness withdrew.

I. Bridges,

ISAAC BRIDGES called and examined.

11,615. (*Mr. Caird.*) You are the master of a trawling smack here, I believe?—Yes.

11,616. Are you part owner?—No.

11,617. Have you long been master of a trawling smack here?—For 18 years.

11,618. Do you hail from here?—Yes.

11,619. What size is your smack?—40 tons.

11,620. What is the length of the beam of your trawl?—36 feet.

11,621. Have you increased the length or diminished it in recent times?—I have never seen any difference.

11,622. Have you always had it 36 feet long?—Yes, from 35 to 36 feet.

11,623. You have found that practically to be a good length?—Yes.

11,624. You are not influenced by the run of the tide in having it short at one time and long at another?—No, I never go far from here.

11,625. Do you go far out to sea?—Quite across to the opposite shore at times.

11,626. Do you go to the Dogger Bank?—No.

11,627. Are there any particular grounds off this shore which you have been in the habit of frequenting constantly, that are not yielding as many fish now as formerly?—No.

11,628. You get as many fish now as formerly?—Equally as many in each vessel, and of course more altogether as there are more vessels.

11,629. Do you know whether the number of vessels has been largely increased?—Yes, it has doubled and even trebled.

11,630. Not only from here but from other places?—I am not much acquainted with other places.

11,631. But the increase is not confined to vessels from Yarmouth?—No.

11,632. Do you find that the number of vessels is increasing on the grounds you frequent?—Yes.

11,633. Do the Dutch vessels come across here?—They come trawling within 45 miles.

11,634. Do you and they frequently trawl on the same ground?—Yes, frequently.

11,635. Both here and on the coast of Holland?—Yes.

11,636. Do the French vessels also come here?—Yes.

11,637. Are they as successful as you or not?—I don't know. I can't understand them if we speak to them.

11,638. Do you often go to the coast off Holland?—Yes.

11,639. Nobody interferes with you?—Nobody in the least. They allow us to go anywhere off the coast of Holland.

11,640. You can fish there where you like?—Yes.

11,641. Within the three-mile limit?—Yes.

11,642. Is there no three-mile limit observed on that coast?—No.

11,643. You have never been ordered off?—No.

11,644. You have never been interfered with in any way?—No.

11,645. Do the foreign fishermen bear any grudge or express it in consequence of your going upon their ground?—No.

11,646. Nothing of that kind occurs?—No.

11,647. You don't bear any grudge to them if they come upon your coast?—No.

11,648. You don't find that you do any injury to each other?—No.

11,649. You think there is plenty of room for all?—Yes.

11,650. Are the quality and size of the fish as good as they used to be?—Yes equally good.

11,651. Is there any kind of fish that has fallen off or decreased in quantity?—I know of no falling off.

11,652. Do you get as many haddocks as you used to get in proportion?—Equally as many.

11,653. Do you get as many cod in proportion?—We don't catch many cod.

11,654. Where are the cod caught that go to London?—Mostly down to the northward.

11,655. Are they caught by line fishermen?—Yes.

11,656. Then all those fine cod we see in London are caught by line fishermen?—I imagine they are mostly.

11,657. The trawl fishermen don't catch those fish in any large proportion?—No.

11,658. Do they catch turbot?—Yes they do.

11,659. Do they supply the largest quantity of turbot that goes to market in London?—The trawl men supply the largest quantity.

11,660. You catch turbot in the trawl?—Yes.

11,661. Do you get as many as you used to get?—Quite as many.

11,662. Do you get more?—I don't know that we get more. We get five or six some nights but at others we don't get one, and that has been the case ever since I have been at sea.

11,663. You don't observe any difference in the average catch nor in the quality?—No.

11,664. Do you find that your trawl injures the fish sometimes by mangling them?—No, I never saw them mangled or rendered unfit for sale.

11,665. Do you bring up many small fish?—No, not a great many.

11,666. On some particular grounds do you bring up a larger proportion of small fish than on others?—The fish are smaller in some places.

11,667. What do you do with the small fish?—Those that we consider of no good we chuck overboard.

11,668. Out of 30 baskets how many would you throw overboard?—Sometimes we get a basketful or half a basketful in a night's catch. There is no more than that of no service to us.

11,669. What becomes of these small fish?—The other fish eat them I believe.

11,670. You think they do?—I imagine that a great part of them do.

11,671. What do you consider an average take of fish in one haul by a trawl-boat?—I don't know.

11,672. What weight—what number of baskets?—They vary a great deal; sometimes we may get five or six, sometimes three or four, sometimes nine or ten.

11,673. What is the largest number you ever saw?—I never saw more than 40.

11,674. What will be the average quantity, taking a good boat, caught in the season?—I am sure I don't know; the fishing season is all the year round.

11,675. Well take all the year round?—I can't give much idea about the matter.

11,676. Do you fish upon the same ground in the summer time as in the winter time?—No, we go right across in the summer time into the shoal water.

11,677. Is that chiefly on the Dutch coast?—Yes.

11,678. Do you send the fish to market there?—We send them here.

11,679. You send them to Yarmouth for London?—Yes.

11,680. The Dutch coast is nearer to you than the Dogger Bank?—Yes.

11,681. It is a shorter distance for you to sail to the Dutch coast than to the Dogger Bank?—Yes.

11,682. In the summer time do you generally bring the fish in fresh to market?—Yes, the cutters have ice.

11,683. You send them over in ice in cutters?—Yes.

11,684. When they come here do you know what market they chiefly go to?—Chiefly to Billingsgate.

11,685. Is there nothing sent direct to Manchester, Birmingham, Leeds, and other large towns?—I dare say there is, but I don't know much about the markets inland.

11,686. Have you any interest in the price of the fish?—Yes, I get a per-centage.

11,687. You get a per-centage on the produce of your fishing?—Yes.

11,688. Has the price of fish increased during late years?—I don't see any difference; some seasons the price is better than at others.

11,689. But there has not been any marked difference in the price between one year and another?—No.

11,690. Are the cod not much dearer than they were 10 years ago?—I don't know much about cod.

11,691. Are turbot any dearer than they were 10 years ago?—I don't know much about the price of turbot.

11,692. Are you engaged in the herring-fishing at all?—No.

11,693. Then you have no knowledge upon that point?—No.

11,694. (*Professor Huxley.*) You have seen the Dutch fishermen fishing?—Yes.

11,695. Do they work with the same kind of trawl that you do?—Something after the same sort; but I don't know exactly how their trawls are fished.

11,696. You never examined them closely?—No; they generally fish with two trawls.

11,697. One on each beam?—No, one forward and one aft.

11,698. On the same beam?—Yes.

11,699. Have you any notion what is the length of their beam?—About 31 or 32 feet.

11,700. Do they carry the trawls on one beam 31 feet long?—Yes.

11,701. Then they can't work as fast as you do?—Yes they do.

11,702. (*Mr. Lefevre.*) Have they larger boats?—No, their boats are smaller.

11,703. (*Professor Huxley.*) Do they carry more sail?—No; they drift faster with the wind and tide. They are a great deal lighter than our boats, and their gear is lighter.

11,704. What is the size of the mesh they use?—I don't know.

11,705. Do you know the length of the net?—No, I don't know the length of the net, but the beam to the best of my knowledge will be 31 or 32 feet.

11,706. What number of men do they have in their crew?—I think they have seven.

11,707. That is larger by three than the crews of your boats?—No, we generally have seven.

11,708. You have as many as seven?—Yes.

11,709. (*Mr. Lefevre.*) Do you think they take a larger quantity of fish than you?—I don't know. I think it is likely that they do sometimes.

11,710. Have you seen the French working?—Yes, frequently.

11,711. Do they use two trawls?—No, only one.

11,712. Is it of the same make as yours?—About the same thing.

11,713. Is your share the same as that of the last witness?—No.

11,714. What is yours?—I get 14*s.* a week, and 1*s.* in the pound upon the vessel's earnings.

11,715. Has that been the same for the last 18 years?—Yes.

11,716. Do you find that you make pretty much the same earnings now that you did when you first began?—Yes, it is quite equal if not more; I think it is more.

11,717. Have you noticed any increase in the price of fish during that time or not?—I don't know much about the price of fish.

11,718. You can give us no idea whether the average price is the same?—No.

The witness withdrew.

G. Pellett.

GEORGE PELLETT called and examined.

11,719. (*Mr. Caird.*) You are the master of a trawling smack here?—Yes.

11,720. Have you been long in that capacity?—Twenty-five years.

11,721. Twenty-five years hailing from Yarmouth?—No, not from Yarmouth all the time; I hailed from London part of the time.

11,722. How long have you hailed from Yarmouth?—Four years from Yarmouth.

11,723. What is the size of your vessel?—Forty-nine tons.

11,724. What is the length of your beam?—Thirty-seven feet.

11,725. Have you ever had it of any other length?—Yes, I had it 36 feet.

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11,726. Did you ever have it 40 feet?—No.

11,727. Do you find that 37 feet is a good length?—Yes, a very good length.

11,728. Does the size of the beam at all depend upon the size of the vessel?—If the vessel is large you are obliged to have a larger beam in order to work the trawl.

11,729. You have a beam to correspond with the length of your vessel?—Yes, in order to keep it clear of the stern when it it is drawn up.

11,730. Have you during all the time you mentioned fished on this coast?—Yes, generally speaking on this coast.

11,731. Where have you been fishing lately?—Off here and around the coast.

11,732. You fish off this coast 40 or 50 miles?—I have been fishing various lengths.

11,733. Have you been in the habit during most of these years of frequenting the principal fishing grounds between this and Holland?—Yes.

11,734. Have you fished off the Dogger Bank?—I have been on the Dogger.

11,735. Often?—Yes.

11,736. Have you ever been to the north of the Dogger?—No.

11,737. Have you ever gone to fish on the Yorkshire and Northumberland coast?—Yes, I have been along there, not fishing with the trawl but with the line.

11,738. Is that recently?—I have not been there for the last nine years.

11,739. Then during the time you have been a fisherman on the fishing grounds on this coast and between this coast and Holland and on the Dogger Bank, have you observed whether the take of fish has increased or diminished?—There are as many fish as ever there were.

11,740. You find that with your own boat you can get as many fish as formerly?—Yes, much more than in former years

11,741. Do you find that any particular ground has been fished out?—No.

11,742. You always expect to obtain fish on whatever ground you put down your trawl?—Yes, wherever there is smooth ground.

11,743. Wherever there is smooth ground you go with as great confidence as you ever did before?—Yes, just the same.

11,744. With the expectation of finding fish?—Yes.

11,745. Have you observed that the number of boats going to the same grounds has greatly increased—Yes.

11,746. Are there two boats for one now?—Yes.

11,747. They have more than doubled compared with what they were?—Yes.

11,748. Compared with 10 years ago?—No, not compared with 10 years ago.

11,749. How many years ago?—20 years ago.

11,750. At what time did the largest increase of boats take place?—I cannot say.

11,751. Has it been gradual?—The number has been gradually increasing.

11,752. Is it increasing now?—Yes.

11,753. Is it increasing every year?—Yes.

11,754. Does every boat seem to get as good a take as it did formerly?—Yes.

11,755. Then the quantity of fish taken altogether must have greatly increased?—Yes, it has increased. I think the more you disturb and pull the ground about the more fish there is.

11,756. You stated that you were a line fisherman formerly?—Yes.

11,757. How long did you practice that?—For nine years, I never put a trawl down.

11,758. You were a long-line fisherman?—Yes, I fished with the long-line, and with the hand-line too.

11,759. (*Mr. Lefevre.*) Where from?—From London.

11,760. (*Mr. Caird.*) As a line fisherman did you go out into the deep sea some distance from shore?—Yes.

18,761. Did you ever fish in the bays?—Never in the bays. I was always a deep-sea fisherman and never in-shore.

11,762. Did you ever find that the trawlers interfered with the lines of the long-line fishermen?—The trawl will not touch them; it will go over them.

11,763. I don't speak of the fouling of the line, but of the fact alleged by the line fishermen in the north with regard to the destruction of spawn and of young fish. They say that the quantity of fish has generally decreased. Did you hear that complaint made when you were a line fisherman?—No.

11,764. Have you observed the trawl-vessels working the trawls when you were a long-line fisherman?—Yes, I have seen them go over my lines.

11,765. When your lines were set?—Yes.

11,766. And they did not touch your lines?—No. They passed over the top. The lines were always close to the ground and the trawls would not touch them.

11,767. Have you ever seen them foul the lines and pull them up?—Never, I have seen them repeatedly go over them.

11,768. What is the length of the lines from end to end?—I cannot tell exactly. I have had out about 12 miles.

11,769. How many hooks on the line?—36 hooks on the line.

11,770. How many lines tied together?—I don't know.

11,771. How many miles would you cover altogether with one long-line?—Each line is 40 fathoms and we have two lines in a piece.

11,772. How many pieces are attached together when you set your lines?—Nine off the Dogger.

11,773. That will be 720 fathoms?—Yes.

11,774. Then your lines would be a mile in length altogether?—Do you mean they would be all a mile long.

11,775, Yes?—Yes, they would be twelve.

11,776. Twelve miles in length?—Yes.

11,777. How many hooks have you on each of these lines?—36 on a line. A line is 40 fathoms long and two lines are what we call a piece. I have been shooting 80 or 90 of these pieces.

11,778. Ninety pieces 80 fathoms long?—Yes.

11,779. That according to my computation would be about 6,500 hooks?—Most likely.

11,780. How long does it take to bait these hooks?—We bait them as we draw them up.

11,781. What quantity of bait would it take to bait such a length of line?—About four or five bushels of whelks.

11,782. Do you generally bait with whelks?—Yes.

11,783. What quantity of fish did you catch?—Sometimes we had a great haul and sometimes not so many.

11,784. Had you ever as many on an average as you would get in a haul of the trawl?—Yes, more.

11,785. On an average you would get more?—I have seen 100 score in a shot; I have got 20 score of cods in a shot.

11,786. What length of time would it take you to get your lines baited, set, and drawn up?—It generally takes us a day. That is our day's work.

11,787. It takes you a day then to go over the lines once?—Yes; we put them out two hours before daylight, and then, as soon as it comes daylight, we commence hauling them in. It takes us all day to get them in.

11,788. Does the cost of lines 12 miles in length exceed the cost of a trawl net?—Yes, they cost a very great deal more.

11,789. Would the cost attending them—the cost of bait—be greater than in the case of a trawler?—Oh yes.

11,790. Is it a more expensive mode of fishing than trawling?—Yes, much more expensive than trawling.

11,791. Is there greater hazard attending it in regard to the loss of your lines?—That depends upon circumstances. If you have your lines shot when there comes

on a gale of wind in all probability you will never see them more.

11,792. Do you never lose your trawl net?—Sometimes we do; sometimes we break the rope on the gunwale and lose the lot.

11,793. Taking the year's fishing, would it require more capital to conduct a fishing vessel with long-lines than a trawl-vessel with a trawl net?—Yes, considerably more.

11,794. The wages and material in every way would cost more?—Yes.

11,795. At the end of the season would you find that you have got more fish with a trawl net than with the long-lines?—Yes.

11,796. Then you think that trawl-fishing is more productive for the capital employed?—Yes.

11,797. (*Mr. Lefevre.*) Are there many long-line fishermen from Yarmouth now?—No.

11,798. Do you come across many of them between here and the Dutch coast?—No.

11,799. How are your wages paid; are you paid by share?—I have 14*s.*, and a per-centage of 1*s.* in the pound upon the earnings of the boat.

11,800. Do you find that your wages have diminished or increased since you have been master?—Very little. I don't see much difference.

11,801. Did you find, when you were a line fisherman, that your fish sold for a better price than fish caught by the trawl?—I never saw much difference. Sometimes they would, according to the market. Sometimes cod would sell better. Cods caught by the line would sometimes fetch a very high price, but it varied very much. Occasionally it would be very high and occasionally very low.

11,802. Was it an advantage to bring them on board alive?—Yes.

11,803. With the exception of the cod, did you find much difference?—No, none whatever.

The witness withdrew.

WILLIAM HOLT called and examined.

W. Holt.

11,807. (*Mr. Caird.*) You are the master of a Yarmouth trawler?—Yes.

11,808. Have you long been engaged as a fisherman here?—Yes, for 20 years.

11,809. Have you ever been a line fisherman?—No.

11,810. Have you ever had any experience at all except as a trawl fisherman?—That is all the experience I have had of fishing.

11,811. What is the size of your vessel?—44 tons.

11,812. What is the length of the beam of your trawl?—36 feet.

11,813. That seems to be the ordinary length here? Yes.

11,814. Are there any beams here that are 40 feet long?—Not that I know of.

11,815. Have they never been more than 36 or 37 feet?—I have worked a larger beam in the north.

11,816. But here you find 36 or 37 feet sufficient for your purpose?—Yes.

11,817. Would you object to have it larger?—Yes. The current in general where we work runs very strong, and when the wind falls light our nets would close. We could not keep them open, and for that reason we could not satisfactorily work a larger trawl.

11,818. Have the nets a tendency to close more in calm weather than in blowing weather?—Yes; the length of the net would fall down in drifting with the tide; it would not admit the fish to the net; they would not get to the far end, and the result would be that we would not catch them.

11,819. Would you not catch fish if the beam were much larger?—No.

11,820. In what kind of weather do you catch most fish?—In middling weather with two reefed sails.

11,821. At what rate would you drift?—About 3½ knots an hour, with the tide and all. The tide will take us about 2 or 2½ in most places where we fish, and the vessel would drift perhaps a knot or a knot and a half; we force them along. We don't like a dead drift, we prefer forcing the boats along with canvass.

11,822. You go faster than the tide?—We like to go faster than the tide. We go very little faster in catching soles, but when we are catching haddock and plaice we go rather faster.

11,823. Is there any means by which you can tell whether you are catching haddock or soles?—We can't tell until we heave up the net.

11,824. When you do that you know what rate you ought to go?—We make one haul, and according to what we find we work.

11,825. If you find haddocks and plaice you make more sail and go faster?—Yes.

11,826. But if you find you are catching soles you take in your sails and don't go so fast?—Yes, we go very easy in general.

11,827. Do you always fish with the tide?—Yes, as near as we can.

11,828. You take the same run as the tide?—Yes, as near as we can. The wind will not always allow us to do so; but the nigher we go to the run of the tide the greater benefit it is to us.

11,829. Do you ever fish against the tide?—We can't do that; the net would not go to the bottom. It lifts up. We can't fish against the tide.

11,830. How far off the shore do you generally go?—From 15 miles off here to the coast of Holland.

11,831. Are there particular seasons at which you fish on this side and at the other side?—We generally cleave to the shore on the other side in the middle of the summer, but the fish on this side is a good deal better in quality than on the Dutch coast. If we find it is not plentiful on this side, then we go to the other.

11,832. They are better in quality on this coast than on the Dutch coast?—Yes, where there is the heaviest tide the fish are always better.

11,833. Are they larger in size?—I don't know much about the size, but the more the ground is disturbed and cultivated the better the produce is that comes from it.

11,834. Do you mean that the fish are better fed?—Yes.

11,835. Are they firmer fish?—Yes.

11,836. Fatter fish?—Yes, they are kept in more constant exercise, and are not allowed to lie and grow dead and black.

11,837. Has your fishing not been better on the Dutch coast? Trawling has been constantly carried on there?—Yes, it is better now than it was 20 years ago.

11,838. Is that because the ground has been more fished?—I have no doubt of it.

11,839. Do you often fish among the Dutchmen?—Very frequently.

11,840. Do they come among you?—About 40 miles from the shore is the nearest they come. They dare not come any closer; their trawls are lighter than ours and would be pulled to pieces if they came on our rough ground here.

11,841. Their gear will not permit them to trawl nearer?—No.

11,842. Is the ground off the Dutch coast smoother than it is here?—Yes, it is very fine all along for 150 miles. It is very fine from the lower part of the Flemish banks down to Schelling and even below that. With the exception of a little place off the Texel it is smooth ground all the way.

11,843. Have you fished on the Dogger Bank?—I went there in the first part of my time, but I have not been there of late years. I was there about the time there were a great many fish caught in the Silver Pits.

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11,844. The Silver Pits are south of the Dogger?—Yes, betwixt that and the Well Bank.

11,845. Are there any grounds which you have been frequenting all the time you have been a fisherman that have shown signs of being fished out?—No.

11,846. No fishing bank has become exhausted of fish?—Not anywhere off here for 150 miles.

11,847. No bank has shown signs of diminution?—No; I take it that all of them have increased.

11,848. Do you ever come upon the long-line fishermen when you are trawling?—Very seldom; they don't come upon our grounds except outside the sands, and there we don't go with our trawls.

11,849. Do you bring up many fish in your trawl not fit to be sent to market in consequence of their being damaged, or being too small?—No; they are all market fish generally. We spoil very few. There is a small portion of small fish such as gurnets and dabs.

11,850. What is the largest quantity of fish you have caught in one haul?—About 40 packages.

11,851. Out of those 40 packages, what would be fit for the market?—The whole of them. Possibly we should not catch a basket of offal when we got these gluts of fish.

11,852. By "offal" you mean fish unfit for the market?—We call haddocks and plaice "offal."

11,853. Do you mean that you did not catch a basket of those?—No; what I meant was that when we fell in with that heavy glut of fish we did not get a basket of small fish.

11,854. Do you ever catch dog-fish?—Yes, lots of them; they are very tiresome to us—they prick our fingers in the dark. It is impossible for us to use lights, and we often feel them when we don't see them.

11,855. You throw them back again into the sea?—Yes, we throw them back again; some take the livers out.

11,856. (*Professor Huxley.*) Is it the piked dog-fish or the spotted dog-fish that you get?—There are two spurs on the back.

11,857. That is the piked dog-fish?—Yes.

11,858–9. Do you ever get the spotted?—Sometimes, in-shore.

11,860. (*Mr. Caird.*) Is there any other unmarketable fish you get in the trawl?—We get thornbacks and other fish sometimes which don't serve the market; they don't fetch much money.

11,861. Do you throw them back into the sea?—Yes, but we don't kill them.

11,862. You can't kill them?—We don't kill them; like men engaged in trawling they would stand a great deal of hardship.

11,863. (*Professor Huxley.*) Do you understand this chart of the North Sea?—Yes.

11,864. Will you point out to us any places you can't work on?—There are lots of places around and about the shores on the westernmost parts of the Well Bank.

11,865. That is in-shore?—No, it is a good way out at sea; on the chart we call these places the Well Bank. It was a bank to the southward of the Silver Pits extending as far as the Dudgeon to the westward, and as far as the White Bank to the eastward; but now we have the Well Bank defined on the chart where there never was any name some years ago.

11,866. Do you find it rough ground all the way to the English coast?—Yes.

11,867. And all the way to the Dutch coast there is smooth ground?—Yes.

11,868. Can you trawl away from the mouth of the channel right across to the Dutch coast?—We can trawl away in the latitude of the Galloper on smooth ground as low as the latitude of Cocquet Isle with safety, but we cannot trawl as far westerly.

11,869. How do you manage when you get off the Norwegian coast; do you ever go so far as that?—No; I am unacquainted with that coast.

11,870. What is the greatest depth you can conveniently trawl in?—In the pits we trawl in 50 fathoms; that is about the most. A few years ago when a number of soles were pulled out there they were all big fish. All the fish caught were big soles, and we were of opinion ourselves that the fish did not breed there in consequence of their being all big soles.

11,871. (*Mr. Lefevre.*) Has the quantity of fish fallen off in the Silver Pits?—I don't think those large soles are caught as they used to be, but there are a greater number of smacks to do the business. At the time I speak of there was not one belonging to Hull, but now they have over 300 sail.

11,872. Do you know the Fiskar Bank?—No.

11,873. There is nothing to prevent your trawling to the eastward of the Dogger Bank right away to the Dutch coast?—No; but we don't frequent that much. Mr. Hewett's vessels go there; he takes that part of the sea. There are many people who are fond of handling the fish, and seeing it is properly stowed away, before it is sent to market; and therefore we generally go to Yarmouth with our fish.

11,874. Have you ever been herring-fishing?—I went one voyage.

11,875. You are not a regular herring fisher?—No.

11,876. Have you been mackerel-fishing?—No.

11,877. Do you fall in with the Hull trawlers?—Yes, in the summer season.

11,878. Do they fish mostly to the northward?—Yes, barring about three months. They come as far as the Hook of Holland, but generally they fish to the northward.

11,879. Do you agree that there is enough fish for all of you?—Yes, I have four sons nearly qualified and I should like to have a vessel for each of them if I had money enough.

11,880. Then do you think it as good a trade as ever it was?—Yes, we have to work a little harder but we earn a little more money.

11,881. How long have you been master of a smack?—Well on for 20 years now. I tumbled into it curiously. I was a seaman before.

11,882. Do you think that as much money is made out of it now as there was then?—We work in heavier weather than we used to do and we pull more gear to pieces, but the fish must be more numerous than they were formerly, because when the first trawlers went out of Yarmouth there were only two smacks. If we live six or eight weeks longer we shall be able to muster 140 sail from Yarmouth alone.

11,883. Does that include Mr. Hewett's boats?—Not at all; he is a stranger, but as some of his vessels could not get home he came here to be handy on the spot.

11,884. There will be 140 vessels from Yarmouth without counting Mr. Hewett's?—Yes, I think there will after Christmas. If we be spared we shall then muster 140 sail.

11,885. All belonging to Yarmouth?—Yes.

11,886. And manned by Yarmouth men?—I suppose if the men can get the money there will be 30 or 40 more fitted out.

11,887. Are they all manned by Yarmouth men?—Yes, the greater part of them. I mean from here and round about the suburbs.

11,888. How many have you in your smack?—Eight.

11,889. How many of those are boys?—Four.

11,890. Are they apprentices?—I have one apprentice.

11,891. Do you take up many large stones with the trawl?—Yes, we have cleared the ground wonderfully since I have been trawling. I can show you some that you would think it impossible for any net to take up, now lying on the borders of Yarmouth Quay.

11,892. Do they do much damage to the fish?—They would if they got along with the fish. Of course they would mangle it a bit before it could be got on board.

11,893. Do you find that that is often the case?—Not now. We trawl now in safety, where 16 or 17 years ago we should have been sure to make a sacrifice if we put our nets down.

11,894. Have you noticed any difference in the price of fish since you came here?—I think sometimes we have a better sale.

11,895. Take the case of haddocks; do they sell for the same price or do they bring more money?—When I first went they were sometimes very low and I have known them at times fetch a great deal of money. In general they may fetch a little more than they did. I think the reason is that we have not so many lines to catch haddocks. They have left off line-fishing and taken to trawling. When I first went fishing in this capacity I think that Mr. Hewett had about 10 or 12 liners, but I don't think he has more than two or three now.

11,896. He told us he had five or six.—I did not think he had as many now.

11,897. The trawlers don't catch as large a proportion of haddocks as the line fishermen?—The haddocks the liners catch are more pure and clear. We mangle them a little and they don't look as well as the line fish at Billingsgate.

11,898. The line haddocks fetch more in the markets than yours?—I think they do.

11,899. Is that always the case with regard to other fish?—There are not many others caught with the line by which the men could make a living.

11,900. Do the line men catch soles?—Not many. Perhaps a chance one if he is hungry has a bite at the hook and gets nailed.

11,901. (*Mr. Caird.*) Have there been any line fishermen here in your time?—We had a few who went to Iceland, but they did so badly that they could not afford to go any more. We had also one vessel that went for haddocks a short distance from here, but she also gave it up from some cause or other.

11,902. In your own knowledge and experience have you ever seen line fishermen give up the line business and become trawlers?—Yes; the vessel I have just referred to is a trawler now.

11,903. (*Mr. Lefevre.*) Do you employ men who have been apprenticed to the trade?—Yes, hundreds of them. We have 700 men employed in trawling, and 20 years ago we had only seven or eight.

11,904. Is there any rule as to the number of apprentices?—No, there are a lot of apprentices now.

11,905. Is there a rule forbidding the employment of men who have not been apprenticed?—No, not here.

11,906. (*Mr. Caird.*) Are there many coast volunteers here?—No.

11,907. (*Mr. Lefevre.*) Did the 700 you mentioned include apprentices?—Yes; our owners have to find a lot of victuals for them.

11,908. Do many of the men go voyages during the year, and take to fishing only during a part of the year?—Some of them leave off trawling to go after herrings.

11,909. But do many go voyages?—Do you mean sailoring?

11,910. Yes?—Some do, but not many.

11,911. They mostly all of them confine themselves to the fishing?—Yes.

The witness withdrew.

Isaac Shuckford called and examined. *I. Shuckford*

11,912. (*Mr. Caird.*) Mr. Shuckford, you are connected with the herring-fishing here?—Yes.

11,913. More largely than with trawl-fishing?—I have about the same number of herring and mackerel vessels as I have of trawl-vessels.

11,914. Is the catch of herrings increasing or diminishing, taking your experience of some years back?—In my experience of something like 30 years I think there are more herrings on the coast now in this present year and last year than I ever knew; certainly more than I have known during the last 20 years.

11,915. In what months do you generally find the herring-fishing to be best here?—Generally from the early part of October until the latter end of November.

11,916. Two months?—Yes, the season lasts four months. We begin the herring-fishing in the early part of September, and we go on generally to near Christmas; but October and November are the two principal months for the heavy catches on this coast.

11,917. Is there any other season of the year except from September to Christmas that you catch herring here?—Yes, there is a season that has originated during the last eight or 10 years, called the spring herring catching. That begins sometimes in the latter part of February, and sometimes in the early part of March, and lasts until the later part of April. But that is a herring-fishing that I don't follow.

11,918. Is it not productive?—There are large quantities caught. Probably millions are caught, but they are unseasonable fish. There is not one of them that is not what we call a spent fish. They have no roes in them and they sell for very little money.

11,919. What is done with them?—They are sent to London and the manufacturing districts. A large portion of them is sold for manure for very little money indeed.

11,920. Are they salted, or are they sold fresh?—They will not bear salting.

11,921. Is there a very large quantity caught in the spring fishery?—Some years a very large quantity, but there have not been so many for the last one or two years. In point of fact, people have got tired of going to catch them, as they have frequently been sold as low as 3*d.* or 4*d.* a hundred. The farmers will buy these spring herrings for manure and give 3*d.* a hundred for them. They are comparatively worthless to them for that purpose, inasmuch as they have got no moisture in them.

11,922. Will they pay the carriage to the manufacturing towns?—Yes.

11,923. Are they sold there?—Yes.

11,924. Are they taken freely there for food?—There is a large quantity sold for very small prices.

11,925. Are they wholesome?—There is no flavour or quality in them; but I believe they are wholesome.

11,926. Is that a fishing that has been lately originated—has it not been long practised here?—It has certainly originated during the last 10 years.

11,927. There was no spring-fishing previous to 10 years ago?—Not to my knowledge.

11,928. Has it diminished the autumn fishery?—Not in the least.

11,929. Then whatever can be caught in the spring is so much addition to the food of the people if it can be eaten?—Yes.

11,930. No damage is done to the autumn fishery in consequence of catching these herrings in spring?—I believe not.

11,931. You find the autumn fishery quite as good?—Yes. We have another herring fishery here, which we call the midsummer herring fishery. That begins in the early part of June and continues for a month or five weeks. During the last seven years it has been quite a failure. We had a very large fishing for one or two years; but whether the spring herring fishery has had any effect upon it is more than I am able to say. I believe it has.

11,932. Are the fish in good condition at that time?—They are fish not curable for exportation; but if they are not kept beyond a certain number of days, as far as quality goes, they are about the most expensive and finest fish we catch during the year.

11,933. How long is it since that practice of midsummer-fishing began?—Not more than 10 or 12 years.

11,934. Then the spring and summer-fishing seem to have commenced together?—Pretty nearly together.

11,935. And you think the spring-fishing has damaged the summer-fishing?—Yes. I judge that there are millions of these herrings which are caught in the

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months of March and April. It is impossible to find one with any thing in the shape of a roe in it. They go on catching these herrings, and perhaps in the early part of May you may begin to see them becoming what we call half-full. They have a sort of gut in them apparently after that. We have what are apparently the same herrings with a larger gut in them; it is not exactly roe, but a fuller gut, and it gives a certain quality to the fish.

11,936. (*Professor Huxley.*) Is that what you call a "matey?"—Do you mean a melt?

11,937. No; I refer to a special term used by the Dutch. I presume that the gut you speak of is the fat gut?—Yes.

11,938. They are fat herrings?—Yes.

11,939. (*Mr. Caird.*) If the fish caught in the spring have no roe in them they are not likely to be fish that from being caught would diminish the supply in the summer?—I think they do.

11,940. Do you believe they would grow into summer fish?—I believe they would.

11,941. But by the spring fishery, except the fish actually caught, you don't appear to destroy the brood?—There is no evidence of that fact on this coast.

11,942. I suppose your autumn fishery is your valuable and great herring fishery here?—Yes, it is the principal fishery.

11,943. Is it a source of much revenue to the place?—Yes, a very large revenue.

11,944. Do you know how many boats are engaged in the herring fishery here?—About 300 or 400 out of this port. The Gorleston boats catch their fish on the same coast, and all belong to the same port. I should say there are 300 or 400 boats altogether.

11,945. How many men are there in each boat?—They range from nine to eleven, according to the size of the boat.

11,946. Are all these 300 or 400 boats engaged in the spring, summer, and autumn-fishing?—No; at at this place not one-fourth of them are engaged in the spring herring fishery.

11,947. Perhaps there are 100 in the spring-fishing?—Not so many as that. There are not more than 50, and they chiefly belong to Gorleston.

11,948. How many are there engaged in the summer-fishing?—The summer-fishing has latterly been such a failure that it has come down to the nominal number of 20 or 30 boats that follow it.

11,949. But there are 300 or 400 engaged in the autumn fishery?—Yes.

11,950. Therefore the autumn-fishing is really a fishing of great importance to you?—Yes.

11,951. Is there no return of any kind kept here by which we could ascertain the relative quantities of herring caught one year with another?—No, I think not.

11,952. There is no official return?—No.

11,953. Are the fisheries here not under any Government inspection the same as the Scotch fisheries?—There is no return kept.

11,954. Is there no return connected with the port from which you could ascertain the fact?—There is no return except from the Custom House, which would give you the export to the foreign market only.

11,955. Is there no Government brand placed upon the herrings here as in Scotland?—There is no such thing as in Scotland.

11,956. There is no Government officer who acts in the same way as in Scotland?—No.

11,957. Do you send your herrings to the same market that the Scotch do?—Decidedly not. Theirs are green fish; ours are all salted and smoked.

11,958. The Scotch fish are salted but not smoked?—Yes.

11,959. Yours are smoked but not put in barrels?—Yes, ours are put in barrels.

11,960. In what way are they sent to the market?—Principally they are salted on board the boats that catch them, and then they are brought ashore and salted again and placed on the floors of the curing houses and then hung up and smoked for 10 or 12 or 14 days. They are then put in barrels and shipped for exportation.

11,961. Are those fish what are called "red herrings"?—Yes.

11,962. They are not bloaters?—No, the bloaters will perhaps be hung up to-day and taken down to-morrow, and perhaps sent to London the same day. Yarmouth bloaters are usually not smoked more than from 12 to 18 hours.

11,963. In what proportion is the catch used as red herrings, and as bloaters, and as fresh fish?—I cannot tell you accurately. All these things would require a little calculation.

11,964. I don't mean accurately, but approximately?—I should say that one-fifth of the catch will be intended for exportation; perhaps one-fourth or one-fifth are exported.

11,965. You mean red herrings?—Yes.

11,966. Are the red herrings chiefly prepared for exportation?—Yes.

11,967. When you speak of exportation, do you mean exportation abroad or to the manufacturing towns?—I mean exportation abroad to foreign countries.

11,968. Is the principal part of the red herrings exported?—All that are cured here are exported.

11,969. They are not used in the home market?—No, they would not suit the home market.

11,970. Where are they sent to?—To the Italian markets.

11,971. To the Mediterranean?—Yes, chiefly to the Mediterranean, the Greek islands, and other places.

11,972. You say there is no brand of any kind upon them?—No.

11,973. Is there no mark so that the buyer can distinguish them as coming from a particular curer?—Yes, almost without exception every man's name is put on the barrel.

11,974. That forms what may be called your trade mark?—Yes. There will also be a number upon the barrel which tells more or less the quality of the fish. A barrel going out with my name may be marked 600. That would be worth more than a barrel marked 750.

11,975. Is that because the fish are of finer quality?—Yes.

11,976. Then do you think that a brand, showing the number of the fish is as good a test of the quality as a Government brand would be?—I am not in a position to speak of that.

11,977. You have never experienced in the market any loss because you had no Government brand?—That is a thing I cannot speak of.

11,978. Your fish never come into competition with branded fish?—No, because the Scotch fish are all green fish; they are all gutted.

11,979. Are your fish not gutted?—Certainly not, they are smoked herrings and nominally speaking we get none here that are gutted.

11,980. Is the gut not taken out of the smoked herring?—Oh dear no; certainly not.

11,981. Then what proportion do you suppose is sent in the shape of bloaters to the market?—Perhaps to the London market about one third of the catch.

11,992. Are bloaters the most remunerative to the fishermen?—They ought to be but it is not always the case. We always prefer the fish brought in, if the boats can bring them in, so that they can make bloaters; but bloaters are the same as anything else. When all the boats bring bloaters, and all have got a large quantity, however good they may be they sometimes go to London and overstock the market.

11,983. Are bloaters selected fish?—You can make a bloater of anything, but generally speaking they are selected fish.

11,984. Is there any particular season for bloaters?—We make bloaters all the season.

11,985. All the autumn season?—Yes, during all the common season up to Christmas, but they are

generally considered best in October, and in the early part of November.

11,986. Are not bloaters made from spring or summer fish ?—They are smoked and sent up as bloaters. In fact there is no other means of doing anything with spring herrings, except salting them one day, hanging them up the next, and sending them off to market on the third. But spring herrings are nearly all poor fish and sold for manure.

11,987. Are some of the fishermen engaged in the herring season engaged at other seasons in trawl-fishing ?—Some of the men who follow herring-fishing are trawlers when they are not herring-fishing ; is that what you mean ?

11,988. Yes.—Some of them are, but they are not as a rule.

11,989. What do they do at the time there is no herring fishing ?—A certain number of fishermen attend the beach and work at bringing the fish ashore from the smacks. They are also on the look out for salvage cases. The principal portion of them come from Caistor, Winterton, and Hasborough and they go home after the season is over. Some of them, who are called "capstan men," are a low class of men so far as payment goes.

11,990. There seems to be a larger number engaged in the herring-fishing than in trawling ?—Yes, three times the number.

11,991. During the season of the year that the herring fishing is not carried on, do any of these men fish mackerel, or any other kind of fish ?—Yes, there are some.

11,992. Some men follow the mackerel-fishing ?—Yes.

11,993. When does it begin ?—It is a summer-fishing. From the 10th to 15th of May up to the 20th of July.

11,994. So that there is continuous work for them from May to Christmas ?—Yes.

11,995. The slack time is from Christmas to May? —Yes.

11,996. Have the wages of the fishermen increased here ?—The wages of the fishermen, as a rule, have been pretty much the same during the 25 or 30 years I have been connected with the business. Some 8, 10, or 12 years ago the seasons were so dreadfully bad that the fishermen's wages were reduced perhaps 15 per cent.

11,997. Are the fishermen paid wages exclusively or have they an interest in the catch of the boats ?—There has been a new class of boats during the last five or six years called "half-and-half" boats. They are not as large as the other boats. They fish by share, but the old standards all fish by wages. Whether the fish are worth 10*l.* a last or only 3*l.* the men get the same for catching them.

11,998. They have no interest in the catch ?—No.

11,999. They have no per-centage on the catch ?—No.

11,999*a*. (*Mr. Lefevre.*) They are paid so much per last ?—Yes.

12,000. (*Mr. Caird.*) Are they paid a fixed price per last ?—Yes.

12,001. Then they are paid according to the quantity caught ?—Yes, but not according to what the fish brings.

12,002. Then they have an interest in catching a large quantity ?—Yes.

12,003. Their wages depend upon their own exertions ?—Yes, to some extent.

12,004. Then the wages they earn would be some test as to the increase or diminution in the catch ?—Yes.

12,005. Has the condition of the herring fishermen, compared with former years, improved, or has it fallen off ?—Are you speaking of the remuneration of the men ?

12,006. Yes, the men who are paid by the last.—Some 10 or 12 years ago the men's wages were reduced in consequence of the seasons being so bad.

12,007. That is to say the price per last was reduced ?—Yes, something like 15 per cent. ; but after that had gone on for three years certain circumstances arose, and the men made something like a stand and obtained their old wages again.

12,008. Has it continued so ever since ?—Yes, up to the present season, when in consequence of the seasons having been so bad for the last few years they agreed to go for something like 15 per cent. less than they have had for the last five or six years.

12,009. (*Mr. Lefevre.*) What is the payment per last ?—The average payment per last is about three guineas for men's wages.

12,010. (*Mr. Caird.*) Is the quantity they are catching now greater than it used to be ?—The quantity they have caught this year is beyond the average catch.

12,011. Do the French herring boats come here at all ?—Not very near the coast; but as far as the fishing is concerned, I am not a practical fisherman and can't say where they come.

12,012. Do they interfere injuriously with your fishing ?—Not much on this coast.

12,013. Do your fishermen complain of it ?—They have done so when they have had to go in the early part of September to fish down in the Silver Pits and towards Flamborough Head. There they have come into contact with the French fishermen, and have got into great disputes, but who is most in fault I cannot say. All I can say is that the French boats are much larger, that they carry a much larger number of hands, and that they shoot so many more nets that whenever they happen to come into contact our people are sure to get the worst of it.

12,014. Are your herring boats decked boats ?—Yes, they are all decked boats.

12,015. Do they keep the sea in rough weather ?—Yes.

12,016. They do keep the sea ?—Yes, many of them are the same class of boats as the trawlers, and after the herring season is over they are capable of being converted into trawl-vessels, and they go trawling in the winter.

12,017. Have you ever heard any complaint that the Government have sent no protection against the fishermen coming among the herring nets ?—I have heard a great deal of complaint on the part of fishermen fishing abreast of the Humber, off Flamborough Head.

12,018. Your chief take of herrings is off Flamborough Head, is it not ?—We get a considerable quantity when we first go to sea, from the middle of September till the 10th of October, off the Yorkshire coast, but the boats subsequently come south. We have no herrings on our coast at that time of the year, after the season is over there our boats work up to Yarmouth.

12,019. Do the herrings work up ?—We find them here then.

12,020. But they may be different shoals ?—Yes.

12,021. Do not the French boats follow them further south ?—We do not find them come so much in contact after that.

12,022. Do you catch much of your herrings three miles from the shore ?—No; a few boats go and fish off the shore with a small number of nets, but very few.

12,023. Then that forms an inconsiderable portion of your take ?—It is quite nominal ; it only lasts for some seven or eight or ten days, or on a chance time for a fortnight ; but the herrings taken in that way don't form one per cent. of the general take or catch.

12,024. (*Professor Huxley.*) You have been speaking of the spring-fishing ?—Yes.

12,025. I think you stated that it began in February ? —I am not particular as to the exact time it begins, but it generally begins about the latter part of February or the early part of March.

12,026. Are herrings ever seen here in January ; is there an appearance of herrings here then ?—There is no general appearance then, but I believe if the boats went off after them they would get herrings, though only a small quantity.

12,027. What is the average size of the fish caught

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in the spring-fishing? Is it as large as the autumn herring?—No; however many millions may be caught during the months of March or April I have never seen a proper herring among them.

12,028. They are not full-sized herrings?—No, they are not full of roe or milt.

12,029. How many go to the barrel?—About 900 or 1,000.

12,030. Whereas your full-sized herrings go about 600 to the barrel?—Yes, about 600.

12,031. Have you ever seen a full herring among the spring herrings?—Never in the early part of March or April.

12,032. Did you ever see one in February?—No.

12,033. Did you ever see spent fish then?—They are all spent fish then.

12,034. Are they spent or are they not full?—I can't answer that. We call them shotten or spent fish.

12,035. They are not the same as you get here in November?—No, they are not as large.

12,036. Are they fat inside?—No, they have neither fat nor moisture. One proof of this is that even the farmer who buys them for manure will not give half the price for the same weight or quantity as he would give for any offal fish, because they have no oil or grease or moisture in them.

12,037. What kind of net are those spring fish caught with?—They ought to be caught with the same net we fish with in the midsummer-fishing; but whether they are or not I don'tknow. I cannot speak from experience, but I have heard that they are caught with nets that run 37, 38, 39, and 40 meshes to the yard. If that is so all these nets are seizable.

12,038. What is the size of the nets you use?—My herring nets are all braided about 31 to 31½ to the yard, but by the time they go through the different processes of barking and being rendered fit for sea, they will be 32½, and by the time they have got worn out they will become 34 to 34½.

12,039. Do you ever use them 36 to the yard?—I never braided anything over 31 to 31½, and in my experience I never noticed them becoming more than 34 or 34½.

12,040. Why do you use them of that particular size rather than any other?—If we had them of a larger size the effect would be that they would not catch fish; if we had them of a smaller size we should get nothing but small fish of which we could make nothing.

12,041. Are you aware of any regulations on the subject?—My impression is that no herring net should be less than 36 to the yard, or an inch from knot to knot on the line.

12,042. Is there any officer to examine your nets here?—No.

12,043. Did you ever know of any nets being seized?—No.

12,044. Nobody takes any trouble about it?—No; because one man has no desire to do another man an injury; but I think there should be a man sent by Government, or some one placed here in authority to see that nets of an illegal mesh are not fished with.

12,045. Is there a Revenue cutter here?—Yes.

12,046. Does she ever overhaul the nets?—I never heard of such a thing.

12,047. (*Mr. Lefevre.*) Is there any Government steamer stationed off here to look after the fisheries?—Not that I am aware of.

12,048. (*Professor Huxley.*) If the mesh of the spring net does not run closer than 37 or 38 it will not catch very small fish?—Yes, it makes a great difference when the meshes are even only one or one and a half closer. That makes a considerable difference in the catch of herrings.

12,049. Are the fish at that time in large shoals?—Sometimes they are in very large shoals. More spring herring-fishing is carried on at Lowestoft than here. I have seen 100 lasts brought in and sold for 3*d.*, 3½*d.*, or 4*d.* a hundred, when we give our men in the proper season 9*d.* a hundred for catching them.

12,050. Where do these herrings go inland. They go in large quantities to Manchester, Birmingham, London, and Liverpool.

12,051. Do you think the poor people are very glad to get them? A man who has nothing but potatoes to eat will be glad of herrings?—I don't say he will not, but I think many thousands of them are of such a quality that even the lower classes after eating a few of them would care very little about herrings.

12,052. You mentioned just now that you did not consider that your spring herring-fishing injured your autumn-fishing?—No, there has been no appearance of it.

12,053. When there has been a large spring-fishing at Lowestoft has there been a falling off in the autumn-fishing here?—I never noticed it.

12,054. The fish you are catching now are full of roe and milt?—Generally speaking they are, but we have now come to the time of the year when we expect to get a certain portion of them spent.

12,055. They are either full or spent?—Yes.

12,056. Do you ever catch herrings here in August?—No.

12,057. Is that because it is not the practice to catch them, or because they are not here?—Because the fish are not on the coast.

12,058. What is about the average tonnage of your herring boats?—In speaking of the tonnage of the herring boats there is very much difference in regard to the way you take it, whether according to the old measurement or the new. Upon what we call builders' measurement the average tonnage of my boats is from 55 to 60 tons.

12,059. Is that fully as large as the tonnage of the trawling vessels?—It is as large as the tonnage of many of them.

12,060. There are as many as 400 of those boats here?—There are somewhere between 300 and 400 boats belonging to the port, but they are not all of that size. Perhaps one half of them will be of a class that run 10 tons below that.

12,061. What is the depth of your nets?—Do you mean of the herring nets?

12,062. Yes, how many fathoms deep are they?—They are 200 meshes deep.

12,063. How long are the head lines?—The cork ropes?

12,064. No, the nossels?—About 15 or 16 inches.

12,065. Not more than that?—No.

12,166. Then you float your nets very near the top of the water?—We float them or sink them according as we cork them.

12,067. But don't you regulate your depth by those lines?—No, the seizings regulate the depth.

12,068. What do you call "seizings"?—It is a line 7 or 8 yards long. There are two on each rope, and they keep the nets from breaking away in strong weather. They are from 1¼ to 1¾ inches in circumference. There are two on each herring net made fast to the warp. If strong weather comes on there would not be sufficient stamina in the rope to resist it; it would break away if it were not for these seizings.

12,069. Do you let your warp swim on the water?—I think not, but I am not a practical fisherman enough to say.

12,070. What is the length of the fleet of nets in one of your boats?—Perhaps as a general rule a little over a mile, say a mile and a quarter.

12,071. What will a herring boat with all its fittings cost, supposing you had to fit one up ready for sea?—If a man desired to have one or two boats he would hardly fit one up for the herring-fishing alone; he would fit her up for both the herring and mackerel-fishing. If he fitted her up expressly for the herring-fishing, a boat with nets and warp would cost 1,200*l.* or 1,300*l.*

12,072. Then the fittings of a herring boat would cost a great deal more than the fittings of a trawler?—Yes, because it is not only the nets she actually shoots, but to carry her over the season she must have three or four sets. If she has three, she will use one

of them in a month. The first that goes out of trim can be repaired by the time the third requires replacing, and thus she will be enabled with three sets actually to fish four sets in the season.

12,073. Is there any kind of capstan for hauling the nets on board?—Yes, the boats have a capstan.

12,074. How many men have you on board?—Eleven.

12,075. How often do you haul the nets up?—Generally speaking, they are hauled up only once a night.

12,076. Have you any regulations with regard to shooting your nets before sunset?—Not that I am aware of, but that is a matter I cannot speak to, as I am not a fisherman.

12,077. Then with regard to the mackerel-fishing, how is that managed; is it carried on by hookers?—No, by nets.

12,078. You practice drift-net mackerel-fishing?—Yes, with nets of a different mesh.

12,079. What is the size of the mesh of your mackerel net?—From 24 to 25½ in. the yard.

12,080. Do you use the same length of net?—The mackerel nets are not as deep in the water, but a mackerel fleet will reach 2½ miles.

12,081. You fit up your boats for the mackerel and herring-fishing?—Yes.

12,082. What does it cost for both?—Something like 1,500*l.* or 1,600*l.* The same warps will do for both, but you will want double the quantity.

12,083. In what condition are the mackerel at that time of the year; are they full fish?—When our boats first go to sea they sometimes get a few mackerel that are not full-roed. The last week or ten days before they finish the same thing will occur, but as a general rule they are always full.

12,084. (*Mr. Lefevre.*) How long have you been here engaged in the trade?—30 years.

12,085. Have you observed any increase in the number of boats engaged in the herring trade during that time?—Yes, as far as this port goes; taking 20 years since there are two-fifths, or double the boats now compared with what there was formerly. The increase originated principally with what we call half-and half boats which fish in closer to the shore.

12,086. Has the quantity of nets used increased in that time?—The quantity of nets has much increased because the number of the boats has much increased.

12,087. But I mean the size of the nets used by each boat?—About 14 years ago the length of the herring net used to be 14 yards to the rope; at the present time it is about 17 yards.

12,088. Then that is about the proportion they have increased?—That is the increase in the length of each net.

12,089. Has the average take of each boat increased?—Do you mean in the herring fishery.

12,090. Yes?—I think the takes on this coast have been more than they have ever been known for many years.

12,091. Is there any means of ascertaining the quantity of fish that is sent from Yarmouth?—Do you mean sent off by rail?

12,092. Yes?—I should think about 20,000 tons a year from here to the London market.

12,093. Do you think we can ascertain the quantity sent off accurately?—It is possible, but I am not certain.

12,094. Is a large quantity of the fish sent by vessels from Yarmouth?—Not sent from Yarmouth direct by vessels.

12,095. Not a large proportion of the whole take?—No, not to the London market.

12,096. But for foreign ports?—For foreign ports the quantity sent away is considerable, some years ranging from 50,000 to 60,000 barrels, each barrel containing 600 or 700 fish.

12,097. Is there any means of ascertaining the number sent to foreign ports?—That could be got from the port dues. I think the officers here have the numbers.

12,098. Do you think the midsummer herring is the same as the spring herring?—My impression is that the spring herring would come to be a midsummer herring.

12,099. You don't think that the autumn herring is the same as the midsummer or spring herring?—I don't know.

12,100. You have not observed that a decrease of the spring herrings has been followed by a decrease of the autumn herrings?—No.

12,101. How late does the autumn-fishing go on?—As near Christmas as possible; within a week or ten days, and sometimes within two or three days.

12,102. (*Professor Huxley.*) You mentioned that you never found summer herrings full?—Not with roe or milt, but I have found them with fat gut.

12,103. They must get full some time or other?—Possibly they may get full in the autumn or winter, but my experience does not allow me to give an opinion upon that.

12,103*a*. How far do the Yarmouth herring boats go to the north?—Sometimes as far north as Scarborough—as a general rule between Scarborough and Whitby is as far north as they go.

12,104. Is there any sprat-fishing here?—Very little indeed; I believe there is a sprat fishery at Pakefield and Lowestoft, but I am not aware that there is any here.

12,105. (*Mr. Caird.*) Are there any shell-fish caught here?—No.

12,106. Neither lobsters, crabs, nor oysters?—No. As a rule there is nothing worthy of the name nearer than Cromer.

12,107. Do you desire any Government interference to regulate the herring fishery?—I think we ought to have Government interference, to see that no nets are fished with of an illegal sheal. They catch the herrings before they come to maturity; but if I saw 10 men using illegal nets, and although I knew it was unjustifiable and wrong both to the trade and themselves to do so, I would not interfere.

12,108. Do you think there are any of these illegal nets here?—I do.

12,109. Is it not the result that they catch fish of a less marketable quality?—Decidedly they do.

12,110. Surely that would not pay them as well?—It don't pay them, but still it takes place at a time of the year when they have no other particular employment to follow.

12,111. Do they not fish with those nets in the autumn fishery?—No.

12,112. Only in the spring fishery?—Yes.

12,113. Have you never seen a small meshed net used in the autumn?—No.

12,114. Then you think the fishermen's own interest guides them in using a legal net in the autumn?—Yes, they catch sizeable fish.

12,115. It would not be for their interest to use a smaller mesh?—No.

12,116. Is there any other point on which you desire Government interference?—No.

12,117. Not as to shooting the herring nets before sunset?—No, I think not.

12,118. There is no regulation that you think would be beneficial to the fishing generally?—I am not practical man enough to speak on that point. I never have been fishing; I am only an owner of boats.

12,119. Are we to gather from what you say that the spring fishery ought to be put a stop to altogether?—That is my feeling in the matter.

12,120. Would not public loss result from that?—I think not.

12,121. Do you think you would get in summer what are now caught in spring?—I think we should get more in midsummer. I think the spring herring-fishing has this effect—it prevents hundreds of lasts of herrings caught in the autumn from being eaten. People get so thoroughly sick of the spring herrings that they don't care to touch them for a long time to come.

12,122. Do you sometimes find difficulty in getting

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your fish disposed of?—Yes, we have had great difficulty this year.

12,123. Is there a glut in the market?—They have been selling at such prices that there has been an immense loss to us catchers.

12,124. Is that on account of the large catch?—Yes.

12,125. In what market has that glut taken place?—In every market in the kingdom.

12,126. Do you find it in Manchester, where many of the operatives are out of work, or in the Lancashire markets generally, where the operatives are in such distress?—It is not confined to the Lancashire markets. Whether the fish is sent to Manchester, Plymouth, Birmingham, or Cornwall, we find the whole of the markets are packed.

12,127. Then it is the case that there has been a large catch of fish universally?—Yes.

12,128. (*Mr. Lefevre.*) What is the price they are fetching now per last?—My boats since they have been at sea have caught 500 lasts and more. If they had been put up to public sale they would not have averaged 6*l.* a last during the season, and many times I have had large quantities of which I have not made more than 3*l.* 10*s.* or 4*l.* a last. I feel convinced, that in an extreme case, I have not made more than 6*l.* or 7*l.* a last.

12,129. What do they cost you in wages per last?—Each boat must get 60 or 70 lasts and realise about 10*l.* a last to keep me clear of loss.

12,130. How many boats have you?—I have nine drift-fishing boats.

12,131. (*Mr. Caird.*) Have you observed in former seasons that the fishing after a warm summer was better or worse than after a cold summer?—I have not observed that as far as quantity goes.

12,132. Is it affected by the temperature of the atmosphere in the summer which no doubt has its effect on the sea?—I think not. I always find when the water is warm in the early part of the year that the fish are not as good in quality.

12,133. Have you ever noticed any seasonable difference with regard to the catch of fish? This year, for instance, there has been a large catch of fish, and every market has been glutted. Have you ever noticed that before?—I am not at all aware that the atmosphere or weather in the summer, whether it is warmer or colder, has anything to do with it.

12,134. But you know as a fact that there has been a large catch this year?—Yes; we had a large catch last year also.

12,135. You had a large catch last year?—Yes, there was not a glut but there was a large catch of fish. With the large catch of fish and the large number of vessels the effect is that this year a greater number of fish has been caught than can be sold with profit to the catcher.

12,136. Are you acquainted with the prices of fish at the large consuming markets in the country?—I send to all of them.

12,136. What is one of the principal markets you send to?—Leeds.

12,138. Is the price of fish lower than it was last year at Leeds?—Yes.

12,139. What other markets do you send to?—Manchester.

12,140. Is the price much lower there?—Yes, it is.

12,141. Is it lower than at Leeds?—I can't say whether it is or not, but taking the season throughout the prices have been very low, much lower than ever I knew them.

12,142. But is the price lower at Manchester than at Leeds?—No, I don't know that there is much difference.

12,143. I suppose the markets are very much regulated by each other? You would not supply Manchester at a lower price than Leeds? If you got more at Leeds you would send them there, would you not?—Yes, practically speaking, the market for fish with regard to prices is like corn.

12,144. It finds it level at once?—Yes.

12,145. Do you send more to Manchester than to Birmingham or Leeds?—We send large quantities to all the markets.

12,146. Which are the largest consuming markets?—With the exception of London, which is the principal, the largest are Manchester, Birmingham, and Liverpool.

12,147. For herrings?—Yes.

12,148. In all those markets is the price considerably lower than it has been on the average?—It is lower than I have known it.

12,149. Much lower?—Yes.

12,150. What would be the average price; what measure do you sell by?—In the London market we sell by boxes containing 180 or 200. They generally sell at so much a 100.

12,151. What would be the average price of 100 herrings in the manufacturing towns during the last five years?—That would be very difficult to say, but I have no hesitation in saying that the average price of herrings in the London market this year is 50 per cent. lower than it was five years ago.

12,152. Is it the same in all the large consuming towns?—Yes.

12,153. Is it 50 per cent. lower than it was last year?—I believe it is fully 50 per cent. lower than it was last year.

12,154. When did that material decrease first begin?—Last year there was a large catch, and we felt a depreciation in our business, but this year the price has been much less than last year.

12,155. Is that to be attributed to the large catch of fish?—Yes.

12,156. It is solely attributable to the large catch of fish?—Yes.

12,157. The greater supply thrown into the market?—Yes.

12,158. (*Mr. Lefevre.*) What wages do you pay per last?—Our wages come to about three guineas per last.

12,159. What price must you realise in order to make it pay?—The price we must realise depends upon the quantity the boats catch during the season. It will take 10*l.* a last and 60 or 70 lasts to clear us.

12,160. (*Professor Huxley.*) That clears the wages of all the men?—Yes.

The witness withdrew.

R. Martin.

ROBERT MARTIN called and examined.

12,161. (*Mr. Caird.*) You are a herring fisherman?—Yes, I have been so.

12,162. Have you been long a herring fisherman here?—Yes.

12,163. For how many years?—Over 30.

12,164. Are you still engaged in that business?—Yes, but I have not been fishing this season.

12,165. What size of vessel have you been in the habit of fishing with?—From 50 to 60 tons.

12,166. Is that a decked vessel?—Yes.

12,167. About the same as a trawl-vessel?—Yes.

12,168. Having heard the evidence of the previous witness, do you agree with him with regard to there being three seasons here for herring-fishing, the spring season, the summer season, and the autumn season?—Yes.

12,169. Do you find that the fish are poor in the spring season?—Yes, very poor indeed; in fact, they are quite young fish that have not come to maturity at all.

12,170. Do you think that the spring-fishing has to any great extent injured the summer catch?—Yes, it has, and the mackerel catch also.

12,171. Why?—Because the spring herring nets stop the fish. The mackerel just get their nose against the net and they lie against it. There they

die and rot away. If they only get their nose against the net they lose all their strength and rot away.

12,172. You think that they die ?—Yes.

12,173. And they are lost entirely ?—Yes.

12,174. Have you yourself practised the spring herring-fishing ?—I was never a spring herring catcher in my life.

12,175. Do they use a small net for it ?—Yes.

12,176. Universally ?—Yes, they are a great deal smaller than the nets used in the autumn-fishing.

12,177. Have you noticed that the summer-fishing has decreased lately ?—Yes, a great deal.

12,178. Do you attribute that to the spring-fishing ?—Yes.

12,179. Has the mackerel-fishing become less also ?—Yes, a great deal less, we have got no fish at all these last few years.

12,180. Do you agree with the previous witness that the autumn-fishing is as good as ever it was ?—Yes, quite equal.

12,181. It has not been affected at all ?—No, only the summer-fishing.

12,182. Do you think that they are the same shoals of fish ?—No, they are different altogether ; they are young fish.

12,183. Are they caught on the same fishing grounds ?—Yes.

12,184. You begin your early fishing in September further north ?—Yes, and we come further south as the season advances.

12,185. Where are the herrings caught now ?—About 20 miles from here, some of them 30 miles.

12,186. North, or what ?—About north-east from Yarmouth.

12,187. (*Mr. Lefevre.*) At what distance from the land ?—Perhaps some of them may be caught not more than 15 miles off. Some are caught just over Smith's Knoll. That is a great fishing place that we reckon upon.

12,188. (*Mr. Caird.*) How long do you keep at sea herring-fishing without coming ashore ? — That will depend on the fish we get ; sometimes we come in next day, sometimes we are out for three or four days. It all depends on the fish.

12,189. On the quantity of fish you can stow ?—Yes.

12,190. If you are two or three days at sea, do you salt them ?—Yes.

12,191. Do you salt them in bulk or in barrel ?—In bulk. We have a place to put them in.

12,192. Do you sprinkle the salt over them ?—Yes, and turn them over and sprinkle them again.

12,193. Do you gut the fish ?—No.

12,194. You just throw the salt over them ?—Yes.

12,195. Then it it is a very simple process ?—Yes.

12,196. What is done with the fish afterwards ?—They are brought ashore, and if they are fresh they are taken up for bloaters.

12,197-8. Is anything further done with them ?—They are cured and sent to the market.

12,199. Are they smoked ?—Yes.

12,200. Are they split open ?—No ; they are hung up on spits run through their gills.

12,201. What are they smoked over ?—Oak billets. They are hung up about as high as the ceiling of this room over the fire, perhaps 20 or 28 feet off. There are what we call "loves" of wood to hang them on.

12,202. Then there are fires to hang them over ?—Yes.

12,202*a*. How long do you hang them ?—If they are intended for bloaters from about a dozen to 14 or 18 hours.

12,203. And how long for red herrings ?—From three weeks to a month for a red herring.

12.204. Then they would be partly cooked would they not ?—Yes, they would be smoked quite through ; they are quite as red inside as out with the smoke.

12,205. Has the price of herrings of that sort increased of late years ?—I think it has increased.

12,206. Has the price of the herring prepared for export increased ?—Yes ; there was an increase some three or four years ago.

12,207. Is it higher now ?—No ; it is lower now.

12,208. Is the largest proportion of the herrings caught here cured in that way and sent abroad ?—Yes.

12,209. More are sent in that way abroad than are sent to the great markets of the country ?—Yes.

12,210. You have yourself been in a herring house and have seen the process ?—Yes.

12,211. You understand the business ?—Yes. I have been working at it personally when I have been at home in the winter time.

12,212. (*Professor Huxley.*) You have never been engaged in the spring-fishing yourself ?—Never.

12,213. Do the fish ever remain on this coast until January ?—Yes.

12,214. You find them in January ?—Yes.

12,215. What kind of herring are they then ?—In January they are what we call shotten.

12,216. Spent herring ?—Yes ; they do not go after them till the latter part of February or the beginning of March.

12,217. But you think herring are here ?—Yes, of course they are here but we think they are quite young fish with no roe in them.

12,218. They are not spent fish in the same sense that the fish you are getting now will soon be spent ?—No, those we have now run larger.

12,219. Is there only one time of the year at which you get full fish ?—Yes, only one time of the year.

12,220. Do you know where the herrings spawn ?—We always think they draw into the shallow water where they spawn.

12,221. That is where you find great quantities of them ?—Yes, always in shoal water.

12,222. Have you been fishing this season ?—No.

12,223. Do you see the fish brought in now ?—Yes.

12,224. Are they full fish ?—Some portions of them are spent fish.

12,225. Already ?—Yes ; perhaps some boats will have all full fish and some will have a few spent.

12,226. I understand you to say that the mackerel-fishing has fallen off ?—Yes, a great deal indeed during these last three or four years.

12,227. Do you attribute that to any other cause than the one you have mentioned ?—We fancy that that is a great hindrance to us.

12,228. Do you think it is altogether that ?—Yes.

12,229. That has caused the falling off ?—Yes.

12,230. Do you think the mackerel come in the same quantities that they did formerly ?—No, they do not. I think they kill them off before we can go after them.

12,231. Did you ever see them killed off ?—They catch plenty of small mackerel now. We see them bring them in ; sometimes they will have such a thing as 1,200 or 1,500 small mackerel. We know that the taking of that fish must be injurious to us because they are hardly fit to eat.

12,232. In one shape or another you get mackerel and herring all the year round pretty nearly ?—Yes, we go in the first part of the year after mackerel.

12,233. What becomes of the mackerel after July or thereabouts ?—We do not think they stir far from the coast. Where the spawn is there the fish is sure to be.

12,234. (*Mr. Lefevre.*) Do you fall in with the French boats in the autumn season ?—Yes, plenty of them.

12,235. Here ?—No, further out.

12,236. Further north ?—In the North Sea, off the Humber. Sometimes there are more of them than of our own boats.

12,237. They do not follow you down ?—No, when we come here they go away to the Foreland.

12,238. Do they go back to France ?—Yes, when they get their fish. They are now fishing off the Foreland.

12,239. Do you have any trouble with them ?—Plenty of it.

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12,240. Is there anybody to look after them?—You cannot make them honest. If they approach near you you are obliged to haul your nets in; they will not haul in theirs.

12,241. Is there any French Government steamer to look after them?—Not often here, but there is off the Scotch coast where they fish close upon the rocks.

12,242. But there is none off this coast?—I have never seen one during all the years I have been fishing.

12,243. Is there any English Government steamer employed?—I believe there has been one boat, but I have not seen it.

12,244. Do you fish within 3 miles off the coast or outside?—We do not fish nearer than 8 miles.

12,245. The French boats are larger than yours?—Yes, some of them have 30 or 40 people on board of them.

12,246. Do you think it would much assist you if you had a Government steamer to look after you?—I think it would; in fact they destroy our nets a good deal. They put their nets in among us and then our fishing is at an end. They will pull all our nets to pieces if we do not get them in.

12,247. Do they observe any rules as to shooting their nets before sunset?—No, they generally shoot them just before sundown. We do the same. Just as the sun is going down we get our nets overboard if we can.

12,248. What is the size of your mesh?—When the nets are new the mesh is about 31 or 31½ inches to the yard.

12,249. Are there any boats that use a smaller mesh?—None that are Yarmouth boats, but the spring boats do.

12,250. None of the boats engaged in the autumn-fishing do?—No.

12,251. Is there any Government official that overhauls your nets occasionally?—I never had anybody overhaul mine.

12,252. Do you know of any case in the autumn-fishing in which a smaller mesh has been used than that you have mentioned?—No, we generally all use the same. I believe they come principally from one manufacturing place. Many of them come from Bridport.

12,253. Where do you think the herrings spawn off this coast?—Just off the shore.

12,254. In-shore?—Just off the shore against the Knoll, and any way where there is a lee. That is generally where we find them. We find many spent fish about 12, or 14, or 15 miles from the land.

12,255. Do you catch any large number of spent fish late in the year?—We have not caught any large number yet.

12,256. Do you find them further off the shore than full fish?—They are generally inside, about 12 or 15 miles from the land.

12,257. Do you mean outside or inside?—I mean towards Lowestoft or Yarmouth. They fetch a smaller price than other fish. Sometimes they bring a mere nothing, about 3*l.* or 4*l.* a last. I have seen them sold for 50*s.* That was on account of the bad market.

12,258. Are you captain of a herring boat?—I have one boat of my own, and I have been engaged in the fishing until this year myself.

12,259. Do you pay your men wages by the last as stated by the last witness?—Yes.

12,260. Can you say whether, on the whole, the wages have increased in the herring trade or not?—The wages have not increased.

12,261. I do not mean per last, but whether, on the whole, the men make more in the trade than they did formerly?—They make as much money; they have got more fish in the last three years to make up for the decreased price.

The witness withdrew.

J. Mainprize.

JOHN MAINPRIZE called and examined.

12,262. (*Mr. Caird.*) Are you a purchaser of fish here?—Occasionally I purchase fish, but I am the owner of vessels employed in the herring and mackerel fishery. I have one vessel engaged in trawling.

12,263. Then you are acquainted with all the kinds of fishing practised on this coast?—I am, but more particularly with the herring and mackerel-fishing.

12,264. Can you give us any accurate figures as to the quantity of herrings caught here in the season?—I have no means of giving an accurate opinion. I can only estimate it by the larger proportion which has been taken up by the owners and cured.

12,265. Have you ever made any computation of the whole quantity caught here?—We have something like 400 vessels fishing out from Yarmouth, and I should consider 50 lasts per vessel an average catch.

12,266. Those are 20,000 lasts altogether?—Yes; I am speaking now of the autumn fishing.

12,267. That is the great fishing?—Yes.

12,268. How many fish are there in a last?—10,000. There are 33 warps to the 100, and four to the warp.

12,269. You call a last 10,000 in number, but a last of fish is in reality very much more than 10,000?—Yes, there are more than 13,000 in a last.

12,270. That comes to 250 millions of fish in a season?—I have never calculated the quantity, but I know that it has increased during the last two or three years. The number of boats has also increased.

12,271. The quantity caught now is a considerable increase on what was caught previously?—Yes.

12,272. You mean that 20,000 lasts are an average season's catch now?—Yes, and that is more than used to be caught because there are now more boats.

12,273. The quantity you mentioned as the present average catch is beyond an average catch?—No, I should take it as an average catch.

12,274. Then the herring must be a source of large revenue to Yarmouth?—It is the chief source of employment we have here; it is our staple trade. In addition to that we have trawling vessels employing six or seven hands each all the year round.

12,275. Do you know the number of people employed altogether in the fishing business in Yarmouth?—I have no means of knowing, except by calculating the number of vessels.

12,276. May we take 10 as the average number in each herring vessel?—That is rather too much, I should say nine would be the full average. There are a great many small vessels. Taking the average of the year the number of trawling vessels would be about 100.

12,277. How many men are employed in the trawlers?—From six to seven.

12,278. Then there are upwards of 4,000 fishermen employed here?—Yes, at sea.

12,279. Sea fishermen?—Yes.

12,280. Do you agree with the previous witness, that the quantity of fish caught, on the whole, is increasing here?—Yes, as far as my experience goes.

12,281. Does that refer to all kinds of fish off here?—Yes, with the exception of mackerel and also the midsummer herring.

12,282. Do you only fish for mackerel in the summer time here?—From the early part of May till about the 20th of July.

12,283. Do you not find them in the autumn?—There have been a few caught by the herring boats, but they do not fish for them expressly.

12,284. They do not come in sufficient abundance to pay?—No.

12,285. Are they seasonable?—They are good in quality this year, but as a rule they are not considered seasonable.

12,286. As a rule have you observed that since they have fallen off in the summer they have increased in the autumn?—Not generally.

12,287. There has been a decided falling off in the midsummer-fishing here?—Yes, from 1853 to 1857

there were abundant years; since then the catch has been very indifferent.

12,288. Has it fallen off in large proportions?—Yes, very large.

12,289. Has the number of boats decreased?—No, it is about the same.

12,290. Then they make a worse business of it?—It has not been at all remunerative.

12,291. Is there any cause to which you attribute that?—By practical people it is attributed to the spring-fishing. A great number of small fish is supposed to be destroyed—the catch is very small; a great number of small mackerel are also destroyed. They are a very tender fish, and as soon as they strike the net they die; large quantities are supposed to be destroyed in that way.

12,292. This spring-fishing has not existed long?—No.

12,293. Only about 10 years I believe?—About 10 years.

12,294. Was the midsummer-fishing successful before then?—It varied, but it has been very unsuccessful for several years since 1857.

12,295. Do you attribute that to the existence of this spring herring-fishing?—Not entirely.

12,296. Are you acquainted with any other ca[illegible]use?—No.

12,297. You know of no other cause w[illegible] injured the fishing or controlled it?—No[illegible]hich has have always been great fluctuations[illegible]; but there

12,298. From your own experienc[illegible] further than 10 years?—I have [illegible]e can you go back business for 16 years. [illegible]been engaged in the

12,299. Was the midsum[illegible]mer-fishing better 16 years ago?—Much better tha[illegible] it has been during the last two or three years.

12,300. And then [illegible]ou had no spring herring-fishing?—No.

12,301. Then d[illegible] would be benefici[illegible]o you go as far as to say that it spring herring-f[illegible]al to the catch of fish generally if the think so. [illegible]shing were put a stop to?—I certainly

12,302. If [illegible] mesh should [illegible] it were made imperative that a small think that [illegible] not be used, would that be sufficient?—I

12,303. [illegible]would effectually check it.

sea?—I [illegible] It would not be worth their while to go to the ordi[illegible]do not think they would catch these fish with

12,30[illegible]ary sheal.

Yes. [illegible]4. Then it would be given up altogether?—

12,30[illegible]

Yes. [illegible]05. And you think it desirable to do that?—

12,[illegible]

Gove[illegible]06. If such a regulation were imposed by the fish?[illegible]nment it would tend to increase the supply of also [illegible]—Yes; the supply of midsummer herring and [illegible] of mackerel.

able[illegible]2,307. Do you know whether any large or valu-fishi[illegible] quantity of herring is obtained in the spring-the [illegible]ng?—The quantity is very large sometimes, but are [illegible] fish themselves are comparatively worthless. They ma[illegible] not worth more than the price they can bring for [illegible]nure.

not [illegible]2,308. Are those which are sent to the large towns firs[illegible] worth more than the price of manure?—At the ve[illegible]t part of the season they are; it is a season when sal[illegible]y few fresh herrings can be obtained, and for the bu[illegible]e of novelty persons purchase them once or twice, th[illegible]t those who deal in them generally send orders to m[illegible] salesmen, after a very little time, not to send any [illegible]re; they are not liked generally.

to [illegible]2,309. After they have been sent for a certain time tak[illegible] the manufacturing towns, do the markets refuse to [illegible]e any more of them?—As a rule they do.

[illegible]2,310. Is there then a glut here?—Yes.

—Y[illegible]2,311. And they become comparatively worthless?—[illegible]es.

12,[illegible]312. And are sold as manure?—Yes.

price?—[illegible]13. And even as manure they bring an inferior

12,31[illegible]—Yes; from 2*d.* to 3*d.* a hundred.

am not [illegible]4. Is any large quantity sold as manure?—I [illegible]able to state the quantity because the spring herring-fishing is prosecuted more by the Lowestoft boats than by ours. It is carried on by the half-and-half shore boats at Gorleston. It would not answer to prosecute this fishing at all unless it was done by the shore boats.

12,315. Are many of the spring fish caught by the large decked boats?—Not by the larger class of vessels, but the same boats are also employed in the autumn-fishing.

12,316. (*Professor Huxley.*) Have you noticed any considerable variation in the catch of herring during the time you have been here?—It does vary very m[illegible] from one season to another. [illegible]uch

12,317. Is there often a run of bad [illegible] has been a large increase in the [illegible] years?—There within the last two years. Fi[illegible] catch on this coast two or three years we ma[illegible]ve or six years since for Yorkshire coast. Co[illegible]de our voyage chiefly on the then, but during t[illegible] comparatively few were caught here voyages alm[illegible] the last few years we have made our caught [illegible]ost exclusively on this coast, and have [illegible] much less on the Yorkshire coast.

[illegible]2,318. Is there any cause you can assign for that?—No.

12,319. Do you pay much attention to the northern markets in reference to the catch in the north?—We generally seek for information as to how the catch goes on.

12,320. It is of interest to you to know the state of the market elsewhere?—Yes.

12,321. Have you noticed any alteration in your catches here as compared with the catches at Wick and North Berwick?—No.

12,322. Have you ever observed whether if you have a good catch here they have a bad one there?—I have not noticed that.

12,323. There has been a very good catch at Wick this year I believe?—Judging from the Scotch accounts there has been.

12,324. (*Mr. Lefevre.*) Is the low price of herrings due to the great catch here, or is it due to the increased catch in other parts?—To both causes, and also in some measure to the depressed state of the manufacturing districts.

12,325. (*Mr. Caird.*) Do you cure chiefly for the foreign markets?—Do you mean the bulk of what I ship abroad?

12,326. Yes, as red herrings.—Yes.

12,327. Where do you find the best market for them?—We chiefly send to the Mediterranean ports. There are some markets to which we send a better description of fish than others; for instance, to the lower parts of the Mediterranean. To the Adriatic and other parts we send an inferior quality of fish.

12,328. Do you send the best fish to Spain and lower Italy?—Unfortunately we cannot ship for Spain at all. Their duty is quite prohibitory.

12,329. Their duty is really prohibitory?—It is practically prohibitory.

12,330. Is there no such duty in Italy?—A duty existed in Naples some time ago, but when the late change of government took place it was remitted, and became merely nominal.

12,331. And has the export to Naples increased in consequence of that remission of duty?—Yes.

12,332. Your best markets are now in the south of Italy?—Yes.

12,333. Do you send to Malta?—Yes, we send an inferior description of fish there.

12,334. Do you supply the Greeks?—Yes.

12,335. And you send none at all to Spain?—No, we believe it would be a great advantage if we were able to send to Spain.

12,336. Do you send to Portugal?—No.

12,337. In consequence of there being a prohibitory duty in Portugal?—I believe so. I feel confident that the fish would have found their way there if it had been at all practicable.

12,338. Do you know what is the amount of the duty in Spain?—I am not able to state, but I know that it is quite prohibitory.

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12,339. There is no fish sent to Spain in consequence ?—No, none.

12,340. Are your fish exported in barrels ?—Yes.

12,341. Do you know the average number of barrels exported from Yarmouth in a year ?—It is very large indeed, and has been so for some years. During the last two seasons large quantities have been shipped by steam for London. There are no official records kept I believe. Last year the direct shipments were between 50,000 and 60,000 barrels.

12,342. What were the home shipments ?—Perhaps 20,000 last year ; this year they will be more.

12,343. So that there will be upwards of 80,000 barrels sent abroad ?—Yes, speaking of the last two seasons, when the quantity caught has been much in excess of previous years.

12,344. Has the price of the fish sent abroad fallen off in the same proportion as at home ?—Very much so.

12,345. (*Mr. Lefevre.*) You do not gut the fish here at all ?—No.

12,346. Do you know if the French boats off here gut their fish ?—I think they do.

12,347. Do they get a better price for the fish when gutted ?—I am not able to give an opinion on that point. We do not compete with them. The pickled fish is sent chiefly to the Baltic. The Scotch have that market in their own hands almost exclusively.

12,348. You do not send to France ?—No.

12,349. There is a prohibitory duty there ?—It is much lower than in Spain, but we do not find it answer.

12,350. (*Professor Huxley.*) Is it possible to obtain any record here of the quantity of fish cured during the last 10 years and exported ? Is there anything like a trustworthy record to be obtained ?—I hardly know how it can be obtained, but we will be glad to do our best to furnish you with it.

12,351. Can we obtain anything like an approximate estimate ?—Not an accurate one.

12,352. But sufficiently accurate to enable us to form a judgment as to the average take of herring ?—I think we can.

12,353. Can you supply us with such a return by-and-bye ?—I will endeavour to do so.

12,354. (*Mr. Caird.*) Is the size of your barrels of red herring the same as that of the Scotch barrels ?—The Scotch barrels are a little larger.

12,355. Do they contain as large a number of herrings ?—I think not. The salt takes up a portion of the room. Our fish being dried pack up closer together.

12,356. Do your fish bring a greater price ?—Not as a rule.

12,357. Are they about the same price ?—I think the Scotch herrings generally obtain a higher price.

12,358. They are differently cured altogether ?—Yes, their package is more expensive. Being wet they are obliged to be in light packages.

12,359. They do not go to the same expense you do in smoking ?—No.

12,360. That seems to be a costly process ?—Yes. I am not much acquainted with the Scotch herrings.

12,361. Do you put a trade mark on your herrings when they go abroad ?—Only our own mark.

12,362. Is your own mark known generally abroad ?—Yes, and in consequence there are some brands that fetch a higher price than others.

12,363. According to the character of the curer ?—Yes.

12,364. Is that regulated by the number of herrings marked on the barrel showing the size of the herring ?—Yes.

12,365. Is that generally a sufficient test to secure a good price for the herring ?—Yes, if the foreigners can depend on the brand.

12,366. Do they depend on the brand ?—They rely upon it in a great measure.

12,367. They cannot look at every herring in a barrel ?—No ; where a shipper has been in the habit of sending for many years the buyers know if they can depend upon his mark.

12,368. Are different prices given for the herrings cured by different curers ?—Yes ; as much as 50 per cent.

12,369. When there is no difference in the quality? —Generally there is a difference in quality.

12,370. Then there is a good reason for it ?—I think so.

12,371. And that is sufficiently tested without the necessity or expense of a Government brand ?—Yes.

12,372. (*Professor Huxley.*) Do you think it would be of advantage to have a Government brand here ?—No.

12,373. Would it interfere with individual enterprise ?—I think we are better without it.

The witness withdrew.

B. Fenn.

BENJAMIN FENN called and examined.

12,374. (*Mr. Caird.*) What is it you wish to say ?—As a preliminary remark I wish to say that I have been fishing since 1819, and that I have been chairman of the mackerel and herring fishery, partly by myself, and in later years as I became older, in conjunction with my friend Mr. Shuckford who has been examined here to day. From the experience I have had, which extends over a very long period, I think the evidence you have received from Mr. Shuckford and Mr. Mainprize, as to the details of the fisheries at Yarmouth, is so correct that any further evidence you could obtain would be merely a repetition, and that too, probably, not from so accurate a source as you have already had, owing to the practical habits of business of the gentlemen who have been examined.

12,375. Then you think that in the evidence we have taken to day we have exhausted the question here ?—I do think so. I hope you will excuse my having made these remarks to you, but having had a long practical experience in the matter, I am enabled to state that with regard to the details of the question you have pretty nearly exhausted it. If there are any other points which have not entered into your investigation, on which you think it desirable to obtain information, I shall be glad to answer any questions you may put to me.

12,376. Does anything occur to you that we have omitted ?—I have on one or two occasions in the course of the time I have been connected with the fisheries given details for the information of the Government. In 1857 some queries were sent down to be filled up and returned to the collector of Customs which, with the assistance of friends, I was enabled to supply. They were general statistics as to the number of vessels employed, the number of hands, the capital employed, &c.

12,377. Was that return as recently as 1857 ?—Yes, it was furnished to the Board of Trade in 1857.

12,378. Have you a copy of it ?—Here is a rough copy, but between six and seven years having elapsed since the return was made there has been much alteration since. With regard to the addition of the half-and-half system of fishing in smaller boats, and also with regard to the spring fishery, returns were to be given. According to the statement I made then to the Government the spring-fishing boats numbered about 300 sail, and they came partly from Scotland, partly from Hastings and Brighton, and partly from Yarmouth. Since that time the greater portion of the fishery has been monopolised or carried on by Lowestoft and Pakefield, and in a small degree by Yarmouth.

12,379. Do vessels not come from Scotland now ?—No ; the fish were so valueless that they found it did not answer their purpose to fit out boats.

12,380. Then is the spring fishery on the decrease ?—No ; the vessels of a small class that fish in the spring autumn fishery are generally employed in the

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fishery, and they number about 300 sail of vessels. I think the evidence you have already had on these matters from Mr. Shuckford and Mr. Mainprize is as correct as possible. Those gentlemen have formed an estimate on the matter to the best of their judgment, and I quite concur in what they have stated.

12,381. Have you anything to say in reference to the summer-fishing?—The summer-fishing has sprung up within recent years. In the earlier stages of the fishery, about 1819, the number of fishers out of Yarmouth was very small indeed. The number employed in the mackerel trade did not exceed 50.

12,382. How long does your experience extend?—Practically from 1819.

12,383. Comparing that with the present time, has the quantity of fish taken at Yarmouth materially increased?—Yes, very materially, inasmuch as what used then to be termed an average catch of herrings was 30 lasts. Our boats did not make the season last as long as it does now. They did not go to the Yorkshire coast in the early part of September. The fishing used to commence here at New Michaelmas, about the 29th, and it continued until the beginning of December, during which time they caught about half the quantity of herrings they catch now.

12,384. And they have more boats now?—Double and treble what they had in 1819.

12,385. You are speaking now of the herring boats?—Yes.

12,386. Does your experience enable you to speak in regard to other kinds of white fish?—Yes, with regard to mackerel.

12,387. Has the quantity of mackerel diminished or increased?—It has diminished of late years.

12,388. Of late years?—Yes, in the earlier stages of the mackerel fishery the mackerel were much more abundant. The number of vessels to take them was not so large, but the catches of each vessel were of a larger character than they have appeared to be for several years passed. As Mr. Mainprize told you, the mackerel fishery has been carried on at a considerable loss by all parties engaged in it.

12,389. Do you attribute that to the same cause he does, namely, to the destruction of mackerel in the spring-fishing?—I have no doubt that to a certain extent that has a prejudicial effect. The spring-fishing is quite a modern affair altogether; I may be wrong, but my impression is that the herrings caught in the spring are young herrings. I have seen them brought to the quays, and have taken considerable notice of them, and they always appeared to me to be herrings which had not arrived at maturity.

12,390. Do you attribute the decrease of mackerel to the destruction of mackerel by the spring-fishing?—I know of no other cause, although there may be; but if so, it has not come within the scope of my inquiry.

12,391. (*Professor Huxley.*) Have you noticed whether the spring and summer fisheries have in any way affected the autumn catch?—Taking the experience of the last few years, certainly not, because this year the increase in the catch has been larger than it has been on this coast for many years.

12,392. Was there a considerable spring-fishing this year?—That I am not prepared to say.

12,393. Shall we be able to ascertain that fact at Lowestoft?—Yes, better at Lowestoft but the catches continually vary. In some seasons there have been large catches both of herring and mackerel and at others the catches have been very small. I have never been able to assign any cause for the difference. I have seen it stated in some of the papers that trawling has had some effect but at the time of which I speak there were no trawling vessels, and yet the mackerel and herring fisheries fell off without any reasonable or apparent cause.

12,394–5. How many years ago is that?—20 or 30 years.

12,396. (*Mr. Lefevre.*) That was before the trawlers came off this coast?—Yes.

12,397. Do you think it desirable that the Government should interfere more with the trade than they do now either by establishing a brand or giving greater protection?—I think not, except with regard to the sheal of the net which is a question of great importance. In my opinion it is very injurious that a smaller description of sheal should be allowed for the purpose of catching herrings than that of one inch to the mesh.

12,398. Do you think that the interest of the fishermen is not sufficient to enable them to decide that matter for themselves?—My impression is that if parties were restricted to the use in the catching of herrings of the inch mesh it would be beneficial to all—even to those who now use a smaller mesh.

12,399. Have you any reason to believe that in the autumn-fishing nets of a smaller mesh than the legal size are used?—Yes, and they catch an inferior description of fish. When there are only 600 herrings in a barrel they are of much more value in the foreign market than when there are 700 in a barrel.

12,400. Have you any reason to believe that nets of a smaller size than the legal mesh are really used in the autumn-fishing?—If they are used they are used by small boats, of which, of my own knowledge, I have no information. I think they are chiefly used, and the greatest prejudicial effect is produced in the spring-fishing.

12,401. (*Mr. Caird.*) Do you wish to make any further remarks?—No.

The witness withdrew.

The inquiry was then adjourned until Wednesday, the 18th of November, at Billingsgate.

Billingsgate, London, 18th November 1863.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

BILLINGSGATE.

W. Marchant.

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WILLIAM MARCHANT called and examined.

12,402. (*Mr. Caird.*) Have you been long connected with the trade in fish in London, Mr. Marchant?—Yes.

12,402*a*. How many years?—42 years.

12,403. Are you a fish salesman?—Yes.

12,404. Can you give us any statement as to the supply of fish at the present time comparing it with previous years?—Past and present?

12,405. Yes.—In about the year 1822, when I first went to sea, about 41 years ago, there were about from 40 to 50 sail of trawling vessels fishing for the London market. At that time there were scarcely any vessels belonging to Dover, Ramsgate, and Hull. There were a few but very few, scarcely worth naming. Our method then was to go to sea as we go now, but not exactly as we go now. Our fish are caught and put into cutters now. Then we went indifferently to sea and caught our own voyage and brought them up to Billingsgate. At that time the fish were much scarcer than they are now. It would take us from four to five days and nights to catch anything like seven or eight bushels of soles. That we used to consider in those days a good voyage for soles.

12,406. You are speaking exclusively of trawling

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now?—Yes; with the same net, the same sort of vessel, with everything exactly the same as we n w have, we could only produce that.

12,407. Perhaps you can trace the gradual progress from that time?—Time went on and it kept at that pitch for many years and after that vessels began to increase at Ramsgate, Dover, and, much later, at Hull. The first vessels I think came round from the westward, and brought up at Dover. At first some of our Barking vessels went down as pilots and introduced them on the coast of Holland.

12,408. (*Mr. Lefevre.*) How long ago is that?—That is about 35 years ago, I should think. The fishing still continued, as far as regards sole-fishing, about the same for a number of years. There never was a large quantity of soles in my early time for many years, nothing like what there is at the present time.

12,409. (*Mr. Caird.*) You stated that you were fishing with the same tackle and the same boats then that you fish with now?—The same boats, the same nets, and the same quantity of hands.

12,410. Then there has been no change in your time in the size of the fishing vessels and the size of the nets?—The boats were not quite so large. We have got some now we call extra large, but the nets and the gear are the same.

12,411. What is the length of them?—32 feet up to 40.

12,412. In former times it was the same?—About 34 feet and we had the same beam heads and the same ground-ropes.

12,413. Has there been any change made in the size of the mesh?—No, no change at all; the mesh is or ought to be about the same now as then.

12,414. Then do I accurately understand you to say that at that time, fishing with the same nets as now, they made a smaller catch than now?—Yes, considerably.

12,415. Can you give us any figures to show us accurately what the difference is?—Since trawling has become so general, I think the trawl has operated the same on the soil of the sea as the plough on the land.

12,416. That is an opinion we have heard frequently expressed, but we should like you to confine yourself to matters of fact?—We can take now about the quantity in two nights that we could take in four or five nights then.

12,417. That is double the supply with the same amount of labour?—Rather more than double.

12,418. You mentioned that there were 40 or 50 vessels from London 40 or 50 years ago, how many are there now?—There are about 1,000 sail I should say.

12,419. A thousand from London?—No, altogether. We have about 200 from London.

12,420. I am speaking of London alone?—Mr. Hewett has lately drawn a large number from London. I cannot say what the number of vessels registered in London is, but I should think there is the best part of 200.

12,421. Are we to understand that 40 to 50 vessels 40 years ago furnished the only supply to the London market?—They did.

12,422. And now taking not only the number of vessels that hail from London, but all others engaged in supplying London, how many are there?—The best part of 1,000 sail. There will be 800 at least. In a rough way I should say between 800 and 900.

12,423. Are we to understand from you that each of these 800 or 900 on an average catches twice as many fish as vessels of the same size did 40 or 50 years ago?—Upon an average treble.

12,424. With regard to particular kinds of fish has there been any change in the proportionate supply to the London market of any particular kind of fish?—Yes, in plaice from the coast of Holland, but they have come from elsewhere. They are not so numerous off the coast of Holland.

12,425. What has been the change with regard to cod?—Cod have nothing to do with trawling whatever; they are caught by the line; they are a line-fish.

12,426. Then take soles?—I believe the produce of soles is 100 fold more than it was. Where there was one bushel of soles brought into London when I was a boy there are hundreds now.

12,427. Are the soles of as good quality as they used to be?—They are better.

12,428. Has the progress been recent or gradual?—It appears to have been gradual. As the vessels increased Providence seems to have ordained that the fish should increase also. There are more fish to catch now than there were when the vessels were fewer in number.

12,429–30. If you heard it stated that the quality and size of the fish had rapidly diminished would you consider from your practical knowledge that that is not a correct statement?—I have heard that stated, but as a practical man I should not think that it is correct.

12,431. You think so as a practical man?—Yes, I believe the fish are of a superior quality now than ever were brought to London.

12,432. Take whiting?—They are a hook-fish. The trawlers have no connexion with them at all.

12,433. Then haddock?—Of late years on the northern ground they have caught a great abundance of haddock in the trawl.

12,434. In the trawl?—Yes.

12,435. Were they not formerly caught by the trawl?—Yes, more so on the Holland coast than now on the northern ground.

12,436. How is it with regard to plaice?—Plaice are a fish continually migrating about. They are never more than two months in any part. We can see them grow in numbers. Where we catch a bushel in a couple of hours, a fortnight later we may catch two bushels.

12,437. Has the supply of plaice kept quite up to the demand?—Quite up to the demand, quite as many as we can find a market for.

12,438. Flounders?—No, they are *nil.*, they are a little river fish.

12,439. They do not come into the London market to any extent?—They come in the small channel boats; they are not a deep-sea fish.

12,440. Well, I suppose that exhausts the trawl fish. Can you tell us about the line-caught fish?—I cannot say much about the line-caught fish. I believe there is as great a supply as there ever was or more, only they come through a different channel than they did formerly when there were no railroads. When I was a boy there was only one steamboat on the Thames, there were no railroads, no ice-houses, or anything of the sort; all the fish for the London market was brought up the river. Now they come from a hundred various channels, from Grimsby by the Great Northern railroad, from other places by the South-Eastern, and from Harwich, Lowestoft, and Yarmouth by the Great Eastern. They are ten-fold now what they used to be when then they came only by water.

12,441. Can you tell us whether the ground on which the greater number of the trawlers fish has varied very much from what it was 40 years ago?—All I can say is that, like Nelson, I have gone through all the degrees. I went first as a cabin boy, then from cabin boy I became master, from master I became admiral, and from admiral I have now become a commander-in-chief. I can therefore speak a little from experience, and the fact is I believe the ground is in a better condition for supplying food to the fish, principally through the trawlers. I believe that if it were not for the trawlers who are continually trawling at the bottom of the sea the ground would become covered with a kind of muck, and there would be nothing for the fish to live on; the trawls constantly passing over it level it.

12,442. You have not answered the question I put to you, which was this—Suppose you were 40 years ago fishing on certain fishing grounds that were well known to you, have the vessels in the course of that time found it advantageous to shift from those grounds?

—Not much. We go on those fishing grounds every season. We have our seasons.

12,443. Do you go further north?—No, we go on just the same ground that we did 40 years ago at certain times of the year, but of late years, since we have had railroads and ice, we have stretched further north, and for why? because the soles on the Holland coast were always very small. From my infancy up to the present time they were always small fish, but the further north and the more we approach the western shores the finer and better the fish are.

12,444. The fish are much finer on our own coast?—Yes, when we come to the eastern shore we come upon nothing but small fish. When I was a boy our market was supplied chiefly by Dutch fishermen. Two-thirds of the turbot that came to the market were brought by the Dutchmen. We used to rig little boats from this place and go to the Dutch coast where we caught small fish, little turbots, by millions. I believe those harbours are the nursery of the brood of flat-fish. I believe they supply the produce of the whole German Ocean.

12,445. Do you mean the bays on the Dutch coast?—The Zuyder Zee and all along that coast.

12,446. Have you fished there up to this time?—Yes.

12,447. Do you believe that at this moment they continue to trawl in those bays?—There are very few bays in Holland. The coast is flat, with large inlets, and thousands of these vessels, the Dutch vessels, fish there as they always did.

12,448. Do they still continue to catch the small immature turbots they formerly caught?—Not so much. They come further out, but they catch small fish. They do not want large fish. Their fish is caught for salting and drying.

12,449. Do you know whether they continue to fish in the mouths of those rivers and the Zuyder Zee?—Yes, the Dutch vessels do.

12,450. And do they continue to catch the small turbots there?—No, they come further out.

12,451. Is there much of the supply to the London market brought from the Dutch coast?—Not so much now as there formerly was.

12,452. Is there not a considerable quantity of fish brought from the Dutch coast and from Dutch vessels?—Not so much as we used to bring in. We used to bring more turbot than is brought now. There is now and then a good supply of cod brought, but very little trawl-fish. Their cod is caught on the Dogger Bank and on our western ground.

12,453. Caught by the Dutchmen?—Caught by the Dutchmen.

12,454. I want to know whether any large proportion of fish supplied to Billingsgate market is brought by foreign fishermen?—Not a large supply. I believe there is some.

12,455. Is there a regular supply from foreign fishermen?—No, not a regular supply. We should go very short if we trusted to them. There is a supply coming now and then from various sources, but of little importance, except cod now and then.

12,456. What is the proportion?—I have not gone into that. It is as nothing; thrown into the scale, it may be called dust in the balance, but it is nothing to operate on our market at all in the trawling way. In the cod way sometimes it does.

12,457. Now regarding the price, has there been much change in the price of fish in the 42 years of your experience?—Yes, a great difference.

12,458. Can you give us some facts regarding that, carrying it on progressively to the present time?—The price then varied very much, and of necessity. If a man had six bushels of soles for his voyage, perhaps the first bushel might fetch him 10*l.* and the rest 15*s.* If you had got fresh fish in those days you could get any price for it. The order of the day then was to get a bit of fresh fish, if possible, and it was such a rarity to get it into the market, that if we could have got fresh fish into the market then as we do now we could have ridden in our carriages in half the time that we have been labouring.

12,459. Then we are to understand that not only the supply of fish has increased, but the supply of fresh fish?—Yes, I believe that where we throw away one hundred weight now, we used to throw away a hundred tons.

12,460. Was that caused by the delay in bringing the fish to the market?—Yes, a great deal of it.

12,461. By the time lost in the fish coming to market?—Yes, the fish used to spoil.

12,462. In what way is that remedied now?—By the use of ice, and the assistance of the railroads; but ice is the main thing.

12,463. The aid of ice has enabled you to go out further to sea?—Yes, by the use of ice we can go further out and bring the fish direct to market.

12,464. Now let us know something as to the progressive rate of the price of fish?—The price is always varying. If you had come to our market last week to purchase soles you would have been frightened. There was such a fluctuation in the price that you could not enter the market. If no more fish came to London now than did then they would be worth a guinea a mouthful. Last week soles were worth 4*l.*, 5*l.*, or 6*l.* a box, and now you may buy the same article as good or better for 12*s.* or 14*s*; that is the difference in a week.

12,465. It depends on the supply?—It depends on the supply, not the demand but the supply.

12,466. Do not take week by week, but year by year?—Year by year, there is not a great deal of difference. There was a difference at times in other years, or else how could a man live catching a bushel of soles and being a week in doing it?

12,467. Instead of going back 40 years, go back to a more recent period, say 20 years ago. What was the average price of soles in the London market 20 years ago?—I do not think there is a great difference.

12,468. Is it less or more now?—I think it is less. Taking the general market from time to time, I think fish is produced now at a cheaper rate than it ever was.

12,469. Do you think the average price of fish in Billingsgate market is lower than it was 10 or 20 years ago?—I believe plaice is more, soles are less. I believe plaice fetch much more money on the average, and soles much less.

12,470. What is the relative price of plaice and soles per pound weight?—I cannot answer that, it is so fluctuating.

12,471. Then may we gather from your answer that the higher priced fish, and the more valuable fish, have become more plentiful and gradually lessened in price?—Yes, a little.

12,472. Is there a larger proportion of soles brought to the London market than of plaice altogether?—Taking the year round, there is a larger quantity of plaice.

12,473. Have you any knowledge of shell-fish?—Not much.

12,474. (*Mr. Lefevre.*) How long were you at sea, Mr. Marchant?—About 25 years.

12,475. And you are now a salesman?—Yes.

12,476. And the owner of trawling boats?—Yes.

12,477. How many?—Five.

12,478. Now, during the 25 years you were at sea, what was the furthest point you went to with your boats?—I should say the Texel, upon the Dutch shore, or down to Schelling for a short period of the year.

12,479. And on our coast how far?—As far down as Cromer, and on the Lincolnshire coast. I am speaking of trawling now; I am not speaking of lining. We go down to the Orkneys lining.

12,480. And you say that trawling boats still go on the same ground now as they did when you were young?—Yes.

12,481. And you think that they catch the same quantity of fish now as they did formerly?—I am

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satisfied they catch threefold more than they did at that time.

12,482. Over the same ground?—Yes, three times the quantity.

12,483. Are the wages you pay to the seamen the same now as they used to be?—Just the same, there is no difference whatever.

12,484. Do you buy fish of any fishermen other than trawlers?—No.

12,485. Can you tell us how many line fishermen are going from the port of London?—There are not a great many, perhaps 50 or 60 sail from Greenwich and Barking.

12,486. Fifty or sixty sail now?—Yes.

12,487. Do you buy any fish of them?—No.

12,488. Can you tell us whether there is any difference in the quality of fish brought in by the line fishermen and by the trawlers?—I believe the quality is about the same as it was. The quantity is greater than it ever was, and the quality is the same.

12,489. Is the quantity brought by the line fishermen the same as it used to be?—Much about the same; in fact they bring more than they did, because the facilities are much greater; the produce is double. The time used to be taken up by passages to and fro.

12,490. Whereabouts do the line fishermen from London fish?—They are all on the same ground; the season compels them to be all on one ground or thereabouts.

12,491. Do the trawlers at all interfere with the line fishermen?—I do not believe they do; imagination may lead some people to think so, but I do not think it myself.

12,492. Have you had any means of judging of the difference in the quality of the fish brought in by the line fishermen and the trawlers?—I do not know that there is any difference. If we catch a cod it is a cod, and it seems to be of about the same quality as those caught by the lines, only by catching a greater number they have a better selection.

12,493. Do the fish brought in by the line fishermen fetch a better price than those caught by the trawl?—They bring a different article; they bring round-fish, we bring flat-fish; ours may be brisk and theirs dull sometimes, and at other times theirs may be brisk and ours dull.

12,494. Do they both bring haddocks to the London market?—The line-vessels bring very little; that is an express business of itself. The haddock business is hardly worth mentioning.

12,495. Do the trawlers bring no cod?—They bring a great supply of haddocks but very few cod, scarcely any worth mentioning.

12,496. Is there any difference in the price of those brought by the trawlers and those brought by the line fishermen; I mean as regards cod?—I should say so. It is treble or four or five times as much. If a cod is caught by a trawler in all probability it is brought in dead and is of very little value. The cod brought here by the liners are alive, and, generally speaking, one live one is worth a dozen dead ones.

12,497. Is any considerable portion of the fish brought in by the trawlers damaged?—Not in these days. There is a small supply now and then, in consequence of the ice vessels missing.

12,498. I mean is there any considerable portion of the fish brought to the London market damaged?—No.

12,499. Is any portion considerably mangled?—No, none of any consequence. There is a small portion which may be injured in stowage.

12,500. What I want to know is, whether the fish brought up are damaged in the catch?—Scarcely any. All are brought up marketable in the net; nothing whatever is damaged in the trawl. I never saw a fish injured by being brought up in the net in my life.

12,501. Do you know how many cutters there are belonging to the London market?—About 40.

12,502. How long ago is it that ice was first introduced, and cutters, into the trade?—Cutters 15 or 16 years ago, and ice about 11.

The witness withdrew.

W. Deering.

WILLIAM DEERING called and examined.

12,503. (*Mr. Caird.*) You are clerk to the market at Billingsgate?—Yes.

12,504. How long have you held that office?—Seven years come next month.

12,505. Do you keep a record of the supply of fish to Billingsgate market?—I simply keep a record of the number of vessels and the number of vans that are sent away.

12,506. The number that daily comes to Billingsgate market?—Yes.

12,507. Do you keep any record of the quantities of fish and vessels discharged?—No.

12,508. Have you any means of getting at it?—None, except the merchants themselves furnish it.

12,509. Is there any means by which we could ascertain, with accuracy, the supply of fish to the market at Billingsgate, daily or weekly?—I believe it would only be an approximate statement.

12,510. Can you give us an approximate statement?—I could not presume to do that.

12,511. Is there any record from which you could get an approximate statement?—I could only get one by applying to all the salesmen in the market.

12,512. Are there no dues paid on the sale of fish?—There are dues levied on the vessels and paid by the vans.

12,513. Not on the quantity of fish sold?—No, not on the quantity of fish sold. To convince you of the impracticability of getting such a statement I may say that I have known a van come with a solitary package and I have known vans to contain 250 packages. You could only ascertain the number of vans that pay the toll, and that is all. It would not be possible to arrive at a correct estimate of the quantity of fish sold.

12,514. Are the tolls you mentioned certain dues levied upon the fish sold in the market?—Certain dues levied on the conveyances bringing fish; not on the fish themselves.

12,515. Are they levied in the market?—Yes.

12,516. Have they been pretty uniform for a number of years back?—I can only speak for seven years.

12,517. Has the rate been uniform for those seven years?—I think there has been no decrease in the number of vessels.

12,518. That is not the question. Have the dues been the same?—I think the dues on the whole have been on the increase.

12,519. Then upon the dues on each individual vessel the rate of payment has been the same during the whole of the seven years?—Yes.

12,520. Can you give us the total amount of dues for each year during those seven years?—I have it in detail from day to day, but I furnish a condensed statement every week to the comptroller's office, and they further condense it into an annual statement.

12,521. You mean the comptroller of Customs?—No, the city comptroller.

12,522. Then, could we obtain from you or the city comptroller the annual amount of dues levied?—Yes.

12,523. Would that, to some degree, be a test of the gradual and progressive supply of fish in Billingsgate market?—It would be a test to a certain extent.

12,524. Do you know of any better test by which we could arrive at a result with accuracy?—None, except a personal application to the salesmen for the exact amount of the fish.

12,525. Is that practicable?—No.

12,526. Can you suggest a better test?—No, I cannot suggest a more correct test.

12,527. Can you yourself give us the facts to which

you have referred, namely, the annual accounts during the time you have held the office?—I could not give it without going through all my books from day to day.

12,528. You say you give a weekly abstract?—Yes.

12,529. Can you not add that up for a year?—When it passes from my hands I have not the weekly abstract. I have the particulars from which the abstract was made out.

12,530. Do you pay the dues over to the comptroller weekly?—Yes, weekly.

12,531. Can you not give us the amount?—Yes, by reference to the cheque book.

12,532. We are desirous of arriving at some accurate statement of the facts?—I am prepared to give every information in my power, but it would be a very difficult affair to give a detailed statement.

12,533. We do not want a detailed statement, but week by week, or year by year—which would be most convenient to yourself?—It would be more convenient for them to render it in a condensed form. They have it done for them all ready. It would be exceedingly difficult for me to go over my books from day to day.

12,534. Then you think we can get the information better from the comptroller?—Yes, I cannot see any hindrance whatever to your obtaining the information.

12,535. Then speaking from your own knowledge during the seven years that you have been clerk, do you think the supply of fish in Billingsgate has increased, diminished, or remained stationary?—I believe the supply of the coarser kind of fish has increased.

12,536. The coarser and lower priced fish?—Decidedly so; especially with regard to haddocks, for which almost a new market has been created by a number of the poorer costermongers taking up the trade of haddock curing. They have been sustained by the fishermen with a larger supply, and as the trade has sprung up it has been met by the fishermen connected with this market.

12,537. Has the price of haddocks in consequence of that increased supply diminished or remained pretty stationary on the average?—I am not as competent to speak of that as a salesman would be, but my impression is that when I came here the haddocks were brought in in much smaller quantities than at present, and they were also of less value. A trade has been created for them. A demand has been created. Sometimes these haddocks fetch a very good price and at other times a very low price.

12,538. What other kind of fish besides haddocks has in your opinion increased in supply?—I think the supply of plaice has also increased.

12,539. Any other kind of fish?—I cannot speak positively of any other; my mind is generally taken up with other matters.

12,540. Do these kinds of fish, the haddocks and plaice, which you call the coarser kinds of fish, go chiefly into consumption among the lower classes?—Yes.

12,541. Do you think that in seven years there has been an increased supply of that fish consumed by the lower classes of the population?—Decidedly.

12,542. Are they chiefly trawl-caught fish?—Yes.

12,543. Altogether so?—Yes, altogether so; the haddocks which are cured are trawled fish, and not hooked fish.

12,544. Then with regard to the finer class of fish, what has been the progress in the supply?—I do not perceive any difference, in the supply of soles for example.

12,545. A previous witness stated to us that the supply of soles had increased in his opinion?—He might be perfectly correct, but I am not conversant with the fact.

12,546. You have not observed a decrease?—No, I have not observed a decrease. I should think on the whole, as far as my memory goes, not having made it a matter of particular observation, that there are more soles at present than there were.

12,547. What is the relative price as compared with what it was seven years ago, wholesale?—I cannot tell you.

12,548. You talk of the finer kinds and the coarser kinds, will you name the kinds of fish you classify in that manner?—Turbot, brill, red mullet, and lineswhiting we call fine fish.

12,549. Cod?—Yes, cod.

12,550. Soles?—Yes, we call them fine fish also, and doreys.

12,550*a*. Then in the coarser kinds you include haddocks and plaice?—Yes.

12,551. Anything else?—Gurnet, skate, maids, and that sort of fish, are mostly considered coarse fish.

12,552. Is there any trade name for the finer and coarser sorts?—No.

12,553. We have heard the expression "offal fish"?—That is the coarse kind.

12,554. Are haddock, plaice, and skate included among offal fish?—Yes, the haddocks were once the perquisites of the apprentices belonging to the fishing boats. Now what they once gave to their apprentices has become a matter of material consideration to the fishermen.

12,555. Can you tell us in what proportion the market is supplied with this coarser and finer fish relatively?—No, I cannot do that.

12,556. Taking the whole of the coarser and the whole of the finer, which is supplied in the greatest proportion to the London market?—The coarser fish decidedly.

12,557. Is it the same with regard to weight?—There is a very much greater amount of the coarser kind of fish than of the finer. There are some other fish which have not been named but which must be included among the coarser kind of fish, such as ling, halibut, and several other kinds of fish.

12,558. Can you say from your knowledge of the market whether the price of the finer kinds of fish is greater or less than it was seven years ago?—I believe it is somewhere about what it was.

12,558*a*. Has the price of the finer kinds of fish continued pretty stationary up to this time?—I think it has on the average, but the salesmen can answer that question much better. My business is only to collect the tolls; I do not pay any particular attention to the price the fish are sold for.

12,559. You do not feel yourself competent to speak of the price of fish. During the same period can you say whether it has increased, diminished, or remained stationary?—I would rather decline answering that because there are other persons who can give you their experience upon the matter.

12,560. Can you tell us what proportion of the whole supply is supplied by foreign fishermen?—No, but as far as my knowledge of the matter goes, I should say the quantity coming from foreigners is very small, with the exception of salmon, and I believe your inquiry does not include that fish.

12,561. No?—The principal supply of foreign fish is salmon—Dutch salmon.

12,562. Is there a large supply of smelts from foreign fishermen?—Yes.

12,563. From the coast of Holland?—They do come from Holland.

12,564. Can you tell us the principal source of supply from our own coast independent of the vessels that come direct to Barking in the Thames?—No.

12,565. Is there any means of getting at that information?—None, except from such gentlemen as are here.

12,566. No market returns show it?—No.

12,567. Can you tell us the export of fish inland from the London market?—It is far less from London to the provincial towns than it was, unspeakably less than it was before the establishment of railways. Prior to the construction of railways London was the principal emporium for fish, and it was sent from London to all the cities and provincial towns of the

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Kingdom. Consequently, going back 20 years, there was, with regard to some fish, a very large quantity sent away; for example, a large quantity of cod was sent away at that time because all the cod being brought here to be sent into the country the quantity was larger then than it is now when so much is sent coastwise from Hull, Grimsby, and other places inland.

12,568. Do you agree with the previous witness in believing that there is a much larger supply of fish brought into the London market now than formerly?—How many years back do you go?

12,569. We went back in the evidence of the last witness for 40 years, but you say you can only go back seven?—From my observation I should say there is a much larger supply of fish. There have been instances in which this market has been for three or four weeks without a supply of any fish.

12,570. Are we to understand that whilst there is an increased supply into the London market there is a decreased export out of it to the large provincial towns of the kingdom?—Decidedly.

12,571. Then there must be a larger supply to the population of London itself?—Yes, a larger supply to the population of London, and a larger supply generally to the population of the country.

12,572. To what part of the country is the fish chiefly sent from the London market; does it go to Birmingham, Manchester, or that direction, or is it sent to the south coast?—I think fish is sent from this market to all parts, but much less to some parts than it was formerly.

12,573. Taking the great towns, such as Manchester and Birmingham, are there any buyers in Billingsgate market, specially for Manchester and Birmingham?—No, but there are buyers for those markets at Grimsby and Hull.

12,574. But not here?—Not that I am aware of, but many of the large fishmongers who are called "Bomarees" in this market send fish in that direction though in smaller quantities than formerly.

12,575. Do you find that the fish comes in a better condition to the market than it used to do?—I do not see any difference; they had ice then, and they have ice now.

12,576. It just remains the same?—Yes, sometimes it came bad then and sometimes it comes bad now.

12,577. Is there any difference in the quality of the fish from the different fisheries?—No, I do not think there is, but that is too finely discriminating a question for me to answer.

12,578. (*Mr. Lefevre.*) Were you connected with the trade before you became clerk to the market?—No.

12,579. Then you cannot speak of any comparative quantity except during the last seven years?—No.

12,580. I think you say the dues are levied on the vans and vessels?—Yes.

12,581. Does every vessel pay the same amount of dues or is it levied upon the tonnage?—If it is a full cargo the vessel pays five shillings, if not it only pays two shillings and sixpence.

12,582. And how is it in the case of the vans?—A vanload drawn by three horses pays one and sixpence, a two horse vanload pays one shilling. The tolls are regulated by Act of Parliament.

12,583. Does the greatest amount of fish that comes to London by railroad come in vans?—Yes, I think it is on the increase.

12,584. Is there any considerable portion of it sold to the fishmongers without coming to Billingsgate from the railroad?—I do not think there is any fishmonger supplied direct from the railway. I never heard of it.

12,585. The fact is that all the fish come to Billingsgate at once?—Yes.

12,586. Do you recollect the time when the fish came in the fishing boats before the time of the cutters?—No.

12,587. Does all the fish come now in the cutters, or are there a certain number of fishing boats that come?—The sprats are brought in the boats in which they are caught, and herring and mackerel have been brought in very large quantities, at the time the dock was in existence, in the boats in which they were caught. Mackerel have long ceased to come in boats, and there has been only one boat of herrings here this year, whereas at one time we were accustomed to have as many as eight a day.

12,588. Then we may take it, with small exceptions, that all the fish comes direct to the port of London in cutters?—Nearly all, very little comes otherwise.

12,589. Is there any inspector in the market to look at the fish, and see if it is fit for sale?—There are two inspectors appointed under an ancient charter by the Fishmongers' Company. I am empowered also under an Act of Parliament to inspect the fish if they are not present. When they are not there an appeal is made to me in any doubtful case.

12,590. Have you power to order the destruction of any fish unfit for sale?—I have power, and use it sometimes.

12,591. Is there any considerable quantity of the fish so destroyed?—A very large quantity in the course of the year.

12,592. Is there any means of getting at the quantity of fish so destroyed?—Formerly an account was kept by my predecessor of all the fish condemned by the inspectors appointed under the charter to which I have referred, but on my appointment the men demurred to that being done, because they thought that it was assuming the credit of having myself condemned so much, whereas they had nothing to show that they had condemned any. I said I wished to have no borrowed plumes, and that if there were any credit in the matter they were welcome to it.

12,593. Can you give us the quantity you yourself have ordered to be condemned?—I can submit my books to you.

12,594. Can you make an extract from them to show what has been destroyed every year since you have been clerk to the market?—There has been a very small quantity independent of that condemned by the inspectors. It was only in their absence that I have exercised any power.

12,595. Do the inspectors appointed by the Fishmongers' Company keep an account?—I think so.

12,596. Do you know whether the fish is ever destroyed in this market in order to keep up the price?—I never heard of such a case.

The witness withdrew.

J. T. Morgan.

JAMES THOMAS MORGAN called and examined.

12,597. (*Mr. Caird.*) Have you been long engaged as a fish salesman in this market?—Ever since I can recollect.

12,598. As a salesman?—I have been a salesman for 24 years.

12,599. Do you sell all kinds of fish that come to the London market?—Yes.

12,600. Then you have had considerable knowledge and experience in reference to the supply of different kinds of fish in the market?—Yes.

12,601. Including both trawled fish and hooked fish?—Yes.

12,602. Can you tell us whether, in your experience, the supply of hooked fish has kept pace with the increased supply of trawl fish?—Yes, there is three times the quantity.

12,603. Three times the quantity of hooked fish?—Yes.

12,604. What do you suppose is the increase in trawled fish?—I should think it is nearly the same.

12,605. Then you think each has gone on progressively at the same rate of increase ?—Yes.

12,606. Has there been any recent falling off in the supply of hooked fish ?—No. I went to sea when I was a boy. I used to be gone about five or six weeks, and I used to come up to Greenwich with a basket of fish containing 10 or 12 and sometimes not more than 6 score of fish, and now I see vessels come in with 10, 20, and 30 score.

12,607. (*Mr. Lefevre.*) Are you speaking of live fish ?—Yes, brought in by vessels that had been engaged in codding.

12,608. When you talk of hooked fish, do you refer mainly to cod ?—Yes, cod and skate.

12,609. (*Mr. Caird.*) In your experience there has been no decrease in the supply of hooked codfish ?—No, there is now three times the quantity. I can prove that vessels I have been connected with during the last five or six years have brought in five or six times the quantity that similar vessels used to catch when I was at sea as a boy.

12,610. Were you a long-line fisherman ?—Long-line and hand-line too.

12,611. Which has increased most in the catch, hand-lining or long-lining ?—The catch by the long-line men has increased the most.

12,612. Are the line-boats the same size as the trawl-boats ?—About the same.

12,613. Do they go on the same ground ?—The line-vessels go on the Dogger Bank during the season.

12,614. What kind of fish are caught by the long-line boats ?—Cod, haddock, skate, halibut and ling; that is about all.

12,615. (*Mr. Lefevre.*) Are you the owner of a fishing boat ?—I have 35 sail.

12,616. What proportion of these are line-fishing boats ?—I have nine vessels hooking and the others are trawling.

12,617. (*Mr. Caird.*) Has the quality of fish you find coming to the market increased as well as the quantity ?—Yes, it is three times as good.

12,618. There is no falling off in the size of the fish that come to the market ?—None.

12,619. Is the cod as good as it used to be ?—It is much better. Twenty-two years ago we used to have cod in the wells for five or six weeks. The consequence was that they pined away. Now they are not caught three days before they are on the consumers table.

12,620. Then the quality is better than it used to be ?—Yes.

12,621. Is there any waste in consequence of the fish being unfit for food, or is that waste less than it used to be ?—Yes, a great deal less.

12,622. Is there less fish caught unsuitable for food than was the case formerly ?—There used to be ten times more thrown away when I was a boy than is thrown overboard now. When I used to go to sea. the first few nights it was our custom to overhaul the well, and throw away all the fish that were dead. Now, the fish are caught, packed, iced, and in the market in three or six days almost alive.

12,623. Is the supply much more continuous than it used to be ?—There is three times the quantity.

12,624. But without regard to the quantity, is the supply more regular day after day ?—Yes.

12,625. Is there a great difference in that respect ?—Three times the quantity comes to the market that used to come.

12,626. And it comes with greater regularity ?—Yes.

12,627. Are there periods in which the market is inadequately supplied ?—Yes.

12,628. Are these periods as frequent as formerly ?—No.

12,629. Do you know whether there is any difference between the quality of the fish caught by the hook by the trawl ?—Yes, the fish they term "offal" caught by the trawl is plaice, haddock, and whiting. They call them "offal" because the fish are dormant when they come to the vessel's side. They are gutted, packed, and sent to London. When they are caught by the hooker they are placed in the well of the vessel alive, and are taken alive to the market.

12,630. Then is the quality of the hooked fish superior to that of the fish caught by the trawl ?—No; one quality is as good as the other.

12,631. You are speaking of the same kinds of fish caught by the line and by the trawl ?—No; plaice are caught by the trawl.

12,632. Perhaps you will be good enough to confine yourself to the same kinds of fish caught by the hook and by the trawl ?—The fish caught by the hook are haddock, cod, and ling principally.

12,633. Are there a good many haddock caught ?—Yes.

12,634. Is the quality inferior ?—The quality of the fish is not as good as when it comes to the market alive, because the fish are gutted as soon as they come on the vessel's deck. They are washed clean, packed, and it takes three days before they get to the market, whilst the fish out of the wells is alive and in the market in 12 hours.

12,635–6. Are all the gutted haddock trawl-caught fish ?—Yes.

12,637. In what proportion is the London market supplied with haddocks caught by the trawl and caught by the hook ?—I should say 99 to 1. Where there is one haddock that comes to the market from the hook there are more than 99 brought by the trawlers.

12,638. Supposing that it might be considered a proper thing to put an end to trawl-fishing altogether, what would be the consequence with regard to the supply of fish in the London market ?—There would scarcely be any at all. There would be no flat-fish whatever. I have had 26 years' experience now, and never more than one turbot came to me that had been caught by the hook, and that was last winter.

12,639. Then there would be an end of turbot altogether ?—Yes.

12,640. How would it be with regard to soles ?—There would be none whatever. They could not catch any with the hook.

12,641. What other fish would the London market also be deprived of if trawling were put an end to ?—There would be no turbot, brill, plaice, and various other kinds of fish that might be mentioned.

12,642. What proportion of the whole supply that comes to the London market would you be deprived of by putting an end to trawling ?—I myself have brought 100 tons per week on the average. For the last four or five years I have averaged 350 baskets a day, which will be about 100 tons a week, and Mr. Hewett has about 200 tons.

12,643. Are you speaking of trawled fish ?—Yes. If it were not for the trawlers I should have none at all.

12,644. What supply would you have had without them ?—I should only have had codfish.

12,645. What weight of codfish ?—From 10 to 12 tons.

12,646. Is that a return in your hand of the quantity you have sold ?—It is just a slight sketch. I find I have had 350 baskets, 1 cwt. in each basket, every day for the last few years.

12,647. Can you tell us the proportion of the principal fish which you yourself sell ?—No. I should think it is about half and half.

12,648. Half what ?—Half offal and half prime.

12,649. They are about equal in quantity ?—Yes, taking the summer and winter together.

12,650. You sell about an equal quantity of prime fish and an equal quantity of coarse fish ?—Yes, that is about the proportion of my sale.

12,651. Do you suppose that your experience represents the average experience of the salesmen in the London market ?—No, I speak of my own sale; what my cutters bring to London.

12,652. Then we must not take that as an accurate average of the supply to the London market ?—No.

12,653. Where do your vessels fish ?—In the summer generally for some months off the back of the Leman and about Smith's Knoll.

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12,654. How far is that from the land?—About 32 or 35 miles.

12,655. Do you get a great quantity of fish there?—Yes, the fish there are very fine indeed.

12,656. Then do you think that your average will show a larger proportion of fine fish than would be the common average of the London supply?—Yes.

12,657. Taking it at half and half, your average would show a larger supply of the prime fish than comes to the London market on the average?—Yes.

12,658. In your experience, can you give us the relative and progressive price of the different kinds of fish during the last 20 years?—I think that the fish are a great deal cheaper now than they were when I first came into the business.

12,659. Take 20 years ago; do you sell soles by the basket?—No, by the box. We used to sell them by the basket. When I went to sea, 20 years back, I have known the best basket fetch 5*l.* or 6*l.*, the next would fetch 3*l.*, and the last one 15*s.* That is because we were obliged to get our own fish, and were obliged to stop out in muggy weather. We could not get our fish to market with the same facility that we do now. Then it was not unusual to throw on an average one half the produce of the voyage away before we came home.

12,660. On the average, you were formerly obliged to throw away as waste a large proportion of the catch?—Yes, quite one-half.

12,661. What proportion do you throw away now?—We don't throw away a fish's eye now.

12,662. Are none thrown away at all?—No. Some of our baskets may only fetch 8*s.*, whilst others will fetch 3*l.* or 4*l.* We have food for the poor and food for the rich.

12,663–4. Take 10 years ago; you can more easily recollect that time. What were the relative prices of fish 10 years ago compared with what they are now on the average?—Codfish is much cheaper now than it was 10 years back.

12,665. Is it the same with regard to turbot?—Yes.

12,666. And soles?—Yes, almost every kind of fish.

12,667. Do you sell herrings here?—No.

12,668. Are any herrings brought to Billingsgate market?—Yes, there have been more herrings brought here this year than was ever known in the memory of man.

12,669. You cannot speak of the supply or the price from your own knowledge?—No, only through our agent at Lowestoft, who says they have been sold as low as 4*l.* 10*s.* the last, and that I never knew of before.

12,670. Do you know the London market?—No, not for herrings.

12,671. But you know that a large supply comes here?—Yes, very large indeed.

12,672. Do you sell any foreign fish?—Yes, lobsters, salmon, and mackerel.

12,673. Has the supply of lobsters increased or diminished of recent years?—It has diminished.

12,674. Is that chiefly the foreign supply or the supply from our own coast?—We have a foreign supply of mackerel in the season commencing the latter end of June, and running through July and August.

12,675. But I want to know about lobsters?—They are falling off.

12,676. Is there a considerable falling off?—Yes; in the course of the season they have fallen off 5,000 or 6,000 a day.

12,677. Do all the lobsters that come to the London market go to Billingsgate?—They go to Grimsby and Harwich, and they are sent to London every day.

12,678. They are brought up by railway to London?—Yes.

12,679. Is the supply gradually on the decrease?—Yes.

12,680. Is the price increasing?—I don't think it is as good as it used to be, and I think the fish run much smaller than they did formerly.

12,681. The fish are smaller now?—Yes.

12,682. To what do you ascribe that?—I have known years back what we call "tens," the largest fish we have, brought to the market. There would be six, seven, or eight tens in 1,000, and now we do not get more than two.

12,683. Do you suppose that the ground has been too closely fished?—Yes.

12,684. How is it with regard to crabs?—I don't know anything about crabs.

12,685. Do you sell oysters?—No.

12,686. Bloaters?—No.

12,687. Do you sell any dried fish?—Sometimes I sell some dried cod when the vessels come from Shetland.

12,688. Do you sell much of that?—Not a great deal. They generally have orders to sell that at Shetland.

12,689. I believe there is a considerable quantity of dried cod in this market?—Yes.

12,690. Do you sell smoked haddocks?—No, but there are people here who do.

12,691. Is there any large supply of tusk in this market?—No, there are very few here.

12,692. Any skate?—There is a great quantity of skate in the months of December, January, and February. They come from the Dogger Bank.

12,693. Has the supply of skate increased or diminished during the last seven years?—It has increased.

12,694. We find on the north-east coast of England that the supply has greatly diminished?—That is because there is nothing for the fish to eat on the Yorkshire coast. Most of them go off to the Dogger Bank in order to get food.

12,695. Are you confident that the supply has greatly increased from the Dogger Bank?—Yes, it has very greatly increased.

12,696. Has the price kept stationary, or has it increased or diminished?—There is no difference in the price, except that the gutted fish may fetch a little less.

12,697. (*Mr. Lefevre.*) Did you begin life as a fisherman?—I commenced when I was about two or three years old.

12,698. How many years were you at sea?—As soon as I could walk I used to go and look after the boat to see that nobody robbed it.

12,699. How many years were you at sea?—Four years.

12,700. As a fisherman?—Yes.

12,701. And then did you come to land?—I lost the sight of my eye when I was 17 or 18 years old, and I found that the sea did not agree with me.

12,702. When did you first own fishing boats?—When I was about 18.

12,703. How many boats did you begin with?—One.

12,704. And have you gone on increasing the number until you own 35?—Yes.

12,705. Of that number I think you stated that you have nine line-fishing boats, the rest being trawlers?—Yes, I think I have 150 odd apprentices, and that is more than any one can say in England.

12,706. How many?—153 I think.

12,707. How many men do you employ?—From 130 to 140.

12,708. Then one half of the crews you send on board are youths or apprentices?—Yes, one half are apprentices, and one half are men.

12,709. Was the first boat you owned a line-fishing boat or a trawler?—A trawler may be a liner in the line season.

12,710. What do you find pays the best?—I am sorry to say that none of them have paid lately. During the last few months I have lost 2,000*l.*

12,711. Taking the average, which pays best, the line-fishing boats or the trawlers?—Since I have em-

ployed clipping vessels with lines for cod on the Dogger they have done the best.

12,712. Do your line-fishing boats go further out than the trawlers?—Yes.

12,713. The line-fishing boats go off the Dogger Bank, and the trawlers remain off the Ness?—From the Ness down to Flamborough Head.

12,714. Do they mostly keep together?—Yes, in the fall, and they send a cutter away for the London market every day with the fish iced.

12,715. Do you own any cutters yourself?—Yes.

12,716. How many?—18 or 20.

12,717. In addition to the 35 fishing vessels?—No, they are included in them. My fishing vessels are nearly all fast vessels, and can act as cutters.

12,718. Do the line-fishing boats keep together off the Dogger Bank?—No, they go by themselves. They take their bait, make a voyage, and then return back.

12,719. Then you have no cutters going out with the line-fishing vessels?—No, only with the trawling boats. When the wind is against them they employ the fastest cutter they have to take the fish in.

12,720. Can you give us any notion as to which pays best, the line-boats or the trawlers?—The line-fishing boats have paid best during the last five years.

12,721. Do you suffer any loss in consequence of the trawlers coming across your lines?—No, they never go near them. As soon as the trawlers see the fishing vessels with lines it is time for them to get out of the way, because the ground that the liners are on will not suit the trawlers, they would lose their tackle.

12,722. Do the trawlers fish on a different bottom?—Yes.

12,723. In deeper water or not?—It is all according to the season. If there is a frosty night or snow they go to deeper water expecting the fish to come to them. In fine weather they fish in shallow water.

12,724. Have the line-boats increased more than the trawlers of late years?—No, the line-boats from London have diminished; they have gone to Grimsby, from which place they make shorter trips, and send the fish up by railway. By going to Grimsby and sending the fish up by the Great Northern railway they can make three voyages where formerly they could make only one.

12,725. Do your boats go to Grimsby?—They are doing so now. We are short of ice, or they would come up to London.

12,726. Have you ever tried to send out steamers to the trawlers from the port of London?—I have sent them out, but they did not answer.

12,727. Do you find that cutters pay better?—If a steam-boat went out and there was any wind she would roll and smash the boats.

12,728. Do you find that any large proportion of the fish caught by the trawlers comes up in the trawl damaged?—No; I have seen a few baskets occasionally damaged, when the wind was blowing heavy, and the vessel was coming up with the wind against her, but nothing to speak of.

12,729. I mean have you ever seen the fish damaged in the catch?—The fish were never as good in the memory of man as they are now.

12,730. Do the fish come up in the trawl with their scales rubbed off?—Yes, sometimes. The vessel will do that in pulling the net over the ground.

12,731. Are they ever in such a state as not to be fit to send to market?—No.

12,732. You send all to market—large and small?—Yes.

12,733. Is any large proportion very small fish?—We have very few small fish. We have small whitings now and then, but very few.

12,734. You have not a large number of small turbot or young fish?—If we get over to the eastward we get small turbot, but we don't want our vessels to go there.

12,735. Do you agree with the last witness that there is not the same quantity of fish exported from London to the provincial towns as there used to be?—I think there is more. When we had to send by boat 20 or 30 years ago we had to pay 20 times the amount in carriage.

12,736. Do you sell mainly to the London fishmongers?—No, I know there are a great number of soles in the summer season sent to Paris. The French fishermen have not brains enough to catch them good enough for the French Emperor to eat, and the fish are spoiled before they get them in.

12,737. Does any supply come to London that is brought by the French trawlers?—No, we beat them out of the field, they cannot get them good enough. They don't like to give 2,000*l.* or 3,000*l.* a year for ice.

12,738. What is the cost of a line-fishing boat and a trawler complete?—To fit out a line-fishing vessel with a good crew and plenty of lines would cost about 1,500 guineas.

12,739. What is the cost of a trawler?—The cost would vary according to the size. The same sized vessel would cost about 1.200 guineas.

12,740. What is the differenee in the crew?—One has eight hands and the other has 13.

12,741. Can you recollect the time when any quantity of fish was distroyed in the market in order to keep up the price?—No, ever since I have been engaged in the fishing business we have not been able to get enough, leaving alone destroying them.

12,742. I only wanted to know if that was so?—No.

12,743. (*Mr. Caird.*) You stated just now that you send a quantity of soles to the Paris market?—I don't send them myself. The buyers buy them of me and send them to the Paris market.

12,744. Has that only recently occurred?—During the last three or four years.

12,745. Has there been a regular trade of this kind going on between London and Paris in the summer time?—Yes.

12,746. Is it carried on only during the summer time?—One man buys regularly every day.

12,747. Does he take any large quantity?—Yes, 30 or 40 baskets in a day.

12,748. Does he take a large proportion of the whole supply?—No, not any large proportion. It varies according to the price. If he thinks they are very dear he will only buy 10 or 15 boxes, but if they are cheap then he will take 30 or 40. The buyers for Paris are ruled altogether by the price.

12,749. Are the Paris buyers coming in large numbers to your market?—There are only two buyers yet.

12,750. Do you happen to know of your own knowedge what quantity altogether is sold in that way, or whether the quantity sent to the Paris market is increasing?—It is increasing.

12,751. Is it confined to soles?—No, it consists of soles, mackerel, salmon, and nearly all kinds of fish.

12,752. Do they take all kinds of fish to the Paris market?—Yes, with the exception of plaice.

12,753. Are they all prime fish?—Yes.

12,754. Then the price in the Paris market is higher than it is in the London market if they can afford the additional cost of transport?—Yes.

12,755. You do not know except from the quantity you yourself sell how much may go in that way from the London market to Paris?—No.

12,756. How many boxes a day do you say you sell?—As many as 40 boxes.

12,757. In one day?—Yes.

12,758. What proportion of your whole sale per day would those 40 boxes be?—About one-third. Out of 120 boxes the Paris buyers would take about 40.

12,759. Do you know whether they take a considerable quantity from the other salesmen?—No.

12,760. Are you aware that they confine their purchases to you?—No, they do not.

12,761. You do not suppose that anything like one-

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third of the fish sold in Billingsgate market is taken to the Paris market ?—No, certainly not.

12,762. Nothing approaching that ?—No, not one-twentieth part.

12,763. (*Mr. Lefevre.*) You said that you had been losing money lately ?—Yes, I should like to sell you my whole fleet.

12,764. Do you attribute that loss to any diminution in the quantity of fish ?—No, but because there are so many in the business that everything is very dear, and the American war affects us very considerably.

12,765. You have not found any falling off in the take of fish ?—No.

12,766. When did you last add to your fleet of boats ?—Last Sunday.

12,767. You have bought another boat ?—Yes.

12,768. Notwithstanding that you are ready to sell your whole fleet at once ?—Yes; with regard to the addition to my boats it occurred in this way. I had an old one that I got rid of, and got another in its place. The builder had been boreing me for some time, and at length I gave him the old one and got the new one.

12,769. (*Mr. Caird.*) Does the fact that it has not been a paying business to you of late years arise from the low price of the fish itself ?—No; I think the principal cause has been the scarcity of ice. I have been for six months running to the rail, and throwing two-thirds of the fish away because they would not pay.

12,770. Because they were so plentiful and abundant ?—No, because it would not pay to send up the common fish by rail. The expense is 4*s.* a basket, and that would not pay for packing them up.

12,771. Has the cost of transport increased lately ?—It has in some part.

12,772. Where have you landed the fish of which you are speaking ?—At Lowestoft, on the Eastern Counties Railway.

12,773. The cost of ice and the expense of railway carriage are too great for the common fish ?—Yes.

12,774. The consequence of which is, that you have destroyed a large quantity ?—Yes; if I could have come here with them I should have had tons and tons of poor people's fish.

12,775. Do you mean offal fish ?—Yes.

12,776. What amount of fish did you destroy ?—In July and August we threw away every bit of 10 tons a day. You must understand that if the cutters get 30 baskets of prime their orders are to leave the sea for them to London ?—Yes. When they come direct to London every day. If they have as much as 700 baskets of offal that counts as nothing, because they must come away with the prime.

12,777. The cost of ice and the railway fare make it a matter of consideration, whether the fish will fetch enough to pay the expense you would incur in bringing London there is no risk. In that case the hatches are not touched until we want the fish in the market.

12,778. Has the number of trawlers from London been increasing within the last few years ?—Yes, it has increased every year.

12,779. You think there is room for all that are on the trawling ground ?—Yes, plenty of room.

12,780. And for more ?—Yes.

12,781. Where is it that the fish you refer to are thrown away ?—They are thrown away on the ground on which they are caught.

12,782. Is a large proportion of your catch thrown away ?—Only when we have no ice. If we have ice, we pack everything and bring it to London.

12,783. When you are short of ice you bring only the prime fish ?—Yes, and the best of the offal.

12,784. The rest are thrown into the sea ?—Yes.

12,785. Because they will not pay ?—Yes. I paid the Eastern Counties Railway 140*l.* in July, and I found that I got for the fish about 14*l.* There were no buyers to buy that sort of fish.

12,786. Is a large proportion of the whole summer catch destroyed in that way ?—Not when we have had a severe winter and have got plenty of ice. There was no ice last winter. We had a mild winter and could get none.

12,787. May I ask you as a man having a large capital embarked in the trade, what may be the average expenditure in a year for ice. I do not wish to go into your private business, but I think that is an interesting fact to ascertain ?—Between 2,000*l.* and 3,000*l.*

12,788. Does the price of ice by the ton vary very much ?—Yes, according to the severity of the winter.

12,789. Where do you get it ?—Off the canals and ditches.

12,790. You do not take the North American ice ?—Only when we cannot get any other.

12,791. Is it much dearer ?—Yes, it is far too dear for us.

12,792. Do you buy it at so much per ton ?—At so much per cart. In the winter time we have 2,000 or 3,000 people men, women, and children, employed in collecting it for us.

12,793–4. Where ?—At Barking, in Essex.

12,795. Do you store it in ice houses ?—Yes, and as they go from London the vessels stop at the mouth of Barking Creek. They have 10 or 20 tons of ice put into them, and afterwards they proceed to sea.

12,796. If you have a mild winter and a short supply of ice, you feel the result of it in the summer ?—Yes.

14,797. (*Mr. Lefevre.*) What is the difference in the price of ice this summer and in a summer after a hard winter ?—I have bought it at 2*s.* a ton. The difference in the price this summer is about 40*s.* a ton.

12,798. (*Mr. Caird.*) Then it is of great consequence to you in your trade that you should have a hard winter ?—Yes.

12,799. It is a matter of considerable importance both to the public and to those engaged in the fishery business themselves ?—Yes.

12,800. Do you never buy ice other than that which is collected in the neighbourhood of Barking ?—Yes, we get it from Norway.

12,801. Do you import ice from Norway ?—Yes, I have had several cargoes this summer.

12,802. Do you import it every year ?—Not if we can get the ice at Barking.

12,803. If you can fill the ice houses in Barking you have a sufficient supply ?—Yes.

12,804. If you cannot do that, you have to import it from Norway ?—Yes.

12,805. (*Mr. Lefevre.*) What quantity of ice do you put into your boats in the summer time ?—From 8 to 35 tons.

12,806. And what quantity in the winter time ?—Generally from 5 up to 16 tons. We do not give them too much, if there is blowing weather.

The witness withdrew.

R. Hewett.

ROBERT HEWETT called and examined.

12,807. (*Mr. Caird.*) I understand, Mr. Hewett, that you are largely engaged in supplying the London market with fish ?—Yes.

12,808. Have you been so engaged for some time ?—Yes, for 20 years.

12,909. What may be the extent of the interest you have in it and the number of vessels and people yon have employed in the fishing ?—The firm I represent have between 50 and 60 vessels.

12,810. (*Mr. Lefevre.*) You are the son of Mr. Hewett who gave evidence to us at Yarmouth ?—Yes, I belong to the firm of Hewett Brothers.

12,811. (*Mr. Caird.*) You have between 50 and 60 vessels engaged in trawling and lining ?—Yes.

12,812. What number is engaged in each ?—We have only seven lining now.

12,813. Can the same vessel be sent either to trawling or lining ?—Yes.

12,814. Have you, in recent years, diminished the number engaged in lining and increased those engaged in trawling?—Our liners have been put on within the last four or five years. They are the only vessels that catch live haddocks for this market that I know of.

12,815. (*Mr. Lefevre.*) Where do they catch them?—On the Well Bank and at Botany Gut, and in fact all over the North Sea.

12,816. (*Mr. Caird.*) Were they put on specially for that object?—Yes.

12,817. Was there such a deficiency in the supply of that description of fish that you thought it a profitable trade to enter into?—Yes, there was none of that kind of fish caught as a regular thing. There was no regular supply at all of live haddock for this market.

12,818. How are they kept alive?—In the wells.

12,819. The smacks are well-smacks?—Yes.

12,820. Are there no other well-smacks except those?—Yes, we have several other well-vessels, but they are employed in trawling.

12,821. It has not been usual to have well-vessels engaged in trawling?—Of late years there have been a great many well-vessels engaged in trawling, but not nearly so many as dry-bottomed vessels, not in the proportion of one to three.

12,822. Do you find that the quality of the fish caught by the line is superior to that of those caught by the trawlers? Are the haddocks superior?—They are better when they come to the market because they have only been killed for 12 hours. The others have usually been dead for more than 48 hours and sometimes for three days.

12,823, Within how many years have you put on these seven line-vessels?—Within the last five years.

12,324. Do they fish on the same grounds the trawlers frequent?—Yes, they all fish on the same grounds.

12,825. In your opinion have the trawl-vessels not injured the line-fishing?—No, these seven vessels catch now and send to the market more fish than 14 vessels would have done 12 years ago.

12,826. What line-fishing is that?—Hand-lining.

12,827. To what do you ascribe that increase in the catch?—There are more fish, I believe, and they lose so much less time in their journeys. They put their fish out at Yarmouth every night. The old-fashioned way was that they sent their fish up in hatch-boats to the dock.

12,828. In your opinion, the same number of men can catch more with the same care on the same grounds than they could some years ago?—Not twice as much but half as much again.

12,829. Using the same vessels?—Yes, the same vessels, the same bait and everything.

12,830. Do you agree with the previous witnesses that the supply of fish to the London market is on the increase?—Yes.

12,831. All the different kinds of fish that come to London?—I do not know of any kind that has decreased except brills. I don't think there are as many brills in the market as there were 10 years ago.

12,832. Is there any reason for that?—I do not know.

12,833. Brills are caught by the trawlers, are they not?—Yes.

12,834. Do they frequent any particular fishing ground?—No.

12,835. With regard to the price of fish, do you agree that the price on the whole has been stationary?—I think it is about the same, but I have an idea that the very best fish fetch rather more than they used to do.

12,836. Is that on account of its better condition?—No, I think there is a greater demand for better fish than there used to be.

12,837. Are there more people to buy and eat them?—Yes, we call them West End fish.

12,838. It fetches more money?—Yes.

12,839. Is that the prime sort of fish—soles, cod, and turbot?—Yes, especially turbot.

12,840. Where are the best fish caught—the primest fish?—On all the banks from here to the Dogger. On the Brown Bank, the Swarte Bank, the White Bank, the Silver Pits, and the Dogger Bank.

12,841. Is there any peculiar excellence in Dogger Bank caught fish?—They are larger than the coast fish.

12,842. Are the cod from the Dogger Bank better than the fish caught upon any other bank on this coast?—No, not better than any other. The Dogger Bank cod we look upon as rather a small cod.

12,843. Where is the best turbot caught?—I don't think there is any difference.

12,844. The nearer banks are as good as those that are further off?—Yes, just as good. They may be a little smaller on the Dutch coast.

12,845. You do not find that by sending cutters to the Dogger Bank they bring a better quality of fish than from nearer home?—We get larger fish on the Dogger than on the Dutch coast.

12,846. I am not speaking of the Dutch coast, but of the banks on our own coast?—There are no regular banks on our own coast.

12,847. Not till you get as far north as the Dogger?—They fish at the back of the Leman—outside the Leman.

12,848. Do the trawlers frequent all the regular grounds off our coast?—Yes, all away along, on both sides of the deep water.

12,849. Is the quality of the fish they catch on all sides equal?—Yes; nobody can tell the difference. Nobody can say:—"That fish came from the Dogger and that from the coast."

12,850. Can you make a distinction between those caught off this coast and on the Dutch coast?—Yes, they are lighter coloured and smaller on the Dutch coast. Fish caught close on the coast are always smaller—both turbot, brill, and everything.

12,851. Then those caught on our coast are of a better quality than those caught on the Dutch coast?—Yes.

12,852. Are you yourself a fish salesman in the London market?—Yes.

12,853. Can you tell us anything as to the supply of fish to the inland markets compared with what it was as far as your own experience goes?—A very great deal more goes away from the London market than before.

12,854. Then you don't agree with the previous witness?—I agree with him to a certain extent, but I think he misunderstood you. A great deal more has been sent away this year than last year or the year before, but not so much in proportion to the whole supply that comes into London. That is what he meant.

12,855. There is a largely increased supply into the London market, and although a larger quantity now finds its way into the provinces than formerly it is not so large in proportion?—Precisely.

12,856. Do you think that with the increasing population of London there is a correspondingly increasing supply of fish?—Yes, about the same. That is proved by the price.

12,857. (*Mr. Lefevre.*) Are the inland towns not as well supplied as they used to be?—They have more fish but not as much as they used to have in proportion to the quantity that used to come to London.

12,858. (*Mr. Caird.*) Then practically, as a fish owner and fish salesman, do you find that the supply has kept pretty steadily up to the demand?—Pretty steadily up to the demand.

12,859. If the demand were much to increase would the supply be equally increased?—I am sure of it. I am convinced of it.

12,860. Do you find from your own experience, sending away vessels to sea constantly, and employing a considerable number of men to catch fish, that the fishing grounds are increasing or diminishing in their yield?—We find that each separate vessel catches more fish than it did 10 years ago, and 10 years ago it

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caught more than 20 years ago. I know that from past experience.

12,861. You do not apprehend, by the increased population of London and the increased consumption of fish, that gradually the fishing grounds will be completely run out by being over-fished?—I am thoroughly convinced that if you send out double the number of vessels there will be no perceptible difference in the catch of each vessel. If you doubled the number suddenly there would be no perceptible difference.

12,862. You are aware that a great question has arisen between trawl-fishing and line-fishing; will you be so good as to tell us what proportion of the whole supply to the London market is got by the trawl fishermen as compared with the line fishermen?—I should think that the line fishermen do not bring 10 per cent. of the fish that come to this market. They do not bring much over 5 per cent. They may bring 7½, but of the whole quantity that comes to this market they certainly do not bring 10 per cent.

12,863. Any regulation that would materially interfere with trawl-fishing would lead to a diminution in the supply, and I suppose to an increase in the price?—Precisely.

12,864. That would be so?—Yes; if trawling were done away with to-morrow you would not have one-tenth part of the fish in the London market that you have now; nor would it come to land at all in England.

12,865. Do you find that practically you can man and keep a trawl-vessel going at a less expense than a line-fishing vessel of the same size?—One costs only 11*l.* a week and the other 16*l.* A regular line-fishing boat with a full number of hands costs 16*l.* a week.

12,866. You are speaking of boats of the same size?—Yes, from 80 up to 100 tons builder's measurement.

18,867. What is the average weight of fish caught by these boats comparatively in a week?—One catches 10 times the weight of the other. The trawler will catch 10 times the quantity caught by the line-boat.

12,868. In the same time?—Yes, give them day for day, or year for year, take the 12 months round, a trawl-vessel will catch 10 times the weight of fish that a line-boat will catch.

12,869. And they catch the kind of fish that is brought in the greatest bulk to the London market and consumed chiefly by the lower classes?—Yes.

12,870. What is the reason that you employ a vessel which costs you about 50 per cent. more per week in wages and otherwise, and yet yields you so much less fish in quantity?—There is so little of that sort of fish brought to the market—only a tenth part as compared with the other fish—that it is a scarce article. It is brought in very small quantities to the market by railway, and it is all sold as West End fish. If the number of the vessels employed in obtaining it were increased the high price it now brings would last no longer.

12,871. Then it only pays because it is a fish that brings an excessive price from the wealthy classes?—Exactly.

12,872. It goes into consumption in the West End?—Yes, and in the small towns in the country.

12,873. Is that applicable to all hook-caught fish?—No, it all depends on how it is got to the market. If it can be got in quantities sufficient to pay the carriage by railway then it is a very paying thing, but it would not answer in a small line boat. An undecked boat cannot catch enough to send by rail and may not get the low carriage for it. They cannot get the higher price.

12,874. Why not? Do not their fish come fresh enough to the market?—They cannot get it to the London market.

12,875. Not in prime order?—Exactly. First of all they cannot keep the fish alive. Our fish are kept alive until 5 o'clock in the evening; they are then killed, packed quickly, got upon the railway, started off at six, and sold here in the morning; so that only 12 hours have generally elapsed since they were swimming about.

12,876. (*Mr. Lefevre.*) It is brought in alive?—Yes, literally swimming alive.

12,877. How often do the boats come here?—When they get a certain amount. When we find that they are likely to be turning up, or if we fancy that they may get disease among them, then we come in quickly before such a thing does take place. We have only three or four boats of that sort engaged at a time. If we sent a large quantity of that sort of fish into the market there would be no demand for it. If we were to bring 100 boxes of live haddocks into the market to-morrow morning we could not sell more than 25 of them; the rest we should have to sell for less money than trawled haddocks would fetch.

12,878. (*Mr. Caird.*) What is the difference between the price of the live haddocks per box or per pound compared with the larger supply of trawl-caught haddocks?—If the supply of hooked haddocks is not more than 20 or 25 boxes, the one fetches a guinea or 1*l.*, and the other from 6*s.* to 8*s.*

12,879. The same weight?—The same number of haddocks; about 40 of them.

12,880. These vessels are employed purely for the supply of the West End and the wealthy consumers?—Yes.

12,881. And well-vessels supply the bulk?—Yes.

12,882. Do your trawl-vessels and line-vessels fish on the same ground?—Precisely; but not all at the same time.

12,883. They do go over the same ground?—Yes.

12,884. Have you ever had any complaint from the line fishermen that they have been interfered with?—Perhaps I may explain that that can rarely occur, although both are fishing on the same bank. Suppose there is a long-line vessel at work, and boats are also engaged in trawling, the trawlers know it is of no use going where the liners are at work, because they would only lose their gear. The liners pick out that part of the bank where there is a lot of stones and rough ground. It is only on such places that the fish will take the hook; it would be of no use for the liners to put down their bait where the trawlers work. All the haddocks we catch in the net are thoroughly well fed haddocks which would not take the hook; all the line-caught haddocks are hungry fish.

12,885. Then are we to understand that the hooked haddocks, although they bring a much higher price and are brought fresh to the market, are in reality inferior fish?—Everybody who understands the subject knows that very well.

12,886. That is really so?—Yes; the one is a fat well fed fish, and the other what we call a hungry fish.

12,887. Do your vessels ever fish within the bays and headlands of the coast?—Taking the year round, the nearest place we fish to the English coast is about 35 or 40 miles off.

12,888. It would do you no harm then, as a deep-sea fisherman, if a regulation were established preventing trawl-fishing within the headlands of the coast?—That would not interfere with the real trawler at all; no regular trawler fishes within seven or eight miles of the coast.

12,889. You would not object to such a regulation being enforced against you?—No, I believe it would do good in case they did such a thing; they might spoil the breed in the shallow waters.

12,890. That has been alleged in the north and stated to us as a fact. We have been told that if an end could be put to it, it would much contribute to prevent the destruction of young fish; do you think that it is so?—I believe there are a large number of small boats that destroy the brood, but the quantity destroyed will hardly make any difference to anybody.

12,891. You would not object to such a regulation being established?—No, it could not possibly bear injuriously upon the trawling trade; if there is any difference, it would do good.

12,892. Have you any knowledge of the herring trade?—No.

12,893. Nor of the oyster or shell-fish trade?—No, but I have of the mackerel trade. I sold more mackerel here last year than anyone else.

12,894. Do you yourself with your own vessels catch mackerel?—We bought foreign mackerel last year. There is one fact which is, perhaps, worth your while to know, about the making of seamen and apprentices; we have 240 apprentices who are continuously growing up to be men, and we reckon that we make from 50 to 60 seamen a year—thorough fellows, who have served at least their six years time to it.

12,895. Do they go into the mercantile service?—Either there, or into the navy, or into our own trade.

12,896. Do you think it is a good nursery for seamen?—There cannot be a doubt of it; we get them principally from the Unions of London. They are principally bound by the magistrates and the guardians of the poor.

12,897. (*Mr. Lefevre.*) Are they regularly indentured?—Yes, they are bound before the metropolitan magistrates; we have 240 of them, and they are every one of them registered at the Customs.

12,898. (*Mr. Caird.*) Do your vessels frequently assist vessels in distress at sea?—Very often; we are seldom or ever without a case of salvage on board.

12,899. (*Mr. Lefevre.*) Does that form a considerable part of your profits in the course of a year?—It does form a part, but not a considerable part.

12,900. What number of men do you employ besides the apprentices?—About the same number; there may be a few more.

12,901. Is not that rather a large proportion of apprentices to the number of men?—We try to keep as many apprentices as men, so that we may keep up a supply of men who have served their time to the trade. Our men object to have what they call sailors; they like men who have served their apprenticeship to it.

12,902. Is there any complaint on the part of the men as to the number of apprentices?—No; on the contrary, they could not get on very well without them.

12,903. Do your boats fish much off the coast of Holland?—Occasionally, at one time of the year.

12,904. Within what distance of the coast do they go?—Close to the beach, into three fathoms of water. It is a perfectly flat shore—all sand when they are fishing off the Hague. They go close in among the buoys when they are catching haddocks, but the fish are very small compared with what we catch on our own banks.

12,905. Do they catch young fish there?—Our nets would not hold them, but there is a quantity of small fish caught in the shallows.

12,906. By the English or by the foreign trawlers?—Not by the trawlers, but by foreign seine nets.

12,907. What is the size of the mesh of your trawl net?—The lower part when pulled out straight is smallest. We have a gauge; we do not go by inches. What we call the head is the largest part, and is twice the size of the other.

12,908. What is the length of your beam?—The shortest will be about 32; the longest is about 42.

12,909. Is there any inspection of your trawls by any Government officer?—No.

12,910. You never heard of such a thing?—No.

12,911. Do you keep statistics with regard to the quantity of fish caught by each boat?—We keep an account of the catch of every boat as it arrives every day.

12,912. Can you tell at the end of every year what each boat has caught?—Within a very little; it is not the exact weight, but what we call a basket.

12,913. Can you furnish us with the comparative quantities caught by the boats within the last 20 years?—Yes.

12,914. We shall be glad if you can give us a comparative list for the last 20 years, or as far back as you can go?—I can give you an average of each boat.

12,915. Have you added to your fleet lately?—Not very much within the last 10 years.

12,916. You have added seven line-boats?—No, they are the same vessels.

12,917. Can you turn trawlers into line-boats?—They are still trawlers if they were wanted. They are the same shaped vessels, and rigged in the same manner.

12,918. Have you added during the last 10 years to the number of your boats?—In the 10 years we have built about eight new vessels.

12,919. Have they been built to supply the place of others?—Principally to supply the place of others, but they have been larger vessels; they have been carriers principally.

12,920. You have not materially added to the number of your fleet within the last 10 years?—No.

12,921. I think you said that you have 50 vessels now?—Yes.

12,922. And of that number seven are engaged in line-fishing at the present moment?—Yes, and the rest are trawling.

12,923. How many are cutters?—Even the cutters trawl when they are there. Out of the whole number there are 22 cutters; but all the cutters trawl occasionally.

12,924. Do your fleet keep mostly together?—Yes, mostly together in a fleet under the command of one man.

12,925. How many fish together?—From 60 up to 120.

12,926. Then other boats fish with you?—Yes; ours form the nucleus of a fleet, under the command of a man in our pay.

12,927. One admiral looks after from 60 to 100 boats?—It will generally run about that.

12,928. How many cutters are necessary to keep them in communication with the markets?—They send away a vessel every day regularly if they are not stopped by calms. In that case they do not catch any large quantity of fish. Ten cutters will do the will work.

12,929. Constantly proceeding to market?—Yes.

12,930. And trawling themselves a little?—They have not much time to trawl if they are frequently running. They may trawl occasionally. Perhaps the captain knows he has to stop two nights and then he make a night's work.

12,931. I think your fleet has gone further north lately?—They have never been so far before.

12,932. Is that because the ground has been occupied by other boats, or because you found that the fish were falling off?—No; we used to fish as far north as the Silver Pits and Botany. That is deep water, and it is comparatively rough ground compared with the Dogger. The Dogger is shallow water, less rope is needed, and it is like a bowling green. We never lose any thing on it.

12,933. Are there no stones on it?—No.

12,934. How much further is the Dogger than where you have been accustomed to fish?—30 or 40 miles further.

12,935. Since your fleet has been off the Dogger Bank have you found it more convenient to send your boats to Yarmouth?—No; we always bring them to London, but we have taken them to Yarmouth this year on account of the want of ice.

12,936. You have sent them to Yarmouth this summer?—We always bring the fish to London.

12,937. Do your line-boats go out in the same fleet as the trawlers?—No; their fish cannot be carried by the cutters. They have to be put alive into the well, and they are killed just before they are packed. When a man starts lining he is utterly independent of any fleet.

12,938. He does not keep with the other liners?—No.

12,939. What is the nature of the line your liners use? They do not use the long-line?—No, a hand-line, a small line with a sprawl wire.

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12,940. How many hooks?—Only two hooks on a line.

12,941. How many lines?—One to each person on board, a man and a boy. They will run from 9 hooks up to 12.

12,942. What is the length of line?—According to the depth of water; about 45 fathoms generally.

12,943. What depth do you fish in?—From 16 up to 40 fathoms.

12,944. What distance from the bottom?—We fish on the bottom. We keep the hooks playing about four inches from the bottom.

12,945. What weight of lead do you use?—4 lbs. of sprawl lead.

12,946. Where do you get your bait?—From Lynn and Boston.

12,947. Do you find any difficulty in obtaining it?—Sometimes, if there is rough weather, the boats are detained; then it comes by rail from Boston to Yarmouth, and is put into the vessels there.

12,948. Do you find the cost of bait an appreciable item in your expenses?—It is a very large item. Wages form the largest item, provisions the next, and bait the next; it is larger than sails or ropes or any thing of that kind.

12,949. Or depreciation of the vessel?—Perhaps not. It is about the fourth item.

12,950. Have you heard any complaints as to the difficulty of obtaining bait?—Very often. In fact, sometimes it is the difficulty of obtaining bait that makes us take the trawl on board again.

12,951. Do you sell for others?—Yes, for a great many.

12,952. On commission?—Yes.

12,953. Are fish sent up to London by rail from other parts of England?—Yes, by railw ay,water-carriage, and other means.

12,954. Do you sell for the fishermen on the Northumberland coast?—None of that fish ever comes to London.

12,955. What parts are the furthest from which they come to London?—In any quantity the furthest they come from is Hull.

12,956. And on the south coast?—From Plymouth in any quantity.

12,957. Do you sell for any foreign fishermen?—I have sold for mackerel fishermen this summer.

12,958. Have you sold fish caught by foreign trawlers?—No foreign trawled fish comes into this market.

12,959. Then you have only sold for long-line boats?—We sell for a great many with whom we are connected.

12,960. Are they all from London?—They sail from Grimsby in Lincolnshire. The crews live at Grimsby. The vessels stay there. They come in there and send their fish by rail in the same way that we send our haddocks from Yarmouth by rail.

12,961. Are their boats fitted for keeping the fish alive?—Yes, with wells.

12,962. Do you sell for line fishermen in open boats?—No.

12,963. (*Mr. Caird.*) Are there any grounds, within your knowledge, which have become fished out?—No, I never heard of any.

12,964. Do you get any Brixham fish here?—Occasionally.

12,965. Does any large supply come from Torbay?—Yes, there is a salesman now in the room who sells all that.

12,966. Is there any difference in the quality of the fish from Torbay compared with our own east coast fish?—Generally speaking they are newer, that is all. They are the same in quality if they were the same in age; but generally speaking they are newer.

12,967. They come fresher to the market?—Yes. They make short voyages, and their fish is almost the same as our line fish. Their boats go off, get in quickly, and send off by rail.

22,968. Do their fish fetch a higher price?—Yes; it is got at a greater expense.

12,969. The Torbay fish fetch a higher price?—Yes; but a great many of the Torbay boats send up in the same way as ours. They join our fleet and send up by our cutters.

12,970. Is there no difference except that they come fresher to the market?—No.

12,971. The quality of the fish is the same?—Just the same exactly.

12,972. The one produces much about the same kind of fish as the other?—Yes, just the same.

12,973. You referred to some kind of lead you called sprawl lead?—Yes.

12,974. What is it?—The lead that keeps the gear at the bottom. It takes it down and sinks it.

12,975. What is it like?—Like a plummet. The sprawl wire goes through it and the hook hangs at one end, so that it keeps the bait at the bottom.

12,976. It runs the line out quickly?—Yes.

12,977. I understood you to say that the liners prefer to fish on rough ground?—Yes.

12,978. And the trawlers prefer to fish on smooth ground?—Yes.

12,979. So that each description of boat will if possible, avoid the ground the other wants?—Yes.

12,980. (*Mr. Lefevre.*) I suppose the rough ground is pretty well known?—They find it out by the lead.

12,981. Between the Norfolk and Yorkshire coasts and Holland the rough ground is pretty well known by the fishermen?—Yes.

12,982. (*Mr. Caird.*) I suppose they put down the lead to ascertain what kind of bottom they are going to fish upon?—Yes; they arm the lead, throw it overboard and from the depth of water and the stuff they bring up they know precisely the spot they are on. They know then how far they are from the rough ground. They never fish towards the rough ground.

12,983. (*Mr. Lefevre.*) Do the long-line fishermen fish on the rough or the smooth ground?—They fish on that part of the Dogger Bank which is noted for being rough.

12,984. They look out for a rough rather than for a smooth bottom?—Yes.

12,985. (*Mr. Caird.*) You referred to a supply of mackerel from Norway?—Yes.

12,986. When did it begin to come to the London market?—About 18 months ago.

12,987. Does it come at the same season as the mackerel from our own coast?—Yes.

12,988. Is it sent in large quantities to this market?—Yes, in very large quantities indeed.

12,989. Does it form a large item in the whole supply?—Very large this last summer.

12,990. Is it packed in ice?—Yes.

12,991. Are the fish much the same in quality as our own fish?—They are very bright. The only difference we found was that on the average they were seven days old. They had been frozen in ice the whole time, so that they were very bright when taken out, and were only good for the day's consumption. They were very bright and nice when taken out.

12,992. They were caught by the Norwegian fishermen?—They were caught by the Norwegians, and brought home in our vessels.

12,993. Do you send your cutters there to bring them in?—Yes.

12,994. Is there a large supply brought in that way?—This last year more were brought from there than anywhere else.

12,995. Have you any idea of the number of tons, or cannot you speak off hand as to what it was?—No, I cannot; we brought more than all the rest brought.

12,996. Had it any effect on the price in the London market?—There was very little Ensglih-caught mackerel in the London market last year.

12,997. Then without that there would have been a small supply?—Yes, very small.

12,998. (*Mr. Lefevre.*) Can you give us a list of the items of expenditure on board the line boats and the trawl boats comparatively?—Yes.

12,999. Perhaps you will make up such a list?—I shall be very happy.

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13,000. Are any of the trawl-boats sailing from London owned by the fishermen themselves?—Yes, but not a very great number. Do you mean are there a great number where the captain is the owner?

13,001. Yes?—Not a great many.

13,002. Men working their own vessels?—Not a great many.

13,003. Can you say how many?—I think if I said a dozen I should be beyond the mark. I think you may take it that there are not a dozen.

13,004. Do they generally attach themselves to a larger fleet?—Yes, if they are trawling.

13,005. You give your captains a share of the catch, do you not?—Yes.

13,006. How much a week besides?—14*s*.

13,007. Can you say what their share amounts to in the course of a year? How much in addition?—They earn altogether between 25*s*. and 30*s*. a week.

13,008. Is that as much as they used to earn when you can first recollect the trade?—I don't think there is much difference; I think it has always been about the same. If a man gets over 30*s*. a week for the 12 months it is considered a very good year, and so it was 20 years ago, and if he don't get 25*s*. he considers it a very bad one, and it was considered the same then; there is not much difference.

13,009. Then the men do not get any share in the take?—No, the men are all on wages.

13,010. Have you lost many boats by casualties?—Very few, until last winter; we were very unlucky then; we lost three.

13,011. Do you insure your boats?—No, we never insure them.

The witness withdrew.

E. Jex.

Edward Jex called and examined.

13,012. (*Mr. Caird.*) Are you a fish salesman, Mr. Jex?—Yes.

13,013. How long have you been engaged in that business?—About 10 years.

13,014. Do you sell all kinds of fish that come to the London market?—Yes, all kinds.

13,015. Does that include herrings?—Yes, herrings, mackerel, and shell-fish, such as oysters and whelks.

13,016. In your experience of 10 years, have you observed whether the supply to the London market has increased or diminished?—I don't think it has.

13,017. It has not increased or diminished?—I don't think it has.

13,018. It has remained much about the same?—Much about the same on the average, I think. There are not more fish now in the London market than there were 10 years ago. If anything there may be more; I think there are more.

13,019. Are there not more vessels employed in catching the fish now?—I do not think there has been any considerable increase.

13,020. Has there been an increase in the price?—Prices have averaged much the same.

13,021. Then has the supply in your opinion been stationary during the last ten years?—I think it has. There may have been a small increase, but it has not been great.

13,022. With regard to herrings, do you sell them largely?—Yes, very largely.

13,023. What may be the average supply of herrings now compared with what it was when you began business?—I believe there have been more herrings this year than have ever been known for a great number of years, and the herrings have been of an inferior class.

13,024. Is the quality not so good?—No, there have been so many shotten, small, and very inferior.

13,025. Do you get herrings at different seasons of the year for this market?—There are fresh herrings nearly all the year round.

13,026. But at a certain season they are of a better quality and kind than at others?—Decidedly.

13,027. At what season are the herrings the best?—In the Midsummer season; but the herrings ought to be in their prime at the latter end of October and beginning of November. At this time of the year they are chiefly shotten.

13,028. Is that unusual at this season?—Yes, they are a bad class of fish.

13,029. Are they coming in in large quantities?—Yes.

13,030. Is the supply unusually large?—Yes, we have had more than for many years.

13,031. Do you remember any year in which there was such a great abundance?—No, not within my experience.

13,032. Have you any accurate statement to give us as to the quantity supplied to the market here?—No.

13,033. Can you tell us how much comes into the market in a week, or a day, or a season?—No.

13,034. Is the price at the present time lower than it has previously been, or is it about the same?—Taking the whole summer, the prices have been lower than they have been in any one season within my experience.

13,035. Then this year the supply of herrings in the London market, and the prices, have been less than you have ever known before?—Yes, I believe so, and the fish are inferior.

13,036. Amongst what class of people is the largest consumption of herrings?—The poorer classes.

13,037. Then at this moment there is a large supply of fish which is consumed principally by the poor?—Yes.

13,038. Do you deal in sprats?—Yes, I sell a great many in the season.

13,039. Has the sprat season begun yet?—Yes, about a fortnight ago. There have been sprats here for two months from the westward, but only very few.

13,040. When does the sprat season begin?—About the 5th or 6th of November.

13,041. How long does it continue?—Until the end of February or the beginning of March.

13,042. Where do you get the principal supply of sprats from?—A great abundance in the season comes from Southampton.

13,043. Do they come by rail?—Yes, and a great many by water. Sometimes there are 20 or 30 boats in a day, and at other times only five or six.

13,044. Where do they come from?—According to where the fish lie. Sometimes they lie a great way down and sometimes only a short way down the river.

13,045. Do all the boats come from the Thames?—No, it is according to the season. As the season gets later the fish go lower down. Sometimes the boats go down to the Swin for them.

13,046. Are they caught all along the estuary of the river?—Yes, all down the river and in the river itself at times.

13,047. The great supply of sprats that comes here is caught either in the river or at no great distance from the mouth of the river?—Yes.

13,048. Do you get any by boats from distant parts of the coast?—We get them by railway, but not by boat. Sometimes we get them from as far as the Swin by boat.

13,049. By what conveyance, by boat or by rail, do you get the largest supply of sprats for the London market?—By rail.

13,050. And the largest supply you say comes from Southampton?—Formerly we had a large supply from Scotland, but the largest supply latterly has come from Southampton.

13,051. You still get sprats from Scotland?—The Scotch supply has fallen off lately, the expense of the carriage by rail is so great.

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13,052. Did they come up in as good condition from Scotland as from Southampton ?—They were in very good condition indeed.

13,053. Have you any knowledge of the quantity of sprats consumed in the London market ?—I have not. I think it is impossible to tell.

13,054. What do you imagine is the proportion as compared with the herrings ?—That would be a rum item to get at.

13,055. (*Mr. Lefevre.*) You get very large quantities of sprats ?—Yes, immense.

13,056. (*Mr. Caird.*) Do the sprats bear any proportion in weight to the herrings ?—No, take the season through, but the herring season lasts all the year round.

13,057. During the season is there as large a consumption of sprats as of herrings ?—In the sprat season I daresay there is.

13,058. Among the poorer classes in London do the sprats form a large proportion of what they eat during that season ?—I think so.

13,059. Is it a matter of great importance that they should be supplied with sprats compared with any other fish they may desire to have ?—There are a great many people who are particularly fond of sprats.

13,060. Are they cheaper than other fish ?—At times they are, but if there is a short supply they get unusually dear.

13,061. Are they the cheapest fish you have in the London market ?—In the full of the season I have no doubt they are. They are sold in large quantities and are the cheapest fish here.

13,062. Have you heard it stated that the system pursued in fishing for sprats is destructive to other fish ?—I believe they do catch a great many small fish.

13,063. Do you find many come to you as sprats ?—We did notice that from Scotland ; there were great quantities of young herrings among them.

13,064. (*Mr. Lefevre.*) Can you distinguish the young herring from the sprat ?—Yes, by the head.

13,065. (*Mr. Caird.*) Is it not the case in the river here that many small fish are caught along with the sprats ?—I daresay it is so in all rivers.

13,066. (*Mr. Lefevre.*) Are they sifted before they come here ; I mean are the sprats sifted from the others ?—No.

13,067. (*Mr. Caird.*) Has there been a large supply of eels in the market here ?—This year there has been a large supply.

13,068. Where do they come from ?—From Ireland chiefly, from the rivers and lochs there. We get a great many from the Shannon.

13,069. Are they fresh-water eels that you get ?—Yes.

13,070. Has there been an unusually large supply ?—There has been an unusually large supply this year.

13,071. (*Mr. Lefevre.*) Are they brought here alive ?—Sometimes, if the weather is cold, but if the weather is warm they come dead.

13,072. Are they ever bad ?—No, they are very good indeed. I never heard of their being condemned, and our inspectors are always round the market.

13,073. If they saw any bad fish they would condemn it ?—Yes.

13,074. Do the eels come to London by railroad ?—I believe they come over to Liverpool, and from Liverpool they are sent by rail.

13,075. (*Mr. Caird.*) Do you sell bloaters ?—Yes.

13,076. Is the supply large ?—Yes.

13,077. Is the price lower this year ?—Yes, very low indeed ; in fact some days ago we could hardly give them away.

13,078. Is the quality of the bloaters this year as good as usual ?—No, very inferior. Some days we get a supply of all full-roed herring, and the next they are all shotten and spent herring.

13,079. Then there is an increase in the supply of bloaters ?—Yes, a vast increase.

13,080. Do you sell smoked haddock ? — Frequently.

13,081. Is there an increase or diminution in them ?—I think there is a decrease in the quantity imported from the north country, but we have opened a trade here in smoking the trawled haddocks, so that we get an ample trade now without going to Scotland for them, and I have no doubt the fish are equally as good.

13,082. Then the supply is as large as it was ?—I believe it is larger.

13,083. But it is a home supply ?—Yes.

13,084. Do you sell dried cod ? — Yes, great quantities.

13,085. Where is it brought from ?—A great deal is consigned from Labrador and Newfoundland.

13,086. Is that supply increasing or diminishing ?—It has diminished lately. The price has also decreased. We have had a good deal from Scotland.

13,087. What is the reason the supply has decreased ?—The fishing has been very bad on both stations at Newfoundland. But in the north I believe it has been very good this year.

13,088. Do you sell barrelled cod ?—Yes.

13,089. What kind of cod is that ?—We have had some very superior from the north of Scotland this year.

13,090. Is it chiefly salt-fish ?—Yes. It is sent up in salt pickled in the barrels from Peterhead, Wick, and Edinburgh. I think there was an increased supply last year. They get them at the Faroe Islands, and they cure them for the Mediterranean and Spain. Very little comes here.

13,091. Have you any knowledge of shell-fish ?—Yes, of lobsters and crabs.

13,092. Is the supply of lobsters increasing or diminishing ?—It is decreasing.

13,093. Have you had any reason assigned for that decrease ?—No.

13,094. Is the price decreasing ?—I do not see any difference.

13,095. Is the supply of crabs increasing or diminishing ?—I don't think there has been much decrease in them. We have had a vast quantity at certain times of the year from the north. In fact, on some days the low prices which they fetched never could have paid them.

13,096. Do you know anything of the supply of shrimps ?—No.

13,097. (*Mr. Lefevre.*) You say that you get fresh herrings now all the year round ?—Mostly.

13,098. Where do they come from ?—We get them from Yarmouth at this time of the year.

13,099. Until when do you get fresh herrings from Yarmouth ?—Until about Christmas time.

13,100. Where do they come from after that ?—From Plymouth.

13,101. How long does that go on ?—I can hardly tell you ; about a month. I know we get them altogether nearly all the year round.

13,102. I should like to have the order of the places from which they come ?—I can hardly tell you the places in rotation. I don't get herrings from all these places although I know they are here. Most of those I get come from the north coast.

13,103. What is the earliest place from the north coast ?—From Scotland.

13,104. Do they come up fresh from Scotland ?—Yes. The first herrings we get are the spring herrings from Lowestoft.

13,105. What sort of herrings are they ?—They are very inferior. They ought never to be caught. I think they do an injury to every branch of the fishery. Sometimes they are sold as manure.

13,106. Are they bought by the lowest classes here ?—Yes, and even they cannot turn them into food. They are like lumps of chips to eat.

13,107. What is the quantity that comes to London ?—There is a very large quantity. Some boats go out and get a large haul and sell them at 2*d.* per 100.

13,108. Do large quantities come up to London ?—

Yes, and loads of them lie here. They cannot be sold at any price whatever.

13,109. After these spring herrings when do you get other herrings?—We next get the midsummer herring and the Isle of Man herring. They are a very fine class of fish.

13,110. When do you get them?—At the latter end of May and June.

13,111. They go to Liverpool I suppose, and are sent on here by train?—Yes, they come from Douglas to Liverpool by the steamer, and the midsummer herrings come from Yarmouth.

13,112. Do you think that the prohibition of the catch of spring herrings at Lowestoft would be beneficial?—Yes, to every class of fisherman. We have noticed this last year that the catch of the midsummer herring has nearly ceased. There has been a great decrease for the last year or two.

13,113. Have you observed any decrease in the quantity of the autumn herrings?—No.

13,114. They are caught off the same coast?—Yes.

13,115. Do you agree with the witness who told us that there is not so large a proportion of fish exported from London to the provincial towns as there was formerly?—I cannot answer for fresh fish, but there is a great quantity of dried fish sent off every day. I myself often send 200 or 300 pads of fish into the country.

13,116. Do you buy as well as sell?—Yes, I receive orders from all parts of the west of England. The herrings sent from London are chiefly sent to the West of England. I think that is chiefly because the railway does not run direct to the west of England. They therefore do not supply the west. We have the orders in London, and send the fish away.

13,117. London is the depôt?—Yes, at this time of the year.

13,118. Is it the same with respect to trawled fish brought into the port of London?—A great deal of fresh fish of all kinds goes in that way. They go away daily both to the West of England and to the midland counties.

13,119. Do you send the inferior qualities as well as the superior?—We don't send an inferior quality to these people. If we did they would soon send them back again.

13,120. I mean the inferior classes of fish—what they call the offal?—Yes, there are plenty sent to the provincial towns. They use a deal of offal fish. When the fish is of good quality I can send from 20 to 30 baskets of plaice, and 20 or 30 baskets of haddocks. I often receive orders to send down five or six pads of plaice, but I cannot send them because they fetch a high price in Billingsgate.

13,121. I suppose the telegraph has done a good deal towards equalizing the price all over the country?—Yes, we ourselves telegraph to state the prices.

13,122. Has that telegraphing told much on the price of fish in London?—I think it has increased the value of fish here in the market.

13,123. (*Mr. Caird.*) Do any pilchards come to the London market?—Very few. I have seen a few this year, but hardly any worth naming. In former years we got a great quantity from Yarmouth and Lowestoft at this time of the year, but I have seen none lately.

13,124. Do you sell many lobsters in the state called "berried"?—No.

13,125. Do they not come into the London market in that state?—No doubt they do.

13,126. Do you think they come in that state in large quantities?—I don't know.

13,127. Do you know whether they are preferred in that state?—I don't think they are.

13,128. Is there one of the inspectors here?—Not in the room. We have two in the market, but the market now is nearly over, and they will be going away.

13,129. Have the inspectors this year ordered a large quantity of fish to be destroyed?—I don't think they have. I have not seen any great quantity. In fact, on some days people have been obliged to go away without any fish at all. They say: "What are you "going to do with us, do you mean to starve us? We "have been a fortnight without any haddocks or "plaice." That is a cry I have heard day after day and week after week.

13,130. Has there been a decrease in the quantity of fish this year?—There has been an increase in the customers as there has been an increase in the population.

13,131. The demand is increasing?—The demand is increasing faster than we can get the fish.

The witness withdrew.

WILLIAM EDWARDS called and examined.

W. Edwards.

13,132. (*Mr. Caird.*) Are you a fish salesman in London?—I have been a fish salesman about 17 years—not the whole time in London, but a portion of the time at Hastings in the county of Sussex. I was a trawler, a herring man, and a mackerel and line fisher 35 years before that.

13,133. Do you sell all the different kinds of fish that come to the London market?—Not all; I am not much acquainted with oysters, whelks, and the like of that.

13,134. But all other kinds of fish?—Yes, the greatest portion of them.

13,135. Do you think during the time you have been engaged as a fish salesman that the supply of fish to the London market has increased or diminished?—It has increased wonderfully this summer, especially with regard to coast plaice caught on the coast from here and off Margate sands and the Kentish Knock.

13,136. That increase has been especially in plaice?—Especially in plaice this summer.

13,137. Is that upon ground that has long been trawled upon?—From the time of my first going to sea, including the time of the man I was apprenticed to, will be upwards of 110 years. His time and mine will extend to that, and I have heard him say that every year in his experience more fish came.

13,138. Then you can speak from your own experience and the experience of the man you were apprenticed to, over a period of 110 years?—Yes, from what I recollect him saying and from what I recollect myself.

13,139. During all that time the system of trawl-fishing has been practised on the coast to which you refer?—Yes.

13,140. That is on the Sussex and Kent coasts?—Yes.

13,141. During that time the same grounds have been trawled over?—Yes.

13,142. Do you find now that the catch of fish on those grounds is as good as it used to be?—Better.

13,143. You think it is improving?—Yes.

13,144. There are more vessels upon it?—Yes, more this summer than ever.

13,145. Do the same vessels take more fish than they used to do?—The same vessels take more fish than they ever did.

13,146. Each vessel has a larger catch?—Yes, larger this summer than ever I knew before.

13,147. Then from your own knowledge and experience, you don't agree with those who say that the fishing grounds have been fished out?—No.

13,148. You think there is no foundation for such a statement?—Not in the least. A few years ago—as far back as 30 years ago—I have known in the month of May a great many turbots and doreys caught with the hook off Hastings, and at the same time they have been caught in the trawl. But they never come now, they seem to have entirely forsaken the ground.

13,149. Do you mean where the trawlers go?—Both where hookers and trawlers go. The liners fish a few miles from the coast on the rough ground, while

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the trawlers go further out amongst the smooth ground.

13,150. They seem to have forsaken that ground?—Yes, entirely. Yet within a few miles of it on the banks there are as many turbot as ever.

13,151. For what reason do you imagine they have changed their fishing ground?—I think the small quantity of mackerel in the English Channel of late years has something to do with it.

13,152. What have they to do with it?—There is nothing for them to feed upon. I believe all ground-fish feed upon the fish of the season, whether mackerel or herring. For instance, at this time of the year, I think it would be of no use to bait the hook with mackerel in order to catch turbot, but if it is baited with herring I think he will take it.

13,153. Speaking of the supply of turbot to the London market, has there been any decrease in it?—No, there has been a large increase this year.

13,154. Is the quality as good as ever it used to be?—Yes.

13,155. And of all other kinds of fish that come here?—Yes, because the facilities for exportation are greater.

13,156. Do you hold the opinion that any increased demand can be met by an increased supply?—I don't know; it is rather curious to say that.

13,157. Have you found in your experience that an increased demand has hitherto been met by an increased supply?—Yes.

13,158. Have you seen any reason to doubt that it would continue to be the same?—Not at all. We keep improving the net and tackle that we use, and we go wherever we think there is a fresh spot of ground. In the year 1838, I believe, I was the first man who ever broke out of Rye Bay to go to what was then called "No Rest," in a south-westerly direction from Dungeness in the English Channel. Formerly we never thought of going down on the western tide in more than six or seven, or eight fathoms of water, and then we had the lead constantly going. If we dropped into a little greater draught of water it was haul in towards the banks directly; but now we go into 24, 25, or 26, or even 30 fathoms, both English and French. I know one piece of ground now that I intend to go over next year.

13,159. Do you expect on ground that has never been trawled over to get more fish?—Yes.

13,160. That does not seem to be the opinion of others?—These fish have never been disturbed; and we always find if there is a certain class of fish which we can catch lying between two railways that it pays us to fish there. If we find fish there we can cover the one market or the other every day, so as to have the fish in London the morning after it is caught.

13,161. (*Mr. Lefevre.*) Any wind will serve?—Yes.

13,162 (*Mr. Caird.*) Do you regulate your fishing by the facilities you have of coming to market?—Yes, if possible.

13,163. Do your vessels make that in some degree a guide as to the places where they will try for fish?—Yes, and the drifters have a little to do with it.

13,164. What are the drifters?—The herring and mackerel boats. Their nets float on the water, and you can't fish with the trawl among them. You are far better off if you are 7, 8, or 10 miles under their lee.

13,165. (*Mr. Lefevre*). You know it is illegal to fish within three miles of them?—Yes, I am aware of that. On the coast of Suffolk I could catch plenty of large soles, larger than are now coming to Billingsgate but I don't go there because I know there is a fleet of herring men there.

13,166. (*Mr. Caird.*) Independent of the Acts of Parliament, it would be inconvenient for you to fish where the herring men are?—No trawler wishes to go where there are drifters.

13,167. I think you said that some change has been made in your trawls?—Yes.

13,168. What change has been made within your experience?—In former years we used a beam running from 27 or 28 feet up to 42. Now the general run of the beam with the improved kind of vessels is from 36 to 42 feet.

13,169. Have you altered the mesh?—The mesh is about the same. I think no one can regulate the mesh better than the fisherman who uses it. It is not to his interest to destroy the goose that lays the golden eggs. That would not pay him, and the matter therefore may be safely left in his hands. I know what the Act of Parliament says, but I never adhered to it very strictly myself.

13,170. (*Mr. Lefevre.*) You have nobody to look after your nets?—No.

13,171. You think it would be better left to you to decide what beam and mesh you should use?—Yes, it would be of no use to put an old-fashioned beam alongside of these vessels now. A beam no thicker than my arm and heads 160 lbs in weight would be of very little use for the vessels we use now, some of them upwards of 60 tons. They would run away as if they had nothing at all overboard.

13,172. Then you think it is not unusual for the trawlers to have a beam larger than the legal size?—Yes, the generality of them are larger than the legal size, and the heads are of greater weight; we have one vessel with trawl heads 4 cwt. and if she breaks her beam again we are going to have an iron one. I certainly mean to try it. There is the same improvement in the drift-net fishing. When I first went herring catching it was a good fleet to have 50 pieces 7 or 10 deep. Now we have about 70 with 101 pieces in each fleet each 11 score deep. You were asking just now about the mackerel that came from Norway. This very year they fell off in the Channel the very day they came from Norway. We had 8,600 pads on the coast on Monday, but I don't think there were 600 on the whole coast during the season afterwards.

13,173. (*Mr. Caird.*) Do you think the fish had gone across?—No; there was no breeze in the bay for the drifters, and you can't catch them without a breeze.

13,174. Do you agree with the other witnesses as to the supply of fish to the London market keeping progressive?—Yes, I believe it is on the increase every year.

13,175. Do you agree that the principal supply is furnished by trawl-vessels?—Yes.

13,176. A very large proportion of it?—Yes, I should say more than 100 to 1.

13,177. Has the price increased or diminished, or continued stationary, on the average, in your experience?—I think the price is about the same as it was when I first went. We had very cheap fish then, and very dear fish; it is now a little more equalised. Last week and this week we consider exceptions, but it is much the same, taking 12 months. I think the price is much more equal than it was. From the 1st of January to the end of December I don't see much difference, taking one year with another. There is no 14*l.* or 15*l.* for a little basket of fish now; and we seldom get only 2*s.* or 3*s.* for a basket. I have been selling 100 mackerel at Brighton for 18 guineas, and I have ended in the same season by selling them for 4*s.* a hundred.

13,178. How much does a basket bring?—11*l.*, 12*l.*, 13*l.*, in years gone by, when the fish was scarce, but the same basket has been known to be sold as low as 2*l.* or 3*l.*

13,179. In years gone by?—Yes.

13,180. There is not so great a disparity of price now-a-days?—No.

13,181. Is that because there is a greater regularity of supply?—Yes; to sell a basket for 30*s.* is a low price. Last week I sold one at 5*l.* and another at 6*l.*

13,182. How was that?—On account of the gale.

13,183. The very stormy weather?—Yes.

13,184. That was an exceptional case?—Yes, I think the market is better regulated and is better

for the buyer, better for the catcher, and better for the consumer than ever it was.

13,185. The price is more regular from week to week?—Yes, and the supply is the same.

13,186. (*Mr. Lefevre.*) Are you the owner of a trawling boat?—Yes, of two, and I have half of two more.

13,187. What ground do you fish over?—We fish from Cuxhaven at the mouth of the Elbe, as far west as the bay of St. Ives.

13,188. Do you principally fish in the Channel?—Yes.

13,189. Not in the German Ocean?—Our vessels are now fishing in deep water at the Back Knoll off the coast of Suffolk.

13,190. I suppose there is a great deal of ground that has not been gone over by the trawlers between this and the foreign shores?—Yes.

13,191. Would a little increase in the price of fish enable you to go further off?—We should have gone further off last summer if there had been more ice. From Ramsgate we went as far north as Hull.

13,192. Has the increased price of ice been materially felt with regard to the distance you can go out?—Yes.

13,193 Then a slight increase in the supply of ice would enable you to go further out to sea?—Yes.

13,194. And trawl over new ground?—Yes.

13,195. Is it your opinion that the fish change their ground a good deal?—Yes, I believe the fish is constantly on the shift. As soon as they come on the Knoll they go into deeper water. The state of the sea itself seems to be constantly changing. Frequently we have weeds coming off the rocks quite green, and it gets ripe the same as if it were in the fields. North of Dover we find the best turbots we can find in the English Channel; though they are not in great quantities they are sufficient to pay a large fleet to go there; but if frost sets in there would be neither turbot nor brill on those banks.

13,196. Are there boats there trawling all the year round?—From the back end of February there have been about 13 or 14 vessels belonging to Dover trawling there. It is principally confined to these vessels. It is the same with regard to the banks off Ramsgate, at the back of the Goodwin Sands.

13,197. Are the fish brought up in the trawl ever damaged by being knocked about?—I never saw a bushel of fish damaged except we had a great weight. Some of them might be nipped by the rope cast round the net.

13,198. You have no large quantity of unsaleable fish in consequence of their being damaged by the net?—No.

13,199. Is any quantity damaged in consequence of taking up stones in the net?—It is very rarely we heave up stones in the net.

13,200. Did you ever heave up any spawn?—Never in my life. I have found a good deal of spawn on the deck after I have gutted haddocks.

13,201. That came from the inside of the haddocks?—Yes.

13,202. You have never brought it up in the trawl?—I never saw any brought up in the trawl.

13,203. In your opinion is it desirable that there should be any legal beam or mesh?—Well, I don't think they would do any good by that. Fishermen are generally keen enough to study their own interests.

13,204. Do you think the law on the subject should remain as it now is?—With regard to that $1\frac{3}{4}$ inches from knot to knot along the line, I think the greatest portion of the trawl is wider than that, but it narrows gradually to the 100 mesh piece, and the same with the cod end.

13,205. Have you ever had your trawl overhauled by any Government officer?—Never.

13,206. (*Mr. Caird.*) Do you get a supply of fish occasionally from Torbay?—Yes.

13,207. Is there a large proportion of fish coming from Torbay to the London market?—A good lot of fish comes from Torbay to the London market.

13,208. Is the quality of the Torbay fish equal to what you get on the west coast?—Yes.

13,209. Much the same?—Yes, it is very good indeed.

13,210. There is no decline in the quantity?—No. What Mr. Hewett meant by saying that I sold Torbay fish was this; he alluded to the Ramsgate vessels, they were originally Torbay men, and they go by that name in Billingsgate now, although it is not Torbay fish. I do sell some Torbay fish, but I am not the principal salesman, no further than that the Torbay men came from Brixham in former years and settled at Ramsgate, and I have been selling for them.

13,211. Is a large proportion of the fish in the London market supplied from Torbay and the west coast?—The Torbay fish will average about 300 baskets a day.

13,212. What proportion will that be of the whole supply?—Not a fiftieth part of the whole.

13,213. (*Mr. Lefevre.*) Have you found that the last year has been an unprofitable one for trawling?—Yes, I believe it has been an unprofitable one for nearly every description of fishermen.

13,214. To what do you attribute that?—We have had so many calms.

13,215. Do you not catch the same quantity of fish?—No. If we have not wind enough to pull the trawl over the ground we can't get as many fish; but, taking the whole year through, there has been more fish this year than in any year I remember.

13,216. Then it has not fetched a good price in the market?—No.

13,217. In consequence of coming in greater quantities?—Whenever there has been any at all there has been a great quantity. The market has been up one day almost unbearably, we hardly knew how to ask enough of money for the fish; but the following day, in consequence of a large quantity having come in, we could hardly ask little enough for it.

13,218. Has the cost of ice had a material effect upon that?—The fish would have come more regularly if there had been plenty of ice than ever it has done. We have had an increase in the vessels. The introduction of the Hull fleet would have done us a great deal of good.

13,219. Then this year has been an exceptional year?—It has been. A month ago there were three vessels that went from Rye Bay. One saved from a haul 45 pads of fish, while the others broke their nets alongside.

13,220. (*Mr. Caird.*) Was that in consequence of having more fish than they could draw up?—They had more fish than they could haul up at once. It was alongside for three or four hours, but ultimately the net broke away.

13,221. The catch was so heavy that they could not bring it safely on deck?—No. Other men have told me that it was the largest haul they had ever seen in their lives.

13,222. (*Mr. Lefevre.*) Where do the whitings come from that are brought to the London market?—A great portion come from Folkestone.

13,223. How are they caught?—By the trawl and the hook-and-line too.

13,224. Has there been an increase in the catch of whiting?—Yes.

13,225. Do many come from Torbay?—Yes, a great many come from Torbay every day.

13,226. (*Mr. Caird.*) With regard to the nets that broke away, what weight of fish do you think there would be in them if they had been brought safely on board?—If they had been brought safely on board there must have been at least from three to four tons of fish in them. The vessel that did save her haul had 55 cwt. That was sent here, and there were seven baskets sent ashore at Hastings and sold. I had the 55 cwt. and paid the carriage for them.

The witness withdrew.

BILLINGSGATE.

H. Marchant.

18 Nov. 1863.

HENRY MARCHANT called and examined.

13,227. (*Mr. Caird.*) You have been for some years engaged as a fish salesman?—Yes; my family have been engaged in that way for 100 years.

13,228. As fish salesmen and fishermen?—Yes. I have an uncle alive now who is nearly 90 years of age.

13,229. What is the experience you and your family have gained during that time as to the supply of fish to the London market?—From what I have heard my uncle say of the olden time they used to come to London with two bushels of soles. At that time they use to fetch 10*l*., 15*l*., or 20*l*. a bushel. Now if we had a vessel that went for a week or a fortnight and came in after a voyage with two bushels of soles we should think the master had gone mad.

13,230. What would you expect to get now?—If we send a vessel to sea for a week we expect about 15 or 20 boxes. A box is equal to a bushel.

13,231. Are you at this moment engaged largely in fishing?—Yes, we have 50 sail of vessels. Mr. Morgan and William Marchant and I are brothers-in-law.

13,232. You have 50 vessels now?—Yes.

13,233. Are they all engaged in trawling?—The greatest part, except about nine.

13,234. Are the nine engaged in line-fishing?—Yes.

13,235. Do you fish for the West End market in the same way as Mr. Hewett?—Yes.

13,236. That is the object of your line-fishing vessels?—Yes.

13,237. (*Mr. Lefevre.*) Do all these vessels hail from London?—Yes, from London. We live at Barking.

13,238. (*Mr. Caird.*) Can you describe from your experience, beginning at January, the different seasons for different kinds of fish supplied to the London market?—I cannot. I know what quantity we sell in the year of all sorts. We sell about 20,000 baskets in a year.

13,239. Are there not particular seasons for particular kinds of fish?—No. Sometimes we have an abundance of plaice come in when we little expect it, and sometimes we have an abundance of soles. It varies very much in a season. This summer we have been catching nearly all soles for three months. It would not pay us, not having a sufficient quantity of ice, to catch offal. If we had had a quantity of ice we could have sent ten baskets of plaice to one of soles, but having only a small supply of ice we fished on the ground where there were most soles.

13,240. Do you on the whole agree with the previous witnesses who say that the supply of fish to the London market has been progressively increasing?—Yes. Seven years ago I sold for about 46 vessels; now I sell for about 36, and I have sold about 2,000 packages more for the 36 than I did a year or two ago the 46.

13,241. Has that great increase taken place within the last two or three years?—Yes, there has been a great increase of fish.

13,242. Each vessel, in your opinion, catches more fish?—Yes. I had five vessels about a month ago that had been fishing for two nights. The one was calm and one was breezy, and these five vessels caught for one night about 17 tons of fish. I was talking to one of the captains about it, and he told me that one of the vessels had been trawling for four hours, and when he came to haul up his net he had so many fish in it that they broke it all in pieces, and out of the fragments he saved 14 baskets of fish.

13,243. On what fishing ground was that?—It was on the westernmost part of the Dogger Bank.

13,244. (*Mr. Lefevre.*) Has that been tried for the first time?—It has been trawled over for the last five years.

13,245. (*Mr. Caird.*) Has there been any decrease in any particular kind of fish that you have observed?—Soles are on the increase. We get now about three or four baskets a night; in former years we only got two a night. To-day the vessels have run from three to four or five boxes.

13,246. From each vessel?—Yes; one had seven, and I think the lowest had three for the night's work.

13,247. Do you think the quality of the fish is as good as it used to be?—I think it is a little better. When I was a boy of 12 or 13 years we could scarcely get five pair of large soles out of 50.

13,248. How is it now?—The fish are now a great deal better than they used to be.

13,249. Are they larger and finer in quality?—Yes; we used to take all the small fish out and put the middling sized and the best together. We could not sell them otherwise.

13,250. Have you any knowledge of the supply of herrings to the market here?—I don't sell herrings.

13,251. Or dried fish of any kind?—I don't sell dried fish.

13,252. Or shell-fish?—No.

13,253. Do you sell any fish to the foreign market; do you sell any to go to Paris?—I sell to friends who buy for that market.

13,254. Is there any large quantity sold in that way?—At times there is a goodish sprinkling sold.

13,255. (*Mr. Lefevre.*) I think you said you sell for 36 vessels now?—Yes.

13,256. Are they in addition to your own?—I have three of my own and 33 others.

13,257. I thought you said you and your brothers had more than that?—We have 50 sail without those.

13,258. Do you not sell for the 50?—Those 36 are from Hull and Grimsby; that is a different branch.

13,259. Where do your own 50 vessels fish mainly?—We fish from Orford Ness down to the Texel island. For the last 36 years we have been down there.

13,260. You don't send them further north to the Dogger Bank?—Very seldom. We generally keep higher up on the old fishing ground. Those vessels which fish on the lower ground encounter a great deal of bad weather. They cannot fish down on the Dogger Bank when we can fish off Yarmouth.

13,261. The further off you go to sea the more danger you encounter?—Yes.

13,262. You have not found that your grounds have been at all over-fished?—No; if I were going over to-morrow I should go according to the weather. When I was a boy, if it was frost, we went into deep water, and if it was mild we went into shoal water.

13,263. Have your 50 vessels an admiral?—Yes.

13,264. Have they other boats with them?—Yes.

13,265. What kind of distance do they keep from one another?—They are constantly within hail of one another, even with their nets down. Those right in the tide expect to get as much as those fishing in front of them.

13,266. Sometimes they follow each other?—Yes. Sometimes one vessel will lose different things, and another vessel a quarter of a mile off will pick them up.

13,267. You don't find that one catches fewer than the other?—When there are 50 sail fishing together we expect all of them to have within three or four pairs of soles of each other. We express astonishment when one man gets a trunk more than another. We think it is owing to neglect, and believe there is something wrong with the vessel.

13,268. Do you keep a tally?—Yes.

13,269. Do you keep statistics of the quantity of fish caught by each boat in the course of the year?—No, we keep an account weekly, but after the fish is sent to the different salesmen it is done with. We make out an account every week and send it to the owner, and take no more notice of it.

13,270. Do you meet with any foreign boats on the grounds you fish?—We meet a great many Flanders vessels; they have increased in number since I was a

boy. When I was a boy there were five or six of these vessels out of Belgium, and now there are about 40. We used to buy fish out of the Dutch boats because we did not ourselves know how to fish then.

13,271. Do your vessels fish with the Dutch vessels on the Dutch coast?—About 30 miles off, and in the summer time within five or 10 miles.

13,272. Not nearer than that?—No.

13,273. Do your boats observe the legal trawl or do they use whatever they like?—Some of the beams are 32 feet long, and some 42, according to the size of the vessel. A vessel of 50 tons will have a beam 32 or 33 feet long, while a vessel of 70 tons will have one 40 or 42 feet long.

13,274. There is the same difference with regard to the weight?—Yes; if a large vessel had a small trawl she would catch no fish at all, it would be floating on the water.

13,275. Do you find that you derive any advantage from using larger boats?—Yes, they have a larger spread, and if a man has a larger rake of course he expects to rake up more.

13,276. Do you regulate that?—We leave it to the captain. If they say that they would like to have a 36 or 40 feet beam they have it cut according to their fancy. The same net that would do for a 40 feet beam would do for a 44 feet one, and the same heads and the same rope.

13,277. Do you leave it to the admiral of the fleet to say where the boats shall be taken?—Yes, we throw all the blame upon him if he is upon a bad spot fishing long, and we send him a reprimanding letter.

13,278. What do you pay your admiral?—We give him two guineas each voyage as an extra donation.

13,279. He is paid the same as the other captains?—Yes, with his two guineas a voyage for extra services.

13,280. How long do they generally stay out?—Sometimes six weeks, and sometimes eight or nine weeks.

13,281. Then do they come back again?—Yes.

13,282. How long do they stay?—They refit and go out again.

13,283. That is the case all the year round?—Yes.

13,284. (*Mr. Caird.*) Do the boats vary much in their catch?—Not much. Very few of them will vary 10*l.* in the year.

13,285. You have heard the different witnesses who have been examined this day, may they be taken as a fair specimen of the different salesmen in Billingsgate?—Yes.

13,286. Do you think we have ascertained through them pretty accurately the state of facts as regards the supply of fish to the London market?—Yes. Mr. Deering could have told you that when he first came here there were about 30 salesmen, and now there are 60, so that according to the increase of fish in the market there has been an increase of men.

13,287. Does each of the salesmen now do as much business as when there was the smaller number six or eight years ago?—I think there is not much difference.

13,288. Would you take the increased number of salesmen as a mark of the increased number of fish?—Yes, I don't think there is a stand now to let in the market.

13,289. Are there more stalls in the market than there used to be?—Yes, treble the number. The market has been twice enlarged since I was a boy.

13,290. At this moment there is not an empty stand?—No, there is a man in the room now who has been without a stand for two years.

13,291. There has not been one to be had?—No.

13,292. (*Mr. Lefevre.*) Have you found that the last year has been an unprofitable one?—It has not been quite as good as other seasons; we have had extra expenses. 50*s.* is a long price to pay for ice, when we have been in the habit of getting it for 7*s.* or 8*s.* We store about 3,000 tons.

13,293. Then this year is an exceptional one?—Yes.

13,294. Do you agree with the last witness that the take has been large sometimes and indifferent at others, and that that has made a great variation in the price?—Yes; sometimes we have had four vessels up here full of fish, and the next day not one.

13,295. You don't think the supply of fish has been less?—I think that the boats I sell for have had more fish than I ever knew.

13,296. Do you agree with the other witnesses that there is plenty of room for more trawlers?—If there were 100 more trawlers out this year, I believe it would not make a difference in the catch brought to market by each boat.

13,297. It would affect the price, but not the catch?—Yes.

13,298. Are new markets opened?—Two years ago they built 40 sail out of Hull, but we have found no difference in the price.

13,299. Have you any liners?—No; I have sold them.

13,300. Have your brothers any?—Yes, nine.

13,301. Are they engaged in hand-lining?—Yes, hand-lining and long-lining; they are long-lining now, and they are catching large quantities of cod.

13,302. Do they pay as well as trawlers?—Just now they are paying better. Cod is fetching a good price; and the trawlers have had a deal of bad weather to encounter.

13,303. Do they catch many haddock?—On the Dogger they catch a great many, but they salt them. It would not pay them to keep them in the well; they are a sickly fish, and they would die.

13,304. Do the long-line men fish principally for haddock?—Yes.

13,305. What is the price of hand-line-caught haddocks?—For good haddocks the first six would fetch 12*s.*

13,306. Two shillings a-piece?—Yes, for the best. The next 12 haddocks would come down to 9*s.*, and perhaps in the latter part of the morning they would come down to 5*s.* a dozen.

13,307. What is the price of trawl-caught haddocks?—We should sell a box of trawled haddocks containing three dozen for 10*s.* or 12*s.*, but for my own part I would sooner have a good trawled haddock than a lined one.

13,308. Are trawled haddocks used for all purposes?—Yes, the fishmongers often sell them out the same as line haddocks; many of them are larger and better. All the fish that are caught in the trawls are good if they are only brought up in ice as they ought to be.

13,309. Still on the average the line-caught haddocks sell for more money?—They are more bright—they are beautifully bright, and they sell better when they are not really as good fish.

13,310. Do you sell for many fishermen in the north?—I sell a good deal for Hull and Scarborough.

13,311. Do you sell for any line fishermen in Scarborough?—No, they get so small a quantity that it would not pay them to send them up here.

13,312. Do they send to the provincial markets?—Yes, but they don't get a wheelbarrowful in comparison with what we catch in the North Sea. They go off for about two days a week, and catch about threescore of cod. We have 9 or 11 hands on board our vessels, and we have sometimes four cutters up, and occasionally as many as ten, each holding 20 tons of fish, and all of them are cleared out in a day.

The witness withdrew.

JOHN GEORGE BAXTER called and examined.

13,313. (*Mr. Caird.*) Are you a fish salesman here?—Yes; more particularly among shell-fish, sprats, and shrimps.

13,314. Has the supply of sprats to the market here been increasing or diminishing?—It has not been so large this year as formerly.

BILLINGSGATE,

J. G. Baxter.

18 Nov. 1863.

13,315. Is the main supply brought here by railway overland from distant parts?—A great deal comes from Scotland; at least that has been so for several years until the present year, when there have been so very few caught that there has only been enough to supply the home market.

13,316. Is there any difference in the quality of the Scotch and English sprats?—The Scotch sprats are much larger.

13,317. Do they bring a higher price?—Yes, generally.

13,318. Is there any large quantity brought generally to the London market from Scotland?—Some days we have had as many as 100 tons.

13,319. Do they chiefly come from the Firth of Forth?—Yes.

13,320. From Queensferry?—Yes, Queensferry and Newhaven.

13,321. In what months are they chiefly brought to market?—From November till the end of February.

13,322. Have you any idea of the number of tons that is sold weekly during the season?—Well, some days we have scarcely any, and other days we get large quantities; then perhaps we may be a week and have only a small quantity each day. Now the last week we had a good few, especially at the commencement of the week. They were brought here by water last Monday week. An immense quantity of them was caught at Teignmouth in Devonshire. They could not get packages to send them away, and they were obliged to send them away loose in trucks. We had a telegraphic message in the morning saying that 100 tons were coming up by special train. That was after we had already received from 500 or 600 to 800 packages in the morning; but when the sprats came there were only 10 tons instead of 100; 90 tons had been left at Bristol or Bath, because they were loose.

13,323. Why was that?—Because they would have been of no use to us when they reached Paddington. We should have had to shovel and knock them about, and they would not have sold in our market. At Bristol, however, they sold very well for sending to different parts.

13,324. Would they go away from Bristol principally to Birmingham?—Yes, and to Cardiff and other places.

13,325. Taking one year with another, has the supply of sprats been increasing or diminishing?—Increasing on the whole.

13,326. Does it form a large article of food for the poorer classes of the people of London?—Yes, when the sprats fetch a good price here.

13,327. What do you call a good price?—A good price is about 6*s.* a bushel. We call 6*s.* a bushel a good price, and sometimes they will fetch 8*s.* Allowing them to fetch 8*s.* a bushel, there are about 80 lbs. weight of fish in a bushel, so that they are a very cheap fish; yet when they are at that price the poorer classes of people can't touch them. They are frequently sold here at 2*s.* or 3*s.* a bushel, and I have sold sprats at 1*s.* a bushel, and even less than that.

13,328. Then they are the cheapest fish per pound weight that comes to the London market?—Yes.

13,329. Then anything that would interfere with the supply of sprats to the London market would be felt as a serious grievance?—Yes.

13,330. Have you observed whether there are immature fish of other kinds mixed with the sprats?—Sometimes, but very seldom. It is only when they catch a few sprats that they catch other fish with them.

13,331. Then the supply is really of sprats and not of other fish?—Yes, we have had as many as 10 vessels with from 300 to 400 bushels in which you would not be able to pick out a gallon of other kinds of fish out of the whole cargoes.

13,332. Have you any means by which you can lay before us the number of tons weight of sprats that come to the London market in the course of a season?—That would be a very difficult item to get at.

13,333. Can you not estimate it at all?—No, there are so many that come by rail and by water that there is no regularity in the mode of conveyance.

13,334. But can you not give us a rough estimate of the quantity?—I don't think I could. I could not average it at all satisfactory.

13,335-6. But in the course of an average week's supply how many tons do you think will be brought into the London market?—The chief market is probably before Christmas. After Christmas if any quantity comes, it is sold at very low prices; then if the vessels catch any great quantity they are sold for manure. Vast quantities are sold for manure—hundreds and thousands of tons.

13,337. Are they sold in London for manure?—Yes, sometimes. They send barges and boats from Maidstone to take them from the fishermen when they are caught. They know if they are likely to bring a good price in London, and they act accordingly. There are sometimes 100 little boats going from vessel to vessel when they are engaged in stowing for sprats. They lie at anchor, and these little boats go alongside buying 10 bushels from one, 50 from another, and 20 from another, according to what the catch has been. They will bring what they pick to the market and of course they get a better price for them in the market than by selling them for manure. The boats that fish for them wish if possible to get rid of them every tide.

13,338. Is a large proportion of the whole catch in the course of a season sold for manure at the mouth of the Thames?—Not at this season. They are sold for food now, but after Christmas perhaps a greater part will be sold for manure.

13,339. Does the taste of the people for sprats abate after that time?—The sprats are not as good then, and the people, after there has been a great quantity, get tired and want something else.

13,340. With regard to the supply of shell-fish, you are also in that trade?—Yes.

13,341. Do you agree with the previous witnesses that the supply of lobsters to the London market is on the decrease?—Lobsters don't come within what I call shell-fish.

13,342. What kinds do you sell?—Oysters, mussels, whelks, perriwinkles, and shrimps.

13,343. How is the supply of oysters now compared with what it was 10 years back?—We have now a supply that comes all the year round. A few years back it only commenced in August, and they only sold until old May-day—about the 12th of May.

13,344. Do you now sell them all the year round?—Yes.

13,345. Are they in condition all the year round?—Yes. I believe they are in better condition during the months of May and June than at any other time of the year.

13,346. Is there a good demand for consumption during the months of May, June, and July?—Yes.

13,347. Do they sell readily during these months?—Yes, but they are a commoner kind of oyster. The native oysters—the oysters that we bring on to our beds—are not sold then. It is not for our interest to remove them during the summer because they are then growing, and it is from their growth that we obtain our remuneration.

13,348. At what season of the year do oysters bring the best price?—The native oysters have got up to a high price on account of the short supply and scarcity.

13,349. Has the supply of native oysters become smaller?—Yes.

13,350. The native oysters are oysters fed upon the oyster beds?—It is rather a difficult matter to define what a native oyster is. Nobody but an experienced man can define what a native is; there are no peculiar fish in any part of England that would be called native in the London market. It requires certain conditions to convert it into a native.

13,351. What is the particular characteristic of the London natives?—The natives are caught just at the mouth of the Thames generally. They are spatted,

and then the brood comes. Then they are removed from Essex to Kent, to come to maturity at the latter place. They have a small deep clear shell that is almost transparent.

13,352. Are they only found in the river Thames and its tributaries?—Natives are got nowhere else.

13,353. They are not found anywhere else?—No.

13,354. Are they the principal supply of oysters to the London market?—No. The natives at the present moment are fetching 70*s.* a bushel, while the common kind of oysters are only fetching 10*s.* a bushel.

13,355. Are the natives that bring such a high price a very small supply comparatively?—Quite so.

13,356. What proportion of the whole supply to the London market will consist of natives?—There is a company called the Whitstable Company that sell natives; their stock at the commencement of the season will be worth 100,000*l.* or 120,000*l.*

13,357. Do you mean pounds weight?—No, value.

13,358. One hundred and twenty thousand pounds sterling?—Yes, before they commence selling them. Then there is the Colchester Company whose stock will be worth from 10,000*l.* to 15,000*l.*, and there are three or four smaller companies that have them.

13,359. They have special grounds belonging to themselves with which they permit no interference?—Yes, they buy the native brood from Essex, and from the mouth of the Blackwater, from the river Crutch, and the Colchester river. They lay it on these grounds, and it remains there until it comes to maturity.

13,360. Where are their grounds?—The Whitstable grounds are opposite Whitstable.

13,361. Is that where the natives feed and are brought to perfection?—Yes.

13,362. Is there a recognised right on the part of anybody to the oyster beds there?—Yes.

13,363. Who gives that right to the Whitstable Company?—It is possessed by the inhabitants who become freemen.

13,364. They possess a right that is generally recognized?—Yes, the Whitstable Company is a company of the inhabitants of the place. Nearly the whole of them are freemen.

13,365. Then it is a joint concern among themselves?—Yes.

13,366. Upon these grounds you say the supply has been gradually decreasing?—It has been gradually decreasing upon all the grounds; the brood has been diminishing.

13,367. From year to year the supply has been becoming less?—Yes; but one good year of spawn, what we call spat, will supply all the grounds for five or six years to come.

13,368. There has not been a good year lately?—No, not for five or six years.

13,369. But a good year might come and then the supply would be as good as ever?—Yes.

13,370. You don't suppose the time will come when all the oysters will be fished out?—No.

13,371. Can any of the oysters from distant places become oysters of as good quality as the natives?—Other oysters would not, but my opinion is that spawn from them on the native grounds would become natives. I know that from experience. I rent a ground down at Southend, about 40 miles from London, and the first year I had the ground there had not been any spat falling upon it for 20 years. A few oysters might be picked up occasionally but not many. The first year I had that ground I laid on it about 500 bushels of oysters from Jersey. It was a small cargo of about 500 bushels. The summer happened to be very warm, and in May the oysters spawned; they spawned early that year. The weather being warm and settled, the spawn had scarcely left the oysters before it adhered to the shells and other rough substances about. In consequence of its being warm weather the ground became stocked, and in the winter time the sand came over the beds and protected them. Providence seems to protect the brood in that way. About seven or eight years ago I picked up as many oysters as I was enabled to sell to the Whitstable people for about 700*l.* or 800*l.*, and for the next three successive years I picked up quite as many; but no spat has fallen since then.

13,372. Did the brood of the Jersey oysters become natives?—Yes, they were natives.

13,373. Then you hold from your own experience that the importation of oysters from another quarter spawning upon these grounds gives you the same quality of oysters as those that are liked in the London market, and are called natives?—Yes, the French have a different idea. One of them came to me last year, he represented a company that had just been formed in Grenouille with a capital of 80,000*l.* They had made beds and laid out that sum on them, and they wanted native oysters to stock them with, thinking that native oysters here would breed native oysters there; but according to my idea they will find themselves very much mistaken.

13,374. Do you think that they will not become natives?—No, they will grow and spread, and not become natives at all.

13,375. You say that you take the oysters from the Essex to the Kentish coast?—Yes.

13,376. Have the grounds on the Kentish coast some peculiarity that adapts them for feeding oysters?—Yes, they get to perfection there better than anywhere else. They feed very well at Colchester. This year there have been better oysters there than I have known.

13,377. Are there any means of feeding them artificially?—No, not on the grounds.

13,378. At what age are the natives taken for use?—When they are about four years old.

13,378*a*. How long do they lie on the ground before they are taken for use?—You remember what I said just now about Southend. They laid there 18 months before I picked them up. Some were of the size of a shilling, and some the size of half-a-crown. They were then laid down at Whitstable for two years, and after that they were sold as natives.

13,379. Is there a regular succession of grounds that you go over year by year?—At Whitstable they have an immense extent of ground, and are always removing them from one part to another. Those that are fit for market next year they will put upon one place, and they will put the small ones upon other parts.

13,380. Then you know what grounds to go upon?—Yes, they are all buoyed out.

13,381. Are they left dry at low water?—No; there is a portion of them left dry at Whitstable at very low ebbs, but it is very small in extent. My grounds at Southend are all dry at ebb tides, so that we can go and pick anything up there we like.

13,382. Is the supply of other kinds of oysters except natives on the increase to the London market?—No.

13,383. Do many French oysters come here?—No, it is the French market that makes ours so scarce.

13,384. Do you send oysters to France?—Yes, I have got some in a boat just now going away to Dunkirk.

13,385. Then there is an export of oysters to France, and no import?—There is no import.

12,386. Has the price of oysters risen considerably of late years?—Yes.

13,387. Is it on the increase?—Yes, on account of the French market; I sold about a month ago 600 bushels of natives. They were taken away in three cargoes, one was to go to Holland, another to Belgium, and another to Dunkirk in France.

13,388. Did they go for immediate consumption, or were they put on breeding ground?—Our grounds supply all parts of the continent.

13,389. Were they the same kind as those which are removed from the Essex to the Kentish shore?—Yes.

13,390. Is there a large business going on in the export of oysters to foreign markets?—Yes; I have grounds in Kent where I have sold oysters from.

13,391. Were the oysters ready for the London market that were sold to go abroad?—Yes.

13,392. But I thought you said they put them on

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beds?—They put them on beds in order to keep them. Some of them might be sold to-day, others a month hence.

13,393. They were not placed there for breeding purposes?—No; what I sold for breeding purposes was another concern altogether.

13,394. From what other quarters do oysters come to London?—We get them from Ireland.

13,395. Are they of good quality from Ireland?—Some of them are of very good quality, but the principal part of them requires to be laid on our beds. We get a great many from there, as many as between 6,000 and 7,000 bushels.

13,396. Is it usual to lay all oysters that come from distant parts of the coast on to your own beds in the Thames before they are brought to the London market?—Yes; it improves the oysters. They grow and get better in colour, and both the shell and the fish itself are improved.

13,397. (*Mr. Lefevre.*) The diminution in native oysters is rather due to the bad brood?—Yes, in a great measure.

13,398. It is not because the oysters don't spawn, but on account of the unfavourable weather at the time they did spawn?—Yes, they require still and warm weather. Under such circumstances, if the spawn falls, it falls on the shelly ground and adheres, but if it falls on the mud or the sand it comes to nothing.

13,399. Do you think the supply of native oysters might be increased by laying out more beds?—No.

13,400. Is there much space for fresh beds?—I don't think there is.

13,401. Do you think it requires a peculiar combination of things—does it require a supply of fresh water and salt water to make a favourable place for a bed?—Yes; I don't think there could be any improvement in the beds. The French have been attempting at Southend to produce oysters artificially, but their efforts came to nothing.

13,402. They have not been a success so far?—No, it was tried also at Ipswich, but was quite a failure.

13,403. You have a bed at Southend?—Yes.

13,404. Was it a bed before you had it, or did you make it?—It was a bed, but no spat had fallen on it for 20 years before. The spat fell on it then; it got into the ground and lasted for three years.

13,405. It may be some years before there is another fall?—Exactly so. We watch them at spawning time. We take up the shells to see if there are any signs. In Essex we have even gone as far as to get a microscope.

13,406. What time of the year do they spawn?—It depends upon the weather. From May until August. Last year it was in July and August.

13,407. In your opinion the supply of native oysters could not be largely increased by laying out fresh beds, or by the artificial propagation of oysters?—No.

13,408. Could it be increased by protecting the beds that lie further out at sea?—No.

13,409. There are beds open to everybody to fish?—Yes; at the mouth of the Blackwater, just below the Whitstable ground, from Whitstable down to Herne Bay. That is below where we catch the native oysters.

13,410. Are those beds fished now there is scarcely anything upon them?—Very little indeed.

13,411. By protecting them would no good be done?—No, if there came any spat it would fill them up. About six years ago there was a spat here, and every little bit of wood, or bone, or pipe, or whatever it was, got something on it. In fact, it was a whole mass of oysters.

13,412. Very few oysters in a favourable season will be enough to supply spat for all the grounds?—Yes, very few if it takes.

13,413. I think you also said that you had observed a decrease in the inferior kind of oysters. That has been on account of the French market and not on account of the quantity falling off?—No, I don't think so.

13,414. Is France now a competitor with the London market?—Yes, they are competitors everywhere. They have a steamer running from Wexford in Ireland in order to take oysters to the west part of France, and they have also vessels over at Shoreham, Newhaven, and Falmouth.

13,415. What is the greatest distance that oysters can be brought profitably to the London market?—From the west coast of Ireland. From the west coast of Ireland they can come by rail, and if they come by rail they come good.

13,416. How long will they keep good?—That depends upon the coldness of the weather. In February and March in cold water if it is clean and there is not much dirt in it they will keep for eight days, but not otherwise. I had a cargo last year at the latter end of March from Wexford, and before it had been on board 48 hours it began to heat, and we had to put them in at Falmouth, and put them overboard there. They were just as if they had been boiled; they were quite hot.

13,417. Do some of the oysters you get ever approach the price of the natives?—The nearest to the natives are 24*s.* a bushel, while the natives will fetch from 60*s.* to 70*s.* a bushel.

13,418. Where are the oysters obtained that are worth 24*s.* a bushel?—They are caught at Falmouth, in Cornwall, and laid on our beds to improve.

13,419. Laid on your beds, or down there?—They come up to our beds, and they improve more than any other oyster. They are very green and coppery when they are first caught; they are almost as green as paint, even inside.

13,420. Do you know enough of oyster-fishing down on the coast to know whether the supply can be increased?—I am sure it could not be increased by artificial means in any way.

13,421. Could it be increased by any protection the State could give to the fisheries?—No; as I said before, if there comes a spat we shall have a supply for years to come. If a spat comes that is all that is required.

13,422. With regard to perriwinkles, do you sell any large number of them?—Yes.

13,423. Where does the supply come from?—From the islands of Scotland. From the Orkney islands, the Shetland islands, and all around the Scotch and Irish coasts.

13,424. How do they come to London—are they sent by rail?—Chiefly by rail, but we get some by sea occasionally.

13,425. Do they keep any length of time?—In the winter time they will keep for a fortnight or three weeks out of the water.

13,426. Has the supply increased or fallen off?—It has increased as much as a third.

13,427. Has the price fallen?—No; the price is more than it was. I can remember a circumstance that took place about 24 years ago that will give you some idea of the increase. I remember on Whit-Monday there were only 50 bushels in the market, and those 50 bushels were not all sold on that day. It took two days to sell them. Now I should say we sell from 300 to 500 bushels in the same time, and that at quite as good a price.

13,428. They are bought very largely by the lower classes?—They are used by all classes; they are sold in almost every street in London, and I send some away into the country; but many of the country places are supplied elsewhere.

13,429. Do you get any perriwinkles from the Kentish coast?—There are a few at Whitstable.

13,430. They come chiefly from a distance?—Yes.

13,431. With regard to shrimps, do you sell them largely?—Yes.

13,432. Has the supply increased in the same ratio?—I think I may say the supply of shrimps has increased equally with the demand. We get a supply from Holland; in fact we are getting them now. I had 50 baskets the other day; 50 baskets came in on Monday, and 20 on Sunday, each basket containing about 11 gallons. I have had as many in the summer as 300

and 400 baskets in a week, each basket holding from 10 to 12 gallons.

13,433. Are large quantities caught in the south of England and sent to the London market?—Yes; the chief place where they are caught is Lee in Essex. They are caught just at the mouth of the Thames. You were speaking some time ago to Mr. Hewett as to whether the stoppage of the trawls in the bays would interfere with other kinds of fishing. It would not interfere with the ordinary fishing, but it would interfere very materially with the shrimpers, because they trawl for shrimps in the bays.

13,434. Hand-trawling?—No, trawling in deep water from Hope Point down to below the Mouse; from Orford-ness to Dungeness.

13,435. Are they sent to the London market from there?—Yes, chiefly.

13,436. Has the supply been kept up or not?—The supply has been more regular since the railways enabled them to get the fish into the market good.

13,437. That has increased both the demand and the regularity of the supply?—Yes, it is the same with winkles; it is thought that the regular supply has caused the demand.

13,438. Did they formerly come by sailing boats up the Thames?—Yes.

13,439. Now they come by railroad, and the supply is more equal all the year round?—Yes, I have been a fisherman myself, and have been shrimping. I have seen 12 or 14 boats out from Lee, and the best boats among them would not be worth more than 30*l.* At the present time they have about 120 boats, and I should say that 50 or 60 of them will be worth 150*l.* each. The men themselves are a class of men than whom better sailors never stepped.

13,440. How many go in a boat?—Two.

13,441. Do they catch any other fish in the net?—Sometimes where there is a spat of small mussels they get to the edge where the mussels are. The spat of the mussels falls according to the streamage of the water. When it falls they go just outside, so as to get clear of the mussels, and take out the fish that is feeding upon them.

13,442. Do the shrimps feed upon the spawn of the mussels?—All kinds of fish do.

13,443. Is there a large supply of mussels on that coast?—No, the mussels don't come to maturity; the fish generally destroy the mussels; they eat them up, and there are also a lot of "five fingers" that get among them. The supply of mussels on our English coast is taken from where at the ebb the ground is dry. We get our chief supply from Holland, as well as shrimps.

13,444. Do you also deal in mussels?—That is in our line; mussels, winkles, and whelks.

13,445. Where does the supply of whelks come from?—We get them from Ramsgate, Whitstable, Harwich, and Grimsby. Those are the four places we get the most from. In the summer time several boats go out from Queenborough trotting for them the same as for cod, not with hooks, but with crabs. They threddle 20 on a snood and bring them on to the hook. The whelks suck every bit of the crab out, and when you bring up the line it is as full as it can hold.

13,446. Does the supply of whelks keep up?—Yes.

13,447. It is a regular supply?—We make it our study to have a regular supply. My son is in that particular business, and all we want is a regular supply.

13,448. Are they caught from a boat or from the shore?—They are caught with long lines in deep water.

13,449. I thought they were caught on the shore when the tide fell?—Only a very small portion; nothing goes to London that is picked up in that way.

13,450. The main supply is caught?—Yes, either by dredging or trotting. We have an agent at Grimsby who supplies the cod smacks. We have some little vessels that go expressly for whelking.

13,451. Are they used as bait by the line fishers?—Yes.

13,452. Is any considerable proportion of the supply that comes to London used in that way. In the winter, when we have a supply in London, and the wind is blowing a gale on the coast, we send a great many to Grimsby for bait. The Great Northern railway allows us the privilege of sending down a quantity by the fast trains. They can get them at Grimsby by 8 in the morning. It is of great advantage to the smack owners and also to the railroad themselves, because if the fishing boats don't get bait they can't fish.

13,453. Whelks are also largely eaten in London?—Yes.

13,454. Is there no means of ascertaining the quantities that are supplied to the London market?—I did prepare a statement on paper for a gentlemen who took a great interest in shell fish, and who wrote a book upon marine animals.

13,455. Did you get the information you gave him from the other dealers in the trade?—We can tell pretty well ourselves in that business.

13,456. Perhaps you can give us the same information?—I think I can do so.

13,457. Can you draw any comparison between the quantities now supplied and those supplied in former years, together with the prices?—Yes.

13,458. (*Mr. Caird.*) Will you be able to furnish us with a return of that kind?—Yes, I shall be glad to do so as nearly as I can estimate it.

13,459. (*Mr. Lefevre.*) Can you give us a return with regard to the perriwinkles, and with regard to other shell fish?—Yes, mussels, winkles, and whelks.

13,460. The oysters are a different branch of the subject?—Yes.

13,461. With regard to shrimps, can you give us the same information?—Yes.

13,462. How is it with regard to prawns?—They are only caught at particular places on the south coast of England.

13,463. They are comparatively a very small trade?—Yes, very small. During this last winter they fetched as much as 10*s.* or 12*s.* a lb.

13,464. (*Mr. Caird.*) Where is Queenborough?—In Kent, a few miles from Sheerness.

13,465. You referred just now to an answer given by a previous witness in reference to trawling in the bays. You said that if that was prohibited it would be an injury to the shrimp fishing?—Yes, they trawl for shrimps, and I understand that in the term bays you include the mouth of our river—the Thames.

13,466. Is it only in the mouth of the Thames they trawl for shrimps?—They trawl as far as the Foreland from Orford-ness.

13,467. If that were excluded it would not do any harm?—It would throw out some hundreds of fishermen.

13,468. But if, within the points to which you refer, from Orford-ness to the North Foreland, trawl-fishing for shrimps in the bays were excluded from any regulations to be adopted hereafter, would that not leave shrimp fishermen free to get the fish usually sent to the London market?—They only trawl for shrimps.

13,469. If within the points you refer to they were excluded from any regulations hereafter adopted with regard to trawling in the bays, would that be sufficient to prevent any damage being done to the shrimp-fishing in the Thames?—That would be sufficient space for them from Orford-ness to Dungeness.

13,470. In trawling for shrimps in the bays, do trawlers bring up any other kind of fish in any quantity; I mean small immature turbot or soles, or any other kind of fish?—I have seen them bring up small fish when the spat of the mussels has come up; but the fishermen throw it over alive; they don't keep it until it is dead.

13,471. Would not many of these small fish be destroyed by the very act of being taken on board or being thrown overboard in consequence of their being

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so very tender?—I think not. I have seen little soles as long as my finger brought up.

13,472. Brought up in the shrimp nets?—Yes, occasionally.

13,473. Is that system of trawling for shrimps confined to the mouth of the Thames?—It is practised from Dungeness to Orford-ness.

13,474. Is it not practised in other parts of England?—Yes, in the Wash.

13,475. Wherever shrimps are found in any quantity that system is practised?—Yes.

13,476. Then any regulation that would interfere and prevent trawl-fishing in the bays would operate injuriously upon the shrimp-fishing everywhere?—Yes.

13,477. (*Mr. Lefevre.*) In fact, in most of the bays and open places like the Wash, you find that shrimping is carried on to a considerable extent?—Yes, wherever there are flat sands. That accounts for the quantity we get from Holland. We also get a few from Scotland.

13,478. Do you get any from Southampton Water and the Isle of Wight?—No, we send down to Southampton and Brighton.

13,479. Do you supply Brighton largely with shellfish?—Yes, with shrimps and winkles. We sometimes get whelks from them there; they are not much eaten there.

13,480. Then in fact large quantities go from London to seaport towns?—Yes.

13,481. Even to places where they were caught?—Yes.

The witness withdrew.

W. Jennings.

William Jennings called and examined.

13,482. (*Mr. Caird.*) I believe your business is chiefly in shell-fish?—Before I answer the question I should like to ask one. What am I sitting here for?

13,483. In order to give us information?—But what for?

13,484. For the benefit of the public?—And of the fisheries too?

13,485. Yes.—That is all I want to know; ask me anything you like.

13,486. Are you a fish salesman in the London market?—I am.

13,487. Are you chiefly engaged in the shell-fish trade?—Not in that particularly.

13,488. Do you deal in all kinds of fish?—Yes.

13,489. Do you agree with most of the witnesses examined as to the supply to the London market being on the increase?—I think there is a great deal more than ever there was.

13,490. Do you think the increase is progressing gradually?—Yes, more keeps coming in every month.

13,491. Of every kind of fish?—Yes; during the 10 years I have been a salesman.

13,492. The quality keeps as good as ever it was?—I think it comes in better.

13,493. As to the price, has it been increasing or diminishing?—I think the price has been better.

13,494. You don't find the increased consumption in London has been followed by a diminished supply?—No.

13,495. Do you find the supply pretty closely follows the demand?—Yes, I think it does.

13,496. Then the supply keeps pace with the population?—Yes.

13,497. Is that shown by the price it fetches?—It fetches quite as much as ever it did, according to quality.

13,498. Do you agree that the largest proportion of the supply of fish comes from the trawl-vessels?—Yes, there is more trawled fish coming in than ever.

13,499. Is the largest proportion of fish that comes to the London market trawled fish?—Three parts out of four are trawled fish.

13,500. It is more than what is obtained by hooking?—Yes.

13,501. Do you agree generally with what we have heard from the previous witnesses?—Yes. I was 22 years a fishermen myself.

13,502. Can you suggest anything which can afford us additional information? If you can we shall be glad to hear you?—Mr. Hewett was talking about a regulation prohibiting trawling in the bays not interfering with the trawlers. It would not with the regular trawlers; but there are a large number of people with large families earning from 1*l.* to 2*l.* a-week who are catching shrimps off Dungeness, Rochester river, and other places, with whom it would interfere very materially.

13,503. These men are engaged trawling in the bays?—Yes, I was the first that put a shrimp net overboard at the North Foreland, and I have sold fish at Margate jetty for London.

13,504. In your opinion would any regulation prohibiting trawling in the bays be injurious to a large class of the fishermen?—Not a bit in the world. It's not the trawling that does the injury; if anything it's the men themselves who do it.

13,505. South of the Foreland is there a great deal of trawling in the bays?—In Winskett Bay, on the back of the hook, in Queen's Channel, and in Prince's Channel.

13,506. In all these bays there are trawlers?—Yes, little boats of 15, 16, or 18 tons, carrying a man and a boy.

13,507. Have you observed whether they catch other fish besides shrimps?—I have been at work and have got a few little plaice; but when you get the shrimps on deck you sift them; you put the shrimps in a sieve and put the others overboard alive. I have got from 40 to 50 bushels of shrimps in a day.

The witness withdrew.

The inquiry was then adjourned until Saturday, the 21st of November, at Lowestoft.

LOWESTOFT.

B. M. Bradbeer.

21 Nov. 1863.

Lowestoft, Suffolk, Saturday, 21st November 1863.

Present:

James Caird, Esq., M.P. (Chairman). | G. Shaw Lefevre, Esq., M.P.

Benjamin Masterson Bradbeer called and examined.

13,693. (*Mr. Caird.*) You are a fish salesman in Lowestoft?—Yes.

13,694. Have you been long in that trade here?—Yes, since 1849 or 1850. I am not exactly sure which, but I think since about 1849.

13,695. Then you have had experience in the fishing trade during the last 13 years?—I have.

13,696. In your experience during that period of 13 years has the quantity of fish taken here increased or diminished, or has it been stationary?—To what kind of fish do you allude; do you mean herrings?

13,697. I speak generally of all kinds of fish that are brought to this port?—Well, as regards the herring, I think there is no diminution, more particu-

larly in this voyage at this season of the year; but as regards the mackerel there is not the slightest doubt that there is a very great falling off.

13,698. Are herrings and mackerel the great staples of the fish trade here?—Undoubtedly they are.

13,699. When did the diminution in the mackerel first begin to exhibit itself?—About four years ago.

13,700. At what time of the year is the mackerel-fishing followed here?—It commences in May and finishes in the middle of July.

13,701. And has it not during these four years shown any increase of yield?—Not to my recollection, except during last year, when we had a few more, but they were lying a long way off the coast. I should say they were lying some 50 or 60 miles off, so far that they could not be got to market fresh, which happened many days, and they did not fetch a fair price.

13,702. And do you think the decrease is to be attributed to the fact that the fish have changed their ground?—Yes.

13,703. Is there any cause to which you attribute the decrease of the mackerel?—Yes; I should say that they are killed by the increase of the spring herring voyage.

13,704. Can you give us any proof of that?—I think there is a very good proof of that here. I have brought with me a sample of one of the spring herring nets, to convince you of the kind of nets that are used, and I daresay that this is not one of the smallest. It runs 40 meshes to the yard. That is a sample of the spring herring net (*producing a piece of net*), and this is a sample (*producing another piece of net*) of the nets that are used at this present autumn season. I have brought a piece of each.

13,705. (*Mr. Lefevre.*) What do you say that is?—This second one is a sample of the kind of net used generally at the present season.

13,706. (*Mr. Caird.*) And how many meshes are there in that to the yard?—This, I expect, would be about 34.

13,707. And the other one 40?—Yes, that is 40.

13,708. (*Mr. Lefevre.*) This one is just a little over the inch?—This one was ordered about 36 or 37 when new, but by the continual barking and using it has had since it is now up to 40.

13,709. (*Mr. Caird.*) Is that small net usual in the spring fishing?—Yes, they are all small nets.

13,710. All small nets?—Yes, because it is of no use to have large ones when you see how remarkably small the spring herrings are fished.

13,711. Is there much mackerel killed at the time the spring herring are fished for in those small nets?—In my opinion the mackerel are meshed or partially meshed by those small herring nets, and killed on the spot; consequently they do not come to maturity, and that no doubt injures the mackerel season.

13,712. And they are not brought to shore at all?—They strike our small nets, and are not brought to shore at all.

13,713. Do you think a great many of them are injured in that way?—As far as the small mackerel are concerned, the smaller sized fish that strike those nets are meshed and brought in, which proves that the spring nets catch those small mackerel; but many of them are seen by the fishermen to strike the nets and fall, and consequently they are lost.

13,714. And do you think that that is so great a loss that the mackerel-fishing is injured in that way?—Yes, I do think so, from the reports I have heard from the different fishermen.

13,715. Has that spring herring-fishing existed any longer than the four years to which you refer?—I think the spring herring-fishing commenced about a year or two after I commenced as a salesman.

13,716. (*Mr. Lefevre.*) That would be about 12 years ago?—Yes; I think about 11 or 12 years ago.

13,717. (*Mr. Caird.*) Then, for about eight years, was there no apparent injury sustained to the mackerel-fishing?—Yes; I can give you a fact in proof of it. I have in the old market sold as many as five and six lasts of mackerel in a day, whereas now we should think it almost the produce of a season to have such a quantity. The boats used to go out of a night and bring in some 2,000 or 3,000 mackerel each; now they cannot do that; the mackerel are driven over to the other coast.

13,718. That is not exactly an answer to my question. I asked you whether for a period of eight years during which the spring herring-fishing continued from the commencement any marked diminution in the mackerel-fishing had been observed?—Yes; we have observed a diminution.

13,719. I asked you that because you had said the diminution only began about four years ago?—A marked diminution in the catch of mackerel began to take place about four years ago; but the spring herring catch has been going on for more than 10 years; but still we did not observe a great diminution in the mackerel until about four years ago as near as I can recollect.

13,720 But if the spring herring-fishing had been continued for eight years and no diminution of the mackerel was observed until after then, and that diminution was only observed for four years, would it not lead to the conclusion that the spring herring-fishery might not be the cause of the falling off in the mackerel-fishery?—I think the fish have fled from the coast in consequence of the prosecution of the spring voyage stopping them in their progress.

13,721. The size of this net seems to be just an inch from knot to knot, which is the legal size?—If you try the mode in which they are generally measured and run it along the yard measure I think you will find that it will run up more than that.

13,722. With regard to the spring herring-fishing, will you be good enough to tell us something of its history and of its produce?—I will endeavour to do so as far as my memory serves me. I think about 10 years ago we had not above 20 or 30 boats prosecuting the spring herring voyage, but at the end of the 10 years, taking it up to last year, there would not be less than 150 and from that to 200 boats employed in the spring herring-fishing. I think I am about correct in that answer. And again, the length of the nets, the depth of the nets, the quantity of the nets carried in the boats, are also much increased, and the boats are much larger that are sent out to catch the fish.

13,723. Do I understand you to be speaking exclusively of the spring herring voyage?—Yes. Where they were carrying 10 years ago something like from five to six score nets of about 20 yards on the rope they are now carrying eight and nine score nets of 23 and 24 yards on the rope, and in some instances there are 100 meshes more depth in the nets now than in those they formerly used, and as to the quantities, they are enormous.

13,724. Could you give us any comparative quantities, showing what they were 10 years ago for the season and what they are at the present time?—I could not give quantities for the season, but I can tell you what they were some days. For instance, sometimes we would have perhaps 50 lasts in, whereas on other occasions I have known as many as 130 lasts to be landed, loaded, and sent away to the markets inland in one day.

13,725. Have you known that recently?—I have known it within the last three or four years, or something like that.

13,726. Then it has become a large trade now?—Yes; but I think we have not had quite so many fish these last two or three seasons as we had three or or four seasons previously.

13,727. To what do you attribute the falling off that has taken place of late?—Well, I think the weather has something to do with it; the state of the winds has something to do with it.

13,728. Has the price of fish anything to do with it?—As to the price of fish, I have sold those spring herrings at 2*d.* a hundred for manure, and they have

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been sent away in trucks and sold in the country farm yards for manure.

13,729. Is it the same class of fishermen who are engaged in the fishing, spring, summer, and autumn ?—Yes.

13,730. And do they fish in the same boats ?—Yes, many of them do; but they change their crews each season. Still, they are the same class of men.

13,731. The same class of men who live here ?—Yes; they are men from this neighbourhood who man the boats. The masters go year after year.

13,732. And do they realize a large sum of money altogether by the prosecution of this spring herring-fishing ?—Well, sir, I have known them to raise only about 40*l.* or 50*l.* in a boat for the season, and I have known them to raise as high as 500*l.* or 600*l.*

13,733. By the spring herring-fishing ?—Yes.

13,734. For one boat ?—Yes; but I have not known that done lately.

13,735. Can you give us some information about the summer herring-fishing ?—I think I can.

13,736. But before we leave the spring herring-fishing, can you tell us what is the quality of the fish ?—The quality is most inferior, and I think the fish are not eatable, and not healthy.

13,737. Where do they go to market with them ?—All over the country; and very often when they reach their destination they are seized and thrown away.

13,738. Still, on the whole, they must pay, or they would not be taken into the country ?—I do not think they do pay, except it be to the railway company who convey them. Suppose I sell a last of spring herrings at 6*d.* a hundred, which is 50*s.* a last, the railway company would get 2*s.* 6*d.* for landing only, and they would get the same proportion per ton for carrying an inferior quality of fish as they get for carrying fish that will fetch 5*s.* a hundred.

13,739. At whose risk are they sent to market ?—At the sender's risk generally.

13,740. Are the senders fishermen ?—No, they are the buyers.

13,741. But the fish buyers must have a profit, or they would not continue to buy the fish ?—I suppose so.

(*The Secretary.*). This net (*one that had been produced by the witness*) is hardly an illegal net.

(*The witness.*) I was not aware of that. I got that from a fisherman.

13,742. (*Mr. Caird.*) I think the question I put to you just now was, who forwarded the fish to market ?—I regret to say that the salesman stands as a medium between the catcher and the buyer. The buyer speculates, and sometimes it happens that the speculation is a losing one, and he does not pay; the consequence is that we are the losers.

13,743. How long does the spring fishery continue ?—It begins in the middle of March, and generally ends in the first week in May.

13,744. Then the period is about two months ?—That is about the time generally.

13,745. And are we to understand that you as a salesman think that the spring herring fishery is not a profitable fishery to anyone engaged in it ?—I believe it not to be profitable, and I also believe it to be very injurious to the next season.

13,746. But it appears that not only the number of boats, but the size of the nets and everything engaged in that spring herring fishery have increased about sevenfold in the last 10 years ?—Yes, that is so.

13,747. Then surely that increase must have been in consequence of the spring voyage being found an advantageous one ?—No; those larger boats were not built in consequence of the spring herring season, but for the purpose of prosecuting the North Sea fishing as well as the home fishing, and going out long distances on their own fishing. And, so far as the nets are concerned, many of the nets used in the spring herring voyage are most inferior nets, that have been used at the end of the voyage in catching the shotten herring.

13,748. Then your opinion is that the prosecution of the spring herring-fishing has been injurious to the summer fishing ?—Undoubtedly; I think it has been injurious to a very serious extent.

13,749. Will you be good enough to explain how that is, and how you can show that to be the fact ?—Yes. My opinion is that the spring herrings when first caught are very small fish. At the time they are caught the weather is cold, but week after week as the weather gets warmer and the season advances, we find that the fish as they are brought in improve very much, until at length they become very fine fish indeed. Well, then they drop off, the fishermen catching next to nothing at all, and after lying up for a little while they begin again in the midsummer season, and at the end of the midsummer season the fish are very much better than they were at first.

13,750. (*Mr. Lefevre.*) Is there only an interval of one week between the spring and summer herring-fishing ?—Sometimes there is only a week, and sometimes a fortnight. Sometimes, as the spring boats have finished their voyage, others will be putting in their large nets to commence their midsummer voyage.

13,751. (*Mr. Caird.*) Do you think that they are the same class of fish that are caught in the spring and in the midsummer voyages ?—I do.

13,752. That the midsummer fish are the same as in the spring, only in a further advanced state ?—Yes; in a further advanced state. They fatten every day, and you may see them.

13,753. You say that the summer fishing has considerably declined in consequence of the prosecution of the spring fishing ?—Yes, I do.

13,754. Can you give us a proof of that ?—I can. I was looking through my books last night, and I find that latterly the average has not been more than 20*l.* or 30*l.* per annum, while some years ago it was about 250*l.* per boat, but certainly over 200*l.* per boat.

13,755. Would you say from your experience that as the spring fishing has increased the summer fishing has decreased ?—Yes.

13,756. That as the spring fishing has increased the other has decreased ?—Well, as far as the spring herring-fishing is concerned, for the last two years there were not quite such large quantities as there were some years previously; but there is no doubt that the midsummer fishing has very much decreased in consequence of the spring herring being caught.

13,757. Is the summer herring-fishing prosecuted in the same boats as the spring fishing ?—A great many more boats enter into the midsummer fishing, because they are a smaller class of boats, and have not to go so far to catch the fish.

13,758. Can you give us any figures as to the number of boats ?—I think there were nearly 300 sail in the last summer season.

13,759. Do you know what the number was five or six years ago ?—About 200, or nearly 200. Some of them were strange boats—boats not belonging to the place.

13,760. Then, as measured by the number of boats, the summer fishing would appear to be progressing ?—No, some of them are employed in fishing for mackerel as well as herring.

13,761. Are the mackerel caught at the same time as the summer herring-fishing is prosecuted ?—No, but they sometimes fish side by side with each other, or thereabouts.

13,762. Is the summer fishing on the whole a very valuable source of revenue to the people here ?—It would be if it were anything like what it was four or five years ago.

13,763. Is it is not so great now as it was then ?—No, not a fifth as good, when there are so many more boats employed in it.

13,764. And do you think that any restriction, either on the spring fishing, or in the imposition of some regulation by which the nets should be used of a smaller size in the summer time, would increase the summer catch ?—Yes, I do.

13,765. In what way do you think it would produce that result?—In the first place, I think they should not be allowed to go out so early to catch the spring herring, and in the next I do not think they should be allowed to carry so many nets.

13,766. In what way would you regulate the number of nets?—If a boat were to carry only three score nets, instead of eight or nine, they could not catch the same number of fish they catch now.

13,767. But that might be got over by having two or more boats?—Then you might restrict it in another way by compelling them to have the mesh of the net larger. I know that there are parties in this town who have been fishing for spring herring with nets that have run as many as 40 meshes to the yard. I recollect an instance in which 39 meshes to the yard were ordered, for I sent the order myself.

13,768. If the legal mesh were to be enforced would that remedy the evil?—They could not then catch the spring herrings, for if the meshes were made larger the fish would go through.

13,769. Do you think that if the legal mesh were to be established for the spring herring-fishing that that would be a sufficient remedy for the evil of which you complain?—I do not know whether it would be sufficient to remedy the evil, but I think it would go a long way towards it.

13,770. With regard to the autumn fishing, how has that progressed in your experience?—It has increased.

13,771. Have you any facts to state as to the gradual progress of the autumn fishing?—There has been a larger number of boats employed, and a larger number of fish have been caught.

13,772. What is the number of boats employed in the autumn fishing now, and what was the number 10 years ago?—Ten years ago I should think there were not above 70 or 80 sail of boats so engaged. At the present time, if I recollect rightly, there are 198, or something like that.

13,773. Are the boats of the same size and class?—They are various. Some have been speculating in the half-and-half boats, and others in the large class boats, some for the purpose of fishing in the North Sea, and others for the purpose of fishing at home.

13,774. There are no open boats employed in the herring-fishing, are there; I mean undecked boats?—There are very few. There are a few here now, Scotch boats, large boats, but in two instances they have had decks put into them since they have been here.

13,775. Can you tell us anything as to the quantities of spring herrings caught here some years ago and the weight caught now in the autumn season?—I think you would get that statement better from the Harbour Dues Office and the railway company.

13,776. With regard to the price, has that increased or has it diminished on the average?—The price, I think, has been about the average, but this season and last season it was below the average, in consequence of the large quantities caught and the bad state of the markets.

13,777. Is the price of the autumn caught herring this year and of the autumn caught herring last year lower than it was some years ago?—Last year it was much higher than this year, and that has arisen partly from the great plentifulness of the fish and the bad state of the midland counties, where the fish are sent.

13,778. Where are they sent?—They are sent to Manchester, Birmingham, Bradford, Leeds, Halifax, Liverpool, and other inland towns. They are sent over the railroad as far as Scotland, the West of England, and everywhere where they can be taken by rail.

13,779. The Yorkshire markets are good, are they not?—Yes, but they are glutted with herrings.

13,780. But I understand you to attribute the prices of late to the want of employment among the people in the manufacturing districts. We are led to believe that in the Yorkshire manufacturing districts the people are well employed, and have good wages. Do you find the prices just as low there as in Manchester?—I believe they are not quite so low there.

13,781. Is there a better market there than in Manchester?—There is not a better market; there is not the demand. Manchester, Birmingham, Bradford, and those places take off an immense quantity. Such a place as Manchester will take as many fish in one day as would suffice for all the other northern markets for several days.

13,782. Taking the period over which your experience extends, will you tell us whether there has been on the whole the same steady price throughout, or has it been rising and falling in the last 10 years during your knowledge?—I should say there has been a steady price.

13,783. That it has been much the same on the average, throughout?—Yes, till we come to the enormous quantity which gluts the markets.

13,784. There is no falling off whatever in the supply of fish here?—No. I think there is a very good proof of that in the enormous quantities of this season.

13,785. Is your autumn fishing the most valuable—the fishing you have at this season of the year?—Yes.

13,786. Does the autumn season yield more money than the other two?—Yes, because there are a great many more employed in it; a great many more boats are sent out to prosecute the voyage, and they go down afterwards to the Yorkshire coast, and work their way up to their own coast. Thus they continue the voyage from the latter part of August until the second week in December, some of the large class of boats.

13,787. (*Mr. Lefevre.*) How many boats do you sell for?—Do you mean this season?

13,788. Yes, this season?—I have not counted them, but I think between 70 and 80.

13,789. Have you sold for the same number this spring season?—No; between 40 and 50.

13,790–1. And this summer season?—Oh, as many as 130, 70 and 80 boats in a day.

13,792. Do you sell for the same boats, season after season?—Yes.

13,793. Have you any means of drawing a comparison between the takes of the same boats in the different seasons?—I could tell you by referring to my ledger.

13,794. I think you stated a little while ago that in the spring fishing you have known boats to make as much as 500*l.* or 600*l.* in the season?—I have known that in one or two years.

13,795. Were those what you would call exceptional cases?—Yes; I did not say one or two boats, but one or two years.

13,796. Was that in consequence of the price of the fish being very high?—Yes, and the scarcity of fish in other markets. When the catch elsewhere falls off it is the better for the spring herring-fishing.

13,797. When you have known the amount realised per boat to be only 40*l.* or 50*l.* for the season has that been in consequence of the great take of herrings and the quantity in other ports?—Sometimes it has been in consequence of the take and the price being very low, and sometimes it has been in consequence of the scarcity.

13,798. To what distance from the shore do the herring boats go in the spring time?—They go about 50 or 60 miles off at the commencement of the season.

13,798*a*. As the season advances do they come nearer in-shore?—Yes, certainly. They commence about 50 or 60 miles off, and they finish something like 8 or 10 or 15 miles off.

13,799. Can you tell us the quantity of fish that you yourself have sold as manure?—Many tons.

13,800. And the price?—I could tell the manure price by referring to my ledger.

13,801. I should like to know the quantity you have sold in each year as manure?—I could not give you the quantity from memory.

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13,802. But you can give us that afterwards?—I can tell you that afterwards.

13,803. And also the quantity of fish you have sold to be sent to the markets?—Yes; I can give the quantities.

13,804. Can you say whether the amount you have sold as manure forms any large proportion of the whole quantity you have sold in the spring season?—The time we have generally been compelled to sell fish for manure has been about Good Friday, when everybody in the midland counties is holiday-making. It is of no use then to send fish to the markets, and on a Good Friday many a score of lasts have been sold for 2½*d.* a hundred, while others have been taken away for manure.

13,805. Then they have been sold for manure not because they were of an inferior quality, but because there has been no demand for them in consequence of the holiday-making?—Many have been sold for manure because they have been brought in on the second day instead of on the first day.

13,806. Because they were not fresh?—Yes.

13,807. I think you said just now that the fish went on improving as the spring season went on?—Yes, undoubtedly they improve as the weather gets warm.

13,808. Then at the end of the spring season they must be as good as they are at the beginning of the midsummer season?—So they are, and they make almost as good a price.

13,809. Then if you were to propose any legislation upon the subject, would it affect the whole of the spring season, or only the beginning of it?—I think if the boats were not allowed to commence the spring herring voyage until April instead of March and were to be compelled to have nets of not more than 36 meshes to the yard, and likewise were only allowed to carry a certain number of nets, it would improve the fishing.

13,810. Can you tell us how many boats go out from Lowestoft—boats belonging to Lowestoft—for the spring herring season?—Something considerably over 100.

13,811. Can you tell us the number of boats coming from other ports to Lowestoft during the spring voyage?—We have sometimes 15 or 20 from Gorleston and Yarmouth.

13,812. Do any foreign boats come here?—Why we call those foreigners.

13,813. I do not mean them. Do any French boats or Dutchmen come here?—The Frenchmen come in the spring season and the Dutchmen come in the spring season to buy fish for bait.

13,814-5. Do you think you would have foreign boats coming and fishing five miles off the coast, catching the fish and bringing them into market here?—That is a question I could not answer.

13,816. Outside the three miles they may catch the herring. Suppose any regulations were made prohibiting our boats from going out in the spring season and fishing in the way they now do, would not the French boats and the Dutch boats come off the coast and catch fish outside the three miles, and then bring the fish so caught into our markets for sale?—They would do nothing of the kind, sir, because at the time the French boats come over here they come for bait, and it would not answer their purpose to fish for the bait. I believe there is another reason why the Frenchmen would not come, and that is, because their boats are three times the size of ours, and they have on board as many as 25 and 30 hands, so that that kind of fishing could not possibly pay them.

13,817. Do you produce this net as an average net used by the fishermen in the spring herring season?—That is a net used by one of the owners in this town who has two boats.

13,818. Did you bring it here as a sample of the nets that are used here in the spring season?—I did.

(*The Secretary.*) He brought it here at my request.

(*The Witness.*) Yes, I brought it at your request.

13,819. (*Mr. Lefevre.*) I think you also stated that you have known cases of nets being used of a smaller mesh, and that you yourself have ordered a net of as many as 39 meshes to the yard?—Yes, I have.

13,820. And I suppose you are aware that that is an illegal mesh?—Well, as regards the illegality of it, I was not aware that there was an Act extending so far as Lowestoft and the east coast which regulated the herring voyage; I thought it only extended as far as Ramsgate.

13,821. Can you tell us the proportion of the nets used in the spring season in which the meshes are beyond the legal number?—It would be impossible for me to tell you that, because I do not go on board the boats to measure them, nor measure them on shore.

13,822. Can you tell us what proportion of the boats you sell for in the spring season use nets that are within the legal mesh?—I cannot tell you that, sir. I know that I have ordered many hundreds of nets for the spring catches at 36 and 37 meshes to the yard.

13,823. In how many cases have you ordered nets of 39 and 40 meshes to the yard, or beyond that number?—Only one.

13,824. Are the nets in the midsummer season larger than the nets used in the spring season?—Oh, yes; much larger.

13,825. And for the autumn season, what size are they?—32 and 33 meshes to the yard, and in some instances 34.

13,826. What interval is there between the midsummer fishing and the autumn fishing?—From the second week in July to about the first week in September.

13,827. What distance do the boats go from the coast at the end of the midsummer season?—Only a very short distance; a few miles.

13,828. At what distance are the fish found in the beginning of the autumn season?—Sometimes the first fish are struck at the back of the Gabbard; more or less than 20 miles distant north-east, and about the same south.

13,829. Have you observed any relation between the extent of the autumn fishing and the extent of the summer fishing?—I believe they are a different quality of fish, and for this reason: going back to the spring season, we find the fish gradually improve; they improve by fattening, and have a fat gut in them; but the first herring generally caught in the autumn season are small full herrings, full of spawn; consequently they cannot be the same herrings as the midsummer herrings.

13,830. Does not a net after it has been used for some time shrink, and the meshes become smaller?—Yes, certainly they shrink up.

13,831. So that a net of 39 meshes to the yard will become in course of time nets of 41 or 42 meshes to the yard?—Yes, certainly they will shrink up as much as three meshes.

13,832. How long do the nets last?—That depends a good deal on the take of herrings and the amount of destruction they meet with, which is sometimes considerable during the fishing.

13,833. But how long on the average?—I should think about two years. In some instances I believe they have been kept, with care, as long as four years.

13,834. Do the fishermen use different sets of nets for the three seasons?—Partially so; not wholly. Some of the nets on board of the boats at the present time used in catching the small shotten herring are similar to those used in the spring, and some of those used in the spring are used now.

13,835. Is there any Government officer who inspects the nets here?—No, sir, not to my knowledge.

13,836. Have you ever known any case in which nets have been seized as illegal?—There have been no such seizures to my knowledge.

13,837. Is there any Government steamer off this coast to look after the fishing boats?—No; but I think it would be a very desirable thing to have one.

13,838. Do the Frenchmen fish off this coast?—I believe they fish higher up; a certain distance off the Foreland. They don't often come here.

13,839. Why would it be desirable to have a Government steamer off here?—Because I think that the fishing smacks and the Frenchmen sometimes interfere with our boats, and our people find their nets cut through occasionally—sailed through and destroyed; and if there were a steamboat on the look out the person doing this might be detected.

13,840. Is it when they are fishing off the Foreland that they meet the French boats?—Our boats sometimes go as high as the Foreland to fish themselves.

13,841. Is it at that time that these things occur; is it then that the Frenchmen cut through their nets?—I think when that kind of thing happens it is among the trawling smacks more particularly. The trawlers sail through the nets, and sometimes steamboats and other vessels sail through them, destroying three or four, and sometimes more nets at a time.

13,842. Do you sell also for the trawlers?—Not often.

13,843. (*Mr. Caird.*) I see there is an ice-house being built here; is that a new thing? Has there not formerly been some depôt here for supplying the trawling vessels?—There was a small one.

13,844. Is there expected to be, or is there now, an increase in the quantity of fish brought into Lowestoft which it is necessary should be provided with ice?—I am not aware that the quantity is increasing to the extent of the provision that has been made, but I believe arrangements are being made with the fishing smacks which come here.

13,845. It seems to be a provision for an expected increase in the trade; is it not so?—I suppose so; but I do not know what the company's ideas are in building such a monstrous place.

13,846. How are the herrings disposed of? In what proportion as fresh herring or as pickled herring, or in what other way are they sent to market?—At this season of the year some are sent away fresh to London and other markets; others are slightly salted in barrels; many truck loads are sent in trucks to various parts, and hundreds of lasts are being put into tight casks for pickling for the winter season and the early part of the year.

13,847. Are they dried in any way or are they salted?—A great many of them are smoke-dried with billet wood. Some of them are sent to market only slightly cured—only hung up for a few hours, and others are dried for a fortnight or three weeks.

13,848. In what proportion are they sent in those different modes to market?—As far as Lowestoft is concerned a much greater quantity of green fish is sent away from here than of cured fish.

13,849. "Green" fish I suppose are fresh, or only slightly pickled?—We call all "green" fish that are not smoke-dried. We do not export from here the same as Yarmouth does, sending out vessels with 2,000 or 3,000 barrels at a time.

13,850. Your trade is almost entirely with the inland country?—More particularly.

13,851. What proportion do you think goes to London of the whole supply?—Not a twentieth part; I may say scarcely a fiftieth part.

13,852. Then London does not form the great market for the consumption of your fish?—There is a great deal sent to London, but it is a dangerous market to send to, and they do not like to risk it. Birmingham is a better market on the average than London.

13,853. I think you stated that Manchester was your best market?—Yes, for the inferior quality of fish.

13,854. Then Lowestoft may be looked upon as supplying more to the midland towns than to London?—Yes, more, certainly.

13,855. (*Mr. Lefevre.*) Where does the main quantity of the spring herring go to?—Into those largely populated towns that I have already mentioned, such as Liverpool, Manchester, Leeds, Bradford, Halifax, &c.

13,856. Do any go to London?—Yes, a few, but not a great deal.

13,857. And is it really your opinion, seeing that from 150 to 200 boats are employed in the spring fishing, that it pays nobody in reality but the railway company?—I believe they are the parties who get the most money out of it; they are paid both for landing dues and for carriage.

13,858. Do you yourself get paid by the last?—Two and a half per cent., and I have to pay all the expenses out of that, and run the risk of the money. Sometimes we lose as much as 150*l.* at a time.

13,859. Have you found it a losing trade to yourself?—I have to a very serious extent.

13,860. Are you ready to give up that branch of your trade?—I do not say I am willing to give it up.

13,861. Can you tell us the size of the spring fish?—Some of them are larger than others.

13,862. But I want to know the general size, the average size?—I suppose about 9 or 10 inches in length.

13,863. And as the season goes on does it increase in size?—Oh yes, it grows to a very fine fish, very fat and thick in the back. If you open the spring herring you will find nothing at all in it, and there is no flavour in it when it is cooked, but as the season goes on and the warm weather comes in you will find that the fish continue to get better and better until they become very fat, fine, and full flavoured.

13,864. Can you determine any particular period at which it would be desirable to commence catching the spring herring?—That is asking me a question upon which I think you ought to hear the evidence of some other person as well as myself. I have already given you my opinion upon that point.

13,865. You have expressed your opinion that some regulations should be adopted with regard to the spring herring-fishery; I now want to know what are the regulations you would suggest?—I think I have already stated that they should not be allowed to commence the spring herring-fishing so early, that they should not take so many nets, and that the number of meshes should be restricted to 36 to the yard.

13,866. At what time in your opinion should the spring fishing commence?—Instead of commencing in the middle of March I think it ought to be commenced in the middle of April or the latter end of April.

13,867. At the latter end of April are the fish as well worth catching?—They are better in quality.

13,868. With regard to the quantity of nets used, do you think it would be of advantage that there should be Government inspection for the purpose of seeing that each boat does not carry more than a certain quantity of nets?—I think that that would be a very good plan, but I forgot to mention one thing which I think will show whether the spring fishing answers the purpose of the catchers or not. I recollect that a few years ago persons would order whole fleets for the spring herring season, but gradually as the nets were worn out and the seasons were not found so profitable they ordered no more, and then instead of that there would be two parties and sometimes three parties to net one boat. If it had answered the purpose of all parties they would have gone on ordering the nets for that particular voyage.

13,869. How many boats went out this season for the spring herring season?—I should think from about 150 to 160; that is as near the number as I can tell you from memory.

13,870. Do you think if any regulation were to be made reducing the number which the boats take out that that would induce boats not to go out? Do you think that that would decrease the number of boats sent out?—I think it would most likely decrease the number of catchers, and therefore it would decrease the number of fish caught.

13,871. Do you think that in that case the fish that would be caught would realise a higher price?—Decidedly I do. In the best season that ever was made the fish mostly averaged 1*s.* a hundred. That is the best season that ever was made to my recollection.

13,872. Then you think the fish would, in the case I have put, be sold for a higher price?—Yes, I do.

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13,873. The seller would get the advantage and the buyer would lose it?—The buyer does not do so well out of a glutted market. For instance, last year they did not do so well out of a glutted quantity, and this year it is a question whether they will do anything. I know many of them who have done no good at all.

13,874. (*Mr. Caird.*) On the barrelled herrings is there any trade mark?—None; only the buyer's mark.

13,875. The buyer here?—Yes.

13,876. And is that mark known in the market to which it is sent?—It is mostly, especially by large buyers.

13,877. How is the price fixed at the market, by opening the barrels and examining the herrings, or by taking the brand?—I believe the barrels are opened and the fish examined, but I think in the case of pickled herrings a sample is generally sent to some wholesale man, and he sends an order to the buyer. The barrelled herrings are not sold in the same way as the herrings that are sent daily. The herrings that are sent daily are sent direct into the market, and there is the bulk before the buyers, and they are sold from one barrel upwards. If a man has 500 barrels lying here he writes to different parties and he receives orders from them to send up so many barrels as a sample. If the samples are approved he sends on the remainder. It is not often they are sent up to be sold the same as the daily fish.

13,878. (*Mr. Lefevre.*) Do you sell for the mackerel boats also?—Yes, I do.

13,879. Have you observed the falling off in the quantity of mackerel to correspond with the falling off that has taken place in the midsummer herring?—Yes, and to such an extent that boats which formerly used to come here from Hastings, Worthing, Brighton, and places in that part of the country, and make a good season—a couple of hundred pounds—now do not come here at all.

13,880. When did that falling off first commence?—About four years ago.

13,881. Can you give us the comparative quantities of the mackerel taken?—How many years do you want the quantities for?

13,882. I should like them for 11 years?—It would take me a week to give you them all. For 10 years I could give them with pleasure, and others beside me can also give them, I have no doubt.

The witness withdrew.

J. Robertson.

JOHN ROBERTSON called and examined.

13,883. (*Mr. Caird.*) You are collector of Customs here?—I am.

13,884. Have you been long stationed here?—About 11 years and a half.

13,885. During that period your attention has no doubt been very much drawn to the progress of the fishery here?—Yes, it has.

13,886. Have you observed, on the whole, whether there has been an increase in the general yield of the fishery here, or a decrease?—There has been a large increase.

13,887. Can you give us any proof of that by any returns or any facts within your own knowledge?—Yes, I can. At the present moment the fishing luggers employed in herring and mackerel-fishing number 176, and eight smacks are employed in trawling only.

13,888. Can you show us the gradual progress that has taken place; you are now taking the present time, giving us the returns for the present period?—Yes, up to the present hour.

13,889. Can you show us what the number was last year and the previous year, and so on; can you show us what it was five years ago?—Yes; only my return is not arranged so. In 1862 we numbered something like 140 boats here.

13,890. (*Mr. Lefevre.*) Has there been an increase from 140 to 176 in the last year?—Yes, that is the number in 1862, and in the present year.

13,891. (*Mr. Caird.*) In 1862 you say there were 140; in 1863 the number is 176; so that there has been an increase of 36 boats?—Yes.

13,892. In the present year?—In the two last years; in 1862 and in 1863.

13,893. Are those boats of about the same size?—No; the boats during that period have very much increased in comparative tonnage.

13,894. Then you have both a larger number of boats and an increase in their size?—Yes, and their tonnage runs from eight tons (they are not all registered, but we have the tonnage of them; they do not require to be measured unless they are 15 tons)—their tonnage runs from eight tons up to 34 tons.

13,895. Do you know the number of men employed in the fishing; have you any record of that in your books?—There are from five to 11 men per boat.

13,896. But do you know the total number?—I have it, and can give it to you.

13,897. It would be interesting to know the total number. Can you go back for any period of years, say five or 10 years back, so as to show us what has been the gradual increase?—I have not got the information here.

13,898. Have you no means of obtaining it?—Oh yes, I could do so.

(*Mr. Lefevre.*) It would be very interesting to have a table, giving a tabular view of it.

13,899. (*Mr. Caird.*) Have you observed that there has been a gradual progress in the fishery here, spring, summer, and autumn?—I have noticed it, but I cannot go into the minutiæ.

13,900. Do you agree with the previous witness that the spring fishing has increased materially, and that the summer fishing has decreased materially within the last two or three years?—Yes, I do.

13,901. Is there any cause to which, in your judgment, you can reasonably attribute that?—No, I have not had sufficient practical experience in the matter.

13,902. With regard to the autumn fishing, has that been constantly progressive?—Yes, in my experience.

13,903. Are there any regulations at all existing just now which interfere with the fishery?—None whatever.

13,904. Is the fishery subject to any regulations as to the size of the nets?—No.

13,905. Or as to any time at which they are to set their nets?—No.

13,906. Do you imagine that any regulations of that kind would be of advantage to the conduct of the fisheries here?—I do not think they would.

13,907. Is there any interference on the part of the French fishermen?—Yes, there are a great many complaints on account of the heavier nature of the French boats.

13,908. Do the French fishermen fish along the coast near Lowestoft?—Not often, but they do at the present season.

13,909. Do they come into collision with the boats here?—Very frequently they do; when the fish are within narrow limits they come into constant collision, and the French boats, taking them as a whole, are of much heavier tonnage than ours.

13,910. The herring fishery is prosecuted generally outside the three-mile limit, is it not?—Yes.

13,911. They hardly ever catch the herrings within the three miles, do they?—No.

13,912. So that the Frenchmen do not come within the prescribed limits?—No.

13,913. They are, consequently, where they have a right to be?—Yes, under the fishery Convention. They are guided by the fishery Convention of 1843.

13,914. Does anyone on the part of the Government, by gunboats or otherwise, attend the fishermen here?—We have had some French gunboats here, I believe.

13,915. Have you had any English gunboats?—We have not had them in Lowestoft.

13,916. Do you think that such interference is desirable?—I think it is.

13,917. Do you think that such an amount of damage is done to our fishing tackle and gear as to render such interference necessary on behalf of our vessels?—I do.

13,918. Have you heard many complaints to that effect?—Yes, we have, a good many; there is never a season but we have at least one or two such complaints.

13,919. Complaints of serious damage?—Yes, by trawling vessels.

13,920. But that is not by French fishermen?—And of damage also by French fishermen.

13,921. But the trawling vessels are not those of the French fishermen?—Some of them are; some of the Frenchmen trawl.

13,922. But the complaints are against the trawling vessels more than against the Frenchmen?—They are against both; against the trawling vessels of the French, and also against the English trawling vessels.

13,923. And the regulations prescribed by the Convention have not in any way been enforced in that respect?—Why, that is rather difficult. It is not easy to get at the authors of the mischief which is generally done under the cloud of night.

13,924. (*Mr. Lefevre.*) What is the nature of the damage done?—Cutting the nets. They get foul of the nets, and the man who is strongest cuts his neighbour's nets, and separates, in many instances, a fleet of nets into two portions.

13,925. (*Mr. Caird.*) The French being heavier than the English can do that?—Yes; but the English trawlers also commit depredations.

13,926. How do they cut the nets?—They have a contrivance called a "devil," which is shaped like a scythe, put up at the stem.

13,927. Have you seen any of those contrivances?—No, I never saw one, for they take care to keep them out of sight. They go right through the nets and cut them across.

13,928. Our English trawling vessels do that?—Yes, not all, but some of them.

13,929. Did you ever see such a thing?—I have seen the fittings, but I never saw the article itself.

13,930. (*Mr. Lefevre.*) Are any of the smacks belonging to Lowestoft fitted with that apparatus?—I will not say they are clear of the thing.

13,931. Then you think there is a case of that sort here?—I think there is.

13,932. (*Mr. Caird.*) And you think they can cut the nets in that manner at night and get off without being discovered?—Yes, I do.

13,933. How is the implement fitted?—It is fitted in the same as a rudder. It goes into one gudgeon, and as it is below water it is not so easily noticed. It is sharp and can be easily shipped and unshipped.

13,934. The object of it is to cut the fleet of nets and so get through?—Yes.

13,935. (*Mr. Lefevre.*) Is it something like a knife?—There is a witness in the room who can describe it to you. I have never seen it myself, but I understand it can be put into very little compass, and be readily concealed from the officers who board the vessels. I know that such a thing does exist, and I don't know any punishment too great to visit upon a man who would make use of such a thing.

13,936. (*Mr. Caird.*) Do you think that any regulations could be adopted to prevent the injury taking place that is said to be done by the spring herring-fishing?—I am not able to answer that question.

13,937. You have not turned your attention to it?—No, there is such a vast variety of opinion upon the subject, as to whether we should prevent the spring fishing or let it go on.

13,938. Do you think it could be so modified as to become less injurious?—I am not able to speak upon that matter; there is so much involved in it that it is really a very difficult question.

13,939. (*Mr. Lefevre.*) Have you observed the same falling off in the midsummer fishing that the last witness has observed?—Yes, I have.

13,940. How far back can you trace that falling off?—I can hardly say; last year we had little or nothing.

13,941. And the year before that?—It was a little better then.

13,942. Was there a good spring herring-fishing last year?—Yes, I think we have always had a good spring herring-fishing.

13,943. Have you observed whether the take diminishes greatly as the spring herring-fishing goes on?—No, I have not noticed it.

13,944. I think you said that a great number of complaints are made to you?—Oh yes.

13,945. Can you say what number of complaints?—Two or three, or three or four in a year.

13,946. Are those complaints of loss of nets or only of the nets being cut?—Of the nets being cut; and last year one boat was lost by a Frenchman running him down when he was at his nets.

13,947. Have you heard of cases of the nets being altogether lost, or only of their being cut?—Yes, I have heard of their being altogether lost. I have a number of applications from parties at a distance, complaining of the loss of nets. I have them now. They do not say how, except that they have been cut by some one.

13,948. Do the French fishing boats come in here occasionally?—Yes, for refuge, and also in the spring herring season, to buy the spring herrings for bait for cod-fishing.

13,949. Are they off the coast now?—Yes, I believe they are.

13,950. How far south from here does the herring fishery extend?—I should imagine to the parallel of the latitude of London.

13,951. Do the boats from here go as far south as that?—Not quite so far.

13,952. As the season gets later are the fish found further south?—Yes, further north and south; it varies.

13,953. When the autumn fishing begins where are the fish found?—They go out from here and according to circumstances they go north and south.

13,954. Is there any particular rule as to the general locality of the fish?—No. Different causes, such as the prevalence of particular winds, cause a variation.

13,955. (*Mr. Caird.*) Do you think that any close time with regard to the spring herring fishery would be desirable?—Yes, I think it would.

13,956. You are of opinion that the spring herring-fishing should not be begun until a certain time?—I think such a regulation would be desirable.

13,957. Do you think that the fishermen themselves who are engaged in the spring herring-fishing would object to that?—I think that they are very anxious to have a limit put to it, or to put an end to it.

13,958. You think that the fishermen themselves can see the evil, but that as there is no regulation put into force with regard to time, one follows the other in order that none may have the advantage?—That is so.

13,959. And if some regulation were to be established you think they would all be very glad and that they would all acquiesce in it?—I do think so, and I can state that they have often expressed a wish to that effect to me.

13,960. Can you, from your own experience, say what time would be the proper time for commencing the spring herring-fishing?—No, I have not had sufficient practical experience to know that.

13,961. Is the mackerel-fishing a source of large trade here?—No.

13,962. Has it never been since you have been here a matter of much importance?—It has never been in my recollection a matter of very great importance, and it has of late been gradually diminishing.

13,963. (*Mr. Lefevre.*) Do you know how many boats are engaged in the mackerel trade here at present?—No.

The witness withdrew.

LOWESTOFT.

J. Taylor.

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JAMES TAYLOR called and examined.

13,964. (*Mr. Caird.*) You are connected with the fishing here?—I am.

13,965. In what capacity?—I am a fisherman myself, and a fishing boat owner too.

13,966. You are the owner of a fishing boat?—Yes, of two.

13,967. Are they large decked boats?—Yes.

13,968. For herring-fishing?—Yes. I go out myself in general.

13,969. Have you been a fisherman long?—Yes, ever since I was 13 years old.

13,970. And what can you tell us about the spring herring-fishing?—Why, we like the spring herring-fishing very well indeed. It does a deal of good to us.

13,971. Do you make much money by it?—I have always made more profit by the spring herring catch than I have made in any other season.

13,972. Do you catch more herrings?—I make more profit according to the amount of herrings we raise. It is not the quantity of herrings so much as the money they raise.

13,973. Do you catch as many herrings in the spring as you catch in other seasons?—Not so many.

13,974. Do you get a higher price for the herrings you catch then?—We raise about 15*d.* or 16*d.* per hundred; but there is a good deal of difference between the money raised by one boat and the money raised by another. One boat one year caught 36 lasts of herrings, for which she rounded 16*d.* a hundred, but another boat only rounded 9*d.* a hundred for what she caught.

13,975. And both boats were fishing on the same fishing grounds?—Yes, and carrying the same quantity of nets.

13,976. How does one boat catch so much more valuable herrings than another?—By being a faster boat and bringing her fish fresh into market.

13,977. Then there is no difference in the quality of the fish; the difference arises from the rapidity with which they are brought to market?—They are the same quality of fish.

13,978. When does the spring herring-fishing commence?—We used to commence about the 20th of March, but now we begin much sooner, about the 7th or 8th of March.

13,979. And how long does the season continue?—Right up to midsummer. There is now but very little stoppage. They stop merely for the purpose of shifting their nets and putting others in.

13,980. Then the spring and summer fishing may be said to run into each other?—Yes, about that; but the boats may lie up for a week or so.

13,981. Did you hear the evidence of a previous witness as to the very inferior quality of the earlier fish?—Yes; they are not of very good quality.

13,982. Do they become better as the season goes on?—Yes, they do.

13,983. Does the price increase also?—The price increases as the quality increases. There are very few caught at that time.

13,984. Are there only a few fish caught at the beginning of the season?—Sometimes they get a quantity at the beginning of the season.

13,985. And are they of inferior quality?—Yes.

13,986. And small in size also?—Yes.

13,987. Do you use a smaller meshed net?—Yes, about 37 meshes to the yard.

13,988. And do you increase the size of the mesh as the season goes on?—We increase it in the midsummer season.

13,989. Do you find that by the system of spring fishing you have adopted you injure the summer fishing?—No, not a mite of it. If there were not plenty of spring herrings I should not think of sending my boats to sea in the midsummer.

13,990. Do you not agree with the previous witness that the effect of the spring fishing is to diminish the yield of the summer fishing?—I do not believe it at all.

13,991. Are they the same herring?—I do not think so. There are so many opinions on that point that we cannot decide that. We know when the herrings are in the net that they are there, but where they all come from no man in the world can tell.

13,992. But you have caught smaller quantities of fish in the summer within the last year or two than previously?—Oh, yes.

13,993. Do you not ascribe that to any cause?—No, sir; only that it is the work of the Almighty.

13,994. Do you not attribute it to catching the same fish earlier in the season?—I think that fishing for spring herrings is very much like dipping a bucket in the sea and getting a bucketful out.

13,995. (*Mr. Lefevre.*) You think that they are so numerous?—Yes, in some seasons. I can give you an instance. In the year 1855 we caught a great quantity of these spring herrings, and in the same year there was a tremendous take of the midsummer herrings. The more we caught of them the more there appeared to be. We used to come in so deeply laden that we could not sell them.

13,996. (*Mr. Caird.*) That was in the summer time; but do you now find that the more you catch in the spring the more you catch in the summer?—That of course depends on the shoal that comes on our coast.

13,997. Has there not been a decrease in the summer fishing during the last four years?—There has been a decrease ever since the good midsummer we had four years ago.

13,998. Has there been the same marked decrease in the spring fishing that there has been in the summer fishing?—Not so much.

13,999. Then the summer fishing has decreased more than the spring fishing?—Yes.

14,000. Has it shown any sign of coming back again to what it was?—The summer fishing has shown no such sign. I did not send at all last summer season; but I have great faith that we shall catch plenty of spring herrings another season.

14,001. Do you think that you will ever catch the summer herrings in such large quantities as before?—If they come upon the coast we shall; of that I feel quite sure.

14,002. Is the autumn fishing as good as it used to be, or is it worse?—Why, the class of boats we have now is of a much superior quality to the class of boats we used to have. They are now quite a different thing altogether. In fact the fishing has been turned quite upside down. When I was a boy we would go out in a lugger and would not take half the quantity they take now. One of our nets now would catch as many fish as three would at that time.

14,003. One of the present nets would catch as many as three of the former ones?—Yes.

14,004. (*Mr. Lefevre.*) Has the take of fish increased in the same proportion?—The take of fish has very much increased.

14,005. (*Mr. Caird.*) In recent years?—Yes, but we used to catch a great quantity of herrings then.

14,006. Have you not observed any decrease in the autumn fishing?—In some particular years we scarcely get any.

14,007. There is a great variation in the quantities caught year by year?—Yes.

14,008. But there has been no decrease which has not been made up again, as in the case of the summer fishing?—No, I have not seen that; but last year where we caught such a body of fish, betwixt the two Gabbards, we have caught none this year.

14,009. (*Mr. Lefevre.*) Where are the Gabbards?—About E.S.E. of Orfordness. I have caught a great many lasts there, but this year there has not been a herring to catch there.

14,010. (*Mr. Caird.*) Do you agree with the last witness in the desirability of having a close time for the spring herring season?—I think that the boats go too early, and that it is not good for them to go so soon.

14,011. When do you think would be the proper time for them to begin ?—I should think the 1st of April would be about a good time to begin.

14,012. Are the fish in good condition about that time ?—They have improved, but very little then.

14,013. When do they begin to be good ?—Why, when they become very few for us to catch.

14,014. And when is that ?—Generally about the month of May.

14,015. Do you not think that if you were to let them alone till the month of May you would then have plenty to catch ?—I cannot say.

14,016. But what is your opinion as a practical fisherman ? — Why, you cannot get them except when they are there to get; and if you were not to get them in the month of April you would not get them in the month of April. I believe that, sir. When they are there it is wise to go and take them. You cannot get them when they are not there.

14,017. But still you would agree in the propriety of having some regulation by which the fishermen would not be allowed to commence the spring fishing until a certain time ?—Yes, and I think also that if our fishermen both on the south and east coasts of England were not allowed to fish on the Saturday night and Sunday night that that would be one of the wisest things that could be done.

14,018. But that would not affect the question with regard to the spring fishing ?—Yes, it would affect it very much, because the fish now caught on the Saturday night and Sunday would not then be brought in. A boat goes away on the Friday and the fish cannot be got into the inland markets before Sunday; therefore they have to wait till the Monday, and the herrings then are not fit for anybody to eat.

14,019. You think if there were some restriction as to their not fishing on Saturday nights and Sunday nights that that would be desirable ?—I think it would do a very great deal of good.

14,020. You think that that would be better than preventing them from beginning the spring fishing so early in the season ?—I think it would be very beneficial.

14,021. (*Mr. Lefevre.*) The reason you give is because the fish cannot be brought to market ?—Yes; the fish are a class of fish that must be taken to market fresh, because they cannot cure them.

14,022. You found your opinion not on the rest that it would give to the fish, but because they would be brought into market in a better condition ?—Yes.

14,023. (*Mr. Caird.*) Would any regulation as to the size of the mesh prevent the fishermen from catching fish that are not fit for the market ?—Why as to the mesh, the fact is that we cannot keep the sheal right. If I buy 60*l.* or 100*l.* worth of lint and get it made the right size, and it is inspected by Government, and then if I take it and try to preserve it it will shrink up eight or nine meshes to the yard, probably, and some won't shrink at all. Some cotton will shrink more than other cotton will in the preparing and tanning. I have known some to shrink four meshes in the yard, and some only two. I have something like 200 of the small sheal nets, and they were all got of one size, 36 going to the yard, but now you may find as much difference in the size of them as three or four meshes to the yard.

14,024. You use the smaller meshes for the spring fishing ?—Yes, the small mesh. I do not use any other.

14,025. You do not agree with what was said by the other witness, to the effect that by a regulation enforcing a larger mesh the spring fishing would be prevented from sustaining injury by the catching of immature fish that are not fit for market ?—The fish are in very good order when they are caught, but it is in getting them to market that they suffer. They are sometimes caught 40 or 50 miles away, and then if the winds happen to be contrary the very fastest of them cannot get here until the second day, and then they have to go, perhaps, a day or two's journey into the country, by which time they are good for nothing.

14,026. Is there any difference with regard to that between the summer fishing and the spring fishing ?—Yes, the summer fish we can salt.

14,027. But not the spring fish ?—Those fish are not fit to be salted. They must be sent in fresh to market.

14,028. Are you a mackerel fisherman ?—I have been in former times.

14,029. Is the mackerel-fishing a source of much revenue here ?—It has been, that is to say when we get a good mackerel season we generally get a good midsummer season.

11,030. Are you of opinion that by the spring herring-fishing you injure the mackerel-fishing. It was stated by a previous witness that the young mackerel struck the nets, and disappeared ?—I have caught plenty of young mackerel in the herring nets.

14,031. Do you think that the mackerel fishing is injured by the spring herring-fishing ?— We have never had a good mackerel season since 1854, when a very large number were caught.

14,032. (*Mr. Lefevre.*) How long have you been a fisherman ?—Ever since I was about 13 years old.

14,033. Did you gradually rise from being a fishing boy to being the captain of a herring boat ?—Yes.

14,034. And did you save money enough to buy your two boats ?—We can save money regularly; that is to say, that I have been very successful.

14,035. Are there many like you in Lowestoft ?—There are several, I dare say. We have to work very hard.

14,036. Are there many men here now who are owners of boats, and who began life as fishermen, withoutan ything ?—Yes; but a good many like myself had a start in life. A great many people can make a move in the world if they have some one to give them a little shove.

14,037. Then I suppose you had a shove ?—Yes, I was one that had a shove.

14,038. Tell me, when you begin the spring herring season, where do the boats mostly go to; where do they find the herrings ?—In the deep water.

14,039. How far out ?—About E. by N. from Lowestoft.

14,040. How far out ?—They go somewhere about 28 miles across; they go about 50 miles off in general.

14,041. Off Yarmouth ?—Yes, off Yarmouth; that is, they start off Yarmouth.

14,042. Do you go out, and spend only one night out, and come back with your fish ?—Sometimes they are out for two or three nights before they find them.

14,043. And as soon as they get any quantity they come in ?—Yes, and sometimes they come in with only half a last, or they are sure to have them spoilt so that they can only be made manure of. Frequently they do not get enough to come into port with.

14,044. The price of the herrings depends very much in the first instance upon whether you can come in and sell them fresh ?—Yes.

14,045. And if they are not fresh when they are brought in they are sold for manure ?—Yes, that is it.

14,046. And if they are fresh, they are sent off to the manufacturing towns in the Midland, and sold at the different markets as fresh herrings ?—Yes.

14,047. Have you ever known a case of fresh herrings being sold for manure ?—Yes, I have on Good Friday or holiday time.

14,048. But you have not known it at the beginning of the season ?—No.

14,049. And when they have been so sold about Good Friday, has that been from exceptional causes; from people not buying fish at that time ?—Yes. I have had 1*s.* a hundred offered to me for the whole catch of two boats for the whole season round.

14,050. For the whole spring season ?—From a certain time of the year to the finishing up in the month of May.

14,051. And does that pay you ?—Yes, because the strain on the nets is very little in the spring season.

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I have seen more young herrings caught and killed in a little boat of 14 tons in one day than we can kill in a much greater time.

14,052. When was that?—When I have been on the Lincolnshire Main. They catch them from Grimsby right up to Boston Deeps. That is in the winter season; they begin to catch them about the month of January.

14,053. After the autumn fishing is over?—Yes. I have seen those vessels come in deep laden with them. They sell them for manure at so much per chaldron.

14,054. Are those young herring?—They are all young herring, from an inch long to 3 or 4 inches, and plenty of them are not so big round as a pencil.

14,055. Are they caught purposely for manure?—They are caught for manure. They run as long as that (*pointing to a sprat on the table*), and some of them are not half so long.

14,056. That is in the month of January?—Yes.

14,057. Is it only in that month that those small fish are caught?—Yes; in January and February.

14,058. Do you ever catch fish of that size off this coast?—I have not known it of late years. They used to catch them when I was a little boy, before this new harbour was built.

14,059. When did you first begin to fish for herrings in the spring?—About the year 1855.

14,060. That was the year you had a great take of midsummer herrings. Had you a great take of spring herrings that year also?—Yes, a great quantity.

14,661. Have you observed since that year a falling off in the takes of spring herrings?—No, we generally get a good lot of spring herrings.

14,062. But since 1855 you have not had a good midsummer year?—No, but we do not expect to have such a thing as that again. It was an unusual thing, such as was never known before.

14,063. Did you go out for herrings in the midsummer season longer ago than 1855?—We used to go out for the midsummer herrings about three or four years before then.

14,064. Not longer ago than that?—No, I was in the first vessels that ever did go for the midsummer herrings.

14,065. What kind of takes were they that you had in the midsummer seasons before 1855?—We did not use to take very heavy herrings, but we took at one particular time very heavy young mackerel.

14,066. Have you observed that the midsummer seasons since 1855 have been worse than they were before?—We have not prosecuted the midsummer voyage so much lately as we used to do.

14,067. I understood you to say that you only went out after the midsummer herrings for three years before 1855?—I only went out for them, I think, about three years before 1855.

14,068. And you said the take of herrings was not very considerable then?—No, it was not very considerable.

14,069. And that 1855 was an exceptional year, and that since then the midsummer fishing has fallen off?—Yes.

14,070. I want to know what the years before 1855 were, and what the subsequent years have been; have they been better or worse?—The three years after 1855 were much better than the three years before 1855.

14,071. I think you said the spring herring-fishing began about the year 1855?—I began it then myself.

14,072. Was that the year in which it was generally begun by others in the trade?—There were a few who began it some time before that.

14,073. But was it general before that?—There were not many boats at that time of day. They were only a very small class of boats at that time.

14,074. Do you attribute the falling off that has taken place in the catches of midsummer herrings to the spring fishery?—I could not say that. I should not like to express an opinion about what I do not know.

14,075. Have you observed any very great variations in the takes during the same season?—Yes, wonderful variations sometimes. Some years you may go and catch very little. I remember being out one fishing season when we only got 18 lasts the whole season. We could not catch any good herrings; they were all shotten fish. That was when I was a boy.

14,076. At what time of the year was that?—In the autumn. They did not go spring herring-fishing then, nor yet at midsummer.

14,077. What is the cost of your boats when they are fitted with nets?—About 800*l.*

14,078. And how do you pay your men?—By shares.

14,079. I want to know how you calculate the shares? how much for the boat, how much for the captain, and how much for the men?—Why, if we get about 260*l.* and there are 60*l.* expenses, about 100*l.* will go among the men.

14,080. And the rest goes to the owner of the craft?—Yes.

14,081. Supposing the whole sum made in the year is less than 260*l.*, say 160*l.*?—Do you mean in the whole year?

14,082. No, in the season. You pay the men by the season do you not?—Yes, we pay them by the season.

14,083. Do you then take the sum of 60*l.* off for expenses?—Sometimes they come to as much as 120*l.* It depends upon the losses. Last Monday a smack got into my nets, and my nets were picked up, and they charged so much for picking them up.

14,084. And that has to be deducted from the profits of the season?—Yes.

14,085. From the amount you make in the course of the season you deduct first of all the expenses?—Yes.

14,086. And the remainder, how do you divide it?—The men take half and the owners take half. They generally run nine shares to the owner and eight to the men.

14,087. How many men are there in your boats?—Nine and 10.

14,088. How many of those are boys?—Only one.

14,089. Are the boys apprenticed?—No.

14,090. Then do you make a separate bargain with your men for each of the three seasons?—Yes.

14,091. And do you take a separate crew each season?—Very often the same crew; but sometimes not. The crew I have in my boat now I have had along with me three or four years. In fact one has now been with me five years.

14,092. Which season, on the average, have you found to be most profitable?—According to the outlay of property we have found the spring season most profitable. It costs but very little to send our boats out in the spring season. I have had 200 nets put on board one of my vessels now. They might be seriously damaged by a vessel going through them and tearing them to pieces, because they all float on the top of the water on this part of the coast. In Scotland they send them so many fathoms under water.

14,093. Then would it materially interfere with your profits if the spring season were to be done away with altogether?—Well, everything would find its level.

14,094. Do you think the price of fish at other times would make up for it?—I have no doubt of that. It would do some people good, and others a great deal of ill. A great many get a living by prosecuting the spring fishing at a time of year when they have nothing else to do. There are some 2,000 or 3,000 people about here who get a living by the fishing in the spring season, and if it were not for that they would have to be maintained by the parish.

14,095. Do you use the same nets in the three seasons?—The midsummer nets and the spring nets are about the same class.

14,096. Have you laid up for the autumn season. Have you finished it?—We are only now prosecuting it.

14,097. But you have three separate sets of nets for the three seasons?—We could use them so, but we generally take the midsummer nets for the North Sea, but we have our separate nets for the spring season.

14,098. What is the size of the mesh you use in the spring season?—We get them 36 meshes to the yard when we buy them.

14,099. But they shrink to something less?—Yes; sometimes eight or nine meshes to the yard.

14,100. Have you known cases in which nets have been ordered of a smaller mesh than 36 to the yard?—Some people would order them at anything.

14,101. Do you think there are many nets used in the spring season that are less than the regulation mesh?—I have heard people talk of ordering them at 37.

14,102. Have you seen new nets that are less than the legal mesh?—Yes, I have seen them ordered. I have heard people talk of ordering a certain mesh.

14,103. Do you think that any considerable proportion of the nets used in the spring herring-fishery are of a less mesh than 36 to the yard?—Yes, they are all of a smaller mesh than 36, after they have been used. I do not think it would be practicable to order them less than that, because they are sure to shrink up very small. The more they bark them the more they shrink.

14,104. What is the usual length of the siezings by which the nets are suspended to the warp; does that vary according to the season?—We generally let our warps go right under the nets. We let our warps drop under them on this coast; but in the North Sea it is quite a different thing.

14,105. Are the fish deeper in the water in the spring than they are in the midsummer season?—No; about the same.

14,106. And about the same in the autumn, too?—Yes.

14,107. Do you agree with the previous witness that it is desirable there should be a Government inspection of the nets to see that they are not less than the legal mesh?—I do not see how you could do that.

14,108. Why not?—If I go and buy nets of 36 gang to the yard (and they cost a good deal of money now, something like 2*l.* per net, when they are fitted up), I do not know that the 36 gang will not run up to 38.

14,109. You cannot tell what they may turn out to be after they have been used?—Why, after they are half used they will become good for nothing on an inspection, and then who is to pay me for my nets?

14,110. I suppose we may take it that for the spring season, when the nets are least used, they are of no use unless they are 36?—They are of no use if they are a less number than 36. In that case they would catch but few herrings.

14,111. Then you find it necessary that the nets should be of a rather smaller mesh than that?—Yes.

14,112. And they become smaller by the barking, and by being used?—Yes.

14,113. Then for the midsummer fishing the mesh is rather larger?—We order the midsummer nets about 31 gang to the yard.

14,114. And for the autumn fishing what size do you order them?—About the same size as for the midsummer.

14,115. I think you said just now that you have quite recently lost some nets?—Yes, last Monday there was a smack went into my nets.

14,116. Was that a trawling smack?—Yes.

14,117. Did it get through them?—Yes, if you will just look at that letter (*handing in a letter*) you will see.

14,118. Did you take the number of the smack that cut through your nets?—That is the very thing we should like to do.

14,119. Are not the smacks that are fishing out here numbered?—They are numbered, but sometimes, if it is dark, we cannot see the smack that has done the mischief. Perhaps it happens at 11 or 12 o'clock at night. We hear a cry of "a sail," and we come up and go to work to get our nets in, but before we have got far he is clear, and away he goes. We cannot go after him; we must pick up our nets, and then if we fix it upon any smack the men will say, "It was dark at night; you never saw us cut the nets."

14,120. Then you cannot see the use of the number to enable you to enforce your claims against smacks that cut through your nets?—Well, sir, you see we cannot catch them, that is the point. If anybody cuts my nets, I want to catch him.

14,121. Do you think it would be better if they were numbered in a more conspicuous way?—It is of no use to number them at all. We cannot see them in the dark. They are, perhaps, half a mile or three quarters of a mile off. You can probably just see that it is a fore-and-after, a smack; you can tell by what little light there is whether it is a fore-and-after, or whether it is a ship, but you cannot see the number.

14,122. Have you frequently suffered the loss of nets in that way?—This is the third loss I have had this year. Another loss I have had I daresay was 18*l.* or 20*l.* My nets were cut into, and I was cut adrift, and my partner was in the same mess two or three nights afterwards. They know when they do these things that we cannot hurt their nets.

14,123. Did you take the numbers of the smacks? We cannot get at them. If they would drift alongside of us we could.

14,124. Have you suffered before in previous years?—The year before last I did.

13,125. Are there many cases in Lowestoft of persons who have lost their nets in that way?—It is a common occurrence. It is of no use to say anything about it, because we cannot do anything in it. So far as my vessels are concerned, 20*l.* or 30*l.* damage is done, and I do not get a halfpenny for it in the way of compensation.

14,126. Do you agree with the previous witness that the trawlers are sometimes fitted with an apparatus for the purpose of cutting through the nets?—I have heard talk of such a thing ever since I was a boy, and have heard people say that they have seen them.

14,127. Have you ever seen them yourself?—No, I have not. It is a rare thing for a fisherman to see them, because they generally keep them out of sight.

14,128. I want to know whether you have ever seen such a thing?—I have never seen one, but I know how they are made, according to what I have been told. They do not want a very sharp instrument if there is a great strain on the warp.

14,129. Have you ever seen the instrument?—I have never seen the instrument myself.

14,130. Have you ever seen a net cut with that instrument?—No.

14,131. In any of the cases to which you have referred, do you suppose that your nets have been cut by such an instrument?—I know they have been cut by some instrument.

14,132. Have they never been broken by a boat passing through them?—Yes, several times I have known them to be cut right through by a boat passing through them.

14,133. A boat would pass right through without being stopped, I suppose, if it were going at any speed?—Yes, they do not want much of an instrument at the bows.

14,134. Why is it that the fish when they come to this part of the coast swim near the surface?—The water at this part of the coast is quite a thick muddy water; but on the north coast of England the water is clear. I say the sky has a great effect on it, and that the more moonlight there is the farther we have to go down for the herrings in the north sea; but the moon does not have so great an effect off here because of the water being thicker.

14,135. You say that because the water here is more muddy than in the North Sea you find it necessary to keep the nets nearer the surface?—Yes.

14,136. And does that expose the nets to injury from the vessels?—Yes, our nets; but it does not affect the trawling vessels.

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14,137. But the trawling vessels would damage your nets?—Yes; the trawl is right down on the bottom, and the warp extends up to the ship. Our warps are only about three inches and are not so strong as theirs are, and they see our nets float on the water and then come clean through.

14,138. The sailing vessels, from the fact that your nets are nearer the surface off here, do more damage to your nets than they do in the North Sea?—Yes, the sailing vessels do.

14,139. So that your nets are exposed to more damage here than in the North Sea?—Yes; three times more damage.

14,140. Is it almost always at night that the vessels pass over your nets and injure them?—Yes; they never trawl over us in the daytime.

14,141. May it not happen that a vessel may cut through your nets at night without being aware of it?—It may happen so.

14,142. Then they do not do it on purpose, but because they do not know that you are there?—I do not know.

14,143. They have the same difficulty in seeing you that you have in seeing them?—They have the same chance of seeing us; we always have a light exhibited at night.

14,144. Where is it that you generally suffer damage from the trawling vessels?—We cannot go 24 miles from our own shore but we find the smacks about.

14,145. Then your herring-fishing is very much on the same fishing ground as the trawling fishermen frequent?—It always is, except in the midsummer season.

14,146. I suppose it would not remedy the evil of which you complain if the trawling fishermen were to be excluded from coming within a mile or two of the coast?—Not a bit; because they never trawl within the Knoll.

14,147. Where is it that you stated those small fish are caught for manure in the month of January?—In the Lincolnshire Main.

14,148. Is that in the Lincolnshire Wash?—Up towards Boston.

14,149. (*Mr. Caird.*) Between there and Lynn?—Yes; right up to the Sound going into the Humber. They fish especially for sprats.

14,150. It is called sprat-fishing?—Yes.

14,151. And you think they are young herrings, do you?—I am sure of it.

14,152. Do you think the sprat and the young herring are the same thing?—No; they are as different as can be.

14,153. Then you think they catch young herrings and not sprats?—Yes, I am quite sure of it. They do not know what is going into their nets until they have got them. Sometimes they will get a boatload of sprats, and at another time they will get a boatload of young herring.

14,154. Is it within certain limits that are well ascertained that that fishing goes on?—It is about a mile and a half from the shore.

14,155. Is the same ground regularly fished with the same object every season?—Yes.

14,156. Ground that can be well defined and ascertained?—Yes; they fish there every season to my certain knowledge.

14,157. And have you any notion as to how many boats are engaged in the fishing there?—There are several from Cleethorpe.

14,158. Are there large quantities caught and sold there?—Yes, I have seen boatloads of them.

14,159. Do you think that the catching of those small herrings injures the herring fishery?—Why, they catch as many in one day as we catch in a whole season.

14,160. Has that been going on for a long time?—Yes, ever since I was a young lad.

14,161. Have you not a larger herring-fishing on the coast than formerly?—Yes; because we have a greater number of boats.

14,162. Then it would appear that that fishing has not done much damage?—I do not know what damage it has done.

14,163. (*Mr. Lefevre.*) How long have you been the owner of a herring boat?—Since 1855.

14,164. Have you kept accounts every year of your expenses?—No; I have kept no accounts.

14,165. I think you stated a little time ago that 1*s.* a hundred during the spring season was the price you had been offered?—Yes.

14,165a. And that that would pay you?—Yes.

14,166. What should you reckon for the midsummer season?—Do you mean what price would pay me?

14,167. Yes?—Why, that would all depend upon the take; because we take a great number of spring herring sometimes. It is quite a speculation.

14,168. Making the same calculations for the midsummer as the spring, what would you say would be the average price per hundred?—I could not say.

14,169. Can you give us any notion as to the autumn fishing?—The fish vary so very much in prices.

14,170. You have given us a kind of average for the spring. You say a fair average is 1*s.* per hundred?—I have been offered that price but I never took it. I would not risk that. I have generally made more than that, taking the round of the season.

14,171. But you cannot give us any calculation for the midsummer or the autumn of the same kind?—I should not like to take 1*s.* a hundred for my catch.

14,172. (*Mr. Caird.*) At the present moment is there much difference in the quality of the herrings brought into the harbour here? Is there at this moment one herring that will bring a higher price than another?—Yes, there is a great difference.

14,172a. What is the cause of the difference?—The different grounds they are taken off.

14,173. Are the shotten herrings caught in here, near shore?—The good quality of herrings are caught further off.

14,174. And the inferior herrings come nearer inshore?—Yes.

14,175. Are they caught by an inferior class of boats and gear?—They are caught with smaller boats, but with the same gear. They do not proceed far out to sea.

14,176. And they are obliged to be content with the inferior quality of fish?—They are forced to be.

14,177. (*Mr. Lefevre.*) I suppose the French boats do not come here in the spring season?—They do not catch here, but they buy a great quantity of herrings of us. They will give us any price for them sometimes. I have known them last year give as much as 9*s.* a hundred.

14,178. Do they salt them?—No, they do not salt them; they use them for bait. I have known them give 9*s.* per hundred

14,179. Was that early in the season?—Yes.

14,180. And were they simply for bait?—Yes.

The witness withdrew.

Kemble.

GEORGE KEEBLE called and examined.

14,181. (*Mr. Caird.*) Have you been a fisherman here long?—No, I have never been a fisherman here.

14,182. Have you not been interested in the fishing at all?—Yes, I am interested in it; looking after the fish and sending them to market.

14,183. Where were you a fisherman?—At Barking, Harwich, and Gravesend.

14,184. A trawl-fisherman?—Yes, a trawl-fisherman and a line-fisherman.

14,185. At the present moment are you interested

in the herring fishery here?—No, not at all. I am solely in the trawl and cod fishery.

14,186. Is the number of boats employed in the trawl and cod fishery on the increase here?—Yes; they come in here when the wind is adverse.

14,187. Do you mean when the wind is adverse for their going into the Thames?—Yes. I have been fishing ever since 1810, and for the first seven years I was in the line fishery. I never saw a trawl when I was first apprenticed.

14,188. Has the increase principally taken place in the trawling vessels?—They have increased in some places and decreased in others.

14,189. Which is the most profitable, the line-fishing or the trawl-fishing?—There are a great many trawl fishermen who go a lining at different parts of the year.

14,190. Are the vessels of the same size, and are they equipped in the same manner?—Yes.

14,191. Have the line-smacks wells?—Yes.

14,192. Do they come in here?—Occasionally they do; when they cannot get to the river they make the first market they can get to. But at this season of the year the principal part of them go to Grimsby, and about Christmas time we shall get a great many of them here.

14,193. Are the numbers that come here increasing?—Yes; they have been on the increase for the last two or three years.

14,194. Do the cod-men complain of the trawl fishermen damaging their fishing?—Not that I have heard.

14,195. Do they both fish on the same grounds?—Yes.

14,196. The line fishermen prefer the rough ground?—Yes; and the trawl fishermen prefer the smooth ground; but they are generally mixed about the one with the other.

14,197. And you say that the line fishermen in the large vessels do not complain of the damage done by the trawling to their trade?—No.

14,198. Have you ever seen any of those knives you have heard referred to for cutting the nets of the fishermen?—Yes; I have used them.

14,199. Was that in order that you might cut quickly through the nets?—Yes.

14,200. Did you find that you did less damage in that way than by running through them in the ordinary manner?—That was the only manner in which we could get clear of them. But that has been done away with now for some years. It was not practiced above one or two seasons.

14,201-2. Why was it discontinued?—Because it was so much complained of by the drift fishermen.

14,203. Is there much damage done to them?—Yes.

14,204. And is there no remedy?—No, I cannot see how there can be. They cannot catch the smacks. The drift fisherman has as much chance to get rid of the trawlman as the trawlman has to get clear of him.

14,205. But the drift fisherman cannot get rid of the trawlman. It is you who do the mischief and not they?—That is clear.

14,206. They do not hurt you, but you do hurt them?—There are certain times when they catch us, but at certain times we catch them. I have seen them frequently have to be cut, and we have sometimes cut our ropes and let theirs be fast, but it is only in fine weather that we can do that.

14,207. Have you in your experience as a trawl fisherman found any of the fishing grounds you frequent ceasing to yield plenty of fish?—No; I believe there are more trawl-fish than ever on the same grounds.

14,208. Are there no grounds that you used to frequent which have been fished out?—No.

14,209. There are no grounds which you as a trawl fisherman would avoid because they have been fished out?—No.

14,210. How far does your fishery extend?—I have been all round England, Ireland, and Scotland trawl-fishing and line-fishing.

14,211. And on the Dutch coast also?—Yes; in my belief there are as many fish caught now as there ever were.

14,212. Don't you think there are more?—In certain times of the year if you go and trawl about one piece of ground of about 20 or 30 miles in extent for a month you will clear that piece, but if you go 20 or 30 miles further you will find the same quantity of fish, and then if you leave that ground and go back to the other you will find the same quantity of fish again.

14,213. Has there been any increase in the line-fishing?—There has been a great increase in the line-fishing, but a decrease in the quality of the fish caught.

14,214. What kind of fish has decreased in quality?—The cod.

14,215. Are the cod not so fine now as they used to be?—No.

14,216. Not on any part of the coast?—No.

14,217. Do they not catch as fine codfish on the Dogger Bank as they used to do?—No. I had seven years fishing on the Dogger Bank, and at that time we seldom used to see any small cod, and if we got a small one and he was alive we used to chuck him overboard. But at that time they did not work long-lines along the shores. We did not know how to work long-lines then where the tide runs; but now they work long-lines all along the shores, and if they get 50 score of cod, as they call them, they will not have five score of good-sized fish. They are mostly small fish.

14,218. Do you think it is the line-fishing along the coast which damages the fishing at sea?—Yes, I do.

14,219. And not the trawl-fishing?—No.

14,220. Are there many cod caught with the trawl?—No, very few.

14,221. Are there any other fish that are decreasing in quality?—I do not believe the soles at certain seasons of the year are so good as they used to be. Before the railroads came here there were very fine soles, and a very large quantity caught at certain seasons of the year at Smith's Knoll. There was a great abundance of very fine soles; but the fishing was then only two or three months in the year, and Smith's Knoll remained after that undisturbed for seven or eight months. Now, however, it is raked about all the year round, and the soles are not so fine as they used to be.

14,222. Not so fine in that particular place?—Yes, that is so.

14,223. But they are caught on other grounds?—Yes; but not in so large a quantity as they used to be.

14,224. Then that is an instance in which the trawling has diminished the quality?—Yes, but I believe there is a greater bulk of fish caught on that particular ground.

14,225. (*Mr. Lefevre.*) Are you yourself now engaged in trawling?—No, I have not been out for the last 13 or 14 years.

14,226. Then your experience extends beyond that period? Since then you only tell us what you hear, and not what is in your own knowledge?—I see the fish; they come under my notice every day.

14,227. Are you a salesman now?—No; what is called a fish agent.

14,228. Do you attend to the smacks?—Yes, and the liners.

14,229. Do many trawlers come in here to send their fish off to market?—We sometimes have a few; but we never have a great number coming in here.

14,230. But a great many more than formerly come to this port?—Yes; a great many come from Ramsgate. They generally fish off the town or about this coast.

14,231. Do they take in ice here in the summer time when there is ice for them?—They ice the fish when they catch them, and when they take ice from here they bring the fish here.

14,232. How long have you been at Lowestoft engaged in this way?—Five years.

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14,233. Have you observed any increase in the number of trawlers in that time?—Yes, I believe there are more come here than used to do, but there is no certainty about them now. If they can get here sooner than to another port they come here, with the exception of Mr. Morgan's vessels, which come in the summer months.

14,233*a*. Who is Mr. Morgan?—A salesman at Billingsgate. When his boats are fishing here they come in here. They generally come about the latter part of July, and they stay until the beginning of October.

14,234. Are they trawlers?—Most of them are trawlers.

14,234*a*. What part of the coast do you refer to when you speak of the long-line fishing?—From Flamborough Head up to Orford Ness, and from Flamborough Head down to the Fern Islands.

14,235. Is there much long-line fishing along the Norfolk coast?—There is a good deal along the Lincolnshire coast at this season.

14,236. And along the Norfolk coast?—I do not think there are many smacks fishing along the Norfolk coast now.

14,237. At what places along the Lincolnshire coast? coast?—Grimsby is the principal place; they go out from there and from Flamborough Head right along the shore up to the Dudgeon, and up to Cromer and back.

14,238. At what distance from the shore do they fish in that way?—Sometimes as close as they can get; from 10 or 20 fathoms to 20 miles off.

14,239. You say that it is in quite recent years that they have discovered how to fish along shore with long lines?—Yes.

14,240. How long ago is that?—I should say within the last 30 years.

14,241. Do they fish from smacks or do they come in open boats?—From smacks.

14,242. They do not come in open boats from the villages?—No; I do not think there are any open boats fishing on this side of Flamborough Head.

14,243. They fish in smacks which come from Hull and Grimsby?—Yes, and in Barking and London smacks.

The witness withdrew.

W. Catchpole.

WILLIAM CATCHPOLE called and examined.

14,244. (*Mr. Caird.*) You are a fisherman?—Yes, but I know nothing of trawling.

14,245. You fish for herrings chiefly?—Entirely for herrings. I never had anything to do with trawl-fishing.

14,246. Do you find the spring fishing a beneficial and profitable fishing?—Yes, quite so.

14,247. You would not like to be deprived of the spring fishing by any regulations established by law?—Not by any means.

14,248. Are not the spring herrings of inferior quality?—Not in the latter part of the season. At first they are rather dry, but they are eatable.

14,249. Are a larger quantity of those fish caught because the spring fishing can be followed at a moderate outlay of capital and gear?—They realized large prices last year in consequence of supplying the Frenchmen with bait. They come in here entirely dependent upon us for bait. I don't think they could go on without our spring catch.

14,250. And is a large quantity sold to the Frenchmen?—Pretty well all. They entirely depend on our spring fishing for their bait. They come here a score or 30 of them at a time.

14,251. Where do they fish?—On their own coast.

14,252. And they come across for bait?—Yes.

14,253. Do they want the bait for line-fishing?—Yes, for various sorts, I believe—cod, and skate, and ray.

14,254. Do you sell the bait over the boats' side to the French boats out at sea?—We sell it to the French boats in the harbour.

14,255. Is any large portion of the spring herrings sold in that manner?—Yes, the greater part of it.

14,256. Hundreds of barrels?—Yes, I may say hundreds of lasts.

14,257. How much have you yourself got for bait sold to the French fishermen?—We realized 230*l*. last year.

14,258. For bait?—Yes, and for other purposes.

14,259. Sold to the French fishermen?—Yes.

14,260. Independent of what you sold on shore?—Yes. During the time of Lent there was scarcely any fish went into the country; after Lent was over the fish was sent into the country markets.

14,261. The French bought the fish during Lent?—Yes.

14,262. Don't you think the fish went to be eaten in France during Lent?—No.

14,263. Did they tell you the fish were all used for bait?—Yes.

14,264. How much would you sell at a time to a French fisherman?—Not more than 2,000 or 3,000. Those French fishermen fish off Dover and in the channel principally. They will not go away without the bait, and they carry a good stock of it with them.

14,265. You say that that was the case last year?—Yes.

14,266. Have you such a demand as that for bait every year?—Not so much as we had last year. I have not heard of such a demand for bait as there was last year.

14,267. And after Lent that demand ceases?—Yes, the price goes down. They did take them afterwards, but not to that extent.

14,268. They did not require so much bait after Lent?—No.

14,269. Would you think it very prejudicial to your interests as a fisherman if any regulation were to be adopted shortening the spring season?—I should not, for my part, like to have it entirely abolished.

14,270. Would you like to have any regulation established as to when it should begin?—I should not.

14,271. Would you like to have a close time when it should begin?—Not for my part.

14,272. Whether the fish are in good condition or not?—Well, sir, it is our livelihood. We never mind the quality if we can sell them.

14,273. Do you think that in saying that you are stating the general feeling of the fishermen here?—Yes, I should say so. They are not all here to speak. I expected to see more of them here, or I should not have come up myself.

14,274. Has the summer fishing in your experience decreased in recent years?—I do not know that it has. We generally look upon it as of less consequence than the spring fishing. I have never made a very large catch during the midsummer.

14,275. Was it never of much importance to you?—Not so much as the spring. I would sooner chance the next spring than I would the midsummer.

14,276. You would sooner lose the midsummer fishing than the spring fishing?—I would for my own part.

14,277. Do you think for the supply of the markets the spring fishing would be a greater loss than the summer fishing?—I was speaking of the Frenchmen, who depend entirely on our spring fishing for their bait.

14,278. With regard to the autumn fishing, do you agree with the previous witnesses that that continues to be a very profitable fishery?—Yes.

14,279. Are you much interfered with by the French fishermen during your autumn fishing?—Not to any particular extent. We do not come into contact with each other much.

14,280. Have you ever prosecuted the mackerel fishery?—Not for the last 20 years.

14,281. Has it been falling off?—Yes, it has.

14,282. What has been the cause of that?—I cannot say.

14,283. Has it anything to do with the spring herring fishery?—I should think not.

14,284. Do you ever see many mackerel at that time?—Not more than two or three in the whole season. It is quite out of the mackerel season.

14,285. Do you use a separate net in the spring season?—The fishing net generally works smaller.

14,286. And as the meshes get smaller you use the nets in the spring?—Yes, the same nets that we used in the autumn we get to use in the spring. I had a great number and worked them up in that way. We get them 32 meshes to the yard, and they afterwards go up to 37 or 38, and that sized mesh will catch any herrings.

14,287. Do they not get smaller than that?—I have none smaller; that is quite small enough.

14,288. They are never made as small as that?—No.

14,289. Are no nets made as small as that?—I have none made so small.

14,290. Are there no nets made so small as that, used in the spring fishing?—No, none made so small as that.

14,291. We hear that they sometimes go up to 40?—They generally work up to 37, 38 or 40, from 32 and 33.

14,292. Is there any difference of opinion among the salesmen as to the advantage of fixing a time for the spring fishing to commence?—I do not know that there is.

14,293. Is it any interest to the fishermen to have a good summer season rather than a good spring season?—We want to catch as many as we can.

14,294. But some fishermen think it advantageous to have the spring fishing and some do not. How arises this difference of opinion?—I cannot say what is the reason for the difference of opinion. I have been 35 years at it and have never missed, and in the spring I have done nothing else for a livelihood. I do not see any reason why the spring fishing should be put entirely on one side.

14,295. Have you prosecuted the spring fishing all that time?—Yes. I have never missed a season and I don't suppose I shall as long as I am able to go the voyage. We have a regular time.

14,296. Do the fish come regularly at that time?—Yes. We generally get plenty when we first go out, and I dare say we should get them before then if we were to go out before.

14,297. You never began the spring fishing in February?—No, I never did.

14,298. Did you never fish in January?—I never heard of its being done.

14,299. Are there no fish to be seen at that time?—I never tried.

14,300. It would be considered rather a dangerous season to prosecute the fishing in the depth of winter?—We never prosecute it till the spring.

14,301. Do you consider the quality improves as the season goes on?—Yes.

14,302. Is there much fish brought here that is used for manure?—Some that gets in three or four days after being caught, and that would not pass at all.

14,303. Are they never used for manure except when they have been caught too long?—I do not know of a case last year. Last year was a very favourable one; we got long prices last year.

14,304. There were none sold for manure then?—Not that I remember.

14,305. Generally speaking, when the fish have been sold for manure has it been on occasions when the boats have been detained for some time at sea and the fish cannot be brought fresh into market?—Exactly so. Contrary winds will cause it. We fish generally a long distance off, quite in the deep water, 40 or 50 miles from the land.

14,306. For the spring herring?—Always as far as that. We have to go a long distance.

14,307. Do you get large catches in the spring?—No, sir; not so large as now. Last year the spring herring season was a very scarce one.

13,308. Are you fishing just now, at this time?—Yes, sir; I was out last night.

14,309. What sort of catches are you getting just now?—We got 11,000 last night, one last and 1,000.

14,310. You got 11,000 herrings?—Yes.

14,311. And their price?—7*d.* a hundred. Some have been sold for less.

14,312. Is that an unusually low price?—Yes, it is at this season.

14,313. Were those inferior herrings?—Yes, what we call shotten herrings.

14,314. Were they caught pretty nearly in-shore?—Yes, quite close; we could see the land.

14,315. And are there more coming into the market that are selling at a higher price?—Yes, fish that have been caught further off the shore. If a man is fishing in a small boat he does not think it safe to go far from land.

14,316. What is the better quality selling for at this moment?—Something like 1*s.* a hundred, and 1*s.* 1*d.*

14,317. Do you find yourself paid by the price you have got?—No, but we had better do that than do nothing.

14,318. Is 11,000 a large catch?—No.

14,319. What would you consider a large catch?—From three to four lasts.

14,320. That is between 30,000 and 40,000 fish?—Yes.

14,321. Have you caught that quantity often this season?—I have never done that. My boat will not carry 10 lasts, but some of the large boats will do so. I saw some last week with 10 lasts.

14,322. Have you any idea of the quantity of fish that may be brought in here during the season?—I cannot give you any idea. Some people can.

14,323. Have you ever brought any small mackerel into market here in the spring season?—Never but one in my life, and then I gave it away. It is a miracle to see them in the spring season.

14,324. (*Mr. Lefevre.*) Are you the owner of a small boat?—Yes.

14,325. What is the size of your boat?—About 20 tons.

14,326. Is it a decked boat?—Yes.

14,327. Did you go out in it in the spring for the spring season?—Yes.

14,328. What did you realise then?—Something over 200*l.* for the spring season.

14,329. What did your share come to?—My share came to 9*l.* 8*s.*

14,330. What, as owner of the boat?—Yes, other people got equal to me. 9*l.* 8*s.* was the share.

14,331. And for the spring season you realised something over 200*l.*?—Yes.

14,332. What part of that did you set aside for expenses?—The expenses vary. Something like 30*l.*

14,333. This last season about 30*l.*?—I cannot say exactly. We were about seven weeks out.

14,334. How many men had you?—Five men and a boy.

14,335. And the remaining 170*l.*, how did you divide that?—The boat and nets take half.

14,336. They belong to you I think you said?—Yes, and the boat and nets take half first, after all the expenses have been paid.

14,337. And the remainder was divided among you?—No, sir; my boat takes a share out of the other. First the boat and nets take half, and then out of the remainder the boat takes a share.

14,338. Then you take half as owner, and some 8*l.* or 9*l.* as master?—Yes, exactly. We shared 9*l.* 8*s.* each.

14,339. Now, of the 200*l.* you realised, how much did you get from the French?—I am unable to say. The greater part of it. We sold a good many herrings

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at 6*s.* and 7*s.* a hundred. All the herrings we sold to the Frenchmen were sold at that rate. We could only get 2*s.* 9*d.* in our own market. All the high prices were from the French.

14,340. How long did the French come here?—Till Lent—Good Friday.

14,341. When did they begin to come?—When we first commenced.

14,342. What were the French boats; smacks?—No; luggers, the same as our own.

14,343. The same boats that are used in the herring-fishery?—Yes, the same boats; they put them into trawling and long-lining, and all that sort of thing.

14,344. Did you see them long-line fishing off this coast?—No; but I have seen the long-lines on board their boats. They chiefly fished in the Channel this year, betwixt Dover and Calais.

14,345. What number came in here?—Sometimes I have seen 20, that is about the most I have seen.

14,346. Do you realise from them higher prices than you can get from the salesmen on shore?—Yes, decidedly.

14,347. What number of herrings would one boat buy at a time?—Never more than 3,000 or 4,000; that is as many as they can keep good during the time they use them.

14,348. And of the 200*l.* the best portion was realised from the French?—Yes, that it was, I am quite certain of that.

14,349. Did you go out in your boat for the summer season this year?—Yes.

14,350. What did you realise this midsummer season?—I made up in debt.

14,351. You made no profit?—No.

14,352. You did not divide anything among the crew?—Not a farthing.

14,353. How long have you owned that boat?—Something like six or seven years.

14,354. Has it been a profitable concern to you?—I have just got a living out of it, we call it bread and cheese; I do not think of earning anything else.

14,355. Should you have any objection to any limit being put upon the time when you should go out in the spring?—Well, I don't know; I don't suppose anything I could say would alter it, but the time we usually begin is about the middle of March.

14,356. Do you think it would be advantageous to you to have a limit put to the time?—If we were allowed to begin before the fish would not be fit.

14,357. But suppose you were not allowed to go out on the spring voyage until the middle of April?—Our spring season would then be nearly over.

14,358. And you would lose all those good prices you get from the French?—Yes.

14,359. (*Mr. Caird.*) That may be called a Lent fishing?—Yes.

14,360. How many French fishing boats come into harbour to buy bait?—They come in in various numbers; I have seen as many as 20.

14,361. How many boats come in altogether, as many as 120?—Not so many as that. I think the season in course of time will wear itself right out; there is not half the quantity of spring fish as there was before; at one time it would hardly answer the purpose to buy the nets, but last spring was better; it was thought as the nets worked out it would not be worth while to buy more for that purpose.

14,362. How many fish would a French boat buy at a time?—Something like 3,000 or 4,000.

14,363. And how many fish may you bring in your own boat at a time?—Something like three or four lasts.

14,364. 4,000 or 5,000 are half a last?—5,000 are half a last.

14,365. How could it be possible that 20 boats, each buying half a last, would take the quantity that the herring boats bring in?—Why half of them do not get enough.

14,366. You mean that the herring boats themselves have very few in them?—The catch is anything but regular; at this time of the year the fish are very regular, and all get them, but in the spring it is not so.

14,367. Then the spring fishing cannot be very profitable on that account?—Why, the one who does not get them this time will get them next time; if I missed to-night I should get them to-morrow night.

14,368. How long have the French been off this coast?—Ever since I can remember; ever since the spring fishing was first carried on, and it is my opinion that we shall have more another season, because the French have done well with what they caught.

14,369. Have you ever sold any fish for manure?—I have at chance times, when they have not been fit to eat.

14,370. When you have come in with the fish still fresh, have you ever sold them for manure?—Years back I have; three or four, or five or six years back, in consequence of the Frenchmen a great many have been sold.

The witness withdrew.

W. R. Archer.

WILLIAM ROBSON ARCHER called and examined.

14,371. (*Mr. Caird.*) We shall be happy to hear what you may have to say?—I will give you some facts. In the year 1855 a great number of the herrings caught during the Midsummer voyage were sold at a less price than those which were caught during the spring season. During this year we have had no herrings reach the price that the spring herrings were sold for—neither the autumn herrings nor the midsummer herrings—because during the spring fishery the herrings once touched 11*s.* a hundred, whereas during the present voyage they have scarcely exceeded 3*s.*, and many of them have been sold for 6*d.*, while a great many have been sold for manure.

14,372. (*Mr. Lefevre.*) Have you been long at Lowestoft employed as a solicitor?—Yes.

14,373. Are you at all connected with the trade?—No, I am not at Lowestoft; at Yarmouth I am.

14,374. Have you any clients among the owners?—Yes, I have both smack owners and herring-boat owners.

14,375. Can you say from your experience that the trade has been a profitable one of late years?—Well, I cannot say it has been profitable to all; it has been so to a great many. But the herring fishery is like everything else, it ebbs and flows the same as a town. You find that a town is rising at one time and ebbing at another. When I knew Lowestoft 15 years ago the herring fishery was in a wretched state. At that time they were all large boats, and then small boats were introduced and they commenced the spring-fishing, and have continued it up to the present time. The fishery of Lowestoft has gradually increased and improved. At the time I speak of there were not more than 15 or 20 boats employed in the mackerel and herring voyages—if I am speaking correctly, and I should like to be correct. About 24 years ago, a great many of the fish merchants were in a state of bankruptcy. That I know from my own personal knowledge. The herring fishery has gone on increasing from that time until it has reached the number of boats of which you have had evidence before you this morning.

14,376. Do you agree with the last witness as to the trade that has grown up in selling fish to the French for bai?—Yes, most decidedly.

14,377. Are there a large number of boats here?—Yes, and it is quite amusing to stand on the pier of a morning and to see the competition among the French to get the herrings before the fishing boats get into the harbour. You may see three or four Frenchmen rowing their boats alongside of the herring boats to ask the prices.

14,378. Have you any knowledge of the prices that are given by the Frenchmen for the fish?—By common report it has been as high as 11*s.* per hundred.

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14,380. That is the best price that has been got for the herrings this year?—That is the best price that has been obtained, I believe, this year. I should state that the observation I made just now in regard to the year when the spring fishing was introduced was applicable to the year 1844 or 1845, before Mr. Bradbeer came to Lowestoft, and when the fish trade was in a very depressed state generally. It has since gone on improving from the establishment of the second-class luggers, and those second-class luggers have increased to the size of the first-class now. In regard to the keeping of the midsummer herring, it has not been brought prominently before you that the midsummer herring are not herring that you can preserve. Fish curers would tell you that you cannot keep the midsummer herring longer than a week, whereas you may the autumn herring almost any length of time.

14,381. The great trade of Lowestoft in curing herring is in the autumn herring?—Yes. The spring and the summer herring must be sold almost immediately and eaten.

14,382. With the exception of the French trade for bait?—Quite so.

14,383. Is it in your knowledge that the French use those herrings for bait?—Yes; at least I have not seen them right through Lent; but I have seen the lines, and I have seen a request from a friend of mine at Dover, asking to have 3,000 herrings sent for bait.

14,384. (*Mr. Caird.*) Do you suppose that any of those herrings sold for bait are for consumption during Lent in France?—No; I think the rules prevent that. There is a steamer about here occasionally to prevent the sale of fish to Frenchmen. That was a most lucrative trade at one time, on account of the bounty in France.

14,385. (*Mr Lefevre.*) Are the midsummer herring sold as bloaters?—Yes, as bloaters sometimes; they are sold fresh.

14,386. They are also sold as bloaters?—They just hang them up and give them a colour and send them to market, otherwise they would all turn to oil. After they have been hung up a week or 10 days, I have seen fish merchants hold them up and the oil has run out of them. I have seen maggots come from them in two days. You cannot keep them. And again, in regard to the spring herring turning to the midsummer herring, I think there is no doubt about that; but in regard to the midsummer herring becoming the autumn herring I think there is a doubt about that, because they are a different species. You see what we call the little Brown Bank herring caught at this season of the year, and they appear to be quite a different species to those that are caught in the earlier part of the year. You find the herring caught now have ribs as it were, which come up here (describing it), and the earlier herring you find to be a fine boned herring, as different as possible from the North Sea herring.

14,386*a*. What effect do you think any restriction on the spring herring season would have on the trade?—I should say it would be highly injudicious to impose one, or to interfere with the trade at all. There is never any good arising from it, because if you were to stop the trade here, there is nothing to prevent the foreigner from catching the fish on this coast and bringing them in. We cannot restrain other nations if our own people are restrained; if we could it would be a different thing. But even then I should contend that any Government interference either with the size of the mesh or the catching of fish would be highly improper. That is my feeling.

The witness withdrew.

P. Kendall.

Philip Kendall called and examined.

14,387. (*Mr. Caird.*) You are the station master here?—Yes.

14,388. Have you been here some years?—I have been here more than two years.

14,389. During that time has the quantity of fish sent over the different lines of rail under your management increased or diminished?—During the time I have been here the two seasons have been about the same.

14,390. Can you from the books in your possession compare them with previous years?—I believe we have had a better tonnage this season than we have had for several seasons.

14,391. A larger quantity?—Yes; and the spring voyage last spring was heavier than it has been for two or three seasons.

14,392. The total quantity of fish sent over the railway last spring was heavier than before?—Yes; and the quantity last autumn was heavier than in the previous autumn.

14,393. And this autumn?—It is about the same as last year.

14,394. Is it by the ton that you keep the account?—Yes.

14,395. What number of tons of fish were delivered at your station last spring?—I could not tell you from memory. I could only tell you by going into the matter.

14,396. (*Mr. Lefevre.*) Can you give us an epitome of the quantity sent for the last 10 years?—It might be arrived at, but you would have to obtain the information from the secretary.

14,397. (*Mr. Caird.*) Can you tell us, if not exactly, at least about the quantity that was transmitted over the line during the spring voyage?—I could not tell.

14,398. Or during the whole season?—We have sometimes 100 trucks, containing about 300 tons of fish.

14,399. Does that continue for days following each other?—Yes, during the present week we have averaged from 80 to 90 trucks a day, and each truck contains about three or four tons.

14,400. To what destination have they chiefly been sent?—They go to various parts. About one-fourth go to London, and the other three-fourths to stations in the midland districts and in the north.

14,401. Including Manchester?—Including Manchester, Liverpool, Birmingham, and other large places.

The witness withdrew.

The inquiry was then adjourned until Friday, November 27th, at King's Lynn.

King's Lynn, Norfolk, Friday, 27th November 1863.

Present:

James Caird, Esq., M.P. (Chairman.) | George Shaw Lefevre, Esq., M.P.

KING'S LYNN.

E. L. Swatman.

27 Nov. 1863.

Edward Lane Swatman called and examined.

14,402. (*Mr. Caird.*) You are the town clerk here, I believe?—Yes.

14,403. Are you prepared to offer us any evidence with regard to the supply of fish here?—I am quite prepared to tell you what the town council have done in reference to this matter. The town council had been informed that the fisheries had been very much infringed upon, and numerous meetings have been held upon the subject. I think I had better state in the first instance that the corporation of this borough divide the Deeps with the corporation of the borough of Boston. The borough of Boston found the same

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difficulty in the matter that we did. The fisheries on both sides of the Deeps have been terribly infringed upon.

14,404. When you talk of dividing the Deeps, do you mean that this borough has a special interest in them, or that it possesses special rights?—It possesses special rights.

14,405. (*Mr. Lefevre.*) Have those rights been granted to the borough by charter?—They have been granted by charter.

14,406. (*Mr. Caird.*) Are the corporation entitled to fish within certain limits?—Their rights are not exactly rights to fish, but Boston Deeps commence where the Deeps belonging to this corporation end, and the two corporations about divide certain rights over those Deeps between them.

14,407. Will you be good enough to state the nature of the jurisdiction of the corporation of Lynn?—Our jurisdiction extends from Edmundsness to Hunstanton Point across eastward, tending towards the southward as far as the Lynn Well floating light, and from thence straight to Lynn.

14,408. (*Mr. Lefevre.*) Does all the rest of the Wash come within the jurisdiction of the corporation of Boston?—The remainder belongs to the corporation of Boston, and some part of it to the corporation of Wisbech. The Nene enters the estuary.

14,409. (*Mr. Caird.*) What is the nature of your jurisdiction?—The nature of our jurisdiction is that it gives us a right to all the fish and everything found within it.

14,410. Within the limits?—Yes.

14,411. Do you derive any revenue from that property?—None whatever.

14,412. Have your fishermen the privilege of fishing exclusively?—No, none whatever. I believe I am correct in stating that many years ago, perhaps 30 or 40 years, the corporation used to license fishermen to fish in Lynn Deeps; but the right has been abolished and has not been exercised for many years.

14,413. Then is your jurisdiction confined to making regulations as regards the fishermen who exercise their calling upon these Deeps?—Yes, we still possess the right, but the fishermen who used to be licensed are not so now, yet the corporation still claim the right of establishing rules and regulations for the good management of the fishery.

14,414. Do the fishermen observe such rules?—No, and unfortunately we cannot make them.

14,415. Have you any right to impose a penalty if they are not observed?—We impose a penalty, but the nuisance of which we complain is this, that they will take a lot of unsizeable fish and land them at places 20 miles from Lynn where we cannot get hold of them. The farmers take the fish and use them for manure.

14,416. Are those fish caught within your jurisdiction?—Yes.

14,417. Can you give us any more complete statement of that?—No, I do not know that I can; it is a thing, however, that is very well known.

14,418. That has gone on for some years?—Yes, it is conceived to be a great nuisance. For instance the fishermen take the herrings when they are what we call unsizeable. They take them in very large quantities, and the farmers buy them of the fishermen secretly and use them upon the land for manure.

14,419. Can such a business as that, where the article is of a bulky character, be carried on much in secret?—Yes, they do it at Lynn. Then, again, mussels are taken by the fishermen which are unsizeable. They are brought into Lynn, and taken out early in the morning, or early in the day, by farmers in carts. These mussels are taken by the fishermen before they get half the size they ought to be.

14,420. Are they taken off grounds that have long been used for the breeding of bait?—They are taken from grounds over which the corporation of the borough ought to exercise a jurisdiction.

14,421. Does not the corporation exercise a jurisdiction?—Unfortunately we cannot enforce the penalty.

14,422. Is that from want of a legal right?—Yes, quite so.

14,423. Have you no legal right to enforce a penalty?—No, not under the Act.

14,424. Then what is the value of your jurisdiction?—The difficulty we experience is this—the remedy would be worse than the disease. Under an old Act of Parliament there is a clause that the fishermen shall not take unsizeable fish, that the mussels shall be of a certain size, and that the corporation shall regulate that size, but if they do not obey those regulations then the corporation have no remedy at all.

14,425. How long is it since your attention was called to the evils of which you complain?—About four or five years ago.

14,426. Have complaints of this kind only arisen within the last four or five years?—I think not.

14,427. Was there no similar cause of complaint before that time?—The only complaint we had was with regard to the smelts, namely, that the fisherman were in the habit of taking them much smaller than they ought to be taken. Some people, however, did not find fault with it. The same thing also occurs with regard to soles; they are taken much smaller than they ought to be.

14,428. Confining yourself to smelts, when did the complaints with regard to smelts arise?—There have been certain complaints for many years. The fishermen bring up little things not bigger than your little finger.

14,429. Is this place remarkable for the catch of smelts?—There have been immense catches here.

14,430. Have the catches increased or diminished?—I think not, but Mr. Cresswell will be able to give you better information upon that point than I can.

14,431. Have you any idea of what the value of that smelt fishery is to the fishermen?—I have no means of forming an estimate, but it must be of considerable value to them.

14,432. Does it continue throughout certain seasons of the year?—I think the principal catch of smelts is somewhere about this time, in the cool months. I should say from September to Christmas.

14,433. From your own observation are you able to say whether the take of smelts has been increased or diminished within recent years?—I should say that it has not diminished.

14,434. It has not diminished?—I should say not; they are very cheap.

14,435. Why do you complain that the fish are taken when they are what you call immature, as the effect of taking them does not seem to diminish the supply?—We do not complain so much with regard to smelts, the principal complaint is with regard to herrings.

14,436. Is there no complaint with regard to smelts?—I do not exactly say that there is, because many people like small smelts. I do so myself. There is a great preference on the part of many persons for very small smelts over the large ones.

14,437. I think you gave us smelts as one of the fish the destruction of which in an immature state was complained of?—They certainly are destroyed very small. I saw a lot this morning that I should call unsizeable fish.

14,438. Were they so small that you thought them unsuitable for food?—No, I do not say that.

14,439. Were they in a state that rendered them fit for food?—Yes. I happen to know many gentlemen in the country who prefer them small.

14,440. Certain persons prefer small smelts to large ones?—Yes.

14,441. Were the smelts you saw this morning of the size that is preferred?—I call them unsizeable.

14,442. How can they be unsizeable if the people prefer them in that state for food?—They were not larger than your finger. It depends entirely on the cook whether they are rendered eatable. If you have

a good cook there is no doubt that they make very good food.

14,443. I understand you to say that you like them best small?—Yes, I do.

14,444. Do people generally like them of that size?—I do not say that; it depends in a great measure upon the cook.

14,445. If there have been complaints made with regard to the falling off of smelts they have not been well founded so far as this district is concerned?—No, certainly not as regards the supply.

14,446. How is it with regard to herrings?—In my opinion there have been great abuses with regard to herrings.

14,447. Will you be good enough to give us some information upon that subject; is this a place where there have been large takes of herring at any time?—At certain times there have been very large takes, but the herrings migrate very much. We catch them in these Deeps at a certain time of the year, and in August you will find them migrating to Scarborough. Immense quantities are brought from Scarborough and cured here. In the winter time we find them here.

14,448. In what months are they caught here?—In the winter months; in December, for instance.

14,449. Do you catch herring here in December?—Yes. I merely give it as my opinion from what I see cried and bawled through the streets.

14,450. Is there any large fishing of herring here in the month of December?—There is a large quantity cried about the town during that month.

14,451. Are they herring that have been caught in the Deeps and brought in here?—Yes.

14,452. Has the herring fishery increased or diminished of late years?—I do not know.

14,453. You cannot speak on that point?—No, I should say it is pretty much about the same. I do not think it has diminished.

14,454. Of what size are the herring compared with the Yarmouth and Lowestoft fish?—I think they are hardly as big.

14,455. If the catch has not diminished what complaint have you to make?—We think the fishery might be rendered more profitable than it is.

14,456. Do you think that the fish might be much increased in quantity?—Yes, there is a very large fishery here, and the consumption of fish is very great.

14,457. Do you think, if some other regulation were adopted with regard to the taking of immature fish, there would be a larger supply of mature fish?—Yes, immense.

14,458. Do you found that on conjecture?—Not exactly on conjecture, because the question is one that has been well sifted by a committee appointed by the corporation. I believe I could tell you exactly what the increase would be if the fish was more protected.

14,459. Let us hear it?—I think the increase would be immense. This is the report that was prepared by the committee appointed by the corporation some three or four years ago:—

"The committee appointed by the corporation to inquire into the condition of the fishery beg to report—

"That they have held several meetings upon the subject, at which some of the most experienced fishermen have attended and given willing evidence as to the actual position of the fishery, the evils which exist, and the probable best remedies to be applied.

"The committee have also, with the aid of the town clerk, considered the several Acts of Parliament relating to fisheries, and also the Charters of Henry 8 and James 1, which constitute the corporation the special conservators of the Lynn fisheries. An analysis of those Acts, and also extracts from the Charters, accompany this report.

"The committee, feeling that the fisheries in the Deeps are alike interesting to all the ports upon the estuary, have corresponded with the corporation of Boston, whose jurisdiction immediately adjoins that of this corporation. The former body have expressed their willingness to co-operate with this corporation in any measures which may appear to be desirable for the due protection of both fisheries.

"The committee find that the fishery in the Ouse and in the Deeps has ever been considered of importance to the port of Lynn, and was so in the reign of King James, who granted a charter to this corporation by which (although they can claim no exclusive right of fishing) they have the undoubted right to claim the regulation of the fishery within the jurisdiction of the port and harbour, which commences in the river Ouse at a place called Staple Wear, between Magdalen and Stow Bridge, thence through the harbour and channel over a very considerable portion of the Deeps to a point called Gore End, a short distance beyond Hunstanton. This power of regulation has been from time to time exercised by the corporation.

"Upon the present condition of the fishery the committee have to report—

"That there are now (including all classes) about 70 Lynn boats employed, and that they are worked by about 150 men and boys. That these boats are maintained in gear and nets at an average cost of about 30*l.* per annum. That a considerable sum is expended annually in building and in repairs. That the many families pertaining to the men employed are sustained by the fishery.

"The committee submit that the above aggregate sum expended in the town for the above purposes fully justifies the vigilant oversight of the corporation, alike in the interest of the town generally as in that of the fishermen themselves.

"From time to time the corporation has, as authorized by charter, published circular notices to the effect that all illegal nets and 'unsizeable' fish would be seized, and in some cases the penalty has been enforced; still, it appears the law has been constantly evaded, and at the present time the committee find:—That in the river large quantities of spawn fish are taken for the purposes of bait for eels by boats from the upper country" [that is, the district beyond the town] "while the Deeps are being swept by larger vessels from Lynn and Boston, fishing with illegal nets, and taking young herring in large quantities for mere manure, which, if left some little time longer in the water, would be had as valuable herring, for which there is now an unlimited demand at good prices. These small fish are sold at several points along the Norfolk coast as well as at Lynn. The same remark applies to mussels, and to so lamentable an extent has the above practice been carried that it is believed that now only one spawn mussel bed remains in the Deeps. In regard to shrimps, it appears to be very common for large parcels to be sent to London, where they are sifted, and the small thrown away. They are then re-measured before being purchased, so that the result is the loss of the carriage of the small shrimps, and no possible, even temporary, profit to the fishermen to compensate for the terrible loss to the future fishing.

"The committee need not remark upon the suicidal policy pursued by the fishermen, or upon the imperative duty devolving upon the corporation, who are constituted guardians of the fishery, to enforce the law upon the subject, so that the fishermen themselves may be better provided for, and that the town rates may be released from the many and pressing appeals from the north end [that is the fishermen's end].

"It appears that not only has an illegal fishing been conducted for many years past, but that a considerable sum has been invested by the fishermen in the purchase of the illegal nets now being used, and that if these nets were at once seized and destroyed it would be a cause of great temporary embarrasment, and in some cases of distress. Any summary proceedings, therefore, the committee do not recommend for the above reason; and also, because it may fairly be argued that the corporation has too long suffered the law to lie in abeyance, and thereby to some degree is responsible for the present state of the fishery.

"Upon a careful consideration of the whole evidence, and of the several acts and charters, and in the confident belief that any oversight of the corporation to be effective must be continuous as well as stringent, the committee recommend:

"That a hand-bill be published, setting forth the several penalties imposed by the Acts and Charters, and stating distinctly the size of the meshes of the several nets allowed to be used, which your committee will, with the sanction of the hall, hereafter determine upon, and also what shall be deemed 'unsizeable' fish in execution of the Acts.

"That such hand-bill shall state that after the expiration of months all illegal nets will be seized and destroyed, and that the full penalties will in every case be enforced, half being given to the informer.

"That any nets being made during the above period, otherwise than as prescribed, will be taken and destroyed.

"That advertisements be inserted in the Lynn paper, and also placards at the several points along the coast, where the small fish are landed and sold, explaining to agricultural gentlemen and others, that all unsizeable fish will be seized, by whomsoever they are held. Such advertisements to

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invite information to be given to the Lynn corporation, and stating that half of each penalty will be given to the informer.

"That in order to a future continuous supervision a permanent 'committee of the fishery' be appointed by the corporation; such committee be required to obtain information from time to time, by the employment of the police or of other agents, so as to enable the corporation as far as possible to enforce the law in regard to the Lynn fisheries.

"That the corporation of Boston be invited to co-operate with the Lynn corporation.

"In conclusion, the committee express a confident persuasion that if the above recommendations be strictly, yet kindly carried out, although the evil may not be prevented, yet that the result will be a greatly improved class of fishermen, with families well provided for by the exuberant produce of the Lynn channel and the Deeps, while the town will be relieved from a pressure upon its rates by a population abundantly provided for by the bounty of Providence.

"A draft hand-bill and advertisement accompany this report."

14,460. What is the date of that report?—It was presented in the year 1858. A copy of that report was sent to the corporation of Boston, and the people of Boston quite approved of it.

14,461. Were the different steps mentioned there taken in consequence of that report?—Yes, every one of them.

14,462. What has been the result?—None whatever.

14,463. The advantages expected by the committee have not been realized?—No, I believe the same evils complained of in this report still exist. They have not been remedied as far as I know.

14,464. What are the regulations. It is mentioned in that report that there are certain penalties imposed by charter, can you tell us what those penalties are?—Under the charter which enables the corporation to act in the matter they have certain powers; the expression in the charter is that they have power to regulate the size of the nets, and also to correct and punish such fishermen as are delinquents.

14,465. Has any attempt been made by the corporation to regulate the size of the nets?—Yes.

14,466. What has been the result of it?—None at all as far as I know.

14,467. Have the fishermen refused to obey the authority of the corporation?—I cannot say that they have refused to obey the authority of the corporation, but the difficulty we feel is how to enforce the regulations.

14,468. Practically they have refused to do so. As I understand you have given notice that such regulations would be enforced, and no attention whatever has been paid to that notice?—As far as I know, I believe not.

14,469. Have you employed anybody to carry out these regulations or enforce them?—We have no power to do it.

14,470. Therefore your whole authority seems to be a dead letter?—Yes; here is the handbill that we published in pursuance of the order of the committee. It was widely circulated, but it has had no effect. I believe the principal offenders are the farmers. They buy the small unsizeable fish and thus offer an inducement to the fishermen to take it.

14,471. The farmers could not buy the fish unless they were caught?—No, but the farmers readily take them, as they are very useful for manure.

14,472. Do you know what price they pay for these small fish?—I have no idea.

14,473. Probably we shall be able to get that from some other witness?—Yes, I think so; these small fish are very useful for manure, that is all I know about it, and the farmers continue to take them.

14,474. (*Mr. Lefevre.*) When were the regulations made by the corporation as to the size of the meshes?—About four years ago.

14,475. After that report was presented?—Yes, after the report of the committee was presented and adopted by the hall; the bill was then put out.

14,476-7. Were there no regulations previously to that?—No. On referring to the placard I find it is nearly five years since the regulations were made.

14,478. (*Mr. Caird.*) In what way do the corporation arrive at a precise limit with regard to the proper size of the nets?—Under the charter of King James they have power to regulate the management of the fishery.

14,479. Yes, but on what principle do they think it proper to fix the size of the herring nets, for instance; at seven-eighths of an inch from knot to knot?—I believe there are only two Acts relating to the fisheries, and they say that certain fish shall not be caught under a certain size. I believe the corporation were guided by those Acts.

14,480. You give here also the size of sole nets, shrimp nets, trim nets, and so on, might not herrings be caught in those nets as well as in a net the meshes of which are seven-eighths of an inch from knot to knot?—Yes, herrings of a certain size, no doubt, could be caught in those nets.

14,481. If the shrimp net is only five-eighths of an inch from knot to knot, and it is used at the same time as a herring net seven-eighths of an inch from knot to knot, would not the shrimp nets catch herrings which you say ought not to be caught?—Yes, but we say they ought not to take them.

14,482. What should they do with them?—Throw them overboard again.

14,483. Is there any large amount of money received by the fishermen for their take of immature herrings?—That is a mere matter of opinion.

14,484. You have no facts whatever to give us, or anything in the records of the town to show the gradual progress of the fishery?—All I know is that the matter has been freely discussed, and that great quantities of herrings in our Deeps are taken of an improper size.

14,485. I think you said in answer to a previous question, that you had not observed that the whole take of herrings has fallen off in consequence of catching these immature fish?—I cannot answer that question from any absolute knowledge of my own, and I may tell you the herring, as I before observed, migrates very much. All the herring caught here at this time of the year are consumed at Lynn, but there are immense numbers consumed at Lynn and the neighbourhood which are caught off Scarborough when we do not find them here at all.

14,486. Is the kind of fish that is used for manure of such a description that it is not suitable for human food?—Certainly it is not fit for human food, being so small.

14,487. Is it caught along with sprats; is there a sprat fishery here?—There is a great dispute going now among certain persons with regard to sprats and young herrings, but Mr. Cresswell knows much more about that than I do.

14,488. Is there any large quantity of sprats or fish called sprats caught here?—I believe so.

14,489. Are they exported inland?—Very likely they are. I should not be able to distinguish a young herring from a sprat, but I believe the difference is well known. I have heard that a great portion of the fish taken and used for manure here is the young herring, but whether it is so or not I do not pretend to say, the fish are so very much alike.

14,490. At what season of the year is the sprat-fishing followed here?—I really do not know, but I fancy in the winter.

14,491. With reference to mussels, I think you said that they were taken usually in an immature state when they were sold for manure?—Yes.

14,492. Are they taken from beds where the mussels are kept for bait?—They are not kept for bait, but the mussels that are sold for manure are taken from very considerable beds, and I am told that what were formerly very valuable beds have now been perfectly cleaned out.

14,493. Do you as a corporation enforce any regulations with regard to mussel beds?—The only way to remedy the evil would be to enforce a penalty.

14,494. And you have never done that?—No.

14,495. Are you aware that the mussel beds are falling off in their yield?—I have been told so.

14,496. Is there a large shrimp fishery here?—Yes, very large.

14,497. Are there any small immature fish of other kinds caught along with the shrimps?—I am not aware that there are; for instance, take the soles, the fishermen never take soles except in the summer months; we get none at any other time.

14,498. Is that because there are no fish here except in the summer months?—I believe they do not go far enough for them.

14,499. In the winter time?—Yes.

14,500. They are not found in your shallow water in the winter time?—No, we never see a Lynn sole in the water in the winter time.

14,501. How is it in the summer time?—There are plenty of them then.

14,502. There is nothing in the mode of fishing that prevents them coming in the winter time?—No. I think if the fishermen would go a little further down in the Deeps they would get soles.

14,503. Then you do not complain of the mode of fishing, except that the men do not go far enough out to sea?—No, not in regard to soles.

14,504. You said there is a large fishery of shrimps here?—Yes.

14,505. During what part of the year is it followed?—It extends throughout the whole year, but the great catch is in the warm months. The shrimps are taken in the spring tides.

14,506. Are the shrimps sent to markets in the interior of the country?—Yes.

14,507. By railroad?—Yes.

14,508. Is there a large supply sent inland?—Yes, I believe a great number of bushels are sent west.

14,509. Is it within your experience that the supply on the average has increased or diminished?—I should say it is pretty much about the same. The supply seems to be sufficient for the demand. A great quantity of shrimps goes now into the midland district instead of going to the London market.

14,510. You do not know from your own observation that there has been any decrease in the shrimp-fishing?—I am not aware of it; we have all we want here.

14,511. Has any complaint been made of the mode in which the shrimp-fishery has been carried on?—No.

14,512. There has been no objection to it on the part of the corporation?—No, I do not think there has been the slightest complaint in regard to the shrimp-fishing.

14,513. It is stated in the report of the committee which you read just now, that there are 70 Lynn boats and 150 men and boys employed in the fisheries at Lynn?—Yes.

14,514. Has that number increased or diminished of recent years?—I do not know, but I think it has increased.

14,515. Has the condition of the men employed in the fishery improved of recent years?—I think so; the principal men have greatly improved, and have made money.

14,516. Is the fishery on the whole prosperous?—I do not say that all are prosperous, but there are some good men among them.

14,517. Has there been any appearance of its being a decaying business, or of the fishermen themselves not being prosperous?—I think not, but I have heard that in the winter months the poorer classes among the fishermen sometimes throw themselves upon the poor-rates. Generally speaking, I should say that the class has very much improved; that is only my impression, however.

14,518-9. (*Mr. Lefevre.*) What is the earliest charter you have affecting the fisheries of this borough?—The general charter of King James is, I think, the earliest. There is a similar one at Boston.

14,520. Do you know of no charter earlier than that?—There is an earlier charter giving great powers to the corporation to deal with property, but the last and most important one in reference to the fisheries is the charter of King James.

14,521. Do you know of any charter earlier than *Magna Charta* vesting powers in you?—No, certainly not.

14,522. Do the charters to which you refer vest in you the soil of the Wash?—No, only certain rights.

14,523. Can you point out in the charter what the particular rights are?—The charter of King James gives us the Admiralty jurisdiction.

14,524. If the clause is a short one perhaps you will be good enough to read it?—It says, "That the said "burgh, and the port of the said burgh, and also all "and singular the Deeps vulgarly called Lynn Deeps, "and also all and all manner of places, parts, and "course of waters extending from the burgh aforesaid "unto a place called Saint Edmund's Ness" (20 miles northward of Hunstanton), "otherwise Gore End, and "from thence north and by west to another place or "sand called Long Sand, and from thence to another "sand called Whiting Sand, and from thence to "another place or sand called Torrington Breast, "otherwise Torrington Breast Sand, and from thence "to West Lynn, and from thence to another place "called Staple Wear" (seven miles up the river towards Stow), "and all and all manner of places and "parts within and upon the aforesaid sands, and to "the utmost flowing and reflowing of the waters "within the limits and boundaries aforesaid."

14,525. The utmost flowing and reflowing within the limits and boundaries?—Yes. "And also all and "singular within the precinct, circuit, and liberty of "the burgh and the port aforesaid, as well by land as by "water, from the time the said office of High Admiral "of England by death, forfeiture, or surrender, or by "any other way whatsoever, shall happen to be first "next void."

14,526. What rights do the charter give you over that space?—Do you mean what powers it gives us?

14,527. Yes?—The powers are contained in another clause. We have a right to regulate the fishermen.

14,528. The charter gives you a right to regulate the fishermen?—Yes; the fishermen and their nets.

14,529. Will you read the clause?—"Moreover We "have granted of Our more abundant special grace "certain knowledge and mere motion from Us, our "heirs and successors, and by these presents do "grant to the aforesaid mayor and burgesses of "the burgh aforesaid and their successors, that they "and their successors, from time to time that the "aforesaid office of High Admiral of England by "death, forfeiture, surrender or any means whatsoever "first next shall happen to be void shall and may "hereafter for ever have the correction and punish-"ment of all and singular the fishermen being delin-"quents in the burgh aforesaid and liberties of the "same and in the port limits and bounds aforesaid or "in any of them part or parcel of them and all their "nets, and also full jurisdiction and power of holding "pleas and courts aforesaid of all actions, controver-"sies, and demands whatsoever there by reason of "any thing or cause concerning fishing or the art "of fishing by any means according to the law and "custom of Our Court of Admiralty."

14,530. Is that the charter of the king, and is it confirmed by Act of Parliament?—It is the charter of King James the First.

14,531. Is it confirmed by Act of Parliament?—Yes, and it is the grant under which we act.

14,532. Have you ever taken legal advice in order to ascertain whether you can enforce any regulation made by you under the charter?—We have no doubt as to our power to enforce the right; but what we complain of is, that the persons who are the delinquents are so poor that virtually we cannot carry out the regulations.

14,533. Have you taken any legal advice as to your power of enforcing the regulations?—No.

14,534. Can you point out to me the Acts of Parlia-

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ment that relate to the fishing in the Wash?—I think there are only two.

14,535. Are they confined to the Wash?—No; they are two general Acts; they are very old Acts.

14,536. Will you be good enough to point them out to me?—They are referred to in the notice which was issued when the committee drew up their regulations. One is the first of George 1., but it does not say what the chapter is; and the other seems to be the 33 George 2.; the chapter is not given in either case. I believe the second Act is the 33 George 2. c. 27, and it is laid down in Burn.

14,537. Those Acts are general and not confined to the Wash?—No, they are not confined to this part at all.

14,538. Under these Acts, have you power to enforce a penalty against any person who takes fish under a certain size?—Yes, I think so, with regard to particular fish.

14,539. Have those penalties ever been enforced?—No.

14,540. Have you no means here of enforcing them?—The difficulty is, that we cannot detect the mischief of which we complain; it is so secretly done that we cannot detect it. For instance, the men will take a whole sweep of unsizeable fish and land it 20 miles from here, so that we know nothing about it at all.

14,541. Have you appointed any officer to inspect the fishing, and see that the fish are not taken unsizeable?—No; but the Preventive people have been spoken to and requested to interfere, and they say they have no power to do so.

14,542. Have you appointed any person on behalf of the corporation to do it?—No.

14,543. Why have you not done so?—I believe it has been on the score of expense. It would take at least three men to do all that is required.

14,544. Then there is no person appointed even to inspect the fish brought into the market here, and to ascertain whether it is unsizable or not?—No, I think I may state that we do not complain of what is brought in here, except with regard to mussels. What we complain of is, that they are taken away in the farmers' waggons and used for manure. As far as my knowledge goes we have nothing else to complain of with regard to what takes place at Lynn. Our great complaint is that mussels are taken and landed 20 miles from Lynn, and that we know nothing about these transactions until they are all over.

14,545. Are they caught by Lynn men;—Not by Lynn men alone but by Boston and Wisbech men as well.

14,546. Have you appointed anybody at Lynn, Boston, or elsewhere to inspect the fish brought to land here?—Some such appointment has been contemplated but has not been carried out.

14,547. In regard to mussels is there any Act of Parliament relating to their size?—I think not. I think there is no regulation except that which has been laid down by the Lynn corporation. They believe that they possess the power of regulating the size at which the fish shall be taken.

14,548. Then the regulation as to mussels is under your charter and not by Act of Parliament?—Yes, certainly.

14,549. Can you tell me where the mussel beds are that chiefly supply Lynn?—I can hardly answer that question. I think about 16 or 18 miles from Lynn, but there are mussel beds that belong to a private gentleman.

14,550. Are there any mussel beds vested in the corporation of Lynn by charter?—No. I think not, except whatever appears in their own jurisdiction.

14,551. Do you think that vests the bed of the mussel beds in the corporation?—I have no doubt of it.

14,552. Have you taken any legal advice upon the matter?—No.

14,553. But you have no doubt that the charter gives you power?—I have no doubt at all that we have the right to regulate the size at which the fish should be taken.

14,554. But with regard to the property of the mussel beds, is it vested in you?—I have no doubt about it. There are large quantities of mussels taken from an estate belonging to a gentleman living about 20 miles from here, and he licenses the men who take them.

14,555. Does he hold his rights under a charter?—Yes.

14,556. Under a grant from the Crown?—Yes.

14,557. Is that the only private mussel bed in the neighbourhood?—It is the only one that I know of.

14,558. Has there been any attempt on the part of the corporation of Lynn to confine their mussel beds to Lynn men, or may anybody go upon these beds and take the mussels?—I do not think there has been any attempt to confine the beds to Lynn men. The attention of the corporation has principally been directed to the taking of small fish. I have heard a calculation made as to the enormous loss occasioned to the fishermen themselves by taking unsizeable fish, and I believe that they admit the evil, but what they say is that they are obliged to do themselves what their neighbours do.

14,559. Is there anything in the charter that confines the fishing to Lynn men?—Yes, I think so, because we only seek jurisdiction in the limits confined by the charter.

14,560. I understand that the power is given to the corporation to regulate the fishermen, but does it confine the fishing itself to the inhabitants of Lynn?—No, I think the Boston people might go and fish as well as a Lynn boat.

14,561. Does it not leave it generally open to all the rest of the world?—Perhaps it may.

14,562. Have you observed any diminution in the quantity of mussels?—I believe the diminution has been immense, at least I have been told so; I do not know it as a fact from personal observation.

14,563. I see that in the notice issued by the corporation the mesh of the herring net is fixed at seven-eighths of an inch from knot to knot, are you aware of an Act of Parliament, the 6th & 7th Vict., which fixes the mesh of the herring net at one inch from knot to knot?—Yes, my attention has been called to that.

14,564. Then why in this notice do you fix the mesh of the herring net at seven-eighths of an inch from knot to knot?—What we contend is, that we have an exclusive jurisdiction in that matter.

14,565. Do you think that yours is a jurisdiction that overrides a subsequent Act of Parliament?—Yes.

14,566. Was it pointed out to you when you issued the notice that there was such an Act of Parliament in existence?—I can hardly say whether the Act of Parliament was pointed out to us or not. It is now five years since that notice was issued.

14,567. (*Mr. Caird.*) You mentioned a mussel bed which is the private property of some gentleman further down, are you aware whether the regulations he has enforced have led to an increased supply of mussels being obtained from his bed?—I cannot say that.

14,568. Do you know what the effect has been of the regulations he has imposed?—The licence is in very general terms and I suppose the mussels are used for the benefit of his adjoining estate; at least I fancy so; I do not know it of my own knowledge.

14,569. Do you happen to know whether the supply of mussels on that bed is increasing or diminishing?—No, I do not.

14,570. You cannot speak of it as a fact at all?—No.

14,571. (*Mr. Lefevre.*) Can you tell me why it is that the mesh of the herring net here was fixed at seven-eighths of an inch?—I do not know exactly what the reason was, but I think I am quite right in stating that it was fixed at that particular size after hearing the evidence of the fishermen themselves, and that it was assented to by them.

14,572. Then the fishermen were consulted previous to the issuing of that notice?—Yes.

14,573. Is there any inspection here of the nets used by the fishermen ?—Not that I am aware of.

14,574. Do the corporation take no means to inspect them ?—No ; and with regard to the size of the mesh they took it from the fishermen themselves.

14,575. Since the issuing of that notice there has been no attempt on the part of the corporation to inspect the nets or to enforce a particular size ?—No.

14,576. Are you aware whether a mesh of a smaller size is used for getting herrings here ?—The net of which we complain is a sort of stow net, which sweeps the whole bed of the river.

14,577. What is the size of the mesh of that net ?—I believe it is a mere poke, but I never saw one in my life.

The witness withdrew.

FRANCIS JOSEPH CRESSWELL called and examined.

F. J. Cresswell.

14,578. (*Mr. Caird.*) Can you define the boundaries within which the corporation of Lynn exercise their jurisdiction ?—I cannot define the boundaries to show the line precisely, but I believe as a general rule we take the right side and the Boston corporation the left of the Wash.

14,579. Can you say between what headlands on the Lincolnshire and Norfolk coasts the Wash may be supposed to extend ?—As a geographical question I think the Wash would extend almost as far as the Humber, and from there across to Cromer. The Lynn Deeps are between Winthorpe and Hunstanton point.

14,580. Does the corporation of Lynn claim jurisdiction over any part of the Wash indicated by headlands ?—They claim jurisdiction as far as the Well floating light, which I think is in a line with Hunstanton Point, and is also in a line the other way with King's Lynn. I do not know exactly what the landmarks are.

14,581. Is there anything in your charter that defines it ?—I think the jurisdiction goes to Saint Edmund Ness, Hunstanton Point, and to the Lynn Well floating light, and then straight to Lynn.

14,582. Have you from your own observation seen much of the fishing in the Wash ?—I have seen a good deal of fishing in this neighbourhood as an amateur for many years.

14,583. Have you practised it yourself ?—Yes.

14,584. Are you acquainted with all the different kinds of fishing practised here ?—I think I may say that I am with all of them except the smelt-fishing. I know very little of that.

14,585. Can you from your own observation say whether the supply of the different kinds of fish caught here is increasing or diminishing ? — I think the herring fishery used to be a great deal better than it is now ; in fact there is hardly any herring fishery at all now. During the last three or four years I have hardly seen any herring worth calling fish.

14,586. Can you remember the time when there were good fish here ?—I remember that about eight or nine years ago I caught a great many, so many that I could hardly get home with them.

14,587. Were they caught within the limits of the jurisdiction of Lynn ?—Close up to it ; I think at the mouth of the Boston Gut.

14,588. And are there no takes of herrings of a similar extent to be had at the same place now ?—Certainly not during the last four or five years.

14,589. Then with regard to herrings, within your own knowledge there has been a great falling off even within the last few years back ?—Yes, there has been a very great falling off indeed.

14,590. Do you know how it has been with regard to smelts ?—I should think it has been about the same as usual. They have never been cared for very much, and they remain much in about the same state as they were formerly.

14,591. Has there been any increase or diminution in the catch of sprats ?—Last year they got no sprats at all in the stow nets, but I think that is an uncertain fishery. Perhaps this year it will be very good, and then it will cease for a year. For the last four or five years the herring-fishing here has ceased almost entirely, and has become hardly worth following as a trade.

14,592. Has the catch of shrimps increased or diminished ?—I think the quantity of shrimps caught is much about as usual. They have always been neglected and small fish have been caught. Therefore it could not be expected that they could improve much.

14,593. Is there any diminution ?—I think not.

14,594. With regard to mussels, can you speak at all as to the supply upon the mussel beds here ?—The mussel beds are almost entirely at times raked up for manure, and a valuable trade to the north in the shape of bait has been very much injured in consequence.

14,595. Is a large proportion of the mussels on the beds taken for manure ?—Yes, a very large proportion indeed.

14,596. Do you think that one half of the whole catch is taken and sold for manure ?—I think a great deal more.

14,597. What price do they sell at ?—About 14*s.* or 15*s.* a ton or 100 bushels.

14,598. Do they sell at the same price for manure as for food or bait ?—They would be much more valuable for bait than for manure, but the men who sell the mussels for manure sell them of a very small size, some of them are only as large as a finger nail. They are taken, in fact, promiscuously, the small and the large together, and what we want is a clause which shall prevent them from selling them under a certain size.

14,599. Do the mussels sold in that way for manure realise more money than the selected mussels that are sold for bait ?—I can hardly say, because the mussels that are sold for bait require a voyage to the north ; but it has this advantage that it fosters a trade with many ramifications from which advantage might be derived. My own opinion is that a very lucrative and important trade might be carried on in that way. Whether the man who shovels up mussels for manure and sells them close at hand to the farmers gets more for them than the man who loads his vessel and sends it to the north in order to dispose of the mussels for bait, I cannot say.

14,600. Do the same class of men supply for bait and for manure ?—The men who take mussels as bait to the north must of course have a little more capital, something to buy a vessel with, while the men who take mussels for manure require little or no capital, but shovel up the mussels into an open boat, and carry them away, and they do not require anything like the capital required for the boats that take mussels for bait to the north.

14,601. Within your own observation, have you found that the quantity of mussels on the mussel beds, in consequence of the large number taken, is on the decrease ?—No ; I believe that nature is so prolific that however much we may reduce the number there hardly appears to be any perceptible decrease. However much we may abuse nature yet we still find that she restores the beds after a certain time.

14,602. Is there a sufficient supply for all the demand that arises in the shape of bait ?—I should say not at times, but some of the fishermen who are now present will be able to give you more definite information on that point.

14,603. You cannot say then whether there has been any scarcity of bait in these mussel beds ?—I cannot speak to that. I have heard that very much complained of, but I never took any mussels myself.

14,604. Have you ever seen mussels used as manure ?—Frequently.

14,605. Have you used them ?—No.

14,606. Are they useful as manure ?—Yes ; I believe they are very good indeed.

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14,607. Are they put fresh upon the ground?—Yes, they are carted off and laid on the land. Sometimes they are mixed with other things. Three days ago I walked over some at Hunstanton which could not have been long upon the land; they did not smell very much.

14,608. How many tons do you think will be used in that way in the course of a year for manure?—I cannot say. Mr. L'Estrange, the gentleman who has been referred to as owning a private mussel bed, had nine or 10 carts that went down every tide in the spring tides. Those nine or 10 carts went down for eight days, and I daresay they would take at least 150 loads of mussels from one bed—Mr. L'Estrange's bed—in the course of a fortnight, so as to work the tides round.

14,609. Would 150 cartloads be taken in one fortnight?—Yes, I think so; but it is a mere surmise on my part. I have been a great deal at Hunstanton, and I have seen the carts go down.

14,610. Is that for the whole year round?—It appears to take place the whole year round; and I believe that I am rather under than over the mark.

14,611. Are all the mussels taken from Mr. L'Estrange's bed used for manure?—Yes, I believe all.

14,612. Has that continued for many years?—Yes, as long as I can remember, and I am 41 years old now.

14,613. Have the mussel beds shown any signs of diminution under this constant exportation?—I think not; but the mussels themselves very rarely arrive at that state which enables them to be used as a valuable trade for bait.

14,614. Do you know whether they are sold or not? Are they taken by the farmers on the estate of the gentleman to whom the bed belongs?—If they are not directly sold they are indirectly.

14,615. If they were not taken for manure would they be used for any other purpose?—I think not. That bed is so situated that vessels could not lie there. That part of the coast is not adapted for vessels lying on the shore; and the consequence is that they cannot make use of that bed for bait. We do not complain that the mussels there are used for manure, but what we do complain of is that the mussels from the mussel beds belonging to the corporation are taken for the same purpose.

14,616. There may be certain situations where mussels could not be used for any other purpose?—Yes, because it would be dangerous for vessels to lie on the shore; and as they are useful for manure I see no objection to such mussels being taken.

14,617. Do you know any regulations that could be adopted by which the supply of mussels on these beds could be increased?—I imagine that regulating the size at which the mussels may be removed would in a great measure meet the difficulty They ought not to be allowed to take them before they arrive at a certain stage of maturity.

14,618. Would you recommend that the corporation of Lynn should exercise the rights given to them under their charter, and enforce the regulations they have here?—I do not say that because I am a member of the corporation, but I should be glad to see such a law established and applied to all the coasts of the country.

14,619. But if you have the power already what greater power would you expect under an Act of Parliament?—A power that would apply generally would be very valuable.

14,620. Would you have the carrying of it out placed in the hands of a public fishery officer?—I do not think it would be necessary to have a public fishery officer. I believe if the Preventive men round the coast were told to exercise a certain amount of control they would be able to do so. They are constantly on the coast, and have plenty of time on their hands; and I think they would be able to meet the difficulty. They could see not only that mussels are taken of a proper size, but that the nets and everything else are of a proper size.

14,621. You desire to see some such regulations enforced by some public officer wholly independent of the corporation?—It is my desire as an amateur fisherman, and I believe it is the wish of all the fishermen that the nets should be so regulated that the greatest advantage should be obtained from them. We consider that we have very good gifts here in the neighbourhood, and we do not wish to see them abused.

14,622. But if you believe that it would be for the good of all the fishermen to enforce these regulations, as a member of the corporation, having the power to do so, is it not your duty to enforce them?—I do not think we have the power. We may have the power legally, but there is a great deal of difference between having a law and having the power to enforce it. We have no officer to send round, and we should not like to place ourselves in collision with the fishermen. There are also other difficulties that would arise. Look at the space that would have to be covered. Many people talk of the difficulty of preserving an estate of a few acres; but here we should have to look after hundreds and thousands of acres of wild sand and water. We could not exercise the control we desire. The only way to do it would be to draw a general cordon round the coast, so that nothing illegal or improper could take place; otherwise the men would go at night and set all the regulations at defiance.

14,623. Suppose there are such regulations as you at this moment have intimated, and that mussels which you say are illegal and improper, and below the size used for bait, were prohibited from being landed on the coast, would it not prevent all the mussels now landed from Mr. L'Estrange's bed being landed for a useful purpose?—Mr. L'Estrange's beds are in rather a different position. They are on a shore which cannot be approached by vessels in order to take them away, and they cannot be used for the purposes of bait.

14,624. Then cannot you see the difficulty there would be in establishing a general law?—I think that if there was a law made some distinction might be drawn between the two cases.

14,625. Are the mussel beds belonging to the corporation very extensive?—I think they must be.

14,626. Do you know the extent of ground they cover or the number of miles over which they extend?—I cannot say. They are on a particular sand, and they vary very much. They come up, I believe, very quickly and go very fast.

14,627. Are there any other kind of shell-fish found in these beds besides mussels?—No; but there are cockles and other things generally close to them.

14,628. Is there any cockle fishery here?—Yes.

14,629. What becomes of the cockles?—Some are put on the land, and some are sent to market. They are very good cockles, I believe.

14,630. Are there any oysters?—Not in our immediate neighbourhood, but there are some down about the floating light, and further out at sea. There may be one or two small oyster beds within our jurisdiction, but they are of no importance. Burnham is the nearest place where there are oyster beds. At the same time we have oyster beds in the Deeps, but I believe they are of no importance.

14,631. It was stated by a previous witness that there are plenty of soles caught in the summer months but not in the winter?—Yes.

14,632. What is the cause of that?—The soles go nto deeper water in the colder months.

14,633. Then that would account for the absence of soles here in the winter?—Yes, fully.

14,634. Is there any other reason, such as overfishing?—Yes. The reason some of us think there are not more soles is that the meshes of the nets are so small that a great number are injured which are not worth taking for food. I know as a sole-fisher myself that I have injured a vast number; whereas if I had been obliged to use a larger mesh they would not have been injured at all.

14,635. Yet notwithstanding you find that when the soles do come in there are plenty?—Yes, but we should like to find more. Our fishery has always been abused and has always produced the same results.

I believe it will continue to be the case until a new system is introduced.

14,636. Has there been any diminution in the quantity of soles caught here?—I think not; but they have always been treated in the same way.

14,637. Is there any increase in the number of boats and the number of people employed in fishing here?—I cannot say. I think there has been no diminution.

14,638. Has there been any increase?—I cannot say.

14,639. Has the size of the boats within your experience remained much about the same?—On the whole I think the boats have improved.

14,640. The nets and gear are they any better?—I think so.

14,641. Do you think on the whole that each boat gets a larger product than it did 10 years ago?—From what I have heard from some of the old fishermen I think they do not get as much, but the men themselves do not drink so much as they did formerly, so that they are able to spend more in their sails and boat.

14,642. So that there is as good a net profit now at the end of the season as there formerly was?—Yes.

14,643. Which kind of fishing on the whole yields the largest return to the fishermen here?—The staple fishery of Lynn no doubt is the shrimp fishery. The Lynn shrimp is noted even in London. They sometimes send away large quantities by train, I believe from a quarter of a ton to a ton and a half in a day. There are, however, many small shrimps caught, the same as in the case of soles. They fish with a small mesh, and the consequence is that they take the fish before they have a chance of arriving at maturity.

14,644. Could they catch shrimps without using such a net?—Other fish are generally caught in shrimp nets as well.

14,645. In fishing for shrimps, is it not the case that you catch other fish at the same time?—Yes, occasionally they catch soles, thornbacks, and flat-fish; but it is very rarely they catch soles, they go to other waters.

14,646. Is it not unavoidable that in fishing for shrimps you run the risk of catching other fish?—They always catch other fish to a certain extent.

14,647. Is there any means by which you could avoid such injury?—No, I think not.

14,648. Are there any regulations you can suggest for the improvement of the fishery?—I think that the size of the mesh for the different fish might be regulated so as to prevent the killing of immature fish.

14,649. Will you define that more particularly; to what size would you be inclined to limit the mesh?—The size of the mesh for a herring net should be seven-eighths of an inch from knot to knot. That size was arrived at after a great deal of mature consideration, and after pushing a number of herrings through the loops in order to ascertain the size. We considered that that was the most practical test we could adopt.

14,649*a*. And the conclusion was arrived at also in consultation with the fishermen?—Yes; and yet we are now told that, according to the present Act, the mesh should be 1 inch from knot to knot. But I think that the difference in size arises, to some extent, from the fact that we have different fish from the deep-sea Yarmouth fish. The herring we catch here is called "Leach's herring." It comes in the winter, about January, and is rather a smaller herring than the deep-sea fish. If 1 inch from knot to knot is the legal size for Yarmouth herring, I should say that a mesh seven-eighths of an inch from knot to knot is quite sufficient for ours.

14,650. Before we leave that question let me ask if herrings of that size caught in January and December are in a good condition?—Yes, they are in a capital condition. They spawn in February.

14,651. Are they full fish?—Yes; they are very round fish, and as full as possible.

14,652. Are they caught in any other season except December and January? Have you any spring or summer fishing?—Not that I am aware of.

14,653. Go on now to the next sized mesh?—The next is the sole net.

14,654. What size do you think that ought to be?—1¼ inch, and the shrimp net five-eighths in the cod or swinge part.

14,655. Is the sole net used on the same ground as the herring net?—It may be used on the same grounds, but one would not interfere with the other.

14,656. What do you say should be the size of the shrimp net?—Five-eighths of an inch.

14,657. Is that used on the same ground where the herrings are caught upon?—Yes, to a certain extent; but I do not think we catch herrings in them. We used to do so in former years when there were a great many herrings. They were apt to swim the net, but that has long been put aside.

14,658. What sort of a net do you now use for catching shrimps?—A regular trawl net.

14,659. Do you fish for them from a boat?—Yes; the net is pulled along the ground at the bottom of the water.

14,660. Is that net used on the same ground where you fish for herrings?—Yes, sometimes.

14,661. Is it not likely that a net with a mesh of five-eighths of an inch used on the same ground as a net with a mesh of seven-eighths of an inch would catch immature herring?—It may or it may not. No doubt, to a certain extent, it will injure the young fish.

14,662. But practically you do not find that much injury is done?—We do not complain of the injury done in fishing for shrimps. We complain more of the trim nets.

14,663. What is a trim net?—It is a net used in the river for catching smaller fish. It is five-eighths of an inch in the mesh, and it catches everything.

14,664. Is that a stow net?—It is very much like it.

14,665. Has it long been used here?—Yes.

14,666. Is it peculiar to this place?—It is an inland net, but it has crept down here.

14,667. Has it not been used here for many years?—It has been used here as long as I can remember.

14,668. Have you fixed the size for the mesh of that net?—Yes; five-eighths of an inch from knot to knot.

14,669. The same size as for the shrimp net?—Yes.

14,670. Have you a size for sprat nets?—No.

14,671. In what way are they fished?—By stowing, in which large bag nets are used where the current is rapid. They take every thing that passes along the water with the stream.

14,672. Are they not nets without a mesh at all? Are they not close nets?—The bag of the net is almost close, if not quite.

14,673. At what season do they fish for sprats?—If you call "sprat-fishing" what we call "stow-fishing," it takes place shortly from this time, in January and February, if there are any fish to be caught then; but I rather fancy that stow net fishing last year was a failure.

14,674. Are many boats engaged in stow-fishing?—Well, if one boat gets a little luck, and makes a good haul of fish, then all of them will go out.

14,675. But last year you say it was a failure?—Yes.

14,676. In previous years has it been an important feature?—I think two or three years they got a great many. About three years ago there were seven, eight, or nine smacks from here, and I know that one or two of them landed four or five tons of sprats and herrings in the course of a week's fishing.

14,677. Were they sent to London?—No, they were sold for manure.

14,678. Are they not used for food at all?—A few

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of the better sort of fish are picked out, but the great body caught is used for manure.

14,679. (*Mr. Lefevre.*) Are they sprats?—Sprats, herrings, and other small fish.

14,680. (*Mr. Caird.*) Have you seen what has been caught in the stow nets?—Yes.

14,681. Have you observed other fish in the nets besides sprats?—Yes, I have seen all sorts of little fish.

14,682. Have you observed herrings?—I have been told that there is a distinction, but I cannot myself see what the distinction is between a herring and a sprat.

14,683. (*Mr. Lefevre.*) You cannot yourself distinguish between a herring and a sprat?—No.

14,684. (*Mr. Caird.*) Do you think these stow nets and stow-boats do much injury to young fish, and to the general supply of fish here?—I have no donbt of it, and I believe I am correct in stating that that is the feeling of the fishermen at large. They agree with me that the stow nets do more injury to our fisheries than anything else.

14,685. By the destruction of the immature fish?—Yes. The corporation decreed that the stow-boats should be altogether abolished on and after the 1st of March 1859; but we have no power to carry these regulations into effect. Even if we did abolish stow-boats in our own jurisdiction they might come from Boston, Hull, and Grimsby, and fish our waters. It would be a great injustice to our men to allow other fishermen to take fish from our waters when they themselves are prevented.

14,686. What quantity of fish is caught by the stow-boats in a season?—3 tons, sometimes more, a week, perhaps 4 tons; and I suppose occasionally, if the fishing goes on for 10 weeks, one boat will catch 40 tons.

14,687. Is not that a large figure?—If you think it is too large say 2 tons. There are 10 boats, and that would be 20 tons a week for the whole number; so if that goes on for eight weeks it will give you 160 tons altogether.

14,688. Do you think there have been 160 tons of immature fish caught in that way?—Yes, and I should say a good deal more too.

14,689. One hundred and sixty tons in a season?—Yes, in a successful season.

14,690. One hundred and sixty tons are caught by stow-boats and sold for manure?—Yes.

14,691. Do you think that that quantity will materially affect the supply of fish?—I should imagine so. In these 160 tons there must be myriads and myriads of fish that would probably arrive at a state of maturity afterwards if they were not caught.

14,692. What will the value of these fish be on the average to the fishermen?—They will sell them for about 14*s.*, 15*s.*, 16*s.*, or 18*s.* a ton, but say 16*s.*

14,693. Then it appears to be a small affair for the fishermen themselves, even if they were deprived of it?—A boat makes 2*l.*, 3*l.*, and 4*l.* a week by it. Some boats will get about 4 tons in the week, and occasionally they may get 1*l.* a ton for it. Thus they would make 3*l.* or 4*l.* a week. It is no very great matter, but it is something for them, and it keeps them going to a certain extent.

14,694. And it seems not to be a matter of great importance to agriculture if the whole supply is not more than 160 tons?—The farmers look very sharply after it. They get everything they can out of the river, and to a certain extent it is very important for them to have it.

14,695. But in your opinion it would be beneficial to the fisheries in general if the stow-fishing in the Wash were entirely prohibited?—Yes; of all kinds of fishing practised in this neighbourhood I think that is the most injurious. I believe that these estuaries are nurseries for fish. I do not believe that herrings go about much and change their position from place to place, but I am of opinion that they are constantly frequenting the same spots.

14,696. Would you prevent all kinds of stow-fishing?—Yes.

14,697. But how would you prevent it?—You might put a stop to it by requiring so very large a mesh to be used that everything would go through.

14,698. (*Mr. Lefevre.*) I believe you said just now that you do not think your charter gives you the power of putting a stop to stow nets?—I really do not know whether it does or not; but our charter is a dead letter. It is of no use.

14,699. You are of opinion that your charter is a dead letter?—Yes.

14,700. Have you taken any step to ascertain whether it is legal or vaiid?—The town clerk can answer that question better than I can.

(*Mr. Swatman.*) There is no doubt that the corporation have the power under their charter to regulate the fishermen; but then comes the question as to the remedy if their regulations are not adhered to.

14,701. I want to know what the objection of the corporation is to exercise their powers?—There is no doubt that they have power to bring an action against the fishermen.

14,702. (*To Mr. Cresswell.*) Why do you not exercise your powers?—If we were told that we had the greatest powers in the world perhaps we might not feel inclined to exercise them. It might be very injudicious to take any step that would bring us into collision with other towns, and with our own fishermen.

14,703. Are the corporation of Boston willing to co-operate with you?—Yes.

14,704. Is there any indisposition on the part of the corporation of Lynn to exercise the powers they possess under the charter?—There is no indisposition to do so that I am aware of, but we think we have very little power in the matter.

14,705. Have you taken any means to ascertain what powers you do possess?—I believe the law says that we actually have certain powers, but we do not exercise them because we have no wish to do so.

14,706. Why not?—Because although we may have legal powers we have no funds to enable us to keep a watch over vast tracts of sand and sea. At present we find it very different to preserve a few pheasants in a small area; and how much more difficult would it be to enforce obedience to our regulations over so large an extent of water as that which is comprised within the jurisdiction of the corporation.

14,707. Then it is a question of funds?—Yes, we could not do it without funds.

14,708. Then do you wish the public to undertake it for the corporation of Lynn?—Not for the corporation of Lynn but for the public of England. The public generally are interested in all that relates to the preservation of the fisheries along the coast. The destruction of immature fish is as bad for them as for us. What is required is a sweeping measure, and it would then not be difficult to enforce the regulations, as the Government have a body at hand capable of enforcing them without any considerable addition to the expenditure of the country.

14,709. Were you a member of the corporation that drew up the report that has been read to us?—No, I think not. My father was, and he is dead.

14,710. Have the corporation taken any steps to ascertain the comparative quanties of fish taken?—No, I think the corporation felt that with the exception of herrings the fishing is much as it used to be. It has been abused no doubt, but the results are much about the same as they always have been.

14,711. Is there any means of obtaining accurately statistics as to the amount and quantity of fish taken?—Not without great trouble and expense.

14,712. What kind of expense would be necessary?—That I cannot say.

14,713. Is there a large quantity of fish sent from here by train?—A great many fish are sent away by train. Many tons are sent away in the course of a day.

But all these points could be ascertained much better from other persons than from me.

14,714. Are any sprats sent off by train?—I have seen sprats put into the train, but I fancy they have been sent to the farmers in the neighbourhood.

14,715. Are the immature fish principally caught in the stow nets, or in any other way?—The stow nets seem to be very fatal to the herring, but all nets that have meshes of an insufficient size destroy young fish. They catch fish before they arrive at maturity, and destroy the value they would otherwise attain.

14,716. Would increasing the size of the mesh of the shrimp net materially affect the quantity of immature fish caught?—If you would have a large mesh you would only catch large fish, and you will allow the small fish in that case to become large ones.

14,717. The mesh of a shrimp net is small, is it not?—Yes, very small, but it is not used in the same place where other fish are caught. For instance, the shrimp net is not used in the same place as the sole net.

14,718. Then do not shrimp nets destroy a large amount of immature fish?—They destroy some, no doubt, but whatever sort of net is used a certain amount will be destroyed. I think, however, we should be careful not to destroy more than we can help.

14,719. I think you spoke of a great catch of herrings about five years ago?—About six or seven years ago there was a great catch.

14,720. Was that an exceptional year?—I cannot say. Herring-fishing at that time always used to be successful to some extent, and produced large quantities of fish, but of late years it has not been so.

14,721. Are fresh herrings brought in here from Scarborough and the Yorkshire coast?—Yes, some of our men go to the north, buy herrings, bring them here, and get money by them.

14,722. Has the price of herrings fallen or increased this year?—I cannot say.

14,723. You do not think that the diminution in the take of herrings may have arisen from its being no longer worth while to fish here in consequence of herrings being brought in large quantities from a greater distance?—The season of our fishing is not the same as that of Yarmouth or in the north. The fish come here at a particular time. They catch them in January and February, and sometimes in December. They come when they are especially valuable, not being caught anywhere else. There are men here who will tell you what price they fetch. I think they are sold for about 2*s.* a hundred.

14,724. What number of boats go out for herring?—Perhaps three or four boats may have gone out to try; but latterly the result has been that after fishing for a short time they have put their herring nets away. I go myself in a small way in the winter, and I have caught 150 or 200 a day with 10 or 12 nets. Those men who have to make a living out of it could not go on in that way.

14,725. Do you know whether the common herring is caught off here as well as the herring you have mentioned to us?—About a month or six weeks ago we caught a few herrings while drawing for smelts, but they were only odd fish, which we call stray fish.

14,726. The fish you catch here in the winter is a smaller description of fish?—Yes, it is smaller. I think you will find a description of it in Yarrell's "British Fishes."

14,727. Do you attribute the falling off to the use of stow nets?—I believe it is attributable to that. I formerly thought that the falling off applied to the sea generally, but I think I am wrong.

14,728-9. Do you think that the destruction of fish in the stow nets affects the supply of herring on other parts of the coast?—I did think so once, but I don't think so now. I believe the herring we have here are local, and that they go out and in but always return to this part.

14,730. Have you observed any diminution in the quantity of fish taken in the Wash?—Last year we took hardly any.

14,731. Previously to that?—Three years ago we had very much stowing.

14,732. Was there any quantity of herring the year after that?—We have had no herring for four or five years of any account.

14,733. How long has the stow-fishing been practised here?—I cannot say, but it has been practised to a greater extent during the last three or four years than it ever was before.

14,734. Has the stow-fishing been carried on here for a very long time?—Yes.

14,735. And yet you say you have only observed a decrease in the quantity of herring within the last three or four years?—The decrease I have mentioned may have been taking place for the last six or seven years.

14,736. Do your remarks with regard to the diminution of the herring apply principally to Leach's herring?—Yes, there is no other herring fishery here but that for Leach's herring. I think the stow nets are vastly increased in numbers, and there has been an increase in the boats too, but I could not say what is the positive fact without looking more into the matter. I am satisfied however that you will find on inquiry that the stow nets have much increased.

14,737. With regard to the mussel beds, I think you spoke of some mussel beds belonging to the corporation?—Yes, there are mussel beds belonging to the corporation.

14,738. Do you know of any charter that invests the soil of the Wash in the corporation?—No.

14,739. What do you mean then?—I mean that we have the power of exercising certain rights over them.

14,740. Do you know whether there are any other private mussel beds except those of Mr. L'Estrange?—No.

14,741. Has any diminution been observed in the mussels there?—I think not.

14,742. Notwithstanding the fact that they are sold as manure?—Notwithstanding the fact that they are sold as manure; but they are never allowed, I believe, to arrive at such a stage that they could be used for bait.

14,743. They never arrive at that stage on Mr. L'Estrange's mussel beds?—No.

14,744. I presume if he could sell them for bait, and if they were of any value to him on that account, he would allow them to grow?—The beds themselves are so situated that the mussels upon them could not well be used as bait; but I think that mussels are certainly of greater value for bait than for manure.

14,745. Is there a large export of mussels from Lynn for bait?—At times I believe a considerable trade is carried on.

14,746. And is there also a considerable trade in manure?—Yes, I believe so.

14,747. Would you put a stop to the sale for manure?—Yes, I would prevent mussels being taken until they reach a certain size.

14,748. Do you think it desirable that certain beds should be vested in the corporation, so as to prevent mussels being taken that are unsizeable?—As a member of the corporation, I do not want anything vested in us.

14,749. You do not think it desirable?—No, I do not see how we are to manage it.

14,750. (*Mr. Caird.*) Do these winter-caught herring fall off in quality as the season advances?—I think they are shotten about March.

14,751. They are caught in December, January, and February?—Yes.

14,752. Is the quality inferior in February to what it is in December?—I always found the fish equally good until they are just shooting their roes towards the end of the season.

14,753. (*Mr. Lefevre.*) Do you know if any attempt has been made by the corporation to enforce the legal mesh they define?—Not of late years. It was to be done by information, and nobody would inform.

14,754. The corporation took no trouble to appoint

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inspectors?—No; the onus was thrown on an informer, and nobody liked to inform.

14,755. The corporation took no steps whatever to enforce it?—I cannot say; I was not a member of the corporation at that time.

14,756. Since you have been a member of the corporation have any steps been taken?—I would take no steps to enforce it; I think it would result in failure.

14,757. Then you do not recommend that steps should be taken?—No.

14,758. Even under the Act of Parliament?—No.

14,759. Have you fished with these illegal nets?—Yes, I believe I have.

14,760. Nobody has informed against you?—No, nobody yet; but I should be very glad to put them all on one side, and I believe all these men would too.

The witness withdrew.

C. Bouch.

CHRISTOPHER BOUCH called and examined.

14,761. (*Mr. Caird.*) Are you a fisherman here?—Yes.

14,762. Have you long been engaged in the fishing business?—I was brought up to the fishing business, and I have been engaged in it since I was six years of age.

14,763. At Lynn?—Yes; and my father, my grandfather, and my grandfather's father before me were in the same business.

14,764. Do you follow all the different kinds of fishing practised here?—Yes, all that are carried on in our Deeps and for several miles below, as far as the Dudgeon float.

14,765. Is the number of boats employed in the fishing here increasing or diminishing?—It is increasing, and they are much larger boats.

14,766. Can you tell us the number and kind of boats engaged in fishing here 10 years ago?—No.

14,767. Or 20 years ago?—No; I am not able to tell that.

14,768. Can you go back to any particular date when you can recollect the number?—When I was a boy there was about a dozen or 15 trimming boats, and as many small shrimp boats.

14,769. How many men were engaged fishing in each?—Generally one man and a boy, and sometimes there would be three in a boat.

14,770. How many boats are engaged in the same fishing now?—I do not know, I have not taken particular notice.

14,771. Has the number increased?—Yes, the boats are increasing every year. They increase by one, two, and three boats every year.

14,772. Are the boats larger?—Yes, much larger.

14,773. And is the fishing here better?—Yes, it is better than it was.

14,774. Do the boats take more fish in each boat than they caught formerly?—They take now less smelts, less buts, eels, plaice, and sandlings than they used to do.

14,775. What kinds of fish are caught by the trim nets?—The trim net is intended to catch smelts, eels, and buts near the upper part of the river, a few miles below Lynn, seven miles or so, up to Staple Wear, just at this side of Stowbridge.

14,776. What kind of fish are buts?—They are flounders.

14,777. Small flounders?—Yes. They catch in the trim nets dabs, plaice, smelts, and eels.

14,778. Do you catch anything else?—I caught a salmon about a fortnight ago.

14,779. Are the principal kinds of fish you catch with the trim net smelts, buts, and eels?—Yes; they are principally river fish. No other net can be used to catch them.

14,780. Are those fish increasing or diminishing in quantity?—They are not so large in quantity as formerly, but that is owing to the alteration in the upper parts of the river, and the improvements that have taken place there. I believe that is the cause that the herrings have not been so plentiful as they used to be.

14,781. What is the reason that the alteration in the upper parts of the river has had any effect in the matter—in what way has that diminished the supply of fish?—In former times the water used to wash over the land above our limits, and it was let off by sluices. Now, when the heavy floods or snow come it is taken off by sluices by means of steam engines which throw it off.

14,782. Am I to understand that by the introduction of a superior description of drainage the breeding grounds have been diminished in the upper part of the river?—The alterations that have taken place in the river have taken the breeding grounds away. They have made a straight level of it where it used to be sands formerly; and the water now that comes off the land is collected together into large sluices, and passing into the Deeps it spoils the water so that it is not suitable for herrings to come upon that ground. Mr. Cresswell is mistaken if he thinks that the use of the stow net has diminished the take of herrings. The real cause is what I have stated.

14,783. Has there been any considerable decrease in the smelts, buts, and eels during your time?—Yes.

14,784. Is the decrease a large decrease?—There are scarcely one fourth as many as there used to be.

14,785. Is there not one fourth the quantity caught now by all the boats employed?—I think not.

14,786. The take of that description of fish has considerably decreased here?—I consider that it has by reason of the spawn being destroyed.

14,787. And the removal of the breeding grounds?—Yes.

14,788. By drainage?—Yes; and by the trim net.

14,789. Do you attribute it entirely to the removal of the stagnant ponds in which the spawn used to be deposited?—It was only eels that bred there; but the water comes down here and keeps the herring away in the winter season.

14,790. What other kind of boats are there? You have referred to the trim-boats. There are shrimp nets and boats?—Yes.

14,791. Has the supply of shrimps decreased?—I do not think there has been any decrease.

14,792. Is there any increase?—I do not see that there is.

14,793. Are there more boats employed now?—It appears almost as if there was an increase. There are certainly no less.

14,794. Can you tell me of your own knowledge whether during your experience there are more boats employed now in fishing for shrimps than there were when you were a young man?—More than a quarter as many.

14,795. Does each boat catch as many shrimps now as it did formerly?—I think they do catch as many, but they bring them up smaller.

14,796. Are we to conclude that there is an increase in the quantity, more boats being employed than were employed some years ago?—I do not think that there is any decrease.

14,797. Are there more boats employed now?—Yes.

14,798. Do you consider that the total quantity has increased?—Yes, taking the quantity caught by the whole of the boats, I do not think that each boat catches much less (if it catches any less at all) than a boat used to catch.

14,799. Then if there is an increased number of boats there must be a larger take on the whole?—Yes.

14,800. In fishing for shrimps do you find that you destroy any other kind of fish in an immature state?—Yes, and so it is in other fishing practised in our

fisheries. I know of none in which that can be avoided to some extent.

14,801. With regard to the herring-fishing, has it increased or diminished here in your experience?—It has diminished.

14,802. There are fewer herrings taken now than were taken formerly?—Yes, since the freshets came down.

14,803. What do you attribute it to?—When I can first recollect there used to be none of the steam mills there are now in the upper part of the country; there are several mills now above our limits. There is nothing to throw the fresh water off, it all comes into our river and passes down our Deeps. Formerly there used to be herrings most frequently every winter. The quantity was very large, sufficient to make it worth a person's while to go for them. They are not as frequent now as they were then at the same season. Now the season Mr. Cresswell spoke of, when he referred to the large catch eight or nine years since, was a dry season; indeed it was so dry that scarcely any fresh water passed through our harbour into the Deeps at all.

14,804. In consequence of that dry season was there a larger take of herring?—Yes, it allowed the fish to come into the Deeps.

14,805. Have you observed that after a dry season there has been a larger take of herrings?—Yes.

14,806. Is that because there has been less fresh water come down into the salt water?—Yes. It does not turn the water fresh, but I imagine it spoils the flavour of it, and the fish do not like it.

14,807. (*Mr. Lefevre.*) The herrings will not come up if there is fresh water in the river?—No.

14,808. (*Mr. Caird.*) You have positively observed that after a very dry season you have got a good herring-fishing here?—Yes, if it is dry in the forepart of the winter until after Christmas the herrings will come up.

14,809. Is the herring-fishery here an important source of revenue to the fishermen?—Yes, of course the herrings are of great advantage to the fishermen if they will come. Several have nets now, more than they used to have in former times.

14,810. Are the young herrings caught by the stow-boats?—I have had stow nets myself, and I know that they are. The stow nets will sometimes catch all sprats, and there will scarcely be a young herring among them, when another day there will be many young herrings. The north country fishermen in their statements say that they have nothing to say against stow nets; neither have I.

14,811. You have nothing to say against stow nets?—No, and I have a paper in my pocket to the effect I have stated, that the north country fishermen do not object to them.

14,812. But you yourself think the stow nets are not injurious?—Yes. The sprats and young herrings leave our Deeps in the month of March. They all go out, with the exception of a few sickly ones, and go right into the sea again.

14,813. Do you not attribute the decrease in the quantity of herring to the quantity of young herrings caught by the use of the stow nets?—I consider that some of them might possibly come back again; but still I believe that what is caught by the stow nets does not injure the general body of the fish.

14,814. At what time do you fish in the stow-boats?—In the winter season.

14,815. Is that in the same months that you fish for herring?—No, we begin sooner with the stow net than with the herring net. We shall begin now very soon with the stow net, and we shall not commence with the herring net until after Christmas.

14,816. Do you imagine that some of the young herring that are caught by the stow nets would have grown into herrings by Christmas, so as to be caught by the herring nets?—No; I do not know, after they leave our Deeps on the coast, which way they go.

14,817. Is there always an interval between the end of stow-boat fishing and the herring-net fishing?—They generally leave off about one time.

14,818. When does the stow-boat fishing cease?—Generally speaking in March—in the fore part of March.

14,819. Do the stow-boat fishing and the herring-fishing go on at the same time?—They generally cease about that time, because the sprats leave the Deeps in the fore part of March generally.

14,820. Is the stow-boat fishing profitable?—Yes, very. I have known an open boat take 70*l.* worth of sprats at one draw.

14,821. (*Mr. Lefevre.*) Is there any stow-boat fisherman here?—Yes, I believe so.

14,822. (*Mr. Caird.*) Are you engaged in stow-boat fishing?—Not now, but I have used stow nets.

14,823. Then you speak of your own knowledge of stow-boat fishing?—Yes, of my own knowledge and experience. Perhaps I may say that I was at a meeting with reference to the fisheries about five years since, and I was not allowed to speak scarcely at all because I was not considered old enough. I was discarded altogether. It was said that my father was not a fisherman, and I was not allowed to say anything.

14,824. What is the value, in the course of a year, to fishermen of this stow-boat fishing?—I cannot tell you the value.

14,825. What is done with the fish?—It is now sold on the ground for manure, and some of it is sent away to different parts of the country—to London and elsewhere.

14,826. Do the fishermen get as high a price for fish for manure as for food?—No.

14,827. Then I presume that they endeavour to sell them for food if they can?—Certainly. I have had as much for fish for manure as 36*s.* a chaldron. That is the highest price I ever knew them to fetch.

14,828. What weight is there in a chaldron?—I do not know.

14,829. Is it upwards of a ton?—I think not, but it may be more. I really do not know what the weight is.

14,830. What price have you received for the same description of fish per chaldron for food?—I have known them fetch as low as 8*d.* a stone, and as high as 2*s.* 6*d.*

14,831. How much would that be for a chaldron?—I cannot tell you.

14,832. Is it a very much higher price than 36*s.* for a chaldron?—I should think it is a great deal higher.

14,833. Cannot you tell us whether it is or not?—It is much higher no doubt, but I cannot tell you the difference unless I was to reckon it up. I believe that 36 bushels are reckoned to a chaldron.

14,834. Then they would sell for a shilling a bushel for manure?—Yes, that is the highest price I ever knew given for them for manure.

14,835. What price per bushel would they bring if they were sold for food?—There are about 7 or 8 stones in a bushel. I believe that is about the quantity.

14,836. Then they would bring about four times as much for food as for manure?—Yes, I think they would.

14,837. Then practically the fishermen would not sell them for manure if they could find a market for them for food?—No; but whenever they get a quantity of them they cannot "rid" them.

14,838. Do you mean they could not sell them?—Yes.

14,839. Does it pay fishermen to go to the expense and trouble of catching them for a shilling a bushel?—Yes.

14,840. That is reckoned a very high price generally for manure?—Yes.

14,841. What is the ordinary price for manure per chaldron?—36*s.* is the highest I ever knew them to reach.

14,842. What is the lowest?—I do not know that they were ever sold by the ton for less than 1*l.* per ton.

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14,843. Is a large proportion of the whole catch sold for manure?—Yes, the greater part of it.

14,844. Is it used in the neighbourhood of Lynn?—No, the farmers in the country places along the Norfolk coast take it.

14,845. Does any portion of it go away by rail?—No, it is kept on the coast and landed in the different harbours. There are men who come on the ground with large boats, yawls, and buy it from the fishermen.

14,846. Do you know how many tons are sold for manure in the course of the year?—I cannot tell. I am not much of a scholar. All I understand is the fishing itself, and with regard to that I have been brought up to nothing else scarcely.

14,847. With regard to mussels have you yourself ever collected mussels on the mussel beds?—Yes; I have had a boat that would carry about 135 bushels, and I carried them away myself about 16 years since.

14,848. Is it 16 years since you gave up going there?—Yes.

14,849. Then you cannot speak of the present state of the mussel beds?—No, I have not been on them at all for three or four years.

14,850. Had you previous to that time constant experience of the mussel beds?—Not so much as some fishermen. There are others who have been more constantly at them than myself.

14,851. From your own knowledge can you say whether the mussels have been increasing or diminishing?—Last winter they were very plentiful indeed; but this winter (I only go by what I have heard the fishermen say) they are not so plentiful as they were.

14,852. Do you think that any regulation of the mussel beds could be adopted with advantage to the fishermen and the public?—I think there might be something done to benefit the fishermen and the public too.

14,853. What might be done?—Well there has been much said about the charter. Now I know that when I was but a boy, and since I have been grown up too, that if any strangers came to our place they were obliged to buy mussels, and they were not allowed to go and catch them for themselves. They gave as much as 6*d.* a bushel for them, and took them from Lynn fishermen. And if they had a mind to go out and catch them themselves they were obliged to employ Lynn fishermen to assist in loading their vessels at 5*s.* or whatever it might be each tide. That course was continued until at last one man refused to pay and set our magistrates at defiance; and the consequence has been that from that day strange boats never did anything of the sort again.

14,854. There was not a set price?—No.

14,855. But they consented to give 6*d.* a bushel?—Yes.

14,856. On condition that the Lynn fishermen should be employed at a certain price in raising the mussels?—Yes; they gave the market price.

14,857. For taking them off the beds?—For having them brought up and put on board.

14,858. Can you state whether the whole produce of the mussel beds has decreased in consequence of their being over fished?—There have been more mussels during the last few years than were ever known in the memory of man before, and there have been more mussel beds.

14,859. Do you know anything with regard to the sole-fishing here?—I have been fishing with a trawl and shrimp net, but I never caught a vast quantity of soles.

14,860. You have not practised that mode of fishing much?—No; less than any other.

14,861. Do you know whether the supply is increasing or diminishing?—I do not think there are as many as there were. I have heard my father say that he has caught as many as three bushels at one haul, and I do not hear of anybody doing that now.

14,862. (*Mr. Lefevre.*) Do you yourself fish during most of the year round?—Yes, I fish at the present time with a trim net, such as that which Mr. Cresswell mentioned.

14,863. Do you fish all the year round with a trim net now?—Yes, in different places according to the time of the year.

14,864. You do not go out into the sea?—They are not fit to go out into the sea with our boats. They would be cut all to pieces.

14,865. Have you a boat of your own?—Yes, and I fish with it. In the winter time scarcely anything comes nigh our reach except fresh-water fish, such as eels, buts, and smelts.

14,866. Have you any other nets except a trim net?—Yes, a drag-net.

14,867. Is that for the river?—For different parts of the Channel. No places in the river suit now. The nets are only used in the Channel. It has been said by the north countrymen that they are destructive in all waters, but that arises from the improper use of them.

14,868. Will you describe the nature of a trim net?—It is a sort of triangle net.

14,869. A triangular net?—Yes. There are three poles; one is about 22 feet, and there is one on each side about 18 feet; the net is spread out; it faces the stream, and the net is attached round the poles. It tapers narrower as it goes round, with a swinge to it.

14,870. What is the size of the mesh of the net?—About three inches is the length of the mesh in the wide part of the net.

14,871. And it gets gradually narrower?—Yes. It goes tapering off until it gets to a small mesh of the same size as we require for shrimp nets.

14,872. What is the difference between a trim net and a stow net; are they much the same?—Yes, they are much the same to stand the stream, but one is for fresh-water fishing, and the other for sea fishing.

14,873. In size are they the same?—There is a great deal of difference in the size. The trim net is much smaller and is used by smaller boats.

14,874. How long have you been out at sea?—I was fishing close to our harbour yesterday.

14,875. In the sea?—No, in the river, within our limits.

14,876. How long is it since you went out to the sea-fishing?—I have not been at that for several years.

14,877. How many years ago?—I hardly know. It may be 18 or 20. But sometimes we catch herring in the trim net. It is now more than 20 years since I was in a herring-driving boat.

14,878. Is it 20 years since you went for herring?—Yes, with a driving net, but I have got them with a trim net.

14,879. How many boats used to go out for the herring from Lynn then?—I do not think there were more than four that had driving nets went into Lynn deeps then. Now there are a great deal more; more than 20 I believe. But there never has been a good season since.

14,880. You recollect the time when only four boats used to go out?—Yes; no more than four at once.

14,881. Did those boats make great hauls of fish?—Sometimes they got 5,000 or 6,000.

14,882. The seasons were variable I presume?—Yes.

14,883. What distance did you go out into the Deeps?—Generally into the Boston and Lynn Deeps, about 20 miles or a little more.

14,884. That was about as far as you went?—Sometimes we might go 25 or 26 miles.

14,885. Was that about as far as you could go with your boats so as to be enabled to get back with your fish to the market?—They could go on further if they considered it necessary. If they thought they could have found herrings further they would have gone further, but they generally tried about that distance from home. Since then they have larger boats, and they have gone further.

14,886. Were you in the habit of meeting boats

coming from other parts of the coast fishing off the Deeps?—The boats from Boston and the Lynn boats fished generally in the Channel.

14,887. Are the Boston boats open boats as well as the Lynn boats?—They are half-decked boats, and they are large boats too. There has been a large increase in the boats there as well as at Lynn since I can remember. There is a great trade at Boston, even more than at Lynn.

14,888. How long is it since you yourself went fishing in a stow-boat?—20 years or more.

14,889. Is the mouth of the trim net square?—No, it is in the form of a triangle.

14,890. The pole, 22 feet long, that you mentioned is at the bottom, is it not?—Yes, and on each side there is a pole 18 feet long.

14,891. (*Mr. Caird.*) Is that trim net used anywhere except here?—Yes.

14,892. Where else?—At Wisbeach. They are only used in rivers for catching smelts; they are proper smelt nets.

14,893. Do you never use a drag net for catching smelts?—Yes.

14,894. Do you catch them better with the trim net than with the drag net?—We do not catch as many with the trim net, but we can catch eels which we could not catch without using the trim net. The drag net has been disputed by the owners of the trim nets and many were seized and taken away and should have been burnt.

14,895. Who did that?—The magistrates in this place.

14,896. When was that done?—Since I can recollect.

14,897. Is there any interference with the trim nets?—No. The owners of the trim nets disputed the drag nets because they said they destroyed too large a quantity at one time, and the drag nets were seized and taken away from several of the fishermen of Lynn since I can remember; but it did no good. It only caused strife and mischief, and then at last they came into the hands of Scott, the gaol keeper, and it so happened that a sack full of them was afterwards found in my father's boat.

14,898. How long is that ago?—I was only a little boy at the time.

14,899. Has there been any interference with the drag nets since that time?—They were disputed at the meeting here which I referred to a short time ago, and which was held about five years since.

14,900. What has been done in the river? Has the drag net been used for catching smelts ever since?—Yes.

14,901. Without anybody interfering? Have they been interfered with by your magistrates, or has the use of them ever been stopped?—No.

14,902. Are both modes of fishing practised now?—Yes; they are fishing together at the present time in a peaceable manner. The net is a useful net if properly used. I cannot say myself that a drag net should not be as good a net as any other.

14,903. Is the drag net used for that purpose of the same size as the trim net?—No, the drag nets are all of one size, and the trim nets vary in size. The size of the drag net mesh is about as large as a halfpenny, a halfpenny will pass through. The mesh of the trim net at the largest end is about 3 or $3\frac{1}{2}$ inches across, and it tapers narrower until it reaches the size we require in catching shrimps. If they were larger they would not hold shrimps.

14,904. Will a mesh that a halfpenny will pass through hold a smelt?—Yes.

14,905. But not unless it is dragged?—Yes it will.

14,906. Will the smelts not mesh in it?—Not unless the smelt is a very small one. A good-sized smelt—a smelt of five inches—will not pass through.

The witness withdrew.

THOMAS CARTER called and examined.

T. Carter.

14,907. (*Mr. Caird.*) Are you a fisherman here?—Yes, and I have been so all my lifetime; my father was a fisherman before me.

14,908. Do you practise all the different kinds of fishing that are practised here?—Yes.

14,909. Have you observed whether there is any kind of fish the supply of which has increased or diminished here?—I think we have had a diminution in soles.

14,910. Has that diminution been very large?—There has been a great decrease this last fall of the year. We have had a great diminution in the quantity of shrimps caught. The reason is, that we had a dry season in the summer time. The shrimps were on the mains, and the sun being very hot killed all of them. That is the reason that they have diminished. Where we got 20 bushels of shrimps in other years we have not got two this fall.

14,911. You attribute the diminution to the fact that it has been a dry, hot season?—Yes, a dry summer.

14,912. To what cause do you imagine the diminution in soles is to be attributed?—There is no account to be given of it.

14,913. Has there been any great diminution in soles?—Yes; this last summer we have caught nothing as compared with other years.

14,914. Has that diminution only occurred this summer for the first time?—No, a year or two ago. In fact we cannot account for it. Sometimes we have more one time than another; but this last season we have had a smaller quantity considerably than in any previous year.

14,915. Do you catch many small soles in your shrimp nets?—In the spring of the year we do.

14,916. Do you catch as many as to be an injury to the fishing when the season is further advanced?—We cannot avoid it. In the shrimp nets, in the spring of the year, the soles are so small that they get into the mesh of the net, and when we pull the nets aboard the soles are all dead. We cannot avoid it.

14,917. Do you catch them in any large quantities?—Not in large quantities. When we haul the nets aboard we get such a thing as a score, or perhaps not so many, may be three, four, five, or six.

14,918. What do you do with them?—They are all dead.

14,919. Do you throw them overboard?—Yes; they are of no use; they are only the length of the first joint of your finger.

14,920. Do you get more of them now than you did formerly?—No; they generally come up in the spring of the year.

14,921. Do they destroy more than they did formerly?—No.

14,922. Then it is not from that destruction in the spring that the falling off has taken place in the summer?—I have no opinion of that sort.

14,923. Have you observed that the herring has fallen off in quantity?—Yes, it has fallen off these last four or five years. During that time we have not had any takes to pay us.

14,924. What is the cause of that?—I am not able to say. The herring appears to be like every other sort of fish; we seem to think that when they come they come and when they go they go.

14,925. The decrease has not arisen from any mode of fishing you practise?—No. Some say they think it is all owing to the stow nets. Then we have heard the north countrymen say the herring is a herring in six months. Some say that the brood of a herring is a sprat, and that it becomes a sizeable herring in six months. Now, if the stow nets have injured these herrings why we should not have had herrings up every season as we used to have them, because stow nets have been used here ever since I can recollect. Why then should we not have them as we used to have them before?

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14,926. Was there as much stow-net fishing a good many years ago as there is now?—Yes.

14,927. At that time was there plenty of herring?—Yes.

14,928. There has been no new mode of fishing adopted here within recent years that could have diminished the young herring, and thereby have caused a decrease in the herring fishery?—No.

14,929. There has been nothing but what has been practised for many years?—No.

14,930. No such result used to follow the stow-net fishing as appears to follow it now?—No.

14,931. Do you fish shrimps?—Sometimes I do. I fish for all sorts of fish.

14,932. Has the quantity caught here increased or diminished?—It has diminished this last fall of the year.

14,933. On the whole has the quantity diminished?—No, I think there has been very little alteration.

14,934. Taking an average number of years there has been little alteration?—There is just as good a fishing now as there used to be; I can see very little difference.

14,935. Have you had anything to do with the mussel beds?—Yes, that has been my work for years.

14,936. Do you fish them for bait or for manure?—No, I take them to be eaten. I pack them up in bags for the midland counties.

14,937. You do not take them for manure?—No.

14,938. Do you find a constant demand for them in the midland counties for food?—Yes, we have done so for some years.

14,939. Do you get a better price for them for food?—Yes.

14,940. Can you use the small mussels for exporting in that way inland?—No.

14,941. Do you select the better ones?—Yes.

14,942. Are they the same as are used for bait?—No, they must be better than those which are used for bait.

14,943. Are they the best quality of mussels that you get?—Yes.

14,944. Do you get a larger price for them than those fishermen who sell mussels as manure?—Yes.

14,945. Then why do not all the fishermen sell them for food instead of for manure?—They cannot get a trade for them, although they might get a trade for them if they could stop people from taking them off the scarps.

14,946. Will you explain that?—About three years ago the fishermen did not know where to go to earn a sixpence. We used to go down to the mussel beds tide after tide for a bushel. When it blew hard of course we could not get down. We were reduced to that state of poverty that we were forced to seek relief from the parish; they would not relieve us, however. I have myself known down the town as many as 72 men, women, and children going into the union three years ago in one night. The reason was that our gentlemen in the Town Council here had let a parcel of strange people come and take the mussels from us, and they had altogether neglected their own fishermen. We had five or six as nice beds of mussels as were ever seen by men, but in the fore part of the season the strangers came and clawed them from us, so that at Christmas we hardly knew where to get three or four bushels. We had what would have lasted us for years and years if the strangers had let them alone. As we picked the better mussels off and took them away the young brood would have been growing up and would have furnished a supply for us and our children afterwards. That would still be the case provided these strangers were kept away.

14,947. Do you wish to see some regulations enforced with regard to fishing on the mussel beds?—Yes.

14,948. What regulations do you desire?—To keep the strangers off and let our fishermen get them.

14,949. You want to have the use of them given entirely to yourselves?—Yes.

14,950. Would you increase the supply in that way?—Yes; if our fishermen had the mussel beds to themselves there would not be a fisherman who would want a bit of bread in the winter time. If they did it would be their own fault. We are to have the Great Northern Railway coming here, and then our fishermen might go musselling and they would find plenty of trade.

14,951. Would you send the mussels to the midland counties?—Yes.

14,952. There would be none left for bait in that case?—If our own fishermen who have bigger boats took them to the north country, for bait of course, they have as much right to do so as we have to take them to the midland counties and sell them for food. All I want is to see the strangers kept off, and then the fishermen here will not be beholden to the parish nor to anybody else.

14,953. Have you noticed whether these mussel beds are at all decreasing in their yield?—Yes, wonderfully.

14,954. Are there fewer mussels got from each bed than there used to be?—Three months ago where we had 10,000 bushels on our scarps, there are not 100 now; that is a great decrease. I have done nothing else but cockleing and musselling for the last four or five years.

14,955. Is it a recent market that you have found for mussels when you say that you send them to the inland towns?—Yes.

14,956. How long is it since you began to do that?—About three years ago.

14,957. Has the price of mussels very much increased in consequence of the opening of that market?—If it had not been for that market we should have sold mussels in Lynn for as little as 2*d.* and 3*d.* a bushel. In point of fact we should have sold them as low as anybody would offer us a price.

14,958. What do you get now?—6*d.* and 7*d.* a bushel.

14,959. What do you get when you sell them for bait?—I have heard the fishermen say that when they have been caught in strong northerly winds and could not get down with them they have sold them for 3*d.* and 4*d.* a bushel.

14,960. But what is the average price of them for bait?—6*d.* and 7*d.*

14,961. Is that after carrying them down to the north?—Yes.

14,962. Then you get a higher price here than you can get there for them?—Yes, when they send them down to the north country, to Scarborough and Whitby and other places, the average price is about 6*d.* or 7*d.* a bushel.

14,963. Do you think you would increase the supply of mussels on the beds if a restriction were enforced on the number of people who are permitted to fish them?—Yes.

14,964. What quantity of mussels is used for manure along the coast?—I do not know. There are a great many strangers that come and get them from Brancaster, Thornham, and other places.

14,965. Do many of your fishing smacks take mussels to Wells, Blakeney, and adjacent parts without their ever coming here at all?—No, not one.

14,966. Your own vessels do not do that?—No, I never knew anyone take mussels down there at all. I never knew one to be taken in that manner by Lynn boats.

14,967. Do other boats take them?—Yes, the Brancaster boats, the Thornham boats, and the Blakeney boats.

14,968. (*Mr. Lefevre.*) Have you yourself ever sold mussels for manure?—Yes, years ago.

14,969. Within the last three or four years?—No, not within the last six or seven.

14,970. You spoke of strangers coming from a distance to take them away?—Yes.

14,971. Where do they mostly come from?—Brancaster, Thornham, Blakeney, and Wells.

14,972. Do they sell them for bait?—No.

14,973. For manure ?—Generally they sell them for manure.

14,974. You are quite sure of that ?—I should say they always do so.

14,975. Do they take any pains to pick out the large mussels, or do they take them indiscriminately ?—They take them just as they get them.

14,976-7. Do you pick out the large mussels?—When the tide ebbs out we have a bit of a pull and pick them out for eating mussels, so that we know where the best lies day by day. We have a bit of a beacon with us and we can mark out one day what we intend to take the next. When we go there we know exactly where to look for the best of the mussels.

14,978. Do you think that the whole quantity of mussels found on the beach has diminished or not ?—Yes, it has diminished wonderfully.

14,979. The whole quantity ?—Yes, take them throughout they have diminished wonderfully.

14,980. Are the beds not as large as they were formerly ?—There are scarcely any beds at all.

14,981. Still strangers come and carry them away at present ?—Yes.

14,982. How long does it take for a mussel to grow to any size ?—What we are now getting to send into the midland counties are three years old; that is their age from the first spawning of them.

14,983. Then in the first instance the mussels are very little?—When the spawn first sets they are hardly visible to the eyes, but we can tell them directly a scarp is set, we have seen so much of them. I myself last year was engaged in picking the best I could find for the midland counties. In some spots the mussels lie and wash together so thick on the scarps that they are prevented from growing very fast. In other places where they only lie one mussel thick, they grow a wonderful sight faster.

14,984. Are mussels two years old fit for bait ?—Yes, they are at two years old.

14,985. Do the strangers take away mussels one year old ?—No, they could not get enough of them.

14,986. Have you seen Mr. L'Estrange's mussel bed ?—No, but I have heard talk of it. He will not let anybody go there except his own people; he stops everybody else from going on to the beds and I do not see why our gentlemen here do not do the same.

14,987. Do you think it would be advisable that some part of the sands here should be vested in private persons so as to give them an interest in keeping up the mussel beds ?—Yes.

14,988. Do you think the fishermen would pay something for leave to go on and take the mussels ?—The fishermen here ?

14,989. Yes ?—That I do not know. I do not know that they would have any right to charge us. We are licensed from Government. I was licensed myself at one time, but I have not got a licence now.

14,990. And did you have to pay anything for a licence ?—Yes, I paid a pound and sixpence some years ago. I have got my licence at home now.

14,991. Did that money go to the corporation ?—I cannot say, I paid it at the Custom House.

14,992. Was it a yearly fee or was it paid once for all ?—It was paid once a year in the first place, but afterwards we had our licences renewed and then we paid a pound and sixpence and we had them always afterwards.

14,993. How long is it since you went out yourself stow-net fishing ?—Five years ago.

14,994. And previous to that were you in the habit of going out every year stow-net fishing ?—I never was stow-net fishing as much as some people. From first to last I have been out about six or seven years.

14,995. Were you in the habit of going herring-fishing also at the same time ?—Yes.

14,996. I suppose you know the difference between a sprat and a young herring ?—Yes, and if you got hold of them in the dark you would know them too; we can tell them the moment we get hold of them.

14,997. Have you ever got any young herring with the sprats ?—Yes, the catch is not always confined to one sort, we catch for instance codfish, thornback, skate, and herring, and other fish all together.

14,998. Is there a large proportion of herring ?—Yes, sometimes. Sometimes we catch a large shoal of sprats, 10 or 12 chaldron, and there will be only one or two young herring among them, while at other times the proportion of herrings will be very considerable.

14,999. Will the young herring sell as well as the sprats ?—It all depends on circumstances. If they are of any size we bring them up for women to hawk in the town, and to send to the midland counties.

15,000. How long will they be ?—As long as my finger; they are not all of a size, they are what we call half-grown stuff; they will be about that size.

15,001. Is that the size of the generality of them ?—Yes.

15,002. Have you ever sold any of these young herrings as manure ?—Yes.

15,003. Is that because the price has not been good enough ?—It has been because we had no market for them to sell them in the town and we were forced to do something with them.

15,004. Have you sold sprats in the same way ?—Sprats are very little thought of in this town for eating.

15,005. Can you tell me what was the price you used to get for the fish sold as manure ?—I never sold much here of that sort of stuff; I have had very little of it in the latter part of my fishing. I generally used to take mine to a place called Hazel and Grimsby. Hazel is five or six miles above Hull.

15,006. Was it worth your while going out fishing for that purpose knowing that you could only sell the fish for manure ?—We have no sprat season here.

15,007. Was it worth your while to catch them for manure solely ?—Yes; it is like other things, if we got a good lot we used to sell them for manure, and if the take was only small then we brought them to market. We might get such a thing as a chaldron or a chaldron and a half of middling good stuff, and we should say to one another, "We have got a nice lot of stuff here, we "had better take them home to market." In that case we should make as much for a chaldron or a chaldron and a half as we should for six or eight chaldrons sold as manure.

15,008. How many boats went out with stow nets 10 years ago ?—Four or five.

15,009. What number are there now ?—I think there will be about 10 or 12. The reason of that is, that during the last two years if there were any sprats going at all, they had middling good seasons. The consequence was that other boats got nets as well. I think there was an increase of three.

15,010. During the eight years you went out with stow nets did you observe any decrease in the proportion of herrings as compared with other fish ?—No, I never observed anything of the sort more than the last year or two I was stowing. I never saw any difference at any other time.

15,011. You went out herring fishing during each season ?—Yes, I have been herring fishing, but not when stowing.

15,012. Is it carried on at the same time ?—Yes, the herring-fishing is carried on at the same time as the spratting.

15,013. How long is it since you were at the herring-fishing ?—Eight or nine years ago.

15,014. How many boats were there out after the herring then ?—I cannot say; 14 or 15 of our own Lynn boats, leaving all other boats out.

15,015. Do you know how many boats there are now ?—Not less than 20 have got nets now.

15,016. Were they all out this last year ?—No, nor during the last three or four years; some have not wet their nets for the last three or four years.

15,017. Do you catch the herring with a drift net ?—Yes.

15,018. Do you use any other net ?—No.

15,019. What is the size of the mesh ?—I am not able to say. I never interfered much with regard to the size of the herring nets.

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15,020. What was the size when you went out fishing?—The same as it is now. You might get an old penny piece through the mesh I should say, but I do not know exactly. I never measured the size of the nets.

15,021. Do you find that you make a better livelihood by taking mussels, or by fishing herrings and sprats?—Of late years I have made a better livelihood by cockles and mussels.

15,022. Have you found less the last two or three years than before?—No, more this last two or three years than before.

15,023. More than in previous years?—Yes.

15,024. Then you have nothing much to complain of in regard to the wages you make?—We are not weekly men, we work by the share.

15,025. How many men do you share with?—Myself and two sons.

15,026. During the last two years you have not had any falling off?—No, the quantity has increased until now, but after this time we shall decrease wonderfully, and grow less and less.

15,027. Does the decrease of mussels give you any fears for the future?—Of course it does, you yourself would not like to see a man come and take a loaf out of your mouth.

15,028. But you have not suffered in pocket as yet?—No, but I fancy that I shall do so before long.

15,029. (*Mr. Caird.*) What proportion of your whole catch in a season's stow-net fishing is sold for manure?—I cannot tell, I cannot state any aggregate amount.

15,030. Is one-half sold for manure?—I should say so.

15,031. Three-quarters?—I should say not; it depends on what sort of stuff is caught.

15,032. Take the average of a season's fishing?—In that case I should say about half.

15,033. Is it a fair conclusion to come to that one-half of all the fish caught by the stow-boats is sold for manure?—There is not more.

15,034. Is one-half sold for manure?—You may say there will be that. Stow-boating is a curious fishing, sometimes we get a lot of all real sprats, and the next tide we get nothing but half-grown stuff, young herring.

15,035. With regard to cockle-fishing, do you use the same boats as for mussels?—They are caught close to the mussels.

15,036. Are they a large source of revenue to the fishermen?—Yes.

15,037. Do they yield as much as the mussels?—We have not quite as much trade for cockles as for mussels, but mussels are a deal of trouble to get ready for the market and cockles are no trouble at all.

15,038. What market have you for cockles?—Norwich is our chief market for cockles.

15,039. Do they sell for about the same price as mussels?—Yes, about 6*d.* a bushel.

15,040. Are they taken for bait?—No, they are taken for food; they are eaten.

15,041. Are the cockle boats increasing with regard to the supply obtained for them?—They are increasing at present, but there are several Grimsby boats now coming up and taking them from us.

15,042. Are they all of one age and size that are taken?—Yes, I think they are all spawned in about one day.

15,043. Then they differ from the mussels in that respect?—Yes.

15,044. Is there the same decrease in cockles that there is in mussels?—The same boats keep coming; the Yorkshiremen come and take them away so that we shall have none left by-and-by, and it will then be the same with cockles as it is with mussels.

15,045. There can be no regulation to prevent that except the taking is limited altogether to yourselves?—No, I think the gentlemen who live in the town should look after that matter.

15,046. Do you think that they ought to prevent the strangers from coming, and keep them to yourselves?—Yes, they claim the Channel, and if they claim the Channel they ought also to claim the mussel beds.

15,047. (*Mr. Lefevre.*) I understand you to say that you share with your two sons?—Yes.

15,048. How often do you divide—every week?—It all depends. Sometimes I send in my bill every week; there are about six strangers we send stuff to. We leave it all to their generosity whether they send the money or not. Sometimes we send the bill once a fortnight, sometimes once a week, and occasionally not for three weeks.

15,049. Are you engaged all the year round?—Yes.

15,050. What do you clear between you?—I have not kept any account. As we get our money in we share it. Fishermen never keep any account of what they share.

15,051. Cannot you give us any notion as to what you make in the course of a year?—No, fishermen are different to people engaged in any other trade; they work by shares, and when they get any money they share it among themselves, but they keep no account in a book of what they get.

15,052. How many men are engaged in this mussel and cockle trade?—I do not know.

15,053. About how many are there?—I should say about 25 or 30. There might be more if our people were so minded and would keep strangers away. In that case there would be plenty of trade for all, and no man would want a crust of bread; if he did it would be his own fault.

The witness withdrew.

S. Bone.

SAMUEL BONE called and examined.

15,054. (*Mr. Caird*). Are you a fisherman here?—Yes.

15,055. Do you follow all the kinds of fishing practised here?—I get nothing but a few mussels and cockles. Sometimes we go off for a few shrimps, but very rarely.

15,056. Does the mussel-fishing continue the whole year round?—It does with me.

15,057. Do you fish them alone?—Yes.

15,058. To what market do you send your mussels?—I sell mine in the town. What markets they take them to, those who buy them of me, I don't know.

15,059. What sized mussels do you sell, are they for food, for bait, or for manure?—For food.

15,060. Are they all sold for food?—Yes, all I catch.

15,061. Do you never bring in mussels that are sold for manure?—No.

15,062. Do you select the mussels that you bring in for food?—Yes.

15,063. Do you reject all beneath a certain size?—Yes.

15,064. Have you long been a mussel fisherman?—All the days of my life since I first went, when I should be about six or seven years of age.

15,065. Has the price of mussels increased or diminished in your experience?—I have known them as high as 1*s.* a bushel, and they are now reduced to 6*d.* a bushel.

15,066. Has 6*d.* been the average price for some years back?—No.

15,067. Is the price lower than it was?—I never knew them so low as they are at present.

15,068. Does that arise from there being a large supply?—Yes, it is in consequence of the large supply.

15,069. A large supply from the same mussel beds?—Yes, from the same mussel beds.

15,070. Is there not an outlet to the midland counties which did not exist in your earlier days?—Yes.

15,071. And yet, although there is an outlet of that kind there is a larger supply than there used to be?—There has been a larger supply but they are going

away now. I can see them decreasing. I can see them wasting away as it were. The land is left quite bare before us. It is just the same as taking turnips out of a field; when the turnips are taken away the field is left bare.

15,072. Do you expect the supply to diminish soon?—Yes.

15,073. Has it begun to diminish?—Yes.

15,074. Is it diminishing now?—Yes, it has been diminishing fast for the last two years.

15,075. And yet the price is keeping low?—Yes.

15,076. Do you fish upon any particular beds?—Sometimes upon one bed and sometimes upon another.

15,077. Do you go over all the beds that are frequented here?—I have travelled over all of them about these limits.

15,078. Has there ever been in any previous year a diminution in the supply arising from the beds becoming exhausted?—I can give no account of that.

15,079. Have you ever seen them run as far short as they have done now?—Yes.

15,080. Have you ever seen them run shorter?—Yes, so that I could not get six spats in a day.

15,081. Did the supply soon return?—No; I have found the beds to be bare of spawn for six or seven years.

15,082. Then there would only be a small fishing during the whole of that time?—Very small indeed. I had only a few cockles during that time. I managed to make a living out of the cockles, although it was only a small one.

15,083. How long ago is it since the beds were so much diminished in their yield?—About four years ago. The mussels we are getting now are about three years and a few months old, so far as I can guess.

15,084. Is that the right age at which they should be used?—Yes, if they were to be high on the main for 20 years they could not be as large as a middle-sized mussel gets in three years.

15,085. Do you expect that if the rate of fishing goes on as at present you will soon get no fish at all?—Yes, I do.

15,086. What remedy would you suggest to prevent that?—I would prevent the strangers from getting them.

15,087. Do the strangers take a large proportion of all the mussels caught on your beds?—Yes, I have known them take over 1,000 bushels in one vessel at a time.

15,088. Was that for bait?—There was some for manure. I never got any for manure myself, but I have helped others to get them for manure.

15,089. Do you think it advisable to put some restriction upon the mode in which the beds are fished?—Yes, I do.

15,090. What restrictions do you think would be advisable?—I can hardly tell you. It should be stopped as soon as possible.

15,091. The restriction you would impose would be to stop all the strangers from going on the beds?—Yes.

15,092. Do the strangers take mussels of a younger age than you take them?—Yes.

15,093. Is a large portion of the mussels taken on the beds by strangers taken for manure?—Yes, a very large portion.

15,094. Is there as much taken for manure as for bait?—If not as much in bulk there are more in number.

15,095. Is there as much taken for manure as for food?—I am not able to say that there is as much taken for manure as for food.

15,095*a*. If some restrictions were established that no mussels should be permitted to be brought ashore for manure would that be of advantage to the general yield of the mussel beds?—Yes.

15,096. (*Mr. Lefevre.*) How long have you taken mussels yourself?—Ever since I was six or seven years old.

15,097. Do you follow any other fishing?—Yes, I have fished for shrimps.

15,098. Do you make smaller wages than you were in the habit of making formerly?—No, not at present, but we are looking to the future.

15,099. To the future and not to the past?—Yes, to the loaves to come.

15,100. The decrease of mussels during the last two years has not greatly affected your receipts?—No.

15,101. Have you observed a variation in different years in the take of mussels?—Yes.

15,102. Sometimes you have a good year and sometimes a bad year?—Yes.

15,103. Do you think the decrease during the last two years is to be attributed to having bad years, or is it in your opinion due to the fact of the mussels having been carried away by strangers?—I think the strangers are doing us a wonderful sight of harm; they are doing us a great deal of harm.

15,104. When did you observe the strangers come for the first time?—I don't know. I think the whole year round, but I never took any notice of that.

15,105. Have you observed them in other years also?—Yes.

15,106. How long past?—Ever since I can recollect.

15,107. Then they did not come for the first time some three or four years ago?—They have been here every year as far back as I can recollect when there has been a good stock for them to come to. When there was none then they would not come.

15,108. Why should you be more alarmed now than you were five or six years ago?—There is the same God to help us now that there was then.

15,109. You had the same grounds of alarm for the future then as now?—Yes.

15,110. But still you did not find that the bad result you now anticipate really did follow?—No further than that we have been flung upon the poor's box.

15,111. I think you said your wages for the last two or three years had been as good as ever they were?—Yes, they have; so that I have not been on the parish box; but that was not the case before.

15,112. But that was due to a bad year?—Yes, to having no mussels and no herrings.

15,113. It was entirely due to the badness of the season?—No, we attributed it to the strangers cutting the stuff away.

15,114. (*Mr. Caird.*) When did the strangers first begin to take mussels from these beds?—Ever since I recollect and I have no doubt even before that.

15,115. Has it only been recently that the beds have been very much run out in consequence of the strangers coming here?—Yes.

15,116. They have been in the habit of coming here as long as you can recollect?—Yes.

15,117. But did they not do damage to the fishermen in former times?—Not until they finished the beds up.

15,118. Then they left?—Yes, until more mussels came.

15,119. In answer to a question from me at the beginning of your examination you stated that you had a larger supply than you had had for a long time?—Yes.

15,120. And that therefore you had less price?—Yes.

15,121. And yet the strangers have been in the habit of coming very recently and are coming now?—Yes; no longer ago than yesterday I was upon the Scarps and saw one of the boats from Scarborough there.

15,122. (*Mr. Lefevre.*) What do mussels fetch for manure?—I think 12*s.* or 14*s.* is about the general price paid for them.

15,123. Is that per cwt?—No, 100 bushels corn measure.

The witness withdrew.

KING'S LYNN.

E. L. Swatman.

Nov. 1863.

EDWARD LANE SWATMAN re-called and examined.

15,124. (*Mr. Lefevre.*) You heard what one of the witnesses stated about the town council having at one time charged something for a licence? What in your recollection are the facts of the case?—My impression is this that many years ago the corporation used to license fishermen. They paid a common licence duty at the Stamp Office, but that has gone quite out of date.

15,125. Did they take any means of preventing other persons from going to the mussel beds?—The only thing I know of within my recollection is this, an action was brought by the corporation against a certain dredger of oysters. It was before my time, and the corporation were defeated.

15,126. Was there any decision in law upon it?—Yes.

15,127. Have you any account of it?—Yes, I have all the papers connected with it. I was not in my present office at that time. It was in the time of Mr. Pitcher, my predecessor, who is now in the room.

15,128. I presume it was decided that the corporation had no right?—It was an indictment brought by the corporation against certain persons. It was defended by somebody—I don't know who they were—and the decision was that the people had a right to do that of which the corporation complained. I believe that was the whole issue, but it was before my time.

15,129. I presume, therefore, it amounted to a decision that the people of Lynn had no exclusive jurisdiction over the fisheries?—No, I don't say that at all.

15,130. Then was it a decision that there is no right on the part of the corporation to exclude strangers fishing within their jurisdiction?—I can't answer the question off hand, but my impression is that we went a little beyond our jurisdiction.

15,131. Beyond the limits of your jurisdiction?—Yes.

15,132. Then it did not amount to any decision of your rights within those limits?—No, no one has a right to interfere with us within our jurisdiction.

15,133. Do you think that within the limits of your jurisdiction you have now power of excluding people from fishing?—Yes, certainly.

15,134. Do you think it advisable that the town should exercise that right?—I offer no opinion upon that. With regard to the case I have referred to, I think it is within the memory of my friend Mr. Pitcher who sits beside you, and he can contradict me if I state anything wrong, but I believe we went a little beyond the limits of our jurisdiction.

15,135. You have heard some of the witnesses express an opinion that strangers should be prevented from going to the mussel beds and taking mussels within the limits of the jurisdiction of the corporation of Lynn?—Yes.

15,136. Do you think it advisable that you should do that?—Yes, I see no reason why strangers should be allowed to take our mussels and fish to other places.

15,137. Do you think the corporation of Lynn would be ready to enforce regulations to that effect?—Yes.

15,138. Then why don't you do it?—We can only do it under legislative powers.

15,139. You don't think your charter gives you that power?—No; the remedy is worse than the disease. What is the use of suing a poor fisherman? Then there is always the difficulty of detecting them. For instance, if a Grimsby man comes and takes fish out of our water we don't know it at the time.

15,140. But do you take any means to ascertain whether they do so or not?—No.

15,141. Have the corporation in point of fact done anything towards limiting the number of people?—No, on account of the expense. It would take two or three men to do that.

15,142. The corporation are not ready to go to that expense?—I don't say that; I have no orders to say that.

15,143. But they have not done so?—No, they have not done so.

15,144. (*Mr. Caird.*) You don't employ any water bailiff or officer of that sort to look after your rights?—I believe there used to be one.

15,145. Did he interfere to prevent the strangers coming?—No; the old water bailiff never went beyond the town of Lynn. The nuisance of which we complain is further seaward.

15,146. Do you think it desirable that certain mussel beds should be absolutely vested in the corporation?—I would not suggest that because people don't like to suggest such arbitrary powers, but the corporation should have some controlling power to see that those people don't offend against the law, if you can understand that. The corporation don't seek to exercise such powers.

15,147. By offending against the law do you mean that people should not be allowed to come from a distance upon the mussel beds belonging to the corporation of Lynn?—My own opinion is, that it would be a most excellent thing for the country if the legislature would pass an enactment binding people not to offend against the law, and at the same time lay down that law.

15,148. I want to know what you think the law is at the present moment?—I know what our law is, but we can't carry it out.

15,149. Do you think that under your charter you could prevent strangers coming from a distance fishing?—I have no doubt we could if we were prepared to pay the costs, but I want to have a positive enactment to save the public from the expense. Fish is a most useful article and my wish is to see an enactment passed that will give the public the benefit of the fish, and prevent persons from taking it in an improper manner.

15,150. I want to ascertain if you think it desirable that the public should interfere to prevent strangers fishing within your jurisdiction; is that what you want?—Yes, I think so.

15,151. What advantage would it be for the public to do that?—I merely give my own individual opinion but I see no reason why a fishing boat from Yarmouth or any other place where they have their own fishing grounds should come and fish within our jurisdiction.

15,152. Do you think it is the interest of the public that the fish of Lynn should be caught by the people of Lynn?—I merely give my own opinion, but I see no reason why fishermen from Yarmouth or Lowestoft should come and draw their trawl nets over grounds in our jurisdiction.

15,153. At the same time you think the corporation of Lynn are not ready to go to the expense of preventing it?—I don't exactly say that, but I believe I am correct in stating that the corporation are not prepared to prosecute persons who offend against their regulations.

15,154. Against their regulations?—Yes.

15,155. They desire that the expense should be incurred by the state or some other persons, and that they should have the benefit of it?—I don't quite go that length, but there are two or three members of the corporation present and perhaps they may express their opinion on the matter.

The witness withdrew.

The inquiry was adjourned until Saturday the 28th of November, at Boston.

Boston, Lincolnshire, Saturday, 28th November 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman).
Professor HUXLEY, F.R.S.
G. SHAW LEFEVRE, Esq., M.P.

SOLOMON HACKFORD called and examined.

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15,156. (*Mr. Caird.*) You hold the office of water bailiff here, I believe?—Yes.

15,157. You have held it since 1860, I understand?—Yes.

15,158. By whom were you appointed?—By the corporation of Boston.

15,159. What is the nature of your duties?—To inspect the fisheries and see that the fish are taken of a proper size, and also to protect the mussels and see that the brood are not taken away.

15,160. Over what extent does your jurisdiction extend?—As far as the privileges of the borough of Boston extend.

15,161. How far do those privileges extend?—To the Boston Outer Knock and the buoy called the Gat buoy, away to the entrance of Lynn Well.

15,162. Does that include the whole of Boston Deeps?—Yes.

15,163. Over how many miles does the jurisdiction of the borough of Boston extend?—I can't form any idea of that.

15,164. Can you give us the length of it in miles, and also the breadth?—It would be something like from 24 to 25 miles from Boston to the Outer Knock.

15,165–6. Over the whole of these 25 miles are there banks with different kinds of shell-fish upon them?—Yes.

15,167. Where are the banks on which the mussels and other shell-fish are found?—They are on the Toft and in the Gat, which you will see run in a parallel line south-south-east.

15,168. What is the Toft?—There is the Toft beacon, on a high sand bank. There is also a sand bank at the Gat, and another sand bank called the Roger.

15,169. Are the whole of those banks dry at low water?—Yes, all those you see marked prominently on the chart.

15,170. Are all the banks where mussels are found dry at low water?—At spring ebbs they are.

15,171. You say that your duty is to superintend the mode of catching the different kinds of fish that are caught here; what are the different kinds of fish caught here?—Chiefly soles and shrimps. There are some few buts and plaice, but they are chiefly shrimps.

15,172. Are there any shell-fish?—In the shell-fish department there are mussels to a great extent, and likewise oysters.

15,173. In what state did you find the mussel beds when you first came to take charge of them?—They were nearly exhausted.

15,174. Was that in 1860?—No; in 1859.

15,175. What measures did you adopt for the purpose of increasing the supply of mussels from these beds?—I had instructions from the Board to see that the mussels brought up were riddled on the beds, but I found that to be impracticable except to a certain extent. We then used to riddle them in the boats. There was a great deal of brood among them, and if we had continued to take them without riddling them we would have exhausted the supply. The beds have now been restored to an enormous extent.

15,176. Did you commence that immediately on your appointment?—Yes.

15,177. What did you do?—I got several warrants against the men who took them away for bait to Lynn or sold them for manure. I applied to the magistrates on several occasions and they granted me summonses; but ultimately there was a doubt as to their authority, and it fell back again to the old system of bringing the small mussels and selling them for manure. They have been sold in that manner to a great extent in Norfolk and Suffolk, and they have also been sold for bait to the north country fishermen.

15,178. Did you endeavour to put a stop to that?—Yes.

15,179. Did you put a stop to it?—Yes.

15,180. For how long?—For six months.

15,181. Was the effect of that stoppage to produce a large increase in the quantity of mussels?—Yes, the increase arose partly from that, and partly from the re-spawning of the old mussels which are laid there. There are now some thousands of acres of mussels there.

15,182. Is there an inexhaustible stock?—Yes.

15,183. Have these thousands of acres increased gradually since you had charge of the beds?—Yes, three or four years ago mussels were very scarce, but now a man may load a large boat in one tide.

15,184. What proportion may be sold for bait and what for manure?—I think about 100 tons a week go away on the average for bait. Perhaps there may be more, and even a greater amount for manure.

15,185. What do the 100 tons a week go for?—For bait.

15,186. And a greater amount for manure?—Yes, there were four small smacks here the other day, getting 30 tons each for manure.

15,187. Is there any large quantity taken for food?—Yes.

15,188. Where are they brought to?—They are brought to Boston.

15,189. What quantity may be taken for food?—I can hardly speak to that. I think there may be more than 100 tons a week brought here.

15,190. Then altogether the beds seem to yield about 300 tons a week?—Yes, at present.

15,191. Are the quality and age of those taken for bait and for food about the same?—Those taken for bait and for food are about the same.

15,192. Are those taken for manure young fish?—They take the young brood, and destroy the beds.

15,193. Where do they take them to for manure?—To Brancaster, Thornham, Burnham, Wells, and Blakeney.

15,194. Have you endeavoured to stop them taking mussels for manure?—I reported them, and they were induced to send and stop them. Notices were also sent to the corporation of Lynn, who acted at one time in union with us.

15,195. But you only stopped them for six months?—Yes.

15,196. When did they resume taking them for manure?—In the middle of 1860, when the season commenced, they began taking them for manure again.

15,197. In 1860?—Yes, I think I was appointed in 1859, and in the latter part of 1860 they began again.

15,198. Have they taken them ever since?—Yes.

15,199. And yet there is an enormous supply at the present moment?—Yes.

15,200. Has it sensibly decreased the beds?—I think it will do so if it is allowed to continue. They go on taking the small spawn.

15,201. Have you observed any diminution up to the present time?—Not with regard to big mussels, but they have cleared the beds they went on. In the course of three years the mussel becomes full grown.

15,202. Has there been any increased demand for bait since you took charge of the beds?—Yes, many tons go away now by rail from Boston down to the northern ports.

15,203. To be used for bait?—Yes.

15,204. Has there been any increased demand for

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mussels as food?—Yes, it seems to me that every smack that requires employment can find employment on the mussel beds.

15,205. Every year is the quantity taken from the beds increasing?—It has increased during the last three years.

15,206. Do you think that if there was a provision preventing mussels from being taken for manure the beds would admit of a constant increase of mature fish?—Yes.

15,207. Is that your meaning?—Yes.

15,208. If you prevent these men taking them away for manure, the beds will give a plentiful supply?—The taking of them away for manure is the cause of a very great destruction.

15,209. Do you complain of any other damage done to the beds in addition to the taking away of the mussels for manure?—No, when they are gathering the big mussels they riddle the little ones from them, and leave the brood on the railway stage.

15,210. Where is that?—On a stage provided by the railway company. They bring them on to the stage and riddle them. The small ones pass through the riddle, and the big ones only are taken.

15,211. What is done with the brood?—I believe it is sold for manure in the town.

15,212. At the railway stage?—Yes.

15,213. If some system could be adopted whereby they could be riddled on the beds would that destruction be prevented?—Yes, but I don't see how that could be done. When the restrictions were first imposed here, they did riddle them on the beds for a time until I got my summonses. They began then to doubt the authority of the corporation of Boston, and when the magistrates would not grant any more summonses they resumed their old habits.

15,214. If some regulation were established by which you could be enabled to enforce the process of riddling them on the beds, where they are caught, so that the brood would be placed back again on the beds, do you think that an advantage would arise from that?—Yes.

15,215. Do you think that would be a protection to the beds?—Yes.

15,216. If none of the brood were taken for manure would that remedy the complaint you have to make?—Yes, I would also prevent them being taken for manure at all.

15,217. Has the take of soles fallen off within your experience?—Yes, a great deal.

15,218. To what do you attribute that?—To the increased number of boats and the destruction of small fish by the trawl. They take them away by thousands. I stopped them once, but still they smuggle them up.

15,219. The small soles?—Yes.

15,220. When are they caught?—It begins in May, and lasts from then up to about this time of the year.

15,221. Have the soles perceptibly decreased within your recollection?—Yes, materially.

15,222. Are they caught in any other season except the summer months?—No.

15,223. Are there a greater number of boats employed in catching them than there were formerly?—Yes.

15,224. They don't get as much?—No, not by a long way.

15,225. Have you any facts you can give us that will prove that to be the case?—Yes, I was in the sole-fishery myself some few years since, and I know that fishermen could bring more into the market than they could vend. They could not sell all they got sometimes, but now that is not the case.

15,226. How many boats are employed in the sole-fishing now?—All the shrimp boats are comparatively engaged in the sole-fishing because they catch them in the small shrimp nets with which they trawl.

15,227. Can they get such soles in the shrimp net as they can sell in the market?—Yes; a few.

15,228. What do they do with the small soles?—If they can get them out of the way of the inspector they do so. Generally they try to sell them or take them home. If they can smuggle them away they do.

15,229. Do you attribute the falling off in the catch of soles to the small mesh?—No, rather to the way in which they are taken, and to the many thousands of small soles that have been destroyed.

15,230. How are they destroyed?—When they take these unsizeable fish, instead of heaving them back into the sea, they skin them and sell them as well as they can.

15,231. How would you remedy that?—I would impose a fine on them. If you caught two or three and fined them, that would soon stop all the rest.

15,232. You think that if you had authority to enforce such regulations as the corporation think proper to adopt you would put a stop to this injurious mode of catching soles?—Yes. Here are the instructions I received from the corporation (*producing a placard*).

15,233. (*Mr. Lefevre.*) Is that the same as that issued by the corporation of Lynn?—Yes, I believe it is almost a fac-simile. I applied to the town clerk for instructions to enable me to carry out these regulations, but he said I was to wait for further instructions.

15,234. (*Mr. Caird.*) Suppose you had power to enforce such regulations as might be adopted by the corporation, what course would you take to carry them out?—When I went on board the boats and found small soles I should report them to the mayor and the borough magistrates, and then the matter would remain in their hands.

15,235. You would not require regulations with regard to the size of the mesh and of the net used in fishing for soles?—I don't see how that is to be done. I have been engaged in sole-fishing myself, and I have tried it. I have a piece of sole net in my pocket now. This (*producing a net*) is what is called the large-sized mesh of a sole net.

15,236. What is the size of that net?—It is about an inch and a quarter.

15,237. What net is it?—A sole net.

15,238. Will not that catch soles too small to be marketable?—Yes.

15,239. It does catch small unmarketable soles?—Yes. The form of the net is such that it drives the small soles down into the cod end of the net.

15,240. Then if you permit the people to fish with that net, and you say that it will catch small unmarketable fish, how are you to prevent that by any regulations you can adopt?—The nets will not hurt the fish although they will catch the small ones; they only drive them down to the cod end of the net. The piece of the net I have shown you is what we call the "wing" of the net; the cod end is somewhat smaller.

15,241. Do you think that the small fish would be alive when they are brought up, and that they could be thrown overboard again without injuring them?—Yes.

15,242. Then you expect that they will be caught, and you think that there should be some regulation requiring the fishermen to return them to the sea when they have been caught?—Yes.

15,243. Do you expect that under any regulation you can adopt small fish might be caught by that description of net?—Yes.

15,244. A shrimp net will catch small soles?—Yes. This is the size of the shrimp net (*producing a net*).

15,245. That is smaller?—Yes.

15,246. Then unless an end is put to shrimping altogether it will be impossible to avoid catching small soles?—You can't avoid it unless you do away with shrimping altogether.

15,247. Has the take of shrimps increased or diminished within your experience?—They have decreased in regard to the quantity they can catch now.

15,248. Has not the season something to do with the quantity of shrimps taken? If there is a dry warm summer does it not affect the quantity of shrimps caught in the shoal waters?—If we have a dry warm summer it is favourable for shrimp-fishing.

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15,249. Was last summer favourable ?—No.

15,250. But has it not been a warm summer ?—Sometimes we have had large takes, and sometimes for a week or two we got none. Generally we have been compelled to leave Boston Deeps and go to Lynn Deeps.

15,251. Is there anything in the mode of shrimping at present adopted which is injurious to the small fish ?—No ; I think the greatest destruction is produced by riddling them.

15,252. How is that done ? — When the shrimps are taken out of the sea they are put into a riddle, and the small shrimps in passing through the meshes are generally killed.

15,253. How can you avoid that ?—I don't see how it can be avoided.

15,254. You don't see any mode by which it can be avoided ?—No ; the riddles we use are iron riddles.

15,255. Is there any regulation you can suggest that would in your opinion prevent the decrease in the take of shrimps here ?—No.

15,256. You can suggest no remedy ?—No, I cannot see any. The greatest improvement would be, requiring the use of wide nets, which would let a great deal of the smallest-sized shrimps pass through. All sorts are taken now in the smaller nets.

15,257. Is the sprat fishery a very valuable one here ?—No, not at present.

15,258. Has it ever been in your experience ?—Yes, it was at one time.

15,259. Then has it fallen off of late years ?—Yes ; there are very few sprats here now.

15,260. What is the cause of that ?—I suppose the way in which the sprats have been taken all round the coast, and likewise in this bay.

15,261. Does the catch of sprats vary from season to season ?—It varies very considerably in quantity here from season to season.

15,262. And has that variation in quantity been always of late years tending towards a decrease ?—Yes ; the supply has been gradually decreasing for several years back.

15,263. Can you suggest any remedy for that ?—I hardly know what remedy I can suggest. With the sprat net it is all fish that comes to the net ; they all go in, and they are all killed.

15,264. Has the sprat fishery existed for some time in Boston Deeps ?—Yes, for many years.

15,265. And has it only lately begun to exhibit a decrease ?—For several years past it has been gradually on the decrease.

15,266. Has there been a greater quantity of boats and persons employed in the fishery of late years ?—There has been an increase of boats all over the island, and that increase has been going on every year.

15,267. But I am speaking now of your grounds here, not of the general fishing ?—They have increased here, but they do not come to fish in this locality.

15,268. Has not that increased number of boats taken as large a quantity of fish ?—No, they have fallen off each year.

15,269. With regard to the herring fishery, how in your recollection has that been ?—I have known it when the herrings have been almost inexhaustible. One season here the catches were immense, but now we have little or none.

15,270. In what season have you usually had herring-fishing here ? — In the winter season from December to February, and sometimes up to March.

15,271. When did you begin to observe a decrease in it ?—I have observed it now for several years.

15,272. What do you attribute it to ?—We think it owing to the millions of small herrings that are taken by the sprat nets.

15,273. Can you suggest any remedy for that ?—No.

15,274. Are there many oysters caught here, and are there many oyster beds ?—Yes, there are a good many oysters caught, but not so many now as there were some years since.

15,275. Are there any valuable oyster beds upon the banks which are under your charge ?—There are no oyster beds of any consequence in our locality.

15,276. Then where are they ?—In Wisbech Channel, at the bottom end of the Gat. At Lynn Well Light there is also a valuable fishery.

15,277. Has there ever been a valuable oyster fishery here ?—Yes, at the lower part of the Deeps, what is called the Dog Edge.

15,278. Is it no longer a good fishery ?—No, the oysters have all been dragged up.

15,279. Were they dragged up by the fishermen here or by strangers ?—Generally by our own men, but partly by strangers.

15,280. Is there no oyster fishery there at all now ?—There are very few oysters there now.

15,281. Is there no means of recruiting that oyster bed ?—Not unless there was a stop put to the taking of small oysters. They take them an inch or an inch and a half across ; they bring in thousands that size to Boston.

15,282. What do they do with them ?—They sell them at reduced prices.

15,283. Is there no interference with them ?—No.

15,284. Does the bed belong to anybody ?—No.

15,285. It is considered public property ?—Yes.

15,286. (*Professor Huxley.*) How do you take mussels here ?—We go ashore with drags and small nets ; we generally use a bow net.

15,287. A drag and a small net ?—Yes, a bow net.

15,288. How is a bow net made ?—With a bow, and there is a bag on it.

15,289. What is the bow made of ?—A piece of willow, or ash so that the fisherman can hold it in one hand and keep the net open.

15,290. Do they scrape the mussels off with anything ?—Yes.

15,291. Is it a thing like a rake ?—Yes.

15,292. So that the mussels are raked off the bed ?—Yes.

15,293. Are the teeth of the rake close set ?—They are about an inch apart.

15,294. Then I presume that they get small mussels because the small ones stick to the others ?—Yes, they all adhere together in a body.

15,295. When they get mussels for manure are they taken in the same way ?—Yes.

15,296. They are all taken in the same way ?—Yes.

15,297. Would it pay for manure if they had to sort the mussels out ?—No.

15,298. Then probably that is the reason why they do not do it ?—Yes.

15,299. But it does pay if you are to sell them for food ?—Yes.

15,300. If taking the mussels for manure is to pay at all they must have them unsorted ?—Yes, and the smaller brood are the best for manure. I say that from what I ascertained myself when I was at Thornham and saw them used for manure.

15,301. Is that because there is less shell and more flesh ?—I believe it is because the shell perishes sooner.

15,302. It is for the interest of the people who get them for manure to take them all unsorted ?—Yes.

15,303. You were speaking of a riddle just now for sorting mussels for eating purposes, what kind of a thing is that ?—It is a wire sieve.

15,304. What is the size of the mesh of it ?—I do not know.

15,305. At a rough guess ?—It is about an inch or an inch and a quarter square.

15,306. How do they work the riddle ?—One man holds the riddle in his hand and they put the mussels in by shovelsfull.

15,307. That can only roughly separate the small ones ?—The young ones are attached to the others by a very fine fibre. It is like a thread, and by heaving them in the riddle those fibres break and the small ones pass through.

15,308. Do not a good many of the big ones also get through ?—No, they wash them afterwards.

15,309. What is the riddle made of ?—Wire.

15,310. Then it is in fact an iron riddle ?—Yes.

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15,311. You said just now that you considered that a mussel became grown out in three years?—Yes.

15,312. Do you mean full grown?—Yes, it falls into decay.

15,313. It dies out?—Yes, of old age.

15,314. How long does it take to bring a mussel to perfection?—It is in perfection in the second year, and the third year it begins to decline.

15,315. You spoke of the mussel beds being exhausted in 1859. Do you mean that the old mussels were worked out?—Yes.

15,316. How many square acres were exhausted in that way?—I cannot say, there were some thousands of acres on the whole of the Toft sands, and the Gat and the Roger.

15,317. Are the mussels mostly on the sands?—No, they are on the mud at the top of the sands. When a mussel bed begins to form it becomes muddy.

15,318. Are there no stones for the mussels to hold to?—Not in our locality.

15,319. Are they quite loose?—They strike down with a kind of fibre into the mud.

15,320. And do they hold together by that fibre in the mud?—Yes.

15,321. I think you stated that your regulations were carried out for about a year?—Yes.

15,322 Not for longer than that?—No.

15,323. Was that one year sufficient to allow the mussels completely to recruit themselves?—Yes, they re-spawned.

15,324. (*Mr. Lefevre.*) I think you said that your regulations were only in force for six months?—Yes.

15,325. (*Professor Huxley.*) Do you mean six months or a year?—They were in force for six months, and then warrants were issued against the Lynn fishermen. At the end of that six months the year was over.

15,326. Then that made a year practically?—Yes.

15,327. So that the mussels were left undisturbed or else were properly surveyed for about 12 months?—Yes.

15,328. And that time was enough to enable the ground to be completely covered, so that since then about 300 tons a week have been taken away?—Yes, the mussels are now very thick all over the banks, the Roger, the Toft, the Gat, and the Blue Bank.

15,329. Do mussel beds cover the whole of these sands?—On the Toft they do.

15,330. (*Mr. Lefevre.*) Do they cover the Long Sand?—There are no mussels there; they are only on the Toft, and the Gat end, and the Blue Bank, and the Roger.

15,331. There are no mussels on the Frisk and the Flat?—No, those banks are all cockles.

15,332. (*Professor Huxley.*) One year's rest was sufficient to cover the whole of the banks you have mentioned with mussels?—Yes.

15,333. And that so thickly that you have been able to fish them ever since for three years?—Yes, the spawn covers the ground very thickly, but during the first season the mussels were so small that the people could not work them.

15,334. Then they got two years rest entirely?—Yes, they began to work them last season, and this year they have been in perfection.

15,335. Then practically they have had two years rest?—Yes.

15,336. You were speaking of cockles being on one of these sand banks, are they numerous there?—Yes, on the flats.

15,337. Are they worked for commercial purposes?—Many tons go away to the manufacturing districts.

15,338. Are they used for manure?—No.

15,339. I suppose the shells are too thick?—I never saw them used for manure.

15,340. I suppose the water in the Wash is thoroughly salt water?—Yes.

15,341. At that height up the Wash there is no mixture of fresh water?—No, the deep-water mussels are all in salt water. We sometimes get fresh-water mussels. We can always tell them; they are of a different colour, and larger.

15,342. You think that a certain flow of fresh-water is of use to the mussel?—Yes.

15,343. Does it clean them?—No, but it generally makes better and larger mussels. We have some in our river; they are twice the size of the mussels obtained on the banks.

15,344. But that is not the same mussel, is it?—It comes at the same time, and from the same spawn.

15,345. You do not mean to say that it is the sea mussel that lives in the river?—Yes, I think it is.

15,346. Surely the mussels do not spread up into fresh-water?—The spawn spreads right up.

15,347. But you do not find any considerable quantity of mussels there?—I have known them very plentiful occasionally. Some ten years ago the whole of the clays marked on the chart at the low part of the scarp were covered. I have not seen them so covered for the last ten years.

15,348. Is that a place that ordinarily has fresh-water on it?—Yes, it is where the inland waters come down.

15,349. But not throughout the year?—No.

15,350. Does it come down there now?—No.

15,351. (*Mr. Lefevre.*) Why does it not come down there?—I do not know.

15,352. Perhaps when the mussels were there it was when the fresh-water did not come down?—It came down then much more than it does now.

15,353–4. Has there been any particular diminution in the quantity of cockles of late years?—No.

15,355. You were speaking of herring being taken here in the winter, is that the same sized herring that you meet with elsewhere?—Yes, we get the same herring in the season, but the take has not been so good for the last few years.

15,356–7. Is that the same kind of fish that you get at Scarborough?—Yes, but not as big.

15,358–9. Have you any smaller kind of herring?—No, not that I am aware of.

15,360. What is the size of the mesh of the herring nets?—The mesh here is seven-eighths of an inch.

15,361. It is as small as that?—Yes.

15,362. So that it is probably a smaller fish?—Yes, it is a smaller fish. The major part of them that come here are shot fish.

15,363. What time of the year do they come?—The winter season, from December to February or March.

15,364. Do you think there are many young herrings taken with the sprats?—Yes, two thirds of the whole number, perhaps three-fourths, are young herrings.

15,365. Do you get any sprats in full condition here?—Sometimes we get a few.

15,366. At what time of the year?—In the winter season.

13,367. About November and December?—Yes.

15,368. Do you notice any difference in the shape of the herring caught here and elsewhere; do the fishermen generally observe a difference in the herring caught in the estuary here and those taken out of the sea?—No, I do not think so.

15,369. How long have you been acting as water bailiff here?—Since January 1859.

15,370. Are you the only bailiff employed by the corporation of Boston?—Yes.

15,371. Is there a large population of fishermen in Boston?—Yes, we have something like 45 boats, big and little.

15,372. What are the fishermen mostly employed in?—In soleing and in shrimping. Shrimping takes place at this season, and soleing in the summer.

15,373. What time of the year does the mussel season begin?—About September.

15,374. And how long does it last?—Until the warm season comes in. As long as they will keep to that they can be sent off and pay carriage to the manufacturing districts.

15,375. Are all the boats employed in collecting mussels?—Two-thirds of them at the present time are employed in collecting mussels.

15,376. Has the number of boats increased of late years?—Yes.

15,377. How do you sell the mussels?—At 9*d.* a bushel, I believe, or a shilling.

15,378. Has the price increased?—No, it has been reduced.

15,379. Is it reduced as compared with 10 years ago?—I would rather say three years ago.

15,380. Was it a bad season three years ago?—Yes.

15,381. What was the price of mussels then?—They were then 1*s.* 6*d.* per bushel.

15,382. Were you at Boston before you were water bailiff?—Yes.

15,383. Can you say what the price was 10 years ago as compared with what it is now?—They were worth more at that time than they are now, because there was not such competition. They are now getting five times the quantity they got then, and I suppose that arises from five times the number of men being employed in getting them.

15,384. By sending so many to market has the market itself been brought down?—Yes.

15,385. Then as compared with 10 years ago there are as many mussels on the beds now as there were then?—Yes, the beds are of about the same limits, except the Clays. The Clays are now extinct.

15,386. Are there as many mussels on the beds?—Yes.

15,387. What do they sell for as manure?—I have no idea.

15,388. I think you said that the herrings have been disappearing of late years?—They have been gradually decreasing for some time.

15,389. How far can you trace their disappearance back?—I can trace them back for many years. The time was when we could bring them into Boston in such large numbers that we could not sell them. They used to lie here in tons.

15,390. Was that an exceptional year, because I see from the history of Boston that the herrings have been disappearing since 1812?—In my day we could get herrings to any amount.

15,391. Was that for more than one good year together?—Yes, for several years.

15,392. Since 1812?—Yes, 16 or 17 years back. Since I have been a pilot.

15,393. I want clearly to understand whether that occurred only in one year or for several consecutive years?—It occurred for several years.

15,394. Has the sprat-fishing been going on all that time?—Yes.

15,395. Have young herrings been caught during that time in the stow nets?—Yes, three-fourths of the sprats are young herrings.

15,396. Then catching young herrings did not affect the catch of herrings at their season?—No.

15,397. I thought you said that the sprat-fishing has fallen off?—The herring-fishing has fallen off, and the sprats have fallen off too, but there was not so much spratting in the early part of my time as there has been since.

15,398. How long is it since the sprat-fishing began to fall off?—We have got none during four or five years in any quantity.

15,399. Was the supply pretty regular before then?—There was not the same quantity caught at that time. I do not know that we had more than one or two boats out of this town at that time.

15,400. What do the men fish for in the summer time?—Generally for soles and shrimps, and many of the bigger boats are employed in taking bait down to the north to lay it on the beds there.

15,401. For the winter fishery?—Yes.

15,402. They do employ themselves about the mussel beds in the summer?—Yes

15,403. Do they keep the mussels alive till they get on the coast off Scarborough?—Yes, they will keep for about five days even in hot weather.

15,404. Not in very hot weather?—Perhaps not quite so long, but they risk that.

15,405. Do you think that one water bailiff is enough to look after the fishing?—I believe that one is quite enough if we had proper protection and were enabled to carry out the letter of the law.

15,406. The magistrates have refused to grant summonses?—Yes, I applied for several, and they expressed a doubt as to how they ought to act. I was ordered by the town clerk to wait for further instructions.

15,407. Does the jurisdiction of the Boston corporation extend over one-half of the Wash?—It extends to the Outer Knock, and the parallel line drawn there forms the boundary between Lynn and Boston.

15,408. Is that about half for each?—Yes.

15,409. Do you think that one other man looking after the Wash on the part of the corporation of Lynn would be sufficient?—Yes.

15,410. (*Mr. Caird.*) Is there a good smelt-fishing here?—No.

15,411. Are smelts not caught here?—They have been caught here in abundance.

15,412. Then are they falling off?—Yes.

15,413. Can you trace the gradual decrease of the smelts?—Yes. Where there used to be a smelt fishery the bed of the Wash has generally been filled up by the recent improvements.

15,414. Then do the fish no longer come here?—Very few; they are getting to be scarce fishing.

15,415. You do not attribute that to any mode of fishing that has been adopted, but to some improvements in the reclamation of the land?—Yes; it has arisen entirely from the improvements which have been made, and from the way in which the Wash has been filled up.

15,416. No destructive mode of fishing has injured the smelts?—No.

15,417. (*Mr. Lefevre.*) Were many complaints made by the men when you tried to enforce the regulation about riddling the mussels on the spot from which they were taken?—Yes. They could not riddle them on the beds, because the mussels were imbedded in mud, and it was therefore impossible for them to riddle them. They must bring them to the water somewhere, and there was no water nearer than half-a-mile.

15,418. If they had been compelled to riddle them in the boats would that have been sufficient?—I think so, provided they took the refuse back again.

15,419. Did you permit that?—Yes, that was carried out to a certain extent.

15,420. Was there any complaint on the part of the men as to interference in that respect?—Yes, ther were still complaints, because they found it impossible to do as much work.

15,421. How was that?—Suppose a man brings a cargo of mussels up, he chucks them ashore and leaves another man to riddle them. If he riddled them himself in the boat he must stop his work until he has riddled them.

15,422. What do they pay the men for riddling them?—I do not know what the rate is, but it so much per bag.

15,423. And it can be done cheaper ashore than in the boat?—Yes, twice the amount of work can be done in that way. The man leaves one lot of mussels ashore and goes for another cargo while they are being riddled. If they were to be riddled in the boat they would have to be cleaned alongside the wharf.

15,424. (*Professor Huxley.*) You were talking just now about mussels in fresh-water. A gentleman in the room has been good enough to put one of these mussels into my hand. Do you mean that these mussels are constantly in fresh-water?—No.

15,425. This, for example, is covered with acorn shells?—It has been taken off our pier. In the summer season when they stop the sluice there is nothing in the river but salt water. At times we have had no fresh water down the Haven for eight months.

15,426. Every tide you have salt water?—Yes.

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15,427. (*Mr. Lefevre.*) Besides the mussels which you say are taken away by the men who come from the north for bait, are any sold at Boston for bait?—Yes; at present there are a great many going by rail down to the northern parts.

15,428. Are those brought by the Boston fishermen sold there?—Yes, they are put in the railroad trucks and sent away.

15,429. Are they included in the 100 tons which you say are sent into the country?—I believe I speak within limits when I say that there are more than 100 tons.

15,430. How much is used for food and how much is sent away?—I do not know; Mr. Hayes will be able, I think, to give you the statistics. He is the contractor for those that go by the railroad.

The witness withdrew.

D. Hayes.

DANIEL HAYES called and examined.

15,431. (*Mr. Caird.*) You are a smack owner and fish salesman I understand?—Yes.

15,432. Have you been long resident in Boston?—Yes.

15,433. How long have you been engaged in that business?—For 40 years.

15,434. Can you tell us with regard to the supply of the various kinds of fish whether the quantity now received here is increasing or diminishing?—It is diminishing very much.

15,435. When did you begin to notice the diminution in a marked manner?—I have noticed it for the last 20 years.

15,436. Has it been a gradual diminution for 20 years past?—Yes.

15,437. Has any particular kind of fish diminished more than another?—I have noticed a diminution, particularly in herrings.

15,438. Of all other kinds of fish is there still a fair supply?—There is not as large a supply as before, but the falling-off in the quantity of herrings has been particularly marked.

15,439. The falling off in the quantity of herrings has been more marked than in any other kind of fish?—Yes, and I attribute it to the use of the stow nets.

15,440. What kinds of fish are brought to this market?—Soles and smelts; that is all I know of particularly.

15,441. Has the supply of soles much decreased?—Greatly.

15,442. When did that decrease begin to show itself most?—The quantity has been decreasing during the last 12 or 14 years.

15,443. Are there as many boats employed in the fishing here now as there were 14 years ago?—I should say there are rather more.

15,444. Is the total quantity caught by that increased number of boats not equal to what it was 14 years ago?—No.

15,445. You speak positively upon that point from facts within your own knowledge?—Yes.

15,446. Can you give us those facts?—Yes.

15,447. What quantity was caught in the course of a week, or a month, or a season, 14 years ago?—What kind of fish are you asking about?

15,448. I am speaking of all kinds of fish?—I have seen 300,000 or 400,000 herrings brought here in a morning; and now 300 or 400 are all that we can raise.

15,449. Was that in December or January?—Yes, in the winter season.

15,450. How long is it since you had a take of 300,000 or 400,000 in one morning?—14 or 15 years ago.

15,451. Have you never within that time had a good fishing, as compared with previous bad fishings?—No; the quantity caught has come down from 300,000 or 400,000 to 300 or 400.

15,452. But what I want to know is this, do not the seasons vary; have you not had one good season, and then one not so good?—No.

15,453. Has there been a constant decline?—Yes.

15,454. Has the supply now diminished to a serious extent?—We don't get more than 300 or 400 at all in a day.

15,455. At no time?—Yes, at no time.

15,456. Has the smelt-fishing decreased in the same proportion?—I think not so much.

15,457. Is there still a considerable supply of smelts here?—I think there is a fair supply caught here now. There used to be a great quantity, but since we had the new cut made there has been a great decrease. There used to be many thousands before the cut was made. The making of that cut cleared a large portion of them away.

15,458. With regard to mussels, has the quantity of mussels decreased or increased within your knowledge?—They have increased quite lately.

15,459. They have increased since 1859?—Yes.

15,460. Can you tell us what quantity is brought here every day on the average?—I can't tell you that. I have sent 100 tons away in a week to Eyemouth, in Scotland.

15,461. Are you doing that now?—No, I am not sending away now.

15,462. Is not this the season at which they are usually sent?—Yes; but the smacks take them down now if there is a fair wind.

15,463. If there is a contrary wind are they sent by land?—Yes, but there have been favourable winds lately.

15,464. Do you sell a large quantity for food?—No, I don't.

15,465. Is there a large quantity sold for food?—Yes.

15,466. Where do they go?—To Manchester, Sheffield, and other places.

15,467. What quantity is sold for food?—I cannot tell.

15,468. Has it been an increasing quantity for the last three years?—Yes, it has very much increased.

15,469. Then the quantity of mussels for all purposes has much increased?—Yes.

15,470. Do you apprehend that there will soon be a decrease?—Yes, if they are allowed to be taken for manure.

15,471. Have the mussel beds shown any signs recently of falling off in their yield?—I don't think they have.

15,472. Then why do you imagine that they will do so?—I think they will if truck-loads are allowed to be sent away with all the brood in them. They don't go for the small ones purposely, but for any they can come at, and they take away the small with the large.

15,473. To what do you attribute the falling off in the take of soles?—I think it is owing to the fishermen catching small ones. Their wives meet them when they come in, and take them round by basketfuls for sale not more than three or four inches long. They have done that for years. The proper size at which they should be taken is about 18 inches, but they take them less than that.

15,474. Do they sell them at a reduced price?—No doubt they do.

15,475. Is there a large quantity sold in that way?—You are speaking now of soles?

15,476. Yes. Is a large proportion of the whole catch sold in that way?—Yes, a great quantity.

15,477. Half of the whole quantity?—I should say more than one half.

15,478. Has that continued for many years?—Yes.

15,479. The humbler classes have had in that way the advantage of getting a cheaper kind of fish than they would otherwise have?—Yes. I have known 20 or 30 pairs of soles sold for 6*d.*

15,480. Can you tell us within your recollection how far the quantity of soles brought to the market in a day, on the average—I mean marketable soles

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such as you sell—has decreased?—They scarcely get any now; the men do not care about going after them.

15,481. Are small soles caught and sold?—Yes.

15,482. Are they caught and sold in large quantities?—Yes.

15,483. With regard to the sprat fishery, has it decreased much within your recollection?—There has been nothing to signify done in it for the last two or three years. They have been partly young herrings and sprats that have been caught.

15,484. Are they sold for food?—Yes; they are sold in the manufacturing towns. A great quantity of them are sold for manure.

15,485. Within recent years have they been sold here for manure?—When the market will not take them they generally sell them for manure; but the market will take a great quantity just now, as we have a very good delivery for them.

15,486. Do you sell oysters here?—Yes.

15,487. Is the take of oysters increasing or diminishing?—It is much about the same. I think it would increase very much if they made the rings of the bottom bag with which they catch them less.

15,488. How long does your experience extend with regard to the oyster take here?—We have always had them in Lynn Well and Boston Deeps, but they get them very small compared with what they did formerly.

15,489. Has the quantity very much decreased altogether?—Yes.

15,490. What quantity will be taken in a season, say in bushels or tons?—We buy them by the thousand here, and not by the bushel, as in other places.

15,491. Then what quantity will be taken by the thousand?—I cannot say.

15,492. (*Professor Huxley.*) Have you caught herrings here yourself?—No.

15,493. You have not been a herring-catcher?—No.

15,494. Do you buy herrings?—Yes.

15,495. At what time of the year do you find that the herrings are most abundant?—They go now about this time and get them.

15,496. At the beginning of December?—Yes, they have caught a few to-day.

15,497. Are there any in the town now?—There were in the morning; a man asked me to buy some.

15,498. In what condition are they now?—In very fine condition.

15,499. Are they fat fish?—Yes.

15,500. Full fish?—Yes, fat fish and full fish.

15,501. Are there any full fish now?—Yes, they are all full fish. They were all full fish that I saw to-day.

15,502. Do you think those herrings are bred here in the estuary, or do they come from some other place?—I think they never leave us.

15,503. Were the herrings you saw here this morning caught here?—They were quite fresh and good. I am sure they were caught here; I know them very well when I see them.

15,504. Is it a different description of herring from the northern herring?—Yes, the northern herring is as big again.

15,505. Do you think we can get some to-day?—I don't think you can. One man had 100 that was caught in the main. I believe he set some stakes, and the tide drove them through.

15,506. Were they quite full?—Yes.

15,507. Is that generally the case?—Mostly.

15,508. How long do they remain full?—I never saw any empty, not lately. I have never seen any shot herrings.

15,509. During how many months do you get them?—About three or four months.

15,510. Are they always full herrings?—They have always been full that I have seen. I have seen a vast quantity of shot herrings from the north, but ours are generally full.

15,511. Do they not become shot at some time or other?—I have never seen any.

15,512. What is the average length of the herring here?—It is a small little herring.

15,513. Is it not more than eight or nine inches long?—No.

15,514. Then it is a quite different looking herring from the northern herring?—Yes, different looking altogether.

15,515. Are the mussels that are caught for bait here riddled?—No, they are all taken with the brood, with the moss on. They would drive off if they did not keep them together.

15,516. In speaking of the "moss" you mean the silky kind of stuff that holds them together?—Yes.

15,517. Then the carrying away of mussels for bait is as destructive as taking them for manure?—I daresay it is.

15,518. Do you not take into account that the carrying away of mussels for bait is one of the causes that has led to the destruction of the supply?—No doubt it is one of the causes.

15,519. Would it be of any advantage if the mussels for bait were riddled?—They would not have them if they were riddled. They could not lay them down on their mussel parks; they would all swim away.

15,520. Then if mussels are to be sold for bait they must be taken unriddled?—Yes.

15,521. If there were any regulations that would put an end to the taking away of mussels unriddled would that put an end to the supply for bait?—Yes.

15,522. So that any regulation which contemplated the suppression of the taking of mussels for manure would prevent the taking of them for bait?—Yes.

15,523. Is this a great market for mussels for bait?—Yes, we send away many to Eyemouth and other parts of Scotland.

15,524. Can you think of any regulation that would prevent the destruction of the fishing for mussels, and allow them to be taken for bait?—I am not aware of any.

15,525. How are soles caught here?—The largest part of them are caught now in the shrimp nets. They used to be caught in sole nets.

15,526. What kind of a thing is a sole net?—It is about 12 yards long.

15,527. Is it a bag net?—It goes with trawl leads.

15,528. Is it made like a trawl?—Yes.

15,529. Is it a kind of light trawl?—Yes.

15,530. What is the length of the beam?—That depends upon the size of the boat. It is generally about 14 feet long.

15,531. Is it used in an open boat?—Yes, the shrimp boats catch soles as well as the trawl boats.

15,532. The ordinary way of catching them is by a regular trawl net, only that the trawl has a small beam?—Yes.

15,533. Did you ever hear it stated that these nets used in the Wash caught spawn in them?—I never heard of such a thing.

15,534. Do you think that the practice of trawling is very destructive to the young brood?—No, but I think the stow nets kill everything.

15,535. Does the herring you speak of spawn in the Wash?—I don't think that it ever leaves us.

15,536. At what time of the year do they spawn?—About May, I think.

15,537. As late as May?—Yes.

15,538. Are the fish caught in May?—No, not in May; generally in January.

15,539. Is that because the fishermen don't set the nets for them?—I imagine that is so.

15,540. What makes you think they spawn in May?—Because I have seen them very thin then.

15,541. But you have never seen herring spawn taken in any of the sole trawls?—No.

15,542. (*Mr. Lefevre.*) Do you recollect the time when the regulations were enforced with regard to riddling on the banks?—Yes.

15,543. Did the supply of mussels for bait fall off?—

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There was not any supply for bait then. It is only of late years that we have got a supply for bait.

15,544. How long ago?—I wrote to Mr. Seymour Clarke, the manager of the Great Northern Railway, for a rate, and they agreed to carry them for 1*l.* a ton. It is only of late years that they have been sold for bait.

15,545. But have any boats come down from the north and loaded themselves with mussels?—Yes, scores of mussels have gone away, but none by rail until lately.

15,546. Were the regulations enforced upon them as well as upon the inhabitants of Boston?—Yes.

15,547. Did you find that the smacks did not come in consequence, and that they did not take mussels?—We were unable to stop them. The authorities here tried to stop them, but they did not succeed.

15,548. What fish do you buy mostly here?—I send for fish from Grimsby. I get the best part of it from that place.

15,549. Then you don't do any great business with the fishermen who come into Boston?—No. I have a few smacks and get a few mussels and soles.

15,550. What sort of vessels are yours?—Trawlers.

15,551. Where do they fish?—Down in the Deeps.

15,552. Do they catch soles there?—Yes; but I have never seen one this last season. It was of no use.

15,553. (*Mr. Caird.*) Do you think that any improvement would be likely to be made upon the yield of mussels on these beds by adopting a regulation requiring the beds to be fished in regular succession, so that some of them would not be disturbed at all for a year?—I think if the mussels were riddled on the beds instead of being brought to Boston they would increase without any other regulation.

15,554. But you said just now that if they were riddled at all they would be useless for bait?—Yes.

15,555. They would not be purchased for bait in that case?—No; not if they were washed and cleaned.

15,556. (*Mr. Lefevre.*) Would that not be a great loss to the fishermen and to the town?—Yes.

15,557. Is there anything paid to the town for the right of taking mussels?—No.

15,558. Do strangers pay anything for the right of taking mussels?—No.

15,559. Are they considered public property?—Yes, anybody can take them who likes.

15,560. Is there any mode by which you conceive the quantity of mussels could be increased for the benefit of the public?—Not that I know of. I know there are thousands of acres at this time.

15,561. They are very plentiful just now?—Yes, very plentiful.

15,562. But you are apprehensive that that abundance will soon cease?—Yes, if they take them as they are taking them now.

15,563. According to the evidence we have before us there appears to be a smaller quantity taken for manure than for anything else?—A great many are taken about Thornham and Lynn.

15,564. I think that the water bailiff stated that about one-third are taken for bait, a third for food, and a third for manure?—About 100 tons are taken for food.

15,565. Sold for food?—Yes.

15,566. And about as much for manure?—I don't know; they are not so particular what they take for manure.

15,567. Do they take them any size for bait?—No; they must be big mussels to be of any use for bait.

15,568. But do they not take small ones with them?—Yes, they take small ones with them because they dare not part them.

15,569. Then, practically, both kinds are taken for the same purpose?—Yes; but when they come here for bait they are riddled, and the small ones go through the riddle.

15,570. But are they put back again upon the banks?—No.

15,571. There is not a system adopted by which they are put back?—No.

15,572. Then, practically, they are destroyed?—Yes.

The witness withdrew.

W. Simonds.

WILLIAM SIMONDS called and examined.

15,573. (*Mr. Lefevre.*) We were told by the water bailiff that regulations were laid down by the corporation of Boston for the management of the fisheries, but that they were not afterwards enforced in consequence of the magistrates refusing to issue summonses?—The point in dispute was that the place for which the summonses were applied for was deemed to be out of our jurisdiction. They riddled the mussels on the Great Northern stage, which is out of the borough, and the magistrates here thought they had no power. It has been a matter of dispute for some time. The fishermen bring them up in boatloads, and they riddle them on that stage so that they can be put on the Great Northern Railway at once.

15,574. Did the magistrates refuse to issue summonses on the ground that the mussels were riddled beyond their jurisdiction?—Yes, that was the reason.

15,575. Have you made no attempt to get summonses issued on the part of the county magistrates?—I am so very young in office, having only been mayor for a fortnight, that I can give you no information.

15,576. But how long have you been a member of the corporation?—I have been a member of the corporation for several years.

15,577. Then you are acquainted with the proceedings of the corporation?—Yes. I believe there has been an attempt made to secure the assistance of the county magistrates, and I think the point at issue is whether the fact that these mussels are riddled in our river does not give us the control as river commissioners, but the point has not been yet settled.

15,578. I think it is three years since an attempt was made to enforce these regulations?—We have made various attempts to enforce them, but I don't suppose we have succeeded practically in doing any good.

15,579. You have taken no steps practically during that time to enforce the regulations that you laid down?—We have only taken steps by appointing a water bailiff, and it appears that all the steps we have taken have been abortive.

15,580. You have taken no steps to give strength to the authority of the water bailiff?—We have done nothing more than make the appointment.

15,581. (*Professor Huxley.*) I should like to know what it is the corporation of Boston complain of with regard to the fisheries. We have visited the town at the invitation of the corporation in order to ascertain what complaint you have to make, but we have not as yet definitely arrived at any clear grievance. What is the complaint on the part of the fishermen, or of those who are entrusted in the fisheries?—Of myself I know nothing about the matter.

The witness withdrew.

T. Wise.

THOMAS WISE called and examined.

15,582. (*Professor Huxley.*) I wish, Mr. Wise, to know what are the particular grievances that are complained of by the fishermenor other persons interested in the fisheries here?—They complain that the fish are taken with nets of an mproper sized mesh, and that mussels are being taken without any regard to the size at which they ought to be taken. The young brood is removed bodily, and in course of time we shall lose our fishing ground. We have found that to be the case to a certain extent.

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15,583. Do you consider that the mode of fishing practised here is wasteful?—Yes. When we appointed a water bailiff in 1859 our mussel beds were very nearly exhausted. We took steps to meet the corporation of Lynn to endeavour to bring about joint measures in order to secure us from losing the mussels altogether. We were of opinion that these mussel beds were very valuable to our fishermen, and that the destruction that was going on ought to be prevented.

15,584. Then you complain that there are wasteful and destructive modes of fishing practised here?—Yes.

15,585. Will you be good enough to enumerate them, in the first place as regards ordinary fish; let us take soles to begin with?—I consider that they are destroyed by being taken in shrimp nets, which are of too small a mesh. Instead of the fish being taken when they are in a fit condition for the market they are frequently so small that they are thrown overboard into the sea.

15,586. You consider that a wasteful mode of fishing?—Yes; these small fish are smuggled into the town and sold whenever it is possible.

15,587. Why are they smuggled?—To prevent the water bailiff detecting that they are of too small a size. They skin them.

15,588. How is that?—The head is taken off; they should be so long from head to tail. They take off the head so that we can't measure them; that has hitherto bothered him.

15,589. Has the offender been allowed to escape on doing that?—The bailiff could not do anything in the matter.

15,590. But he could surely state what the maximum length of the fish was although the nose was cut off?—He could hardly say that originally it had not been of the proper size.

15,591. I think your bailiff must have been easily beaten?—The falling off in the fishery here has been sensibly felt by the people engaged in the fishing trade. I recollect when the boats got 30*l.*, 40*l.*, or 50*l.* worth of fish in one haul in the herring-fishing.

15,592. To what do you ascribe the falling off in the herring-fishing?—To the sprat-fishing.

15,593. Do you mean stow-boat fishing?—Yes. If you examine the small fish sold as sprats you will find that eight out of ten of them are young herrings.

15,594. Has that sprat-fishing gone on for many years?—For about 12 or 14 years.

15,595. Has there been a gradual diminution in the number of herrings caught during that time?—Yes, there has been a gradual and very perceptible diminution.

15,596. With regard to mussels, from what cause do you think the falling off in the yield has taken place?—I think the cause has been the taking of mussels without regard to their age,—the taking of the young brood.

15,597. What regulations do you think would be effective in preventing their further destruction?—I am not aware, unless they were laid down on separate beds and taken up in rotation.

15,598. Do you think it would be a sufficient protection if a third or one-half of the surface of the mussel-beds was protected for a year or two, not allowed to be fished, and a regular rotation enforced?—I think the taking of them in rotation would be the best system.

15,599. Do you think that could be carried pretty easily into practice?—Yes.

15,600. It would not be at all difficult to say what beds ought not to be fished?—No, the mussels here are quite uncovered. This has been a matter which has engaged the attention of the corporation for a great number of years.

15,601. (*Mr. Lefevre.*) Has the sprat-fishing fallen off as well as the herring-fishing?—The quantity of sprats taken now is not nearly as large as it has been.

15,602. Do you know whether the proportion of young herrings is about the same?—About the same, I think.

15,603. They still continue to catch a considerable number of young herrings?—Yes; I have seen at one period 20 boatloads of sprats taken in a day, and now you don't see a boatload once a fortnight.

15,604. (*Mr. Caird.*) Has not the sprat-fishing been practised here longer than 12 or 14 years?—No.

15,605. There was no sprat-fishing 20, 30, or 40 years ago?—No, I don't recollect that there was. At one time, 30 or 35 years ago I think, sprats were caught above the bridge towards the sluice. They used to be brought up by the tide, and the fishermen put nets across the river and caught them in the receding tide.

The witness withdrew.

J. Cousens.

JOHN COUSENS called and examined.

15,606. (*Mr. Caird.*) Are you a fisherman here?—Yes.

15,607. Have you been long engaged as a fisherman?—Yes.

15,608. For how many years?—Nearly 40; 37 I think.

15,609. What kind of fish do you catch here?—When I first started fishing I caught smelts, sprats, buts, plaice, and so on in general, but afterwards I managed to get a larger boat, and I went after mussels, sprats, and herrings.

15,610. What do you do now?—I am engaged in musseling generally.

15,611. Do you get mussels all the year round?—No.

15,612. What else do you fish for?—I go shrimping and prawning in the summer season.

15,613. What are the different seasons in which you catch the different fish?—The mussels we get in this season.

15,614. What is the season?—From September until the following May, or a little after.

15,615. And then what do you begin to fish in May?—I then fish for shrimps, prawns, soles, and so on.

15,616. How long does that season last?—In general during the whole of September and October.

15,617. From October what do you fish then?—It depends on the season. If the season comes on severe we begin musseling again, or oystering.

15,618. What time of the year do you fish for smelts?—Smelts have two seasons. The first, the spring season, commences at the beginning of March and lasts until the 1st of May. Then it goes off from May until September.

15,619. Is there no fishing for smelts during the warm months?—No.

15,620. When do you begin again?—In September.

15,621. And then do you fish on until March?—Yes.

15,622. Has the take of smelts increased or diminished within your recollection?—It has diminished somewhat in consequence of the works which have been in progress in our rivers.

15,623. Have those works diminished the fishing?—Yes. They have destroyed the food for which the smelts came into the haven.

15,624. Is there not as large a quantity of smelts taken now as there was 20 years ago?—No.

15,625. And you attribute that to some improvements which have been made in the rivers, inland?—Yes; the consequence of the improvements has been that there is no food within the limits of our waters upon which the smelts can feed.

15,626. And formerly there was food for them?—Yes.

15,627. With regard to shrimps, has the quantity

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caught here increased or diminished?—It has decidedly diminished.

15,628. What is the cause of that?—I think it is partly owing to the reclamation of the land. The land has been much taken in of late years.

15,629. During your experience, which extends over nearly 40 years, has there been much of the land over which you used to fish reclaimed from the sea?—Yes.

15,630. And was the position now occupied by that reclaimed land formerly a good position for catching shrimps?—No, that is not it exactly. Formerly at times the shrimps used to come up to those places, and then go off again to deeper places; now they come up to the small brush-work they have put in the river, and they do not in general go down again. I think it is very likely that the fresh water and the weed coming down the haven kill the shrimps, and prevent them from getting down into our Deeps. I think that has been the principal cause of the diminution in the number of shrimps here.

15,631. Are there more boats engaged in fishing for shrimps than there used to be?—Yes; I think there are.

15,632. Have they increased much?—Yes.

15,633. In recent years?—Yes.

15,634. Are there twice as many boats as there were formerly?—Yes, I think so.

15,635. Do all of them make a good living?—They do not all of them make a good living. Some will make very little, while others will no doubt make a very nice living.

15,636. On the whole is the number of shrimps now taken by double the number of boats as many as was taken 10 years ago?—No, I think not.

15,637. Has that been partly caused by over-fishing the shrimps?—No, because the Deeps, both Lynn Deeps and Boston Deeps, and the Gat, are quite large enough for far more boats than have been engaged in the fishing. There has been no injury done in that way, nor has there been any interruption to the supply.

15,638. What is the cause of the interruption in the fishing?—I believe the principal cause is what I have already stated, namely, the inclosure of the banks. The result of that has been to destroy the food, and now there is no food for the fish to come after in our rivers.

15,639. I think you said that the supply of soles has also decreased?—Not at all times.

15,640. Are there as many soles caught now as were caught formerly?—No; but it depends in a great measure on the food to be found in Boston Deeps.

15,641. Are there as many people employed in fishing for soles as there used to be?—No.

15,642. Is that because it has been found not to be a paying business?—Yes.

15,643. What is the cause of that?—I believe the cause has been the variation in the seasons of the year. We have had north-east, southerly, and other unfavourable winds during the last two years. They have been very prevalent and have injured the fishing.

15,644. What effect has a southerly wind on you?—A southerly wind drives down the Lynn and Boston Deeps, and along the coast, and the fish will not face it. It is the same with the sprats and herrings.

15,645. Then do you attribute the decrease in the number of soles caught here to the prevalence of winds blowing down the Deeps?—Yes, partly.

15,646. Has there been a greater prevalence of late years of winds from that quarter than formerly?—At times there has. Mild weather would make a great deal of difference.

15,647. (*Mr. Lefevre.*) Has the wind lately been generally southerly?—Yes; for the last 18 months.

15,648. (*Mr. Caird.*) Southerly and north-easterly?—Yes, southerly and north-easterly.

15,649. (*Mr. Lefevre.*) Do you mean that the wind has been blowing from the land towards the sea?—Yes.

15,650. (*Mr. Caird.*) Has the sprat-fishing increased or diminished?—It has diminished.

15,651. Are there as many persons employed in the sprat-fishing as there used to be?—Yes.

15,652. Do they not take as many fish?—No.

15,653. How long is it since sprat-fishing began here?—I cannot say.

15,654. Has it been as long as you can recollect?—There was sprat-fishing here before I can recollect.

15,655. Did they catch them by using stow-boats?—Yes; we all use stow-boats.

15,655*a*. Have stow-boats been used as long as you can recollect?—Yes.

15,656. That has always been the system practised here in fishing for sprats?—Yes.

15,657. Has the number of stow-boats increased at Boston?—Yes.

15,658. Has it materially increased?—Yes.

15,659. Can you go back for 20 years and compare the take of sprats on the average 20 years ago with what it was five years ago, when I believe you had a very good take?—There was a very fair take five years ago.

15,660. How was it 20 years ago?—There were very large takes then.

15,661. Had you a larger take 20 years ago than you had five years ago?—Yes, I think we had.

15,662. Has there been no increase during the last 20 years?—No, I believe not. Between 20 and five years ago I do not think we had any large season, but, on the contrary, we had a decrease betwixt the two periods.

15,663. Since then have you had large takes in recent years?—Two years ago we had a nice shoal of sprats, and then they went away from us, and we had no more.

15,664. What was the cause of that?—A large species of seaweed came up in Boston Deeps and Lynn Deeps and all over the Lincolnshire and Norfolk coasts. Southerly winds then set in, and all the half-grown herrings and sprats went away together.

15,665. Did they go away along with the seaweed you have mentioned?—Yes; they deliberately went away from us, and we were greatly distressed in consequence.

15,666. Have sprats been caught and sold for manure for a long period?—Yes.

15,667. Are they sold for manure as a matter of course, or when they cannot be sold for food?—When we have no sale for them for food we sell them for manure. Suppose a boat comes up with 10 or 20 tons of sprats, say that it should happen to have 20 tons; in that case we should take four or five tons off the top and send them to market and get our money for them as food. The rest would not be quite good enough for the market, and would be sold for manure.

15,668. Could you do nothing else with it?—No.

15,669. I presume that wherever you can sell it for food, you do so because you get a better price for it?—Yes.

15,670. What number of boats are engaged in the sprat-fishing in the season?—I can hardly tell. I have one only.

15,670*a*. With your one boat in a good season, how many tons of sprats do you catch?—It depends on the weather.

15,670*b*. But take a good season; supposing the weather is favourable?—We depend on the tides.

15,671. But suppose the tides are favourable. They come and go every day, do they not?—Decidedly not. The tides only last us perhaps a fortnight. There might be a gale of wind during those tides, and we might be only a day or two out at the fishing. Perhaps a boat might get five or 10 tons; but that would be according to the size of the boat.

15,672. Will a boat sometimes take as much as 10 tons?—Yes; and sometimes only five tons or three tons.

15,673. What is the largest take you ever saw at one time?—12 tons.

15,674. Will you get that in succession in a course

of days ?—No ; the boat would have to come away from the ground to deliver them either for sale or for manure, according to the weather.

15,675. If anybody told you that by over-fishing sprats you have injured your prospects for the future fishing of sprats, would you believe that that is true ?—I am telling you the truth.

15,676. Do you think that by over-fishing the sprats in the Wash, you may take too many out one year and too few the next ?—Decidedly not. We had none last year, and the season before last we had very few. Some boats will get perhaps three or four chaldron, while others will get only three or four bushels. We none of us got any last year, but perhaps this next season may be more profitable.

15,676*a*. Although you caught none last year, you think it possible that you may have a good season this year ?—Yes.

15,677. And if you catch a good number this year, you may catch an equally good number next year ?—Yes. There is a large quantity of codfish caught now in Boston Deeps. The Grimsby, Cleethorpes, and Hull smacks are getting codfish out of Boston Deeps.

15,677*a*. Are they trawling ?—No, long-lining ; and we think we shall have a good sprat and herring season.

15,678. Does a good herring season follow a good cod season ?—Yes.

15,679. Then you look for a good season because a good many cod have been caught ?—Yes, at the Outer Knock buoy.

15,680. Do you think there may be as good a season as there has been formerly ?—I have no reason to think to the contrary. I am sure I hope to see it, if only for the sake of those poor fellows who catch herrings on the mains at Bennington, Wrangle, and so on.

15,680*a*. (*Mr. Lefevre.*) Where is Wrangle ?—On the Lincolnshire coast, before you get down to Wainfleet.

15,681. Along the Friskney Flats ?—Yes.

15,682. (*Mr. Caird.*) Has the herring-fishing fallen off ?—Yes, during the last two years.

15,683. Then do you expect that you may have as good a season this year as you used to have in former times ?—I think it is very possible. Our Deeps are equally the same that they were formerly.

15,684. Have you not destroyed the brood ?—No, we don't take the brood.

15,685. Do you take no young herrings with the sprats ?—Only rarely. If they come in the sprat net of course we cannot help taking them, but we do not destroy any more than we can help.

15,686. Can you speak of the take of herrings as far back as 20 years ago ?—Yes.

15,687. Had you 20 years ago sometimes a very good season, and sometimes a middling season ?—20 years ago we had very middling seasons.

15,688. Was the fishing as bad as it is now ?—It was very inferior. 20 years ago it was very bad.

15,689. Did it then begin to increase ?—A little trifle. That was owing to the herrings coming from the Norfolk coast.

15,690. How did it go on ? Give us the history of the herring-fishing for the last 20 years ?—The herrings in general used to come from the north coast across the Dowsings into our Deeps. That was the sort of fish we used to catch. It was not the North Sea fish, however. The North Sea fish never enter our Deeps.

15,690*a*. Are your fish smaller fish than those caught off the Norfolk coast ?—Yes.

15,691. Smaller than those caught off Yarmouth ?—Yes.

15,692. Are they the same sort of herring as the Yarmouth herring ?—No, decidedly not.

15,693. You say they come from the outside ?—Yes, and we have also fish that have been bred in our Deeps. They grow to what we call "half-grown stuff," half-grown herring, and then in the sprat season we catch them and get a good price for them in the manufacturing districts, equally as good as for herrings of a proper size.

15,694. Is that because they are scarce then ?—Yes, and we are obliged to take such like fish as this in order to get a living.

15,695. As a fisherman is it your opinion that there is no such prospect of a decrease in herrings as to lead you to suppose that the quantity altogether has been seriously diminished in the Wash ?—Not in the least.

15,696. Do you think it probable that you will have as good seasons as you have ever had before ?—Yes, I believe it is very probable that we shall have a good supply this season.

15,697. Did you practise the same kind of fishing in former years that you practise now ?—Yes, for 35 years.

15,698. Are there more boats employed now than in former years ?—Yes.

15,698*a*. You are a mussel-fisher as well as a herring-fisher ?—Yes.

15,699. Have you had many years experience of the mussel beds ?—Yes.

15,700. Twenty or 30 ?—Yes.

15,700*a*. Did the mussel beds 20 or 30 years ago yield as many mussels as they do now ?—No.

15,701. Do you remember any period when the mussel beds were much fished out ?—Yes.

15,702. When ?—About seven years ago.

15,703. What was the cause of that ?—By taking them away previously for manure in the manner they are doing now from Brancaster and Thornham.

15,704. Do they take the same kind of mussels that you take for bait ?—They take all the small brood away.

15,705. Is not the same kind taken for both purposes ?—No.

15,706. Do you pick them ?—We take the largest.

15,707. Do you throw the small ones back again ?—There are no small ones with the large.

15,708. Are not small mussels found with the large ones ?—No.

15,709. Do you send no small ones with the large mussels when you send them away for bait ?—No, only a few odd ones.

15,709*a*. You pick them for bait ?—We pick up the best both for bait and for consumption in the manufacturing districts.

15,710. Are no small ones taken for food ?—No.

15,710*a*. Do you bring no small mussels ashore ?—No.

15,711. Do you riddle them ?—Yes, but there are no small ones among them.

15,712. How can you prevent yourself from taking small ones ?—On one bed they are all large mussels, and on another they are all small.

15,713. Do those who take the mussels for manure go on the same beds that you do ?—They go where the small mussels are, and they collect the brood at the time we are getting large mussels. They collect them and take them for manure. If they were allowed to remain they would be distributed by gales of wind and strong tides, and would be distributed over a larger space for us to collect at a future time. But they are not allowed to remain. There were two boats, both belonging, I believe, to Brancaster taking them away for six, seven, or eight weeks.

15,714. And are they of quite a different age from the mussels that you take for bait ?—Yes, they are decidedly, and they are a much smaller mussel.

15,715. Do you riddle the mussels you take for bait ?—We don't riddle anything at all. We only take the dirt away. We dare not take any small mussels because they would not suit our markets. We take them as nearly as possible all of one size.

15,716. Have you had a large supply of mussels during the last three years ?—Yes.

15,717. What has been the cause of that large supply ?—Seven years ago the brood fell. They were three years breeding. In some places where the fresh-water ran over them they grew extra fast and laid

thick on the beds. They grew like a lot of oysters, remarkably fast and we always take the largest.

15,718. Have you fished oysters here?—Yes.

15,719. Are there any good oyster beds?—No, we are badly off in that respect.

15,720. Are they all fished?—Yes, we have no oysters about us to speak of.

15,721. Did you ever have any large quantity of oysters?—Yes.

15,722. How have they become exhausted?—In consequence of foreigners coming among them.

15,723. Have they cleaned the beds out?—Yes. I recollect about 15 years ago that we found a very fine bed outside the Boston Gat, but a lot of people came and cleared them out in the course of a month or six weeks.

15,724. Were they entirely taken away?—Yes, entirely.

15,725. Have there been none since?—No.

15,726. (*Professor Huxley.*) I did not understand what you stated just now with regard to riddling the mussels. The water bailiff told us that the mussels obtained for food were regularly riddled through sieves?—Yes.

15,727. Is that operation of riddling not performed to separate the large ones from the small ones but merely to get the dirt off?—Just so.

15,728. Are there no small ones?—Only a few, we do not take any small mussels.

15,729. How can you help it when you are raking them up with a rake?—We only go where the large ones are. I brought up a hundred strike to-day and there would only be two or three bushels with cockle shells, that is all out of the lot that would be small.

15,730. Do you think that the big mussels keep together?—Yes.

15,731. You were speaking about the herrings caught here, have you ever been herring-fishing yourself?—Yes.

15,732. The herrings you catch here are different from the north country herrings?—Yes.

15,733. And different from the Yarmouth herrings?—Yes.

15,734. What is the average size of your herring?—About 14 inches, I think.

15,735. Fourteen inches?—Yes, 12 or 14 inches.

15,736. Why a north country herring would be a good-sized herring at 14 inches?—Perhaps they will only be 12 inches. Ours is a small thick herring.

15,737. I think 12 inches would be the average size of the north country herring?—Ours is smaller than the north country herring.

15,738. What time of the year are your herrings full?—They begin to get full directly.

15,739. Are they all full fish?—Yes.

15,740. How long do they keep full fish?—Generally until March.

15,741. Do they become spent after that?—Yes.

15,742. Where do they spawn?—We believe that they spawn in our Deeps, I have known them spawn there.

15,743. How do you know that?—We have seen the spawn.

15,744. Have you ever found spawn in the net?—No.

15,745. You spoke of there being a particular season for mussels?—Yes.

15,746. What is the season for that?—The season is confined from August to May.

15,747. Are there any got during the rest of the year?—Yes, they are good May over.

15,748. Are they not good between May and August?—They are not as good then because they are spawning.

15,749. Do you not fish for them in those months?—A few odd ones occasionally we get.

15,750. Is that because they are considered out of season and are not so marketable?—Yes.

15,751. (*Mr. Lefevre.*) Is there no sale for them at that time?—No.

15,752. Will they not sell for bait?—No.

15,753. Nor for food?—No, nor yet for food.

15,754. Are they taken for manure then?—Yes, they are sold for manure at that time.

15,755. Then the fishing does go on during the whole year?—Yes.

15,756. Do you think that by any regulation as to close time the supply of mussels would be increased?—It might be if these parties were prevented from taking them for manure. The mussels might then have three or four years more on the beds before they were taken.

15,757. How long is it before a mussel is fit for food?—About three years.

15,758. Is it only in the third year that they are large enough to take?—Yes, at first they come about the size of linseed.

15,759. What size are they after the first year?—About the size of a large bean.

15,760. And what the second year?—They are then ten times as large, I should say. It depends on the season of the year and the weather whether they grow fast or not.

15,761. Does it also depend to some extent on the quantity of them?—Yes; the thicker they are the less they grow, and the more they are separated by gales of wind and so on the better they grow on the beds.

15,762. Do you think the regulations as to riddling on the banks do harm rather than good?—We could not carry them out.

15,763. Do you riddle them in the boats close to the banks?—No, we cannot; when we are there we are up to the knees in mud on the banks.

15,764. Could you not riddle them in the boats?—No; it was utterly impossible to carry them alongside the smack, and to riddle them when we were up to the knees. We should have no water there to wash them with.

15,765. But how is it when you get to the boat; do the boats lie dry?—You can riddle them when you get to the water. It is quite the same whether we try to riddle them in a row-boat or in the smack. It is utterly impossible that we could do so.

15,766. Do you recollect the time when that regulation was attempted to be enforced by the corporation?—Yes, I recollect it well.

15,767. Were they able to enforce it?—No, they were not.

15,768. Was it found impracticable?—Yes, it gave the fishermen here privileges, I believe. We took all our refuse down, and there were parties who took it for manure from the railway stage. I believe it is found to be a remarkably good manure.

15,769. Do you know what it fetches for manure?—Our people make something like a shilling a ton of it.

15,770. Not more than that?—No, it is only the refuse out of the tubs after the mussels have been washed. There are cockle shells, a few cockles, a quantity of cot, and so on.

15,771. What is "cot"?—It is a kind of weed; parties wish to have it for manure.

15,772. Do you know whether any large quantities of mussels are sold for manure, and are simply mussels instead of being the refuse?—Yes.

15,773. What do they get for it a ton?—About 15 shillings.

15,774. Can you tell us what proportion of young herring you find among the sprats; is it any large proportion?—It depends how the shoals go together; I cannot tell you. The sprats go by themselves in general, and the herring in general go by themselves.

15,775. Is there a difference in the price you can get for the sprats and the young herring?—Yes, decidedly.

15,776. What is the difference?—Sometimes for eating full grown sprats will be worth more than young herrings, and sometimes the young herrings will be worth more than the sprats.

15,777. Is that when they are poor?—Yes.

15,778. Out of condition?—We never catch them when they are out of condition.

15,779. Do you ever fish purposely for young herrings?—When our net goes overboard we catch anything that comes in.

15,780. Do you find that the young herrings decrease in number?—Only this last season they have left us, but not owing to our catching the small fish, but to the winds. The winds take all our fish off; the winds and the red weed that I told you about.

15,781. Do the men catching herring along the coast catch the same herring that you have been speaking of?—Yes.

15,782. Has their catch fallen off?—No, it is the same, I believe. They got a nice lot last September, and from January to the beginning of March; then the herring went altogether. The south winds set in and they went off.

15,783. How many boats go after herring from Boston?—Not more than 10.

15,784. Is that more than went off five years ago?—Not more.

15,785. Is it about the same?—Yes, I have diminished my fleet of herring nets, and several others have done the same. I have a sprat net also. We have about 20 sprat nets altogether.

15,786. Have you a herring boat?—No, I have only three or four lengths of herring nets. I cannot fit out a fleet.

15,787. Have you been out herring-fishing?—Yes.

15,788. With your own nets?—Yes, but not for these last two years.

15,789. How long have you been a fisherman here?—37 years.

15,790. Have you found that your average earnings have fallen off much?—No.

15,791. Have they been about the same?—They have been better latterly. I was brought up to the smelt fishery and to our fresh-water fishery previously to being in this trade. I have been 14 years in this trade.

15,792. Has the number of fishermen in Boston increased?—Yes.

15,793. What has been the increase since you can recollect?—I cannot say.

15,794. How many are there now?—I think we have 50 or 55 boats.

15,795. Of all kinds?—Yes.

15,796. How many boats had you 20 years ago?—I cannot tell you exactly, but 20 or 25 years ago we had a little more.

15,797. (*Mr. Caird.*) Over what extent in miles do the mussel banks stretch?—There are very many different mussel banks. The Lynn men and the Wisbeach men fetch them as well as the Boston men. We have eight very good banks, and they extend, I think, about six miles along the bay and they are five or six miles wide.

15,798. Then your mussel banks are about six miles square?—They are perhaps more. The channel runs between them.

15,799. Do you fish the mussels at low water?—Yes.

15,800. Do you gather them when the water is off the banks?—Yes.

15,801. Then you can see what size you are taking up?—Yes, and we put beacons down to mark what we intend to take the next time we go. After we have been one day for a boatload we put a beacon there, and we are thus enabled to take our boat directly to where we can find the larger stuff.

15,802. When you are picking them off the mussel beds do you take them clean off?—No, we do not take the whole of them, but we get them as clean as we can.

15,803. As clean as you can of the size you want?—Yes.

15,804. Do you think it would be of advantage if some regulation were adopted by which the beds could be taken in succession, so that some might not be fished at all?—I cannot see that. If they would not fish it for manure it would be possible. A gale of wind frequently shifts the small mussels on to the lower beds, and in the course of three or four months they will grow as large again and become fit for consumption.

15,805. Would it not answer to have beds in succession coming in year after year, one after another?—It would be impossible to fish them in that way unless a fresh brood came. It would make no difference.

15,806. The fresh brood would come and be left for three or four years, so that it might come to perfection before it was taken. You would not fish the small beds at all?—We do not that now. If we have a gale of wind that shifts them off, and in a short time they grow large.

15,807. Do you think that they are shifted about from bed to bed as the wind takes them?—Yes.

15,808. And that you could not have a succession of beds such as I have been speaking of?—Decidedly not. We go regularly where the large mussels are, and not where the small ones are.

15,809. (*Professor Huxley.*) Are you of opinion that the mussels shift so easily as that?—Yes, they are shifted by gales of wind.

15,810. Then do they shift in a mass?—Decidedly, and they fall over where the fresh-water runs down, the same as in an oyster lay. They grow remarkably then.

15,811. Is that in consequence of the fresh-water?—Yes.

15,812. How can fresh-water affect them, particularly on these banks?—I take it that they are dry for eight or nine hours.

15,813. How can that be so, they are covered twice in 24 hours; are they nine hours dry?—Yes, the higher beds are in general.

15,814. But on these sandy muddy banks the rain water cannot lie?—There are fine runs there, and the gales of wind shift the mussels into the runs. In heavy rains they go in these runs and feed on the fresh water.

15,815. But the mussels cannot move themselves about?—I am aware of that. They are shifted about by a gale of wind.

15,816. I do not understand what they are to feed on in the fresh-water, there is no food in that?—Yes, there is, and in salt water too.

15,817. I cannot understand how showers of rain could do them much good?—I will give you an explanation of that. Before these beds were formed we had some old mussels that were good for nothing. They were taken into Brancaster harbour, where there is beautiful spring water running over. They keep their oysters upon those lays which are composed of blue clay, and spring water runs for nine or 10 hours. It is beautiful clear fine water. The salt water comes over them also, and I take it that the salt water feeds them and the fresh-water as well.

15,818. Does not the salt water do it, and not the fresh?—I think the fresh-water does it also. We get the finest mussels from our haven when the water flows in.

15,819. A river is a different thing, it contains food of different kinds, but rain coming down from the sky cannot contain much food?—The fresh-water I speak of runs over the banks in large quantities, and forms a sort of creek, where the mussels lie.

15,820. Yes, but we were talking at first about these banks covered by the sea water. All the food they can get must be derived from the sea water; they cannot be fed by rain water?—It is fresh-water that passes over them, and we believe that they take nourishment from it.

15,821. (*Mr. Lefevre.*) Is there any spawn or brood of mussels sold here?—No.

15,822. You never heard of such a thing?—No, it comes at first like linseed. We find it on the buoys which form the passage up and down Boston and Lynn Deeps, but there is never anything of that kind gathered for sale.

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15,823. It is never gathered up by anybody, and sold?—No, 24 or 25 years ago I was coming from Scarborough into Boston Deeps, and I noticed a formation of mussel spawn going on. It was a red spawn on the top of the water, and afterwards we found it on the Toft. We thought it was mussel spawn, but whether it was or not I cannot tell.

The witness withdrew.

. T. White.

FRANCIS THIRKILL WHITE called and examined.

15,824. (*Mr. Lefevre.*) You are the town clerk of the borough of Boston?—Yes.

15,825. We have been informed that the corporation of Boston have jurisdiction over a great portion of the Wash called Boston Deeps?—Yes.

15,826. Under what charter is that jurisdiction held?—Under various charters of King Henry the Eighth and Queen Elizabeth. Those are the principal charters that relate to this subject.

15,827. Perhaps you will point out in the earliest charter the part which particularly affects the rights of the corporation?—I do not know whether it is particularly mentioned in the charter of Henry the 8th. I think it comes more specifically under the charter of Queen Elizabeth, which recites that for a long time the port had been in existence, and that the corporation had taken upon themselves the duty of maintaining sea marks, a duty they perform to this day.

15,828. It has no reference to the fisheries?—In consideration of that duty, in the first place, the Queen grants exemption from any power or authority of the Admiralty of England, and then creates a court to be held before the mayor of the borough and a learned person to be called judge of the court with full jurisdiction to their successors. They are to have "the "correction and punishment of all and singular the "fishermen, being delinquents, in the borough afore-"said and liberties of the same, and in the port, limits, "and bounds aforesaid, or in any of them, part and "parcel of them, and all their nets; and also full "jurisdiction and power to hold pleas and courts for "all actions, controversies, and demands whatsoever." That is a court authorized to be established in the borough independent of the Admiralty.

15,829-30. Is there any power given to you to make regulations affecting the fishing here?—No further than that. I think it may be considered to be covered under the general terms of the charter: "Moreover, "We have granted of our abundant special grace, "certain knowledge, and mere motion from Us, our "heirs and successors, by these presents, to the "aforesaid mayor and burgesses of the borough and "their successors, that they and their successors from "time to time, when the aforesaid office of High Admiral "of England by death, forfeiture, surrender, or any "means whatsoever, first and next shall happen to be "void, shall and may for ever have the correction and "punishment of all and singular the fishermen, being "delinquents aforesaid, in the borough aforesaid and "liberties of the same in the port, limits, and bounds "aforesaid, or in any of them, parts or parcel of them, "and all their nets; and also full jurisdiction and power "of holding pleas and courts aforesaid for all actions, "controversies, and demands whatsoever, there by "reason of anything or cause concerning fishing, or "the art of fishing, by any means according to the "law and custom of our Court of Admiralty." They are very general but very large words, and they are very specific.

15,831. If in looking over your papers you find any clause that vests in you the foreshore and also the soil of Boston Deeps, perhaps you will be kind enough to give it to us?—Yes, I am not aware that there is any such clause with regard to the actual soil; I think we have only this clause with regard to the general jurisdiction.

15,832. Does the charter give any right of fishing?—No.

15,833. Then under the charter affecting the corporation there is no exclusive right of fishing to the inhabitants or to the corporation?—No, but I apprehend those words, "the correction of fishermen" would apply to all fishermen.

15,834. Has not that charter been virtually repealed by a subsequent Act of Parliament?—With regard to the Admiralty jurisdiction—whatever that amounted to—it is repealed, but inasmuch as services are rendered in consideration of which this charter was granted, I am almost inclined to think that the powers which were conferred by that charter are not repealed by that Act because it is exempt in the first place from the Admiralty jurisdiction of England, and then power is given to the mayor of the borough to create a certain jurisdiction, a certain court for certain offences therein mentioned. There may be a question in point of law whether the Act repeals the whole of the charter.

15,835. What is that Act of Parliament?—It is the 5th and 6th William IV., chapter 76, section 108. "And be it enacted, that from and after the passing "of this Act so much of all laws, statutes, and "usages, and so much of all royal and other charters, "grants, and letters patent, heretofore granted to any "borough or body corporate, whereby such borough "or any place within the precincts or liberties of the "same, or such body corporate, or the freemen or "inhabitants of the same do claim to be exempted "and released from the jurisdiction and office of the "Lord High Admiral of England or the High Court "of the Admiralty of England, or whereby any body "corporate, or any mayor, bailiff, recorder, steward, "or other chartered or corporate officer of any "borough has or claims anything belonging to the "office of Admiral whether or not it be exercised by "virtue of any commission to them or any of them "to be directed, shall be and the same is hereby "repealed."

15,836. On the assumption that the charter is still valid with regard to the rights it confers over Boston Deeps, has the corporation from time to time issued regulations for the management of the fisheries?—My late partner who was formerly town clerk entered carefully into the subject and referred to the charters and to the records of the borough in concert with the corporation of Lynn. We were anxious to act together as far as possible. The line of demarcation showing the jurisdiction of each corporation is clearly fixed. It is laid down on the Long Sand, and the charters of the two boroughs exactly agree. We issued regulations conjointly.

15,837. In concert with the corporation of Lynn did you come to an agreement as to certain regulations that were to be promulgated?—Yes, and these were the regulations promulgated after consulting with the corporation of Lynn.

15,838. How long ago is it since those regulations were made?—They were only made recently—in 1859.

15,839. In order to carry out those regulations did you appoint a water bailiff?—Yes.

15,840. Previous to that time you had issued no such regulations and had no water bailiff to look after the fisheries in any way?—No.

15,841. And you had issued no regulations with regard to these fisheries?—Pearson, one of the officers of the corporation here, will be better able to explain that.

J. Pearson.

JOHN PEARSON called and examined.

15,842. (*Mr. Lefevre.*) Were there any regulations previous to that time?—None in particular.

15,843. (*Professor Huxley.*) Was there no fishery officer?—There was a coroner whose jurisdiction extended from the Sluice Bridge to the Outer Knock buoy.

15,844. Has he anything to do with the fisheries?—No.

FRANCIS THIRKILL WHITE recalled.

15,845. (*Professor Huxley.*) Can the corporation prove any right by prescription which enables them to interfere with the fishermen under the charter. You say that the power is given; I wish to know if they have done anything to exercise it?—The records of the town say, that in the year 1555 a Scotch ship riding in the roads, laden with herrings, was compelled to come into Boston to sell the same. In the same year 1555 Nicholson the coastman and every other ship coming up had to lay up their herrings in a shop, and were not to sell the same to any person except a freeman. In 1558 no cyger was to buy any fish in the markets before eight in the summer and nine in the winter.

15,846. (*Mr. Lefevre*). That is a regulation with regard to the borough?—Yes. In 1605 a certain Alleyn was to have during his life the fishing in the haven to the extent of its liberties, provided he should give to the mayor yearly a dish of the best fish he could procure, and pay 1*s.* a year rent. In 1662 the fishing in the haven was rented for 13*s.* 4*d.*

15,847. The fishing in the haven?—Yes.

12,848. Whereabouts is the haven?—From the High Bridge to Maud Fossdyke. In 1739 means were ordered to be taken to prevent the fishing within the Admiralty jurisdiction of the borough without a licence. In 1813 the fishermen of the borough petitioned "that restrictions should be put "on the fishermen of Lynn, Sheringham, and Cromer, "forbidding their fishing in Boston Deeps in the "herring season." I believe the hall replied that they had no power to do so. The Deeps referred to in the charter form part of the great estuary of the Wash between the coasts of Norfolk and Lincoln.

15,849. No attempt was made until 1859 to interfere with the mode of fishing carried on, or to exclude any strangers from it; is that so?—Yes.

15,850. Previous to 1859 you had no water bailiff to look after the fishery, to enforce regulations, or to exclude anybody from it?—No.

15,851. In 1859 you appointed this bailiff, and issued these regulations?—Yes.

15,852. But since then you have taken no means to enforce the regulations?—Some steps have been taken, but there have been no convictions under them. I believe there have been one or two summonses issued.

15,853. But they have not been carried to a conviction?—No; for this reason, the former part of the regulations do not appear sustainable by penalties attached. The latter part, under the statute of George 2, would be sustainable.

15,854. Under Act of Parliament?—Yes, under modern Acts, and under an Act of George 2.

15,855. (*Professor Huxley.*) There is one of your regulations that I see is contrary to an existing Act of Parliament?—Which is that.

15,856. It is the regulation which states that the herring nets shall have a mesh seven-eighths of an inch from knot to knot. As a matter of fact every herring net found of that size could be seized and condemned under an Act of George 3, which regulates the size of the nets over the whole of the country. That Act obliges the mesh to be an inch from knot to knot, while your regulation is that it should be only seven-eighths of an inch?—Yes, that is so, I believe.

15,857. (*Mr. Caird.*) We remarked the same thing at Lynn?—The regulation issued by the corporation of Lynn was precisely similar to ours.

15,858. (*Professor Huxley.*) That is a somewhat remarkable fact. I am quite certain about the existence of the Act I refer to, and that it applies to the whole coast. We have had it under our consideration over and over again?—Then it can hardly have been referred to when these regulations were drawn up; they were drawn up in concert with the town clerk of Lynn.

15,859. (*Mr. Caird.*) This size of seven-eighths of an inch from knot to knot was adopted at Lynn in accordance with the wishes of the fishermen themselves as being the size most likely to catch the fish they require. It was not framed in accordance with any Act of Parliament, I believe?—I believe that was so.

15,860. (*Professor Huxley.*) For your own information I may tell you that there is an Act which states distinctly that the mesh of a herring net shall not be less than an inch from knot to knot?—I was not aware of that before.

15,861. Then all nets made in accordance with your regulation would be illegal?—Yes, so it appears.

15,862. I do not know whether the Convention applies to this part of the coast, as the Wash, I presume, would be regarded as an inland water, but the same size is laid down in the Convention?—I think the Convention with France does not apply here. It applies only to a certain distance beyond the headlands.

15,863. There is no question at all about the existence of an Act of Parliament rendering it illegal that any mesh shall be used of a less size than one inch from knot to knot?—Then seven-eighths would of course be illegal.

15,864. (*Mr. Lefevre.*) I have only one other question to ask as to the charter; have you any means of ascertaining what your legal rights are under your charter?—No.

15,865. Did you ever restrict persons from fishing here?—No steps have ever been taken to ascertain our legal rights.

15,866. (*Mr. Caird.*) Under what title do you claim jurisdiction over Boston Deeps?—Under so much of our charters as are not repealed by that clause in the Act of William the Fourth.

15,867. Can you refer us to any portion of the charter that gives you such a right?—This is the only portion—"Moreover We have granted of our "abundant special grace, certain knowledge, and "mere motion from Us, our heirs and successors, "by these presents to the aforesaid mayor and "burgesses of the borough and their successors, "that they and their successors, from time to time "when the aforesaid office of High Admiral of England by death, forfeiture, surrender, or any means "whatsoever first and next shall happen to be void, "shall and may for ever have the correction and "punishment of all and singular the fishermen being "delinquents aforesaid in the borough aforesaid and "liberties of the same, and in the port, limits, and "bounds aforesaid, or in any of them, part or parcel "of them, and all their nets; and also full jurisdiction "and power of holding pleas and courts aforesaid for "all actions, controversies, and demands whatsoever "there by reason of any thing or cause concerning "fishing or the art of fishing by any means according "to the law and custom of our Court of Admiralty."

15,868. You think that that gives you the power?—Yes; it also gives us power with regard to anchorage and ballasting.

15,869. Do you think that it gives you the power of regulating the fisheries all over Boston Deeps?—The question in point of law is whether the right of the Admiralty, which is taken away by this charter, is affected by the 108th section of the 5th and 6th William 4., which abolishes the whole of the grants under the charter.

15,870. Do you think the charter is valid *quoad* any restrictions imposed here?—We have always taken the charter to be valid.

15,871. Since 1859 you have never taken any opinion on it, or practically tried to enforce the regulations you have made?—No.

15,872. (*Professor Huxley.*) The Act of Parliament to which I referred is the 48 George 3. c. 110. s. 12. It provides that the mesh of the herring nets shall not measure less than 1 inch from knot to knot?—Then this regulation of ours would fall to the ground.

15,873. Quite so, unless this point of law were raised, that yours is an inland water and this Act does

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not apply?—There may be a byelaw applicable to inland water that is not comprehended in that.

15,874. (*Mr. Lefevre.*) Does the corporation of Boston attach considerable importance to this power of regulating the fisheries?—As far as I am justified in saying anything on the part of the corporation, I believe the members of the corporation take a great interest in the matter. It has been represented to them that the take of fish has been injured by an injudicious and wasteful mode of fishing; they have been told that nets have been improperly used, and that some of them have too small a mesh. For instance, shrimp nets have been used in catching soles. Not only are the actual meshes improper, but nets have been improperly used. The consequence has been that fish which are too small have been taken and the brood has been injured.

15,875. Was it in consequence of complaints made by the town that you issued these regulations and appointed a water bailiff?—Yes, and also in consequence of complaints made in Lynn. We were very anxious to act in concert together.

15,876. Then why have you not attempted to ascertain what your rights are under the charter, and to enforce the regulations you have made?—We have issued summonses.

15,877. But why have you not prosecuted them to a conviction?—There does not appear to be any power to attach penalties.

15,878. You have never gone to the trouble and expense of ascertaining that fact?—No.

15,879. Then I take it that you are afraid of incurring any expense with a view of improving the fisheries?—The corporation have not been able to see their way clearly in the matter. That has really been the question.

15,880. (*Professor Huxley.*) The fact being that improvement is more or less uncertain, whereas expense would be inevitable?—Yes, the corporation are quite willing to put themselves in the hands of the Commissioners if anything can be made in the shape of a suggestion by the Commissioners with a view to benefit the fisheries.

15,881. (*Mr. Lefevre.*) Would the corporation desire to have vested in them more power for regulating the fisheries than they have now?—Yes.

15,882. Would they be prepared to go to any expense in enforcing them?—Yes, I think they have shown that, inasmuch as they have already appointed a water bailiff. I think I am justified in saying that they would be ready to go to further expense.

15,883. I ask that specially because from what we were enabled to gather yesterday the corporation of Lynn are indisposed to go to any expense?—I do not think that objection would be raised in Boston. They have already gone to the expense of appointing the water bailiff with a proper boat in order to enable him to carry out the regulations, assuming that such regulations can be properly enforced.

15,884. Would one bailiff be sufficient?—Yes, I think so. As far as I can presume to say the corporation would be disposed to afford every facility to the water bailiff in carrying out proper regulations.

15,885. (*Mr. Caird.*) Do you consider that you have a right to levy any payment from the persons who take mussels from your beds?—We have never assumed any right of that kind.

15,886. (*Mr. Lefevre.*) Have you any right under your charter to restrict the number of people who are to come upon the beds?—I think we should have had if it had not been for this 108th section of the Act of William Fourth. You can hardly find words in the language more full to give them authority. The question would be, is there a practical mode of giving effect to it. The charter says "fishing, and the art of fishing." That is as full as words can be, but the machinery is wanting to enforce the jurisdiction. In one of the records I read to you just now it states that there was a complaint made against foreigners from Sheringham and Cromer in Norfolk, but the hall at that day thought they had no power to interfere in the matter.

15,887. Has the corporation ever considered whether it would be desirable to vest in them the actual soil of these mussel beds with the view of having a proper control exercised over them?—That question has not been brought forward.

15,888. Would the corporation be prepared to take upon themselves such powers?—I can hardly answer that question. There are several members of the corporation present.

15,889. (*To Mr. Simonds, the Mayor.*) Would the corporation be prepared to have the property in the mussel beds vested in them?—I think we should like it very much, and if it was vested in us then we could keep foreigners from coming there.

15,890. (*Mr. Caird, to Mr. White.*) To whom do you suppose the right of the soil belongs at present?—To the Crown within high-water mark, unless it belongs to the frontagers.

15,891. Would it not be worth while for the corporation to make an application to the Crown, and get the grant of those beds?—They would not like to incur the expense of anything like an Act of Parliament.

15,892. But they might apply for a grant to enable them to establish regulations with regard to fishing?—I believe it is the wish of the corporation to do what they fairly can to protect the fishing. They are prepared to go to some expense, but they would not like to go to any great expense. They would not be prepared to incur the cost of an Act of Parliament.

15,893. Would it not be worth while to go to the expense of obtaining a legal opinion as to the actual existing rights of the corporation?—I think so.

The witness withdrew.

The inquiry was then adjourned until Monday, the 30th of November, at Great Grimsby.

Great Grimsby, Lincolnshire, Monday, 30th November 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | GEORGE SHAW LEFEVRE, Esq., M.P.

GREAT GRIMSBY.

W. Baxter.

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WILLIAM BAXTER called and examined.

15,894. (*Mr. Caird.*) Are you well acquainted with the fishing trade here?—I ought to be; I have been connected with it now for more than 43 years.

15,895. How long have you been at Grimsby?—Nearly two years. I have been here altogether for about 16 months, but I have traded backwards and forwards here for several years.

15,896. Are you well acquainted with the fishing trade at Grimsby?—Yes.

15,897. Both line and trawl-fishing?—Yes, both.

15,898. Are you able to say from your experience whether the catch of fish here has increased or diminished?—There are more codfish off here this season than I ever knew in any previous year.

15,899. Is the supply of all other kinds of fish increasing also?—I do not know that there is any increase in it, but there is no diminution.

15,900. Do you think there are more fish of any kind caught and brought into the market here this year than in preceding years?—Yes.

15,901. Is there more at this moment?—Yes, I think there is.

15,902. Does that apply to every different kind of fish brought here?—Yes.

15,903. Is there any particular kind of fish that has diminished?—None that I know of.

15,904. How is it with regard to haddocks?—They are equally as plentiful now as ever.

15,905. Are they as good; are they as large in size, and as good in quality?—I do not know that they are as large in size quite.

15,906. Where are the best cod caught?—About Cromer Knoll.

15,907. At the knoll off Cromer?—Yes.

15,908. Is that ground suitable for trawl-fishing?—Yes.

15,909. Has it been trawled over?—Yes, for the last year or two.

15,910. For not more than a year or two?—No.

15,911. Do many of the line-vessels go there now to fish?—Yes, a great many.

15,912. Have they long frequented the ground?—Yes, they have frequented it for a long time; I have frequented it for the last 40 years.

15,913. With line-fishing vessels?—Yes.

15,914. Do you know whether in the course of that time the take in that part has increased or diminished?—I think it has diminished.

15,915. There are not as many caught now as there used to be?—There are more cod vessels there than there used to be when I was there 40 years ago. When I first went there were not more than four or five cod vessels.

15,916. How many are there now?—Perhaps 50.

15,917. Do you suppose that each of the 50 catches as many fish as each of the four or five did in former times?—I do not think they take as much now in each vessel as they did formerly, but there are as many taken off the ground altogether by the 50 vessels as there were altogether formerly.

15,918. We can easily imagine that there must be many more caught by 50 vessels than by four?—There are a very great many more caught.

15,919. Are the cod caught now of as prime a quality as they were formerly?—Yes, they are just as good in quality.

15,920. Are they as good as the cod caught on the Dogger Bank?—At a certain time of the season they are quite as good, and even better. They are better at this time of the season.

15,921-2. Are there particular seasons for particular banks?—Yes.

15,923. What is the cause of certain banks being better at one season than another?—Because the fish are not there at certain times of the season.

15,924. Do you know why they change from place to place?—I believe they follow the herring. If you go to the Knoll in October you will see very few cod, but when you get into November then the cod begin to come. The reason is that the herrings about that time go across, and that causes the cod to follow them.

15,925. Do you always find that the cod follow the herring?—Yes.

15,926. As a line fisherman would you generally follow a herring fleet when you observe that there are a good many herrings being caught?—At certain times of the year there are certain grounds upon which the herring come, and then the cod follow them. When the herrings take away, the cod go away too.

15,927. Does a line-smack and a trawl-smack each cost about the same sum of money?—No.

15,928. Which costs most?—I think a line-smack will cost double as much as a trawl-smack.

15,929. With all its gear?—Yes.

15,930. Is it manned by the same number of men, or by more?—It is manned by double the number of hands.

15,931. Is it more costly altogether to maintain?—Yes, it costs a very great deal more.

15,932. Which of the two has the largest catch of fish on an average; has a line-smack or a trawl-smack the largest take generally?—I cannot tell you, but as general rule the trawl-smack will catch the largest weight of fish.

15,933. Suppose that a trawl-smack and a line-smack go out together for a month's fishing, which vessel at the end of the month will bring in the greatest quantity of fish?—I cannot say. It is all according to the catch of fish. The trawl-smacks in general will bring in the largest weight of fish.

15,934. (*Mr. Lefevre.*) But the fish they catch is not of so valuable a character as that caught by the line-smacks?—No, it is not of the same quality. It is a different quality of fish altogether.

15,935. (*Mr. Caird.*) Then the catch of the line-smack, on account of its superior value, will bring the most money?—Yes; the line-boats bring in live fish.

15,936. And their smaller take may be much more valuable than the larger take of the trawl-vessel?—Yes.

15,937. Are you the owner of a line-smack?—Yes, I am.

15,938. Then, as the owner of a line-smack, can you state which of the two, a line boat or a trawl-boat, pays the greatest return for the capital invested in it?—I cannot answer that question on account of the fluctuating character of the business. Sometimes a line-boat pays best, but not always. I had a line-smack the year before last that ran me out 110*l.*

15,939. Do you mean that you lost that sum by it?—Yes.

15,940. Do you know whether or not the line-smacks are now paying on the whole?—Yes, just now I believe they are paying.

15,941. Is that because the catch has increased?—Yes; it is because the catch has increased this season.

15,942. Is it a better season for fish now than it was in the year to which you refer?—Yes, it is a much better season.

15,943. Do you remember any year in which you had a better season for fish than this has been?—Never.

15,944. Then it is not the result of your experience that the continued fishing of any particular bank has diminished the supply of fish?—No. I have known a great many fish in the north country years ago, and now there are not so many vessels fishing there, and yet there are not so many fish by a great many as there used to be.

15,945. To what part of the north country do you refer?—The Pentland Firth and on towards the Highland way.

15,946. Do you mean towards the western shore?—Yes.

15,947. Were you in the habit of fishing there in former times?—Yes, from 40 years ago up to within the last three years.

15,948. What kind of fish did you fish for there?—Codfish.

15,949. Are they not as abundant as they used to be?—They are not one half nor one quarter as plentiful as they were formerly.

15,950. What is the cause of that?—It would puzzle me to tell what is the cause, but nevertheless it is the fact that the quantity of fish has greatly decreased.

15,951. Is there any trawling there?—There never was a trawl shot there.

15,952. Is there any other part of the coast that you used to frequent formerly in which you have found that the quantity of fish you can catch has similarly fallen off?—Yes.

15,953. Where?—At Peterhead.

15,954. Has the decrease been very noticeable?—At a certain time of the season we might go there and the fish would be sure to set in. But now, at this time, there are seldom many fish caught there.

15,955. Has there been any trawling off Peterhead?—There never was a trawl shot there.

15,956. Then you cannot attribute the falling off to the use of the trawl?—No; there have been no trawlers there.

15,957. Have you, as a line fisherman, been in the habit of fishing on the same bank as the trawl fisher-

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men and at the same time ?—I do not quite understand the question.

15,958. Have you been in the habit of setting your lines on the same ground and at the same time as that on which the trawl fishermen have been fishing with their trawls ?—Yes.

15,959. Have you ever found that the operations of the trawl fishermen have in any way interfered with your success ?—No, not in the least.

15,960. Did they ever foul your lines ;—No, they never foul them so as to do them any injury unless they happen to come athwart a buoy.

15,961. Do you and they often fish on the same ground ?—Yes, very often.

15,962. And do you find that the two modes of fishing can go on together on the same ground without any disadvantage to each other ?—Yes.

15,963. Have you ever found that the trawl fishermen have cleared the ground so that you could not catch fish ?—No.

15,964. Do you think that that is ever likely to occur ?—No, I think not.

15,965. Have you been in the habit of fishing on any particular places on the Dogger Bank where trawl-fishing has been going on ?—I was never where the trawl-smacks were fishing ; I have been fishing on the Dogger Bank, but not exactly when the trawl smacks were fishing; they have not been fishing there at the time I was there.

15,966. Have you been in the habit of fishing in the Silver Pits at the same time the trawl-smacks were fishing there ?—No, never.

15,967. Is there any particular ground upon which you have been fishing at the same time the trawl fishermen were fishing ?—Never in my life ; but still I know from experience that if they go clear of my buoy they will not hurt me the least in life.

15,968. Is it the case that you as a line fisherman prefer rough ground to fish on ?—Yes.

15,969. And the trawl fishermen prefer smooth ground ?—Yes.

15,970. In that way you endeavour to avoid each other's ground ?—Yes.

15,971. Do you think that the trawl fishermen, fishing on the smooth ground near the rough ground you frequent, clear away the fish so as to make it injurious to your fishing ?—No.

15,972. You never found that it had that effect ?—No, never. There have been more codfish here this season than was ever known before.

15,973. Is there much trawling carried on off here? —Yes, on the smooth ground close to the rough ground, but just off here it is all rough ground.

15,974. And on that rough ground do you fish with the line ?—Yes.

15,975. Outside the rough ground the trawl-boats fish with the trawl ?—Yes.

15,976. Has that gone on successively now for a good many years ?—Yes.

15,977. For how many years ?—I think about 20.

15,978. Have you not observed that the supply of fish on the rough ground frequented by the line fishermen has decreased in consequence of trawling on the smooth ground outside of it ?—Not a bit ; there have been more this season than for many years.

15,979. Therefore you conclude that there has been no decline in the number of fish ?—Not a bit of it.

15,980. You do not believe that there has been any decrease in the supply of fish upon the fishing grounds you frequent ?—No.

15,981. Is the quality of the fish caught by you as good as it used to be in former times ?—Yes.

15,982. Do you get any turbot with your lines ?—Very seldom ; by chance we get one now and then, but very seldom.

15,983. What fish do you principally catch ?—Cod, halibut, and skate.

15,984. Have you not found the haddock caught off the shore rather on the decrease ?—No.

15,985. Is there no kind of fish on this coast which in your experience is on the decrease ?—No, years ago, but that is before a trawl was ever shot, they decreased. There used to be a great many to the southward, but before a trawl was shot they decreased.

15,986. (*Mr. Lefevre.*) Of what fish are you now speaking ?—The haddock.

15,987. (*Mr. Caird.*) When the fish are brought in here by the line fishermen in any large quantity and the market happens not to be very good, what do you do with them ?—We put them in chests and store them.

15,988. What are the chests to which you refer ?—They are chests that float in the docks: I believe you saw them this morning. They are what you saw the codfish in.

15,989. Are they open boxes that float in the water? —Yes.

15,990. The fish are taken out of the wells in your smacks and placed in these open boxes ?—Yes.

15,991. How long will they live in those boxes in the docks ?—I have had some there for 17 days.

15,992. Have they been perfectly healthy and lively all that time ?—Yes.

15,993. Do you keep them there until the market becomes favourable ?—Yes.

15,994. So that you are always enabled to supply the market with a considerable quantity of cod ?—Yes.

15,995. Of course you find that for your own interest ?—Yes.

15,996. Do you store in these chests all kinds of fish ? Are the fish you put in in this way of different kinds or only of one kind ?—We only put cod and halibut in the chests.

15,997. Are they the only kinds that are kept in that way ?—Yes.

15,998. You never keep haddocks in the chests ?—No ; haddocks would only keep alive for a little while in the chests.

15,999. Then you are obliged to send the haddocks to market when they are brought in ?—Yes.

16,000. It is only cod and halibut that you store in that way ?—Yes.

16,001. When stormy weather comes on, and it is unsuitable for your boats to go to sea, do you obtain a supply of cod and halibut for the market from these boxes ?—Yes.

16,002. Is there generally a rise in price when you experience stormy weather and the boats are unable to proceed to sea ?—Yes.

16,003. Would the market be supplied if you had no reserve of that kind to fall back upon ?—No, very often fish are scarce even with that reserve.

16,004. Have you a large quantity stored in the docks here now ?—Yes, a great many.

16,005. Can you give us any notion of what the quantity is ?—Perhaps 700 or 800 score.

16,006. 700 or 800 score of cod and halibut ?—There are very few halibut. Perhaps there are not two.

16,007. They are almost all cod ?—Yes.

16,008. If you were obliged to send the whole of these to market at once it would greatly diminish the price would it not ?—Yes.

16,009. It would overstock the market ?—Yes.

16,010. Is there any other place on the coast where fish can be similarly stored and kept alive so as to afford a regular supply to the market ?—No, not to the same extent as at this place. They may keep a few at different places. I believe there are a few stored at Gravesend.

16,011. At Yarmouth can they store any ?—No, not at Yarmouth, They keep a few at Harwich, I think, and at Gravesend.

16,012. At Hull they cannot ?—No, the water will not allow them.

16,013. Is there too much fresh-water there ?—Yes.

16,014. Do many of the Hull boats come here ?—There are no line well-vessels belonging to Hull.

16,015. Do you ever see any spawn?—No, very little.

16,016. You never expect to find spawn?—I have sometimes seen the fish full of spawn.

16,017. Do you never look for it when you are endeavouring to find the best ground on which to fish?—We do when we are catching haddocks.

16,018. How do you look for spawn?—We put grease in the lead and when we throw it down to the bottom of the sea the spawn sticks to it, and we bring it up with the lead.

16,019. When you find spawn sticking to the lead do you think it a good place to fish for haddocks?—Yes.

16,020. Why?—We believe that the haddocks follow the spawn and feed upon it.

16,021. You do not destroy the spawn yourselves?—No, certainly not.

16,022. But you go to the grounds where you expect the haddocks will come to destroy the spawn?—Yes, We go upon the foul ground, the rough ground off here.

16,023. (*Mr. Lefevre.*) Are you still the owner of a smack?—Yes.

16,024. Have you more than one?—Yes, I have two.

16,025. Are they both line-fishing vessels?—Yes, both are line cod boats.

16,026. How long have you been the owner of a fishing smack?—About 20 years.

16,027. Do you find that a smack is as profitable to you as it used to be formerly?—Yes. When I went to sea myself; but if you were to give me two more now I would not be troubled with them.

16,028. Since you left off going to sea yourself have you not found the business as profitable as it was before?—No.

16,029. When did you buy your second smack?—About seven years ago.

16,030. When you fished off the Pentland Firth, where did you bring your fish to?—London.

16,031. Then you salted it before you carried it to market?—Yes.

16,032. You had a well in your boat also, I presume?—Yes.

16,033. When did you begin to fish off the Pentland Firth?—About 43 years ago.

16,034. Have you noticed whether the price of cod has diminished very much from that time to this?—No, I think that we get as good a price for cod now as we did then.

16,035. Can you tell us what is the number of line-boats at Grimsby?—I am sure I don't know.

16,036. Have you experienced any difficulty in obtaining bait of late years?—Sometimes, in bad weather, but we can always find a supply of bait in fine weather.

16,037. Do you pay more for it now than you did 40 years ago?—No, we pay nearly about the same price; I have not noticed much difference in the price of bait, and when we have fine weather we can get plenty of it, but in bad weather we sometimes run short.

16,038. Do you find the herring spawn mostly on the rough ground or the smooth ground?—We find the young codfish generally on the rough ground.

16,039. I am asking you where it is that you find the herring spawn. Do you find that on the rough or the smooth ground?—On the rough ground.

16,040. Not on the smooth ground?—No, not a very great deal.

16,041. Do you happen to know what other fish feed on herring spawn besides the haddock?—Codfish will feed on it.

16,042. Will soles feed on it also?—No, I never saw any herring spawn in a sole.

16,043. Do you find soles more upon the smooth than upon the rough ground?—Yes. They could not take them upon the rough ground if they were there. They cannot work with the trawl on rough ground. It would tear their nets all to pieces.

16,044. You do not catch soles with the line?—No, they are caught by the trawl.

16,045. How many men do you have on board each of your line smacks?—10 hands.

16,046. How do you pay them?—The mate gets 22*s.* a week and the men 20*s.* each. The captain has nine per cent.

16,047. Do they share in the fish you catch?—No, we pay them all wages. The mate gets 22*s.* a week, and the men 20*s.*, and we find them in provisions.

16,048. You say that you pay the captain differently from the men?—Yes.

16,049. You give him a share?—Yes, nine per cent.

16,050. (*Mr. Caird.*) Has the price of fish, within your experience much altered?—No, I have seen greater prices years ago.

16,051. Is the price lower now than it was some years ago?—No, not generally. At times it would be very low then, but I have seen it higher a good many years ago than it has been recently.

16,052. Is the price at this moment as low as you have known it?—No, I have seen it lower.

16,053. Then is the price at present about an average price?—Yes, I should say it is about an average price.

16,054. An average price for all kinds of fish?—Yes.

16,055. Do you notice whether the prime fish have more increased in price than the lower quality of fish?—No; I have seen better prices years ago than we see now.

16,056. But looking back to your experience of say 10 years ago, would what are called the offal fish bring more money now than they did formerly; has there been a greater increase in the price obtained for offal fish than for prime fish?—Yes, there has been a greater increase in the price of offal fish.

16,057. What is the reason of that?—The reason is that they make a different use of the offal fish now from what they did formerly, especially the haddock.

16,058. What different use is made of them?—They smoke them now. Years ago they did not smoke them. Then we caught plenty of haddocks and threw them overboard as being of no use.

16,059. Then the introduction of smoking has increased the price of haddocks?—Yes.

16,060. And does it make a certain market for them at all times?—Yes.

16,061. Has there been an increase in the price of plaice?—No, but I have known them to be much lower years ago than they are now.

16,062. Then they have increased in price?—Yes, but it varies according to the weather and according to the catch of fish.

16,063. (*Mr. Lefevre.*) I think you said that you lost 110*l.* in one season?—Yes.

16,064. When was that?—Two years ago.

16,065. Is it since you left off being captain of your own smack?—Yes.

16,066. Are you making money this year by your smacks?—Yes, I have got a little money by them lately.

16,067. You have realized a profit from them?—Yes.

The witness withdrew.

HENRY KNOTT called and examined.

H. Knott.

16,068. (*Mr. Caird.*) Are you well acquainted with the fishing trade at Grimsby?—Yes.

16,069. Have you been some years engaged in it?—Yes.

16,070. Can you tell us whether the supply of fish brought in here has increased or diminished of recent years?—It has increased considerably.

19,071. Have you any figures you could place

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before us to show what the increase has been?—I have no figures, but I can give you the result of my experience. 20 years ago I came from the south and took up my residence at Hull. There were then only three smacks fishing from the port of Hull, and now there are about 300. Five years ago some of us left Hull and came to Grimsby. As our experience taught us that Grimsby had more natural facilities than Hull we came here to reside. I have fished over nearly all the fishing grounds from Hastings down to Hartlepool, including the Silver Pits and the Dogger Bank, down as far as the Dutch coast. At times I have found that the fish have fallen off on some grounds while they have been plentiful on others, but looking at the question generally I have found an increase in the fish caught and landed both at Hull, and at the present time at Grimsby, over and above what was caught and landed 20 years ago, or even 10 years ago.

16,072. You speak of an experience of five years at Grimsby?—Yes.

16,073. Has the number of vessels engaged in fishing increased during those five years?—When I came here there were five or six smacks brought from Hull. There were none of our sort here then, but now we have near 70.

16,074. Your sort are trawl-vessels?—Yes.

16,075. You are not engaged in line-fishing?—No, the system I follow is strictly trawling.

16,076. (*Mr. Lefevre.*) How many vessels have you got?—Three.

16,077. (*Mr. Caird.*) Has the increase from 5 up to 70 been a gradual increase or has it been sudden?—It has been a gradual increase. They have been built and bought year after year. Many have been built by persons now in this room.

16,078. Has the price of fish increased or diminished during that time?—It has rather increased.

16,079. Rather increased?—Yes. When the fish is very scarce we find that the markets are as high as they ever were, and even above what they were something like 18 or 20 years ago; but taking a fair average I do not see much difference in the price.

16,080. Taking your experience of five years at Grimsby has there been much difference in the price?—Yes, the price has increased.

16,081. Has there been a gradual increase in the price?—Yes, a gradual increase.

16,082. Does that apply to all sorts of fish?—Yes, to all sorts I have to deal with.

16,083. Specify the different kinds of fish you have to do with?—Turbots, soles, brill, plaice, haddocks, skate, and so on. Sometimes we get a little codfish, but very little of that sort generally.

16,084. Which do you call offal fish?—Plaice and haddocks.

16,085. Has the quantity of turbot, soles, and brill increased since you came here?—In some parts of the year and in some seasons we get a great deal more than in others. Sometimes at this season of the year we find soles slack, and at others they are very plentiful. They are very plentiful just now, and for the last three years I should say there has been an increase in the quantity of soles and turbots caught and landed at this port.

16,086 Are the quality and size of the fish as good as they have been?—Quite as good.

16,087. You don't perceive any diminution in the quality or size of the fish?—Not any whatever.

16,088. Has the price of turbot, soles, and brill on the whole increased during the last five years?—Yes.

16,089. Taking the offal fish,—plaice, and haddocks, they are a lower priced fish, are they not?—Yes.

16,090. Has the price of plaice and haddock increased in the same degree?—The price of haddock has increased more particularly.

16,091. Is that from scarcity or from a greater demand for haddocks?—I can corroborate Mr. Baxter's evidence. We used to throw the haddocks overboard. We could not sell them until they undertook to smoke the haddocks. Since then haddocks have been in great demand and the price has increased.

16,092. Then it has not increased in consequence of the scarcity of haddocks, but because a new outlet has been found for them?—Yes.

16,093. Has plaice increased in price in the same proportion as the finer qualities of fish?—There has not been so great an increase in the price of plaice.

16,094. Can you tell us what will be the proportion of prime and what of offal fish in an average take?—I could not give you that just now. It would be necessary for me to go through my books in order to ascertain it. It fluctuates very much. Some weeks we have a large take and other weeks only a small one. You could not get a fair average unless you took six or twelve months right through.

16,095. Generally speaking, from the fact that the offal fish brings a lower price, there must be a larger quantity of it?—Yes.

16,096. Could you by looking at your books give us some certain facts upon that point?—Yes.

16,097. Will you do so?—Yes.

16,098. Does the place where you fish at all influence the proportions of the different kinds of fish you catch?—Yes.

16,099. Are there certain grounds on which you get a larger quantity of prime fish in proportion to the quantity of offal?—Yes, when we fish close to the rough ground we get more prime fish than we do when we go further off into the clear ground.

16,100. Do you with that knowledge direct your vessels occasionally to take one fishing ground and occasionally to take another?—Yes.

16,101. Just as you think it likely to suit your own views with regard to the market price?—Yes.

16,102. So that you can in some degree regulate the proportions of fish you bring to the market?—Sometimes, if the weather permits, we can do so. If there is strong blustery weather we cannot go near the rough grounds at all; we are forced then to fish upon the fine grounds.

16,103. Then in stormy weather the largest proportion of your take will be offal fish?—Yes, unless we have an extremely cold and severe winter. Then the soles are in great abundance in the Great Silver Pits and about there, as they have been in years gone by.

16,104. Will you name the different fishing grounds your vessels frequent from Grimsby?—Yes; there are what we call the "off grounds."

16,105. Will you be good enough to begin at the Thames and name them in regular order?—We fish off the coast of Holland sometimes.

16,106. Do you go as far down as Dungeness?—Yes, I have been fishing in Rye Bay, but my vessels have not, they don't go there.

16,107. Where do they frequent?—About 40 miles off east-north-east, off the Humber, that is the first ground they go upon.

16,108. Is that the Outer Silver Pits?—Yes.

16,109. The Dogger Bank?—Yes, inside, and from off Flamborough Head.

16,110. Do you go north of Flamborough Head?—Very little; sometimes we get as far down as the latitude of Scarborough, but not often. There is no fishing ground there, it is only along the shore.

16,111. (*Mr. Lefevre.*) As you go further north you are obliged to go further in?—Yes.

16,112. (*Mr. Caird.*) What depth of water do you find is most suitable for trawl-fishing?—The best water in which there is most fish is not too deep. We generally fish in water from 15 up to 50 fathoms in depth.

16,113. You seldom go beyond 50 fathoms?—We cannot very well go beyond 50 fathoms. It is only very seldom we go up to 50.

16,114. (*Mr. Lefevre.*) There is not much water in the North Sea that is 50 fathoms deep?—Only at the east end of the Great Silver Pits, although the average depth of water at the Great Silver Pits is not as much as that.

16,115. (*Mr. Caird.*) When you come south, where do you come to ?—Out at the back of the Leman, just inside of it, and so on.

16,116. Do you go to Smith's Knoll ?—We fish close to that in fine weather.

16,117. Do you go any further south ?—No ; not from Grimsby. We go across the south side from the Brown Bank along the Dutch coast.

16,118. That is in the summer time ?—Yes.

16,119. You never fish on the Dutch coast in the winter ?—No.

16,120. In the summer time you get good catches of flat-fish there ?—Yes.

16,121. Has every one of the grounds you have pointed out to us been long frequented ?—Yes.

16,122. In consequence of being repeatedly trawled over has any one of them become less productive in fish ?—Not one that I know of.

16,123. There is no fishing ground that you have found falling off in the supply of fish it yields ?—We may have found them beginning to give in, but then in a month there will be an abundance of fish caught in them.

16,124. You have never exhausted any particular ground ?—No.

16,125. Have you fished the Great Silver Pits ?—Yes.

16,126. Is it not the case that vast quantities of soles were found there when the Silver Pits were first discovered ?—Yes ; the meshes of the net were like a mat with the heads of the fish stuck in them.

16,127. Is there not the same abundance now ?—That arose in a very exceptional case. It was an exceedingly cold winter, and in such a season we generally find abundance of soles in the Great Silver Pits, in the deep water, sheltered on each side by the banks.

16,128. Then the decrease in the Silver Pits is not caused by the place being fished out, and you think on the return of favourable weather that you can get plenty of fish there ?—Yes.

16,129. Is that ground particularly favourable for catching soles ?—Yes, and haddocks.

16,130. (*Mr. Lefevre.*) How long have you been a smack owner ?—About five or six years.

16,131. Did you begin with one smack and increase up to three ?—Yes, or rather I began with a piece of one.

16,132. Do you yourself go out to sea now ?—No, I have not been to sea for five years.

16,133. Not since you became a smack owner ?—No.

16,134. Have you found it on the whole a profitable business ?—Yes, I have got a living, and I have increased my property somewhat.

16,135. You have not lost money since you became a smack owner ?—No, I have got money.

16,136. Do you find variations taking one year with another ?—Yes.

16,137. In some years you have made more than in others ?—Yes ; there is not a more fluctuating business under the sun than ours.

16,138. Have you lost any money in any year ?—No ; if I lost at one time I got it at another.

16,139. What is the tonnage of your boats ?—I have one boat 38, another 39, and a third is just over 56 tons.

16,140. What is the length of the beam of the trawl ?—They run from 40 to 42 feet.

16,141. You are aware that 38 is the legal beam ?—No, I am not.

16,142. Is there nobody here on the part of Government to look after the beams and nets of the trawls ?—No, I think not.

16,143. Do you find the larger the boat the longer the beam you require ?—No ; small vessels have the same. We have some small vessels about 32 tons, and they have as long a beam as mine of 56 tons.

16,144. What is the weight of the iron heads of your largest boat ?—About 230 lbs. perhaps.

16,145. Not more than 230 lbs. ?—No; they vary a little. I don't know the exact weight of those that were sent on board my last vessel.

16,146. What do you weight the rope with ?—Nothing ; we only round it with the rope ; we don't put any weight whatever on it. We are forced to have a little more spread, because we don't use any heavy ground-rope. We refrain from using a heavy ground-rope, because we should mangle the fish if we did.

16,147. What is the size of the mesh of your trawl ?—It is very nearly Government size.

16,148. Then you know there is a Government size as to the mesh of the net ?—I have heard so ; I don't know the exact size.

16,149. You don't know what it is ?—No.

16,150. Have you ever inquired ?—No. The same trawl we have now was what I was taught to use 20 years ago. Our trawls have never varied.

16,151. Do you find that this, on the whole, is a better place to send your smacks from than Hull ?—Yes, it is a far better place. It has many more natural facilities, and the metropolis is more available, and we can get our fish to the manufacturing districts quite as readily. In fact there are a great many Hull vessels that land their fish here on account of the facilities we possess.

16,152. But the increase at Grimsby has not been from vessels leaving Hull and other places ; but, on the contrary, it is owing to a natural increase due to Grimsby itself ?—Yes ; we have had perhaps a dozen vessels that have left Hull and come here, but the others have been built and brought from other places.

16,153. Is the number of boats coming here increasing year by year ?—Yes, there is an increase this year (1863) of about six smacks.

16,154. Do you find that any large proportion of the fish brought up in your trawl-boats is damaged ?—No, I never observed the fish damaged except sometimes when the winds were against us preventing us from coming to land at a time when there was no means of keeping the fish.

16,155. Do you send ice in your boats ?—Yes, when we can get it. I have had ice now for six months right on.

16,156. It depends upon your being able to get ice whether you can bring in your fish fresh ?—Yes, we nearly all of us take ice. We have adopted that plan in order that we may bring our fish into market fresh. We formed ourselves into a company. There were perhaps about 15 of us, and we laid out 2,000*l.* or 3,000*l.* a year on ice.

16,157. You formed yourselves into a company ?—Yes.

16,158. How many belonged to the company ?—Fifteen.

16,159. Do you mostly fish together ?—The company I mean was simply a company of gentlemen on shore.

16,160. Not of smack owners ?—Not altogether of smack owners ; smack owners and fish merchants.

16,161. Do you ever find that the fish come in with their gall bladders burst ?—No.

16,162. You have never observed that ?—No, except they have been ripped at sea. We take off the fish's head at sea, and that is the only time I ever saw the gall bladder burst. In fact, we take nearly all the inside of the fish out, the gall included, and throw them away.

16,163. Do your boats fish in company ?—Not often.

16,164. Do you find much difference in the results of the fishing of different boats ?—One boat may catch a great deal more than another, but then the one that caught most may perhaps fail on the next occasion, and the one that caught the least may catch the most.

16,165. Do you find, on an average, that they bring in about the same returns ?—There is not much difference.

16,166. Do the larger boats bring in more than the smaller ones ?—If a boat is very small, a moderate

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sized one will bring you in more than a very small one.

16,167. Do you think it desirable that the Government should fix any length of beam for the trawlers?—If they don't allow it to be over 45 feet, I think that would be long enough.

16,168. What reason have you for restricting it to 45 feet?—I have no reason; I have no wish to interfere in the matter, but I think, according to the size of our nets, that would be long enough.

16,169. According to your experience, a beam of 45 feet would be desirable for the fishing here?—Yes, I believe the beams are as long as those used in the west country now.

16,170. What is the tonnage of the largest trawler out of Grimsby?—56 tons.

16,171. Then yours, in fact, is the largest?—Yes.

16,172. Yet you have not found it desirable to have a longer beam than 42 feet?—No; the same sized beam, nets, and heads as will go on board a smaller boat of 29 tons—the same sized net and the same sized apparatus altogether.

16,173. Have you had any complaints of your men from the herring boats with regard to any interference on their part with the herring nets?—Yes, I have experienced considerable difficulty in the herring season myself in that way. They drift on these grounds together, and our living is frequently entirely sacrificed in consequence. We have to go elsewhere, away out to sea, to clear them altogether, and if in the summer time the wind is from the westward we cannot get on as well as if we were nearer in.

16,174. Do you give your men instructions to keep clear of the herring boats?—Yes, to our own sacrifice frequently.

16,174*a*. Are you aware that the law compels you to keep three miles off from the herring boats?—That is rather an arbitrary law, because they come and monopolise the smooth places on which we have to trawl. If you go over the chart you will find that there is only one-third of the ground available for trawl-fishing purposes; while the herringers could fish over two-thirds and even more than that.

16,175. But were you aware of the existence of such a law as that to which I referred?—No, I was not.

16,176. Have you had any demands made upon you for compensation by herring men?—Yes, once.

16,177. Did you have to pay anything?—I did.

16,178. Was it for damage done to their nets?—Yes, for supposed damage. It was done to a French boat.

16,179. Was that claim made before the magistrates here?—No, it was made through the French consul at London, and was sent down to the Custom House here at Grimsby.

16,180. What did you pay?—I had to pay 6*l.*; but some of our smack owners have frequently paid as high as 20*l.* for supposed damage.

16,181. When your men come to the herring nets do they take up their trawls?—The difficulty is that in the night time we cannot see their nets in the water until we have actually caught them. We cannot go out of the grounds over which we have to trawl. We also have to go with the tide, and we never know that we have caught the herring nets until we have caught hold of them with the warp. Sometimes they reach three miles in length, and you cannot see the boats at all until you have caught their nets.

16,182. Are you of opinion that it is advisable that any regulations should be made with regard to trawlers and herring boats?—Yes, I think it is highly advisable that some regulation should be made.

16,183. What would you desire?—I would have them keep on the rough ground. If they only kept on the rough ground I would allow them to go where they liked. In that case they would not interfere with the trawling smacks.

16,184. But if the herrings were on the smooth ground, do you think the herring boats should be prevented coming for them?—That would not prevent them going after them if they did not get in the way of other vessels.

16,185. Suppose there were no trawlers on the ground, would you make them keep out of the way?—I can hardly give any opinion upon that.

16,186. (*Mr. Caird.*) Is it not the case that the herring is often found upon the smooth ground upon which you are engaged in trawling?—Yes.

16,187. Then it would be a great hardship upon the herring fishers if such a regulation as you mention were adopted?—No, it would not, for this reason; they say, and no doubt it is a fact, that where trawling goes on the trawl stirs up the loose stuff at the bottom of the sea, and causes the herring to come there in order to get the food that the trawlers stir up. The herring boats generally look out for a fleet of smacks, and they keep as close to them as possible.

16,188. But if there was a regulation preventing them doing so, they would not catch those herrings?—If there were no trawling smacks there at all, they would find herrings, no doubt.

16,189. If you were told that the trawlers here had exhausted their own coast, and were therefore going north to new grounds, would you believe that was true?—North of the Humber?

16,190. Yes?—I don't believe they will go there, because there are no fishing grounds there.

16,191. There are considerable grounds frequented by trawlers north of the Humber?—Yes, in the summer time, but they are of no value in the winter time.

16,192. Trawlers go down as far as the Tyne, do they not?—Yes, along the shore.

16,193. Along this shore they don't keep in-shore at all?—No. They are obliged to do so on the Scarborough grounds and round off Flamborough Head, but our smacks at Grimsby don't fish within 30 miles of the shore.

16,194. If regulations were adopted that would restrict you from fishing within the headlands, would it be injurious to you?—Not at all.

16,195. Or within a certain distance of the headlands?—I should not mind that.

16,196. It would not be injurious to be kept outside of them altogether?—I think not.

16,197. You don't catch a large quantity of your fish within the bays at all?—No.

16,198. You never fish in the bays?—No.

16,199. (*Mr. Lefevre.*) Are there any line fishermen in open boats at Grimsby?—No.

16,200. Are the line-fishing boats all smacks—decked boats?—Yes.

16,201. Do you find any complaint here against your men on the part of the line fishermen for disturbing their tackle?—No, we manage our business amicably together. I have never heard a murmur all the time I have been at Grimsby.

16,202. Are your smacks on the ground the line fishermen frequent?—They frequently fish together.

16,203. There is no complaint on either side?—Not any.

16,204. Are your smacks at this time fishing on the same ground as the long-line fishermen?—I should imagine they are.

16,205. Whereabouts is that?—About 40 miles from the Humber.

16,206. Near the coast?—No, right off, about south-east.

16,207. Are there any French line-fishermen fishing at the same place?—Not any.

16,208. Are there any Dutchmen?—Occasionally a Dutchman comes here trawling or hooking off the Well Bank.

16,209. (*Mr. Caird.*) Do trawl fishermen some times change and go into the line-fishing, and do line-fishermen sometimes change and go into the trawl-fishing?—Sometimes, but not in our vessels. The well-vessels they can adapt to either purpose. Sometimes they can use them for trawling in the summer time on the Dogger Bank and the Well Bank. They keep the fish alive in the wells.

16,210. Is there any marked difference in the return

obtained upon the capital employed by trawl fishermen and line fishermen ; does the one get a larger return than the other ?—The line fishermen will draw more money than we do.

16,211. Do they make a larger profit on the capital they have invested?—I cannot say that.

16,212. Has there been a larger increase of trawlers than of line-fishing vessels ?—Yes.

16,213. If there is a larger increase of trawlers that would indicate that trawling is the more productive of the two ?—Perhaps it may.

16,214. What is your own opinion upon that point ? —I don't know the receipts of the cod smacks here, and therefore I cannot give an opinion.

16,215. You cannot say whether on the whole the capital employed in trawling is more productive than the capital employed in line-fishing ?—I should say that the one is equal to the other. I think the line fishermen are doing very well.

16,216. What is the number of the line-fishing vessels from Grimsby ?—About 42.

16,217. (*Mr. Lefevre.*) What is the number of trawlers ?—There are 70 sail of trawlers.

16,218. (*Mr. Caird.*) There is a much larger number of men in a line-boat than in a trawl-boat ?—Yes.

16,219. Then there will not be a greater number of men employed in trawling than in line-fishing altogether ?—They take 9 or 10 hands in a vessel engaged in line-fishing.

16,220. That would be about 400 fishermen altogether ?—Yes.

16,221. In your 70 vessels how many do you carry ? —Five hands in each.

16,222. That would be 350 altogether ?—Yes.

16,223. Then you have pretty nearly the same number in the different businesses ?—Yes.

16,224. (*Mr. Lefevre.*) Do you pay the men in the trawl boats the same as the line fishermen are paid ? No, we go by share.

16,225. How is that ?—The master takes a share and three-eighths, and the men take a share and one-eighth each. They divide by eight.

16,226. Are there four men besides the master ?— Yes, men and boys.

16,227. What does the owner get ?—He has what is left to find the vessel's gear, to pay the apprentices, and provide the apprentices' provisions.

16,228. Do you provision the ship ?—I provision for the whole ; but I deduct the provisions for the men from their shares when we divide with them.

16,229. How often do you divide ; do you divide at the end of each voyage ?—No, at the end of five or six weeks.

16,230. Are the men engaged by the year ?—No, by the voyage.

16,231. Is the captain engaged in that way too ?— We don't engage for any length of time at all. In fact we go on amicably as long as we can make everything agreeable.

The witness withdrew.

ALFRED BLAKE called and examined.

A. Blake.

16,232. (*Mr. Caird.*) You are engaged in the lobster fishery on the coast of Norway ?—Only for the last three seasons ; I am a line fisherman.

16,233. We desire to get some information in regard to the supply of lobsters from Norway ; you can give us it, can you not ?—Yes.

16,234. You have been engaged in that business ? —Yes ; it has been gradually on the decrease during the last three years.

16,235. Have you been engaged over in Norway ? —Yes.

16,236. What were you doing ?—Superintending a district.

16,237. Superintending the catching and shipping of lobsters to this country ?—Not the catching of them, only the shipping of them.

16,238. Have you been employed by a house on this side for that purpose ?—Yes.

16,239. Who employs you ?—The agents on this side.

16,240. What is your business ?—To superintend the shipping on that side. I superintend the vessels, and send them away weekly with the week's catch. The natives there catch the lobsters

16,241. In what part of Norway have you been engaged ?—In the Karmo district. I can give you the total quantity of lobsters sent away.

16,242. What is the number ?—154,854.

16,243. Was that number sent away last year ?— Yes.

16,244. That is the supply during the whole season of the particular locality under your inspection ?— Yes, in the course of three months.

16,245. Are there any other people employed in collecting them for this country ?—Not from that district. The lobsters are sent here by contract.

16,246. Are there other districts in Norway from which this country is supplied ?—Yes.

16,247. Comparing the last year's supply with the present, has it increased or diminished ?—It has diminished.

16,248. Has there been a great diminution ?— About 50,000.

16,249. What is the cause of that ; are the lobsters being over-fished ?—No, it depends upon the weather.

16,250. There may come as large a supply as there was last year ?—Yes, if there was a mild winter.

16,251. The deficiency does not at all result from over-fishing ?—No.

16,252. Is there any large proportion of all the lobsters that come into Grimsby supplied from Norway ?—All that come into Grimsby are supplied from Norway.

16,252*a*. Does that form a large portion of the supply to this country ?—Yes.

16,253. At what season do you get them ?—The season commences in April and concludes on the 12th of July.

16,254. Is that the only season that you fish for lobsters in Norway ?—They are not allowed to fish them at any other time.

16,255. Is the price of lobsters increasing or diminishing in Norway ?—Diminishing. Many companies have tried their hands at it, but they have been ruined. They will not give as much now as they did. They found that they could not get their returns in this country.

16,256. Has the price here increased or diminished ? —I don't know.

16,257. How many vessels have been engaged in bringing lobsters to this country during the season ?— Six.

16,258. (*Mr. Lefevre.*) Do they all come to Grimsby ?—No, to Harwich also.

16,259. Are not lobsters brought from Cromer and that district ?—I think not.

16,260. The trade in Norway has been rather overdone ; there have been too many employed there ?—It depends upon the weather.

16,261. I thought you said that some of the firms had been ruined there ?—Some of the firms in this country have been ruined by speculating.

16,262. By buying lobsters in too great quantities ? —No, but at too great a price.

16,263. (*Mr. Caird.*) How do they catch the lobsters ?—With coops.

16,264. In the same mode as they are caught on this coast ?—No.

16,265. What is the shape of the coop ?—It is a small barrel with a net at each end. Instead of having a head, the head is formed by a net.

16,266. It is open at each end ?—Yes, with a net across.

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16,267. Where do the lobsters go in?—A space is left in the centre, and the lobsters crawl in.

16,268. Do they catch a larger quantity than they do with the lobster pots in this country?—Yes, but the fish are very scarce occasionally, and the fishermen will not get more than 15 fish in a night out of 20 of these coops.

16,269. Do they bait the coop?—Yes, with fish.

16,270. Have you ever seen them used here?—No.

16,271. Do you think any advantage would arise from fishing with them here?—No, there is too much tide.

16,272. That would be an objection?—Yes.

16,273. Then the tide runs more here than there?—Yes.

16,274. (*Mr. Lefevre.*) What is the close time of the season in Norway?—It commences on the 12th of July.

16,275. And when does it conclude?—They begin fishing in April, and they go on from the 4th of April till the 12th of July.

The witness withdrew.

B. Bulpit.

BENJAMIN BULPIT called and examined.

16,276. (*Mr. Caird.*) Are you a line fisherman?—Yes.

16,277. Have you been long engaged in the line-fishing at Grimsby?—Six years at Grimsby.

16,278. Have you had many years' experience of line-fishing before that?—Yes, I have been at it altogether 34 years.

16,279. Have you always been engaged in line-fishing?—Line-fishing and trawling as well. Some parts of the season I have been line-fishing and some parts of it trawl-fishing; but during the last six years I have been engaged in nothing but line-fishing.

16,280. Long-line fishing?—Long-line and hand-line fishing.

16,281. Do you fish in both modes from the same vessel?—Yes.

16,282. In your experience, within the last 10 years, have you found that the quantity of fish you can catch is increasing or diminishing?—I think it is very much on the increase.

16,283. In the same vessel, with the same number of hands, and the same number of lines?—Yes.

16,284. Are your vessels larger than they used to be?—Ours is not. It is about 23 years of age. There are a few larger, but not many.

16,285. What is the size of your vessel?—64 tons old measurement.

16,286. Do you fish on the same fishing ground that you used to frequent in former years?—Yes, I have been fishing on these grounds for the last 26 years.

16,287. Have you found as many fish this last summer as you used to find before?—There have been more fish this summer than I have ever known during the whole of the 26 years.

16,288. More than during the whole of your experience?—Yes.

16,289. On the same grounds?—Yes.

16,290. Are these grounds frequented by trawlers?—Yes, the trawlers are a very little way from us; sometimes 10 and sometimes only 5 miles.

16,291. Yours is rougher ground than the trawlers frequent?—Yes.

16,292. But is it in the same banks and in the same locality that has for a long time been frequented by trawl-boats?—Yes.

16,293. Then you don't agree with those who say that the line-fishermen have suffered injury from the practice of trawl-fishing?—No; on the contrary, I think trawl-fishing does us good.

16,294. In what way?—The trawl as it goes over the ground disturbs it, and things come up so that the cods can follow and obtain good food.

16,295. The result is that you find a larger quantity of fish on the same ground than you did in former years?—Yes, during the last four or five years we have found the most that ever we found.

16,296. Then the supply of fish has been increasing for some years back?—Yes, during the last four or five years since the trawl-vessels took to trawling more constantly over these grounds we have found more codfish.

16,297. Do you frequent the grounds where the open boats practice line-fishing?—There is a time of the season when we are obliged to do so, but it only lasts for a month.

16,298. (*Mr. Lefevre.*) Whereabouts is that?—At Dimlington, off Flamborough Head.

16,299. (*Mr. Caird.*) Is that at Bridlington Bay?—Off Hornsea and Withernsea.

16,300. Do you come within the Head?—No, in sight of the Head, on ground more than 10 miles from the shore.

16,301. Do you get many fish there?—At times; there are more fish at one time than another. It depends upon the manner in which the fish set in after the sprats.

16,302. Are you aware that the open-boat fishermen who fish off the coast to which you refer complain that the quantity of fish they can take has very much fallen off?—I don't know. I don't believe it is on account of our vessels going there. We only go there when the gales of wind set in; we cannot go anywhere else. We go when the fish set in after the sprats.

16,303. Are their lines the same as yours?—Yes.

16,304. They catch the same kind of fish?—Yes.

16,305. But they cannot leave the shore when you leave it, and they find no fish can be caught there?—Yes, they often leave that shore; they fish where we do.

16,306. Do the open boats fish out in the distant deep sea?—Sometimes when the weather is fine; it is all according to the weather.

16,307. But you are able to continue at sea when they are obliged to come to land?—Yes.

16,308. You are able to continue fishing when they are obliged to run for the harbour?—Yes.

16,309. In that way are you able to catch fish in rough weather when the open boats are obliged to run for shelter?—Yes, I think we are.

16,310. Is there any particular fishing ground that in your experience has diminished in its yield of fish?—No, unless it is the Orkney Islands fishing. It seems to have fallen off along the Caithness coast, the Stack, Skyë, and other places.

16,311. Is there any on your own shore between Flamborough Head and the Thames that has diminished within your experience?—I don't think there is.

16,312. You cannot point out any particular ground that you would avoid going to, on which you used frequently to catch fish?—No, not one.

16,313. Have you been in the habit of going north to the Orkney Islands?—Yes.

16,314. How long have you been going there?—I have been going there for the last 32 years on and off.

16,315. When were you last there?—About two years ago.

16,316. Were you as successful as you had been in previous years?—We could not find anything at all.

16,317. In places that you were formerly successful in finding fish?—Yes.

16,318. There has been no trawling there?—I never saw a vessel with a trawl down in those parts.

16,319. What do you imagine is the cause that fish has fallen off there?—I can't say. I suppose it is the track of the herrings; they don't track there.

16,320. If you were told that it had arisen from over-fishing,—that the reason why the fish had diminished off the Orkney Islands was that they had been over-fished, do you believe that would be true?—No,

I should not. If those grounds have been over-fished then our grounds have been ten times more fished.

16,321. Is there any other part of the Scotch coast that is not as productive as it used to be?—No.

16,322. Have you ever fished on the grounds off Peterhead?—No; I have been more off the grounds here. I think I have frequented them more than any other man here.

16,323. Do you know the Knoll Bank?—Yes, Cromer Knoll.

16,324. Are the fish there as plentiful as they used to be?—Yes.

16,325. Are there as many vessels fishing there as there were in former years?—Yes.

16,326. Has the number of vessels fishing upon the grounds along the east coast of England, between Flamborough Head and the Thames, greatly increased within your experience?—Yes.

16,327 Do you think that every one of those vessels can catch as many fish each as the smaller number of vessels was in the habit of doing in your early times?—Yes, I think they do.

16,328. Do you ever fish on the Dutch coast?—I have not done so for the last six years. In former times I did. We used to go every season.

16,329. Was that in the summer time?—Yes, in the summer time.

16,330. English fishermen only go there in the summer time?—Yes, they commence in March or April.

16,331. Where do you get your bait?—There are boats that go up to the Deeps for it, and sometimes we get it at Saltfleet.

16,332. What kind of bait do you use?—Whelks.

16,333. Do you buy that bait?—Yes.

16,334. Are they brought here and put on beds?—No, they come up in bags. We take them up in bags and put them in our wells.

16,335. Are they not stored up in banks, so that you can have recourse to them when you want them?—No.

16,336. But you take them from the Deeps direct?—Yes.

16,337. Has the price of bait diminished or increased?—It is much about the same as it has been for the last 30 years.

16,338. Do you buy it by the bag?—No, by a measure that is called a "wash."

16,389. What is a "wash"?—Twenty-one quarts and a pint, that is a proper stamped wash.

16,340. It is about the same as a bushel?—It is not as much as a bushel. I think 21 quarts and a pint is what they call a wash.

16,341. Is a wash about three-fourths of a bushel?—Yes, as near as can be.

16,342. What supply do you require to take to sea with you when you go to fish in the long-line season?—We take 40 wash, and in the end of the line season, 15, 20, or 25 wash. We seldom take more than 25 wash in the end of the season.

16,343. Do they keep fresh in the well until you require them?—Yes, quite alive; they keep as well in warm as in cold weather.

16,344. Is it of importance that you should have a regular and constant supply of that bait?—Yes, it puts us much out if we can't get it.

16,345. Have you had any difficulty?—Yes, before I came to Grimsby I have been detained three weeks before I could get bait.

16,346. Was there no bait to be had in the Deeps?—I was fishing at Whitstable then. I have had no detention since I have been at Grimsby.

16,347. Does the bait all come from the Deeps?—Yes, from the Deeps and Saltfleet.

16,348. (*Mr. Lefevre.*) Do you mean Boston Deeps?—Yes, Boston and Lynn Deeps.

16,349. Do you use mussels?—No, I never use mussels.

16,350. Do you know whether any of the long-line fishermen use mussels for bait?—Not any of us here.

16,351-2. (*Mr. Caird.*) They use mussels very largely for bait in the north?—I have heard they do.

16,353. Have you ever tried them?—No, I never did. I never heard of anyone who did. I don't think mussels would stick on our hooks. Our vessels are under sail, and I think when the hooks were thrown overboard the mussels would fall off. It is not a hard enough substance to resist the action of the water when we throw the hooks overboard.

16,354. (*Mr. Lefevre.*) The mussel is better adapted for open-boat fishing?—Yes.

16,355. (*Mr. Caird.*) Why?—They can ease the oars and drop it overboard. We are generally under a press of sail, and the line goes out very fast, and as we chuck it overboard it would go off.

16,356. Your bait is a tougher description of fish?—Yes, the whelk is.

16,357. Has the price of fish to you, as fishermen, increased or diminished in recent times?—It is according to the weather; the average is about the same. Perhaps there may be heavier prices given for fish now than during the last 20 years, if the weather is unsuitable for vessels to catch fish.

16,358. Have you long been in the habit of putting your fish in boxes in the dock, keeping them fresh to suit the market?—Only since I have been at Grimsby.

16,359. Have you derived much advantage from that?—Yes, great advantage indeed.

16,360. Does it enable you to retain your fish so as not to overstock the market?—Just so.

16,361. You supply the market just as the market requires it?—If it were not for this I think Billingsgate market would be often without a codfish at all.

16,362. Is there any other place where that is done?—I believe they have store boats at Harwich and Gravesend.

16,363. Store boats?—Yes, not like ours, but vessels with large wells in them.

16,364. In which the live cods are taken out of the cod vessels and stored?—Yes.

16,365. Have they been long in use?—They have been in use at Gravesend for the last 15 or 16 years.

16,366. They have only been introduced here during the last five years?—Yes, the last five or six years.

16,367. Has that enabled you to get a better price for your fish on the whole?—It has at times.

16,368. If you had no means of storing them, you would not be able to make in the course of a year as good a price for your fish?—I think not.

16,369. Do you catch many haddocks?—Very few; only in the Dogger season, which commences now and lasts up to March or April. We catch a few on the Dogger Bank.

16,370. On the whole, which kind of fish pays you best as fishermen?—Codfish, haddock, and halibut. They pay us well if we get a good many of them.

16,371. Is there any kind of fish that has fallen off in quantity within your experience?—No, I think not.

16,372. You get the same proportion of fish that you used to get?—I think rather more.

16,373. More of all kinds of them?—Yes.

16,374. No particular kind has decreased in comparison with any other kind?—I don't think there has.

16,375. Do you think the quality is as good as it ever was?—Yes.

16,376. You get as fine haddocks as ever?—Yes.

16,377. Are the turbots as fine?—The halibuts are, but we don't go in for the halibuts much.

16,478. Where do you get the finest cod?—At Cromer Knoll in the season.

16,379. What is the best season for that?—It commences in November and lasts up till January or February.

16,380. (*Mr. Lefevre.*) What is the season for the hand-line fishing?—The season commences about July and lasts up to the latter part of October; that is what we call our hand-line season.

16,381. Whereabouts do you fish?—I have fished off here for the last 26 years.

16,382. What distance from the coast?—About 30

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miles from Spurn Point. In the latter part of the year the fish have been found in deeper water.

16,383. Then you begin with the long-line ?—Yes, in the latter part of October or the beginning of November.

16,384. Is any proportion of the fish you catch on the line injured by dog-fish or suckers ?—Yes, sometimes the dog-fish will eat the codfish.

16,385. What proportion do you lose in that way ?—In a set of lines we may have two or three scores, and 20 or 30 will be eaten up.

16,386. Is that a common thing ?—It is at times, but not frequently.

16,387. That would be about one half of the catch ?—I have seen quite half eaten.

16,388. Have you ever seen more than half ?—Yes by the "dogs."

16,389. Do you consider that extraordinary ?—They may be away from us for 12 months, and sometimes we have them among us two or three times running.

16,390. Do you ever lose any by the sucker ?—I never noticed that I did.

16,391. Do you find that the dog-fish take the fish you catch with the hand-line ?—No.

16,392. You take them up at once and don't lose any ?—Yes.

16,593. Your boats are now using the long-line ?—Yes.

16,394. Are they now fishing off Cromer ?—Some are off Cromer, and some on the Dogger Bank.

16,395. How many boats do you own ?— Only one.

16,396 Do you sail in it yourself ?—Now and then ; not always.

16,397. Do you find it makes a difference in your returns when you don't go yourself ?—I have been middling successful, even though I have not gone myself.

16,398. How long have you given up going yourself ?—I have not been for seven or eight months.

16,399. How long have you given up going regularly yourself ?—I have not been for the last five years.

16,400. Have you found on the whole that your profits have diminished ?—I don't see much difference in them.

16,401. What is the length of the long-line for use ?—The length of one line is 40 fathoms.

16,402. How many of these lines do you use ?—Sometimes we use 160 of these lines at a time.

16,403. Does it depend upon the length of the day ?—Yes, and what tide we are fishing in.

16,404. And in what water too ?—Yes.

16,405. Do you shoot across the tide ?—Yes.

16,406. When you fall in with trawlers do they ever cross your lines on the ground ?—Yes, I have been fishing and the trawlers going over my lines day after day and year afteryear for three or four years running. On all the grounds here the trawlers have been going over the lines regularly, but so long as they don't touch the buoys they don't hurt us at all.

16,407. Do they not catch the hooks ?—They may catch a hook and pull it off, but I don't know that I ever noticed it.

16,408. They never disturb the lines ?—No.

16,409. Then you don't think it can be true, as complained of elsewhere, that the line fishermen lose their lines in consequence of the trawlers going over them ?—No, I never found it so, and I have been with them plenty of times.

16,410. Have you ever lost a buoy by the trawlers ?—No, they try to avoid going over the buoys if they can. If they can't avoid going over the lines they try to clear the buoy, and then they never hurt the lines.

16,411. Are your boats bringing home great quantities of codfish just now ?—Not for a fortnight or three weeks, but before that they had good takes.

16,412. What is the regular supply to the London market from here ?—It varies a very great deal.

16,413. Have the tanks here been full of codfish lately ?—Yes, the chests have been full of codfish here for the last three weeks.

16,414. What do they hold ?—According to my calculation, there are now from 800 to 1,000 score of cod here.

16,415. Do these chests belong to the dock company ?—No, a man hires a chest.

16,416. What do you pay for them ?—One shilling each.

16,417. For how long a time ?—As long as we like to keep the codfish—until we want to send them to London.

16,418. Do you catch bigger cod at the Dogger Bank than at Cromer Knoll ?—At both places we get very fine cod ; they are just the cod we like.

16,419. Have you found of late years that the size of the codfish has been decreasing off Cromer ?—No, I think they are as fine as ever I saw ; I never saw finer.

16,420. Is there a large proportion of small cod brought in here ?—Very few from Cromer Knoll or the Dogger Bank.

16,421. Do you catch a large proportion of turbot with the long-line ?—Sometimes we may catch one or two, but not often.

16,422. Do you ever catch soles ?—We may catch one or two, but not frequently.

16,423. Do you think the dog-fish follow the haddock and cod in shoals ?—No ; I think the dog-fish have fallen off on our coast. I have not seen many of late years. At one time there used to be a great quantity about this coast.

16,424. Do you find that the herring nets at all interfere with you ?—At times they do, but our vessels are always under weigh and keep clear of them.

16,425. The long-lines ?—If we begin to shoot our lines before daylight we keep a good look out.

16,426. Do you shoot before daylight ?—If we have a nice fine morning we will shoot between 4 and 5 o'clock.

16,427. How long do you leave your lines down ?—We shoot about half-tide, and when the tide begins to slack then we begin to haul.

16,428. Do you sometimes get a second shoot in a day ?—Yes, sometimes.

16,429. Do you make most money when you send your boat out trawling, or when you send it out line-fishing ?—I make most from line-fishing.

16,430. Is it not a bad sign when dog-fish are rather scarce ?—It does not appear to be a bad sign on this coast. They have been scarce now for the last four or five years, and the smacks have had a good catch of cod every year.

16,431. You have not observed that there has been any comparison or falling off between the codfish and the dog-fish ?—No.

16,432. (*Mr. Caird.*) Have you practised both trawling and line-fishing ?—Yes, until the last six years.

16,433. Which pays best ?—I always found that line-fishing paid me best ; I liked it best.

The witness withdrew.

J. O. Hawke.

JOHN OLIVER HAWKE called and examined.

16,434. (*Mr. Caird.*) Do you manage Mr. Dalton's fishing boats ?—Yes, I do.

16,435. It was stated to us by Mr. Dalton at Hull, nearly two months ago that his line-vessels were a very, bad speculation ; from that time to this has it so continued, or has the produce of his vessels improved ?—They have improved lately.

16,436. Are they paying better now ?—A little.

16,437. (*Mr. Lefevre.*) Are they paying at all ?—I should say they are just about paying.

16,438. (*Mr. Caird.*) Then is he in better spirits now, and desirous of going on ?—I don't think he is if he could get out of it. He has unluckily got into a bad trade.

16,439. (*Mr. Lefevre.*) Do you manage his business?—Yes, and I have vessels of my own.

16,440. (*Mr. Caird.*) Are yours in the same business?—No, mine are trawlers.

16,441. His are line-vessels?—Yes, and I have line-vessels too.

16,442. Are your line-vessels as unremunerative as his?—They are the same; I am interested with him in the line-vessels, I am connected also with him in trawling, but I have trawlers of my own as well.

16,443. Which do you find pays best?—Trawlers.

16,444. Do they pay better for the capital invested?—Yes; they don't pay as much money but their expenses are less.

16,445. There is a larger nett balance?—Yes.

16,446. Do you find that trawl-fishing on the whole is a remunerative trade?—Yes.

16,447. You have not found the line-fishing to be a remunerative trade?—No.

16,448. Is there a prospect of its becoming a better trade?—I don't know; I have given up all hopes of it.

16,449. How long have you been engaged in it?—For three or four years.

16,450. Has it gone from bad to worse?—In 1859 the vessels paid very well, but they have got worse ever since.

16,451. Has the price diminished?—I don't think it has.

16,452. Has the quantity of fish diminished?—I think the quantity has diminished up to within the last two or three months or so, but I don't think that is any criterion for the fishing trade any more than a good harvest on land. It is due to exceptional causes. We have had such fine weather that immense quantities of fish have been caught off here this season.

16,453. Then am I to conclude from that that it is a question of weather; that if there has been any diminution at any time, it is not because there is not plenty of fish in the sea, but because you don't have favourable weather to catch them?—Yes.

16,454. You don't think that the supply of fish in the sea has decreased?—No.

16,455. Do you know of any banks or fishing grounds that are less productive than they used to be?—I believe the Dogger Bank is less productive in haddock than it was a few years ago. I find that our vessels don't bring in so many haddocks as they did in 1859, 1860, and 1861.

16,456. That is on the Dogger Bank?—Yes.

16,457. You are referring now to haddocks alone?—Yes.

16,458. You find the other kinds of fish quite as numerous?—Yes.

16,459 And as fine in quality?—Yes.

16,460. Of late, during the last two or three months, have you found the same decrease in haddocks?—They have only just begun to fish the Dogger Bank. Two or three vessels have gone from here, but they have brought but very few haddocks in with them. Although I am interested in the fishing I must be allowed to say that I think there is a great quantity of small cod or codlings brought into this dock which ought not to be brought. There have been some scores of thousands brought in all through this season. I am no practical fisherman, but I have seen them brought in by our vessels and by others too. I find sometimes that a vessel will bring from 30 to 60 score of these codlings, about 15 inches long, or even less. I am told they are caught off Dimlington, close to the land.

16,461. By your line-vessels?—Yes.

16,462. What distance from the land may that be?—Close to it; but I can't tell you exactly; I am no practical fisherman.

16,463. Is that in Dimlington Bay?—Yes.

16,464. On the Yorkshire coast?—Yes; off Spurn Point.

16,465. You have not been in the vessels fishing?—No; but I have seen the fish brought in.

16,466. Do you know that they are caught close in-shore?—Yes; some of them in Boston Deeps. They have been fishing there for the last few weeks, in 3 or 4 fathoms of water, and have been bringing in large quantities of small cod, from 12 to 18 inches long. I think they ought not to be caught and brought in by us or by any other cod smacks.

16,467. Do you think they are immature fish?—They are; they must be.

16,468. Do they bring a good price in the market?—I don't think they fetch 4*s.* or 5*s.* a score, and sometimes we can't sell them for more than 3*s.* a score.

16,469. What do they bring per pound weight compared with what they would bring if they were allowed to become mature fish?—I can scarcely answer that question. I have seen them brought in, some of them less than 12 inches long.

16,470. They are all caught in shoal water, close in-shore?—Yes.

16,471. By the long-lines?—Yes, by the cod smacks. We reckon, from the Dogger Bank, eight or nine score of codfish a good catch; but these smacks are bringing in from 30 to 40, 50, and 60 score of cod from off Dimlington and Boston Deeps. They must necessarily be immature fish.

16,472. Would those nine score from the Dogger Bank bring as much money as the 50 or 60 score which are caught close in-shore?—Ten times as much, I should think. Nine score would fetch at least six or seven times as much as 50 or 60 score of small fish.

16,473. Would it take a much longer time to make a voyage to the Dogger than to make the other voyage?—Yes, it would.

16,474. How much longer?—If there is a fair wind they are only a few hours in running to the Dogger Bank from here.

16,475. Then would not a fisherman stand much in his own light if he went to a place where he could only bring in a catch of fish worth a sixth-part of what he could bring in if he went to the Dogger?—The Dogger Bank fishing has only just commenced. If he had gone there a month or six weeks ago he would not have found any fish. They fish in-shore, because no fish are to be got on the bank. The bank-fishing is commencing now.

16,476. Is there any other place where they can go to fish?—They have been fishing during the last month in Boston Deeps.

16,477. That fishing is also in-shore?—Yes, in shoal water.

16,478. Is there any deep-sea fishing that may be got at the same time?—I am not aware of any. These small fish are after the sprats, close in shore, I believe.

16,479. Fishermen go to the ground where they believe they will catch those fish.—Yes.

16,480. They could not at the same time catch anything else?—I don't know that; there are practical fishermen here who can give you that information best.

16,481. They have been in the habit of doing that for many years?—Since I have been connected with them they have.

16,482. Has the take of full grown cod diminished in consequence?—I have not noticed that it has.

16,483. You have not observed any falling off in the quantity of full grown fish in consequence of these small cod being taken?—No.

16,484. Then what do you complain of?—I think it is a great shame that so large a quantity of fish should be brought to market, fetching almost no money.

16,485. (*Mr. Lefevre.*) Why?—It seems a pity to kill such things.

16,486. (*Mr. Caird.*) Would any other fish be brought in at the same time?—The larger fish must be somewhere.

16,487. You are not a practical fisherman yourself?—I am not.

16,488. You don't go to sea at all with your vessels?—No.

16,489. You can only speak of what comes ashore?—Yes.

16,490. You don't know where the fish are caught?

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—Only what the captains told me. They told me that they got close in-shore at Dimlington, in three or four fathoms of water, and at Boston Deeps.

16,491. Is that only during the month of November ?—In October and November.

16,492. Then after November no more of these little fish are caught ?—No ; then they begin to go to the Dogger Bank and Cromer Knoll and bring in large fish.

16,493. (*Mr. Lefevre.*) Do you think it would be advantageous to you as the owner of fishing smacks if the State interfered to prevent the catch of small cod ?—I think perhaps it might. The fishermen would then probably find out other grounds where they could catch larger fish.

16,494. Do you ever instruct your captains to go further off ?—I have told them that I was ashamed of what they brought in and that I would rather they had kept out than come in at all. I have told them that I would prefer that they would bring no fish rather than those they have brought.

16,495. Do you find that you only get a small price for such fish ?—We must have something to meet the expenses and therefore we put up with it.

16,496. How many vessels are you interested in ?—I have the management of, and am interested in seven altogether.

16,497. How many of these are Mr. Dalton's ?—Five ; the five are not solely and wholly his.

16,498. You have no interest in these five ?—Yes.

16,499. As owner ?—Yes, as owner.

16,500. You have two of your own besides ?—Yes.

16,501. How long have you had them ?—For two years.

16,502. Have you found that you have been losing money at the same rate as Mr. Dalton ?—I don't say that I have. The vessels that I have of my own are trawlers.

16,503. They are not line-boats at all ?—No, I don't want any line-boats.

16,504. Does Mr. Dalton assist you in looking after his boats ?—No.

16,505. He leaves it entirely to you ?—Yes.

16,506. Do you agree with him that he has been losing money during the last five years at the rate of 200*l.* a year ?—No, that is a mistake. Mr. Dalton did not explain that properly ; he has not lost 200*l.*

16,507. Was what he meant to say that in one year he had lost 200*l.* ?—No, he had a vessel that lost upwards of 300*l.* in hard cash without allowing anything for interest.

16,508. Is there any mode of accounting for that ?—I am not a practical man ; I cannot do so.

16,509. Do you think he did not tell us of other years, wherein he made up that loss ?—No, last year one of our vessels lost upwards of 400*l.* in hard cash without allowing anything for depreciation or interest on the capital.

16,510. You don't agree with him when he says : "I have lost 200*l.* per annum on each of my boats" ?—Yes, I do.

16,511. Then how do you explain it ?—We offered one of our vessels for sale——

16,512. I am not talking about vessels being sold, but of what has been the result of the trade for the last few years. He tells us "I have lost 200*l.* per annum on each of my boats" ?—Yes.

16,513. Do you agree with that ?—No, this is how the case stands. Supposing I had a boat for three years, that would be 600*l.* If it was brought into the market now, it would not fetch 500*l.* and yet it would have cost 1,000*l.* The interest on this amounts to about 150*l.* and then the vessel only selling for 500*l.* makes a still greater loss. Taking all our vessels together it really amounts to that.

16,514. Then you think the words "I have lost "200*l.* per annum on each of my boats" includes the amount of the depreciation on the boat as well ?—Yes.

16,515. It does not refer to his gains and losses alone during that time ?—No.

16,516. During the five years he may have been making large gains ?—I think not ; I should be glad to show you our books.

16,517. Can you give us a return of the losses and profits during the last five years ?—I can hardly do that ; but I can show you our books.

15,518. We shall be quite satisfied if you give us a list showing your losses on each boat during the last five years—can you give us such a return ?—Yes.

15,519. Is it your opinion that the loss has been general with all the owners of line-smacks ?—No ; there are always exceptions. The last witness, Mr. Bulpit, would not have had his expenses if his vessel were like the one upon which I told you we lost 400*l.* last year. Where that vessel has gained 380*l.* his vessel has made three times that amount.

16,520. Do you think his case is exceptional ?—There are two men, who are sitting there, and they make double the money of any other cod men in the place.

16,521. How do you account for that ?—I don't know how to account for it, but it is a well-known fact. They are always together and what the one gets the other gets.

16,522. Perhaps it is due to their being more experienced ?—They don't always go to sea themselves, but I will guarantee that their two boats make as much money as any other three, or taking the worst, as any other four or five out of this place.

16,523. Do you think that the line-boats generally have been losing money ?—You see they don't look at it in a proper light when they say they have been making money. For instance, if they take up 30*l.* and make 30*l.* then they say they clear themselves. They don't take into consideration the loss of interest upon their capital, and the depreciation of property.

16,524. But you with your better knowledge think that the line-boats have been losing money ?—I should say that they have.

16,525. Notwithstanding that they have been increasing in number ?—I don't think the cod smacks have been increasing in number lately.

16,526. Have your vessels been lying in the dock ?—Yes, the one is lying in the dock that made only 384*l.* from September up to the 3d of March in the height of the season. It laid by here from the 3d of March until the 28th of June and then we sent her away to Iceland. The one that lay alongside of her was laid up in April, and we sent her to sea in the beginning of September.

16,527. Do you find it answer best to leave them in the dock rather than send them to sea ?—Yes, I do.

16,528. (*Mr. Caird.*) As I understand you, you speak in a complaining tone of the result of your fishing altogether—do you imagine that any remedy of any kind can be applied to save you from the loss of which you complain ?—I think if a stop were put to this in-shore fishing by which they bring in immense quantities of small fish that are not worth the expense of catching, that some benefit would accrue to us.

16,529. You have referred to two gentlemen here who practise the same description of fishing that you do. They go to sea when your vessels lie in the dock, and they find it a paying and remunerative trade, while you find it a losing one. They have the same difficulties to contend with in the catching of immature cod, and yet they find it answers. What do you expect the legislature can do for you when these gentlemen can go on fishing and realizing a profit ?—But they are altogether an exception ; they have nearly the whole of the line-fishing to themselves in the summer. They don't go to Iceland, but they fish off here. They go in their own vessels and they have apprentice lads on board, and they can work their vessels cheaper than we can do. If they had two or three vessels competing with them they would soon have to shut up.

16,530. There is nothing to prevent your competing with them?—No, but although it will pay their boats to fish off here in the summer, if there were four or five they would be losing money. They began it when they first came here and no one else tries it.

16,531. (*Mr. Lefevre.*) I thought you said your men had been bringing home these small cods as well as the other fishermen?—Yes.

16,532. Do they not pay for the catching?—No, they scarcely meet the expense.

16,533. Then why do you send the vessels out?—Because they say there is nowhere else to go, and of course I don't know whether there is not.

16,534. (*Mr. Caird.*) Is there an immense quantity of these small cod brought to market?—Yes, immense.

16,535. Is the price very much lower than for other fish?—A score of good cod would be worth as much as 20 score of those small cod.

16,536. What would be the difference in weight between a score of good cod, and twenty score of small cod?—I don't know. About 12 score of Dogger cod would fill a van, but it would take between 50 and 60 score of these small fish. The small cod sell for about a sixth of the price of large cod.

16,537. During the time these small cod are coming to market there is no great supply of the finer description of cod?—No, there are very few then.

16,538. If the small cod were not brought to market there would at that time be rather a scarcity of fish of that description?—There would be none at all, but when they are catching the small ones they sometimes hook a fine fish among them.

16,539. Do these small cods go into the large consuming markets of the country?—Yes; a great deal is sent to London.

16,540. Does any of it go inland to Manchester, Birmingham, and such places?—Yes, it goes to all those markets.

16,541. Is there a large quantity of it got?—Yes, an immense quantity.

16,542. I presume it goes for consumption among the poorer classes of people?—Yes.

16,543. So that there is a large supply of food sent at that time into the consuming districts to the poorer people?—Yes.

16,544. You have not observed that the result of that has been to diminish the supply of large cod?—No, I have not.

The witness withdrew.

JOHN STARLING called and examined.

J. Starling.

16,545. (*Mr. Caird.*) You are a line fisherman, I believe?—Yes.

16,546. And a successful one?—Yes, I am happy to say that I am.

16,547. What do you attribute your greater success to, as compared with that of the last witness, who seems to have found it rather a bad business?—I cannot say; all I know is that I have found it a good business.

16,548. Do you take any other mode of fishing than he does?—Not that I am aware of; but I do not know how his captains manage it.

16,549. Do you go upon the same fishing grounds which they frequent?—We are supposed to fish all upon one principle.

16,550. Do you catch more fish?—Yes, I think I do.

16,551. Do you go on the same fishing grounds?—Yes.

16,552. Do you think that your business is better managed?—We all manage our own business; we have no large establishments to keep up, or anything of that sort, which runs away with a great deal of money.

16,553. Do you think that each of your vessels bring more fish to land?—Well, I do not know; but I think we do on the average, taking the year through.

16,554. Have you noticed whether on the fishing grounds you have frequented successively year after year, the quantity of fish you can catch has increased or diminished?—I have been down here at Grimsby now for nearly five years—five years come next month—and the quantity of fish I have been enabled to bring to shore has been on the increase with me ever since I have been down here. I think on the whole that the quantity of fish in the sea has increased.

16,555. Between what points do you usually fish along the coast north and south? Do you go as far north as Flamborough Head?—Very seldom; but we went down this last summer as far as the Berwick Bank.

16,556. Is that off Berwick?—Yes.

16,557. Is it a good fishing bank?—Yes, there are always plenty of fish there, except when the herrings are passing; they float from it then, but they return again.

16,558. What kind of fish do you get there?—Cod.

16,559. What season do you go there?—We went there last July.

16,560. At this season of the year where do you fish?—I have been fishing about here from five to forty miles off this coast for the last two months.

16,561. Have you frequently seen the trawl-fishermen near the grounds upon which you fish?—Yes.

16,562. Do you not complain of the injury they do you; or is it the fact that they do you no injury at all?—We don't think they do us any injury, and it almost seems a miracle that they should be able to pass over our lines without hurting us; yet, nevertheless, it is a fact that they do not injure us.

16,563. They go over your lines without hurting you?—Yes.

16,564. Are you of opinion that the mode of fishing which has been practised by the fishermen here has not tended to decrease the supply of fish?—No, I think not.

16,565. It has not decreased the supply of fish of any kind?—No, I think not.

16,566. In reference to the small cod of which the last witness spoke, is there a large take of those small cod in the season?—Yes, there are a great number taken every season. Every year is alike in that respect.

16,567. When does it come?—About the middle of October.

16,568. And until when do you continue to catch it?—Until about the end of November.

16,569. Then does it come just in the sprat season?—Yes, the sprats all set in along the shore at that time, and the cods come in after them.

16,570. Do the large cod not follow them as well as the small cod?—Yes, there are large cod among them.

16,571. You get large and small cod together?—Yes.

16,572. In what proportion?—If we get 40 score of cod there will perhaps be five or six score of good cod among them.

16,573. Do you get a larger proportion of small cod when you come in-shore than if you remain out, fishing in deep water?—We are generally 10 miles from the shore when we catch the small cod.

16,574. Where do you catch them?—Off Dimlington.

16,575. Dimlington Bay?—Yes, except it happens to be blowing a very heavy gale, and then we may, perhaps, come a little nearer in.

16,576. Do you catch a larger proportion of small cod then than at any other season of the year?—Yes; the cod seem to hang about there; but there are places off the Dowsings, where we also get them in considerable quantities.

16,577. Where are the Dowsings?—About 40 miles from here; the fish we get there are as small a

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fish as we get at Dimlington. We frequently catch them just as small, but it is only in the season from October to December that we catch these small fish.

16,578. You only get them from October to December ?—Only in that season along the shore ; we do not fish along the shore at any other time except that. That is the only time of year that we do fish along the shore.

16,579. Is there a large proportion of all your catch at that time of year of that description, namely, small cod ?—Yes.

16,580. Is there as much as one half small cod ?—Yes.

16,581. Is there more than half ?—Sometimes.

16,582. Much more than half ?—There will be all one half, and sometimes more than one half small.

16,583. Do you realize much as a fisherman from these small cod ; do they pay you well ?—Yes.

16,584. Are they not very cheap ?—Yes ; they do not pay according to the value of larger cod, but there is a great quantity of them, and we reckon that the quantity pays, although it is sold at a cheaper rate. It does not matter much to me if I make 50*l.* in a week, whether I make it by small cod, or by large.

16,585. I suppose you mean if it occupies about the same time to catch them ?—Yes, that is just it.

16,586. I imagine that these small cod form a very cheap food for the people ?—Yes, very cheap at times.

16,587. Much cheaper than the bigger cod ?—Yes. I think it is a grand thing for England that they are caught. They fill a good many mouths when it would be difficult to obtain other food. There is not a question about that.

16,588. Have you found that that description of fish has been caught at that particular season for many years ?—Yes, ever since I can recollect the fishing.

16,589. Has the same abundance of small cod been found this year at the same season ?—Yes, I think there has been rather more this year.

16,590. There has been rather more fish of every kind, has there not ?—Yes, there seems to be a very good supply. There are as many now at Cromer Knoll as ever I knew in the course of my whole experience.

16,591. Do you mean that there is as large a supply of good cod at Cromer Knoll as you ever experienced ?—Yes.

16,592. Then you do not find that the fact of your catching these small cod has at all injured the supply of large cod ?—No, not in the least.

16,593. You do not believe in anything of that kind ?—No, we have no reason to believe so, because we have found more fish every year.

16,594. How many years have you been engaged as a line-fisherman ?—Twenty-four.

16,595. Have you found that trawling has been injurious to your interests as a line-fisherman ?—No, but although I have been a line-fisherman for 24 years, I have been trawling between the seasons. I was first apprenticed to the lining business.

16,596. In your experience as a line-fishermen over a considerable number of years, have you found that trawl-fishing has been at all injurious to your business as a line-fisherman ?—I think not.

16,597. Do you think that the two modes of fishing can go on together without the one injuring the other ?—Yes.

16,598. The quantity of fish you have been enabled to catch year by year has not at all diminished ?—I think not ; on the contrary, there seems to be more fish now than there ever was.

16,599. (*Mr. Lefevre.*) At what distance from the coast do you generally find the small cod of which you have been speaking ?—What distance ?

16,600. Yes.—Well, perhaps three miles. No doubt we should find them closer in-shore, but we do not like to fish too near, because we generally find that the fish run very small the closer we get in.

16,601. The nearer you fish to the shore, the smaller, as a general rule, you find the fish ?—Yes, and for that reason we do not care about going too near the shore. We generally fish about five miles off the land, so that we can go into any depth of water.

16,602. Do you catch the small cod with the long-line or with the hand-line ?—With the long-line.

16,603. As the year goes on, do the fish go into deep water ?—Yes. For instance, in our hand-line season, before the sprats come, these small fish are numerous 30 or 40 miles off ; but when the sprats come in they leave the grounds 30 or 40 miles off and come along shore.

16,604. When the sprat-fishing is over do they go out again to sea ?—Yes, they have gone now. There are no fish there now. I had a vessel fishing there last week, and it came in with a very small lot. They are all gone ; they always leave at this time.

16,605. If you did not catch them in-shore in this way, do you think that later in the year you would catch them out at sea ?—No, I think they spread ; they spread all over everywhere.

16,606. Do you go out yourself in your smack ?—Yes, but I have a rest now and then.

16,607. Do you own more than one smack ?—No.

16,608. Do you think that the business is managed more profitably when the owner goes out with his smack himself ?—I think so.

16,609. Do you think that that accounts for the last witness having found it an unprofitable business ?—I think there is a little in that. We understand the nature of the business and know all that is wanted. Perhaps the captain on one of the smacks will come to Mr. Hawke and say, "We want so-and-so," and he does not know whether they do want it or not, because he does not understand the business.

16,610. Is there a large proportion of line-smacks here owned by men who go out themselves in them ?—Most of them.

16,611. And the trawlers too ?—Yes, some go in their own smacks, and there are some who do not.

16,612. Do you know how many men there are who go out as captains of their own smacks ?—I cannot say ; perhaps there may be a dozen or 15 out of this place.

16,613. Not more ?—No, I think not. I am speaking now of the cod vessels.

16,614. How many go out as captains of their own trawl-vessels ?—I do not know anything about them.

16,615. Do you find that you lose any large proportion of your fish by the dog-fish ?—No, I have scarcely ever lost any, except upon one occasion, about three years ago. It was in the spring of the year. I shot my lines and we had six and a half score of cod on the shank of the lines, and all we got alive was six.

16,616. But that was an exceptional case ?—Yes. When I came in I hung them about the ratlines. It was a great curiosity, the rigging appeared to be covered all over with skeletons.

16,617. Had they left all the bones ?—Yes, but the eyes were all out, and also the cheeks.

16,618. As a general rule you do not lose many fish by the dog-fish ?—When the herrings are about we do now and then, particularly between Cromer Knoll and Cromer.

16,619. What proportion do you lose on an average ?—Some days we never lose one. We can only tell when we begin to haul in because the fish are still on the hook. Perhaps some days we may have a score or so taken, perhaps not more than three or four ; we never take any particular notice.

16,620. Do you think the dog-fish feed on the cod ?—I think a dog-fish is not particular what he feeds on.

16,621. Do they pursue the codfish in the water ?—Yes, the cod is fast to the hook and they can manage him.

16,622. Do they pursue the codfish when they are not fast to the hook ?—I think not.

16,623. Do they feed on young cod ?—I should think they feed on all sorts of young fish, and herring spawn, and everything like that.

16,624. Have you seen young cod eaten by other

fish?—Yes, you may frequently see young cod inside the large cod.

16,625. They feed upon one another?—Yes.

16,626. Then I suppose that a large proportion of the young cod fall victims?—Yes, it is the same with them as with all other kinds of young fish.

16,627. (*Mr. Caird.*) In fishing do you ever find yourself working on the same ground as the foreign fishermen; do you ever have the Dutch or the French fishermen fishing with you?—Only on the Dogger Bank. The Dutch vessels are there.

16,628. Are they line fishermen?—Yes.

17,629. Do they not interfere with you in any way?—No.

16,630. Have you ever fished on the Dutch coast?—I have only been trawling; I was never lining there.

16,631. You never go lining on the Dutch coast?—No.

16,632. (*Mr. Lefevre.*) How do you work the hand-lines?—We have one line to each hand, and 10 hands in all on board a line-fishing boat. During the latter part of the day, about sunset, we have all hands on deck, as we reckon that that is the time of day when we can catch the most fish. During the early part of the day it is not necessary to have all hands on deck, and only part of them are engaged in working the hand-lines.

The witness withdrew.

THOMAS NEWBY called and examined.

T. Newby.

16,633. (*Mr. Caird.*) Have you been long resident here at Grimsby?—Yes, all my life.

16,634. Have you had a good opportunity of ascertaining the condition of the fishing interest?—No landsman here has had a greater opportunity than I have had.

16,635. At what time did it become of interest and importance?—About the year 1853.

16,636. Was that after the railway opened?—Yes, the year after.

16,636. Has it gone on progressively increasing since that time?—It has gone on steadily increasing since that time.

16,637. Both in the number of fishermen and in the number of vessels engaged?—Yes.

16,638. Has there been a pause in that steady increase?—None whatever.

16,639. Have many strangers from a distance come here and entered the business?—Very many. In point of fact it has caused one part of the town to be built—the part in which I reside.

16,640. Has the increase been nearly equally divided between trawl fishermen and line fishermen?—I think, speaking from memory, that about the year 1859 there was what I may call the greatest flush we have ever had. There was a quarrel about that time in Hull between the owners and the men, and some of them migrated here. One gentleman, Mr. Vivian, brought five smacks at one time, and there were other vessels which also came here.

16,641. Have you observed whether of recent years the supply of fish brought to Grimsby has much increased?—Yes.

16,642. Has the supply of all kinds of fish increased?—Yes.

16,643. Do you know whether the long-line fishermen or the trawl fishermen bring the largest supply?—I should imagine the trawl fishermen from what I have seen, but we do not often see the result of the cod men's voyages. They put their fish in chests and keep them in wells.

16,644. Do they supply the market with fish from those chests as the market can afford to take it?—Yes.

16,645. The trawl fishermen send their fish to market at once?—Yes. The only way in which we ever get cheap fish in Grimsby is when there is what they call "lost market" fish.

16,646. If they lose the market do they sell the fish here?—Yes, they sell it here then.

16,647. Is there a large quantity of that fish sold here?—Since we have had so many fishing boats here we have had less fish for domestic purposes than we ever had formerly.

16,648. Is that because most of it is sent away inland?—Yes.

16,649. Has the condition of the fishermen themselves improved?—Yes, all who like are making money.

16,650. It is a prosperous trade?—It is a prosperous trade for those who work at it themselves—those who understand it and manage it themselves. But I think if a man wants to sink money the best thing he can do is to go into the fishing trade if he does not understand it. He will very soon in that case accomplish his object.

16,651. Then you think it is a trade that cannot be conducted profitably unless accompanied by personal knowledge and personal supervision?—I am satisfied of that.

16,652. Have the most successful persons engaged in the business been persons who have themselves gone to sea in their boats?—Yes, they have either gone to sea or have attended to the business on shore. They have looked after everything the vessel has required.

16,553. And they have been practically acquainted with all the requirements of the business?—Yes, I think that has been the secret of their success.

16,654. Has the price of fish increased of late years?—From what I know, having had many income-tax papers to make out for these gentlemen, I think the price has increased.

16,655. What have the income-tax papers to do with it?—They make their returns, and I know what they make from year to year.

16,656. Have the profits of the fishermen increased as shown by those papers?—With some the profits have increased considerably, but there are some who have not made much way.

16,657. Speaking of the price of fish as supplied to the consumer, are you aware whether it has increased or diminished?—It has increased considerably.

16,658. The price of all kinds of fish?—Yes, I know very well that when I was a boy we never thought of giving more than 1*s.* 6*d.* for a very large codfish here.

16,659-60. Do you know whether that is the case in the manufacturing districts where they buy your fish?—No, I think not.

16,661. Probably when you buy fish here they get very little there?—Probably none. Speaking of my own knowledge, I am able to say that the fishing trade has been of very great importance to Grimsby.

16,662. (*Mr. Lefevre.*) Is that due to the increased demand, and to the fact that the railroads are able to take the fish inland, or to an increase in the supply?—I think it is owing to their being more locomotive facilities.

16,663. Do many of the owners of the fishing smacks return something under the income tax?—Yes, most of them pay income tax.

16,664. Then your observation does not show that it is a losing concern?—No; and having it under my eyes every day, I am enabled to see whether it is a losing concern or not.

16,665. There are not many instances of men losing 200*l.* a year by a vessel?—Certainly not. If ever a case of that kind happens it arises from non-practical men engaging in the business; such non-practical men would be pretty sure to lose.

16,666. Can you form any notion of what a man can get out of one smack in the course of a year?—He ought to be able to clear his 100*l.* a year.

16,667. Profit after paying all expenses?—Yes.

16,668. And after paying for the depreciation of

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the vessel?—Yes, if he is fortunate. There is one gentleman who has lost two smacks since he has been at Grimsby, but that is an exceptional case. I should say altogether that each vessel will make 100*l.* a year.

16,669. Are you speaking now of cod smacks or of trawlers?—Of trawlers.

16,670. Do the cod smacks make more?—Yes.

16,671. They are larger vessels, I believe?—Yes, and they turn over a great deal more money.

16,672. (*Mr. Caird.*) I think I understood you to say that the condition of the poor in Grimsby has very much improved?—It has.

16,673. In what way has the fishing produced that effect?—I will give you an instance. As I came down here I met a man who I know has a dozen olive branches around his table, and who, although a hard working man has great difficulty in getting a living for himself and those dependent upon him.

16,674. Is he a labourer?—Yes. This morning I saw him with a great bundle of offal fish, plaice, in his hand, which I knew he must have had given to him. By this means a great many of the poor in Grimsby get a dinner when they would otherwise have none.

16,675. But that is from the kindness of the fishermen?—Yes, it is from kindness, no doubt; but yet that is what has been complained of by the Northumberland men as waste fish. In point of fact what they complain of goes to feed the poor.

The witness withdrew.

T. Campbell.

THOMAS CAMPBELL called and examined.

16,676. (*Mr. Caird.*) I believe you are a buyer of oysters and shell-fish?—Yes.

16,677. Where are the oysters got here?—We catch them at different places. Some are got six or seven miles from the Spurn Point, at a place called Saltfleet.

16,678. Are there oyster beds there?—Yes, it is all an oystery bottom, a kind of stony bottom.

16,679. Do you cultivate them?—No; that is only the ground from which we take them.

16,680. Is it ground upon which you have placed oysters for the purpose of breeding them?—No, they breed on their own ground.

16,681. Then they are natural oyster beds?—Yes.

16,682. Are they the property of the public?—Yes.

16,683. Can anybody go and fish there?—Yes.

16,684. Without any hindrance at all?—Yes.

16,685. No amount of money is taken for the privilege of fishing there?—No, it is in the open sea.

16,686. Has it long been frequented for oysters?—Yes.

16,687. Do they yield as well now as they did in former years?—Yes, they do generally.

16,688. Does the yield vary in different seasons?—Yes.

16,689. Are the beds closely dredged?—Yes, very closely. They are dredged by smacks from Colchester, Rochester, and other places in the summer season.

16,690. Are they more closely dredged now than they used to be?—Yes, I think they are. There are more vessels that go there now.

16,691. And still they continue to yield a great quantity of oysters?—Yes.

16,692. There has been no falling off?—No, I do not think there has been.

16,693. Does the quality of the oysters continue much the same?—Yes.

16,694. Are they not becoming smaller?—No; it appears to me that they breed there almost every year.

16,695. You think that what may be taken away this year will be supplied in abundance next year?—Perhaps not in very great abundance, but there will be just as much as will enable the men to live by catching them.

16,696. Is there a large quantity taken here?—A good many in the summer season.

16,697. When they are taken by the Colchester men in the summer season are they taken to be laid down again on the Colchester beds?—Yes, the small ones are.

16,698. What do they do with the large ones?—They are brought here and sold in the market.

16,699. Is there any close time—any time during which they are forbidden to fish?—Not here.

16,700. Do they fish all the year round?—Yes, all the year round.

16,701. Is that not found to exhaust the beds?—I never saw any difference.

16,702. What quantity is there taken in a year off those beds?—I have no idea.

16,703. Is there any particular difficulty in fishing the oysters?—No, if the weather permits. You can only fish them in fine weather.

16,704. Would it not be possible to run so many dredges over them that they would be cleared off altogether?—No, there are too many stones.

16,705. There is always shelter for them?—Yes.

16,706. Do the dredges not take up the stones?—Yes, but they are glad to get rid of them again.

16,707. Do they pitch them back again?—Yes, directly they bring them up.

16,708. Are they loose stones or rocks?—Loose stones; they vary from 2 or 3 stone to half a pound in weight.

16,709. Is there any other kind of shell-fish caught on those beds?—No; except a few whelks.

16,710. Do they get whelks there for bait?—Yes.

16,711. Are they regularly fished for as bait?—Yes, in the summer season: at least, it is rarely that they fish there now, generally they go further southward for whelks for bait.

16,712. Are there any other oyster beds than those you have mentioned?—Yes.

16,713. Are they at Cleethorpe?—The oyster beds at Cleethorpe are private property. They bring the oysters from the beds in the sea and lay them on the beds at Cleethorpe to grow; they take the small ones that are not fit for the market.

16,714. Who do the beds at Cleethorpe belong to?—To the inhabitants there; they hire them.

16,715. Do they fish them under any restrictions?—No.

16,716. Do they fish them at all seasons?—Yes.

16,717. All the year round?—Yes.

16,718. Then the small ones may be taken up as soon as they are put down?—They would take them up if they could dispose of them, but they keep them until they grow larger. The longer they keep them the more money they can realize from them.

16,719. Do the Cleethorpe beds continue as productive as ever?—Yes, I think they are better than ever they were.

16,720. Why are they better?—Since the docks have been made the same amount of tide and surf does not run over them. They are partly sheltered.

16,721. It has become a better breeding ground?—Yes; the docks project further into the Humber and shelter them.

16,722. Can anybody who likes go there to fish them?—No.

16,723. Nobody except Cleethorpe people?—No. The beds are dry at low water, and then they pick them up.

16,724. With their hands?—Yes. The ground is all staked out.

16,725. Do they select the oysters?—Yes.

16,726. (*Mr. Lefevre.*) Do the oysters breed there?—No, they only grow; that is all.

16,727. (*Mr. Caird.*) Is a large quantity taken from there every year?—Yes.

16,728. Have you any idea what the quantity is?—No; it varies very much.

16,729. Do they send the oysters to market by railway?—Yes.

16,730. Then could we not ascertain the quantity from the railway officials?—I think not. They bring them here and send the weight of them by the railway from the docks.

16,731. Are there any other oyster beds there than the two you have referred to?—Yes, there are oyster beds in what they call Lynn Well. You will find it marked on the chart. It is all oystery about Lynn Well.

16,732. Is the bed at Cleethorpe on the beach?—Yes, just on the edge of the low water.

16,733. (*Mr. Lefevre.*) How far does it extend?—For about two miles.

16,734. It is about two miles long?—Yes, from the point.

16,735. To the south?—Yes. The beds are laid in plots like gardens.

16,736. (*Mr. Caird.*) Are they indifferently fished, or do they belong to separate people?—They hire them.

16,737. Of whom do they hire them?—Of Lord Yarborough.

16,738. Do they pay rent for them?—Yes.

16,739. They belong to Lord Yarborough?—Yes.

16,740. What do they pay for the ground?—2*l.* a plot, I believe. They are only small plots.

16,741. How many plots are there on the whole bank?—A great many—above 100.

16,742. Where is the bank to which you referred first—where everybody may fish?—Off the Spurn.

16,743. (*Mr. Lefevre.*) At Donna Nook?—No.

16,744. At Saltfleet?—Yes.

16,745. How far does it extend?—Six or seven miles.

16,746. How far from shore?—About 10 or 12, and some parts only 2½ miles from the inside.

16,747. (*Mr. Caird.*) Is that bed dry at low water?—No.

16,748. (*Mr. Lefevre.*) What is the depth of water?—About three fathoms is the shortest depth.

16,749. What is the greatest?—I have been working in 9 and 10 fathoms.

16,750. Does it begin at Saltfleet?—Yes.

16,751. Between Saltfleet and Donna Nook?—A little to the north.

16,752. Where does it go to?—Below Trusthorpe Sands.

16,753. Between Trusthorpe and Sutton?—Yes.

16,754. How broad is it?—I do not know.

16,755. Does it go as far as the buoy?—No.

16,756. How near the shore?—Close to the shore; almost to what they call the Rose Sand.

16,757. (*Mr. Caird.*) Close to low water?—No, not to low water.

16,758. (*Mr. Lefevre.*) How broad should you say the beds are?—About 10 or 12 miles, I think.

16,759. How many boats are there engaged in dredging there?—About 50 sail in the summer season.

16,760. Do they dredge them in the winter?—No, they cannot work then.

16,761. Do the gales of wind disperse the oysters?—Yes, and the ground is so heavy they cannot dredge the beds. The oysters stick close to the ground in the winter season.

16,762. Do they dredge up both big and small?—Yes.

16,763. The big ones they take to market and the small ones they lay on the Cleethorpe beds?—Yes, and the Colchester men also get them and take them home for sale.

16,764. Do they place them on the beds at Colchester?—Yes.

16,765. You say they do not breed at Cleethorpe?—No, they do not.

16,766. What is the reason they do not?—They could not breed there.

16,767. Because they are not covered at low water?—Yes, the frost would kill them in the winter.

16,768. Do they breed at Saltfleet?—Yes, I have been fishing them on the beds there years ago with my father, and I see no difference in them now. There has been more at times after a heavy spat.

16,769. (*Mr. Caird.*) The spat is the spawn?—Yes.

16,770. (*Mr. Lefevre.*) I suppose there are variations in the supply if there is a good spawning year, or otherwise?—Yes. They sometimes go inside the Dowsings and work for them.

16,771. Are there any fixed places for working for them?—No, they go wherever they can find them.

16,772. Where is the other bed you were talking of?—Round the point at Burnham Flats.

16,773. (*Mr. Caird.*) May anybody who likes work there?—Yes. The beds go from Burnham Flats right down to the banks.

16,774. (*Mr. Lefevre.*) How long do you recollect that oyster-fishing?—Ever since I was a boy of 12 years of age.

16,775. How long have they been laid down at Cleethorpe?—Ever since I can recollect.

16,776. Are there any oysters found along the Yorkshire coast in Bridlington Bay?—No; we have tried there, but it is altogether too barren.

16,777. Then except on the grounds off Saltfleet and Burnham Flats, you do not find oysters in any quantity?—No; off Burnham Flats, and all up the Well, you will find them.

16,778. Have you been up the Wash dredging for oysters?—Not up the Wash, but off Lynn Well.

16,779. Have you found many in the Deeps?—No, but there are plenty of stones.

16,780. It hardly pays them to work there for oysters?—No, the work is too hard. There are 14 or 15 fathoms of water, and the bottom is full of stones.

16,781. You do not think that there has been any diminution in the supply of oysters?—No, I do not think there has been. We always reckon if there is any young spat on the ground, that if we tear it about it causes it to live.

16,782. (*Mr. Caird.*) If you dredge the ground when the spat is upon it, you think you increase the quantity for another year?—We reckon so. We have had spats and have not worked upon them and they have all died.

16,783. (*Mr. Lefevre.*) Do you buy oysters from the Cleethorpe ground?—Until this last season I have done so.

16,784. Did you buy there all the year round?—Yes.

16,785. Are they fit to eat all the year round?—Yes, some are, but some are not.

16,786. Do the fishermen know what are fit to eat at different times?—Yes, they know when the oysters are full of spawn.

16,787. Have they regular relays of oysters coming on at different times?—No, the men who have them are so poor, they cannot afford to put them down, only the small ones. As they catch the larger ones they must sell them to live upon.

16,788. The small ones they lay down?—Yes, in order that they may grow larger, and in the winter season they sell them to maintain themselves.

16,789. Are they unfit to eat then?—No.

16,790. Is there no season when they are unfit to eat?—They are only unfit to eat when they are full of spawn. They are not all full of spawn at the same time, only the odd ones.

16,791. Do they separate those which are full of spawn from the others?—No, they cannot do so.

16,792. They cannot tell whether they are full of spawn or not?—No, it rests with the opener to do that.

16,793. Is there a great difference in the price taking one year with another?—They are dearer now. They are more scarce.

16,794. (*Mr. Caird.*) Are they scarcer on the grounds?—No, but they are very bad to get.

16,795. Does your recollection go over a good many

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years in reference to all the oyster beds you have mentioned?—Yes, I have been brought up to it all my life.

16,796. Fifteen or twenty years ago, were there as many oyster boats engaged in the fishery as there are now?—I think there were rather more if anything.

16,797. The oyster boats have not increased then?—No, they have not.

16,798. Has the quantity of oysters taken off the beds increased?—It is about the same.

16,799. Is the quantity the same?—Yes, about the same.

16,800. Has the business not been a sufficiently paying one to attract a large number of boats?—No. When they are stopped from working about the south they come here occasionally, and may make 5*l.* or so a week.

16,801. Do you think that the whole of the oysters might be taken away if there was not a very rough bottom?—Yes.

16,802. (*Mr. Lefevre.*) Do you think, if the oysters were allowed to remain upon the beds at Cleethorpe, they would spawn?—I do not believe they would.

16,803. Has the experiment ever been tried?—I have known oysters there for 10 years without spawning. We have had them spawning in our docks in abundance, but not on the beds at Cleethorpe.

16,804. (*Mr. Caird.*) In your docks there is always water?—Yes.

16,805. And on the beds at Cleethorpe there is no water twice a day?—Yes, in the neap tides they are not dry at all.

16,806. When are they dry altogether?—In the summer months.

16,807. In the winter, when the oysters are quite young, you think the frost would destroy them?—Yes, the water being cold in a sharp winter would kill all the young oysters.

16,808. Do you suppose that an oyster breeding ground ought always to be covered with water?—Yes.

16,809. With regard to other shell-fish, do you deal in whelks for bait?—Yes, I sell a great deal.

16,810. Where do you get them from chiefly?—Generally close to low-water mark off Burnham in Norfolk. One of my smacks came in from Wells this morning.

16,811. Is there any regulation as to the fishing of whelks off that shore?—No.

16,812. Anybody can go there?—Yes.

16,813. At any season they please?—Yes.

16,814. Is the supply of whelks there increasing?—I think they get as many now as they ever did.

16,815. Can you get as many as you require?—Some of my vessels have come in with 150 to-day.

16,816. One hundred and fifty what?—150 wash.

16,817. Does the take vary?—Yes, it depends upon the weather.

16,818. Are they all dredged?—No.

16,819. Are they picked up at low water?—No.

16,820. How are they caught?—They are caught in hoops, the same as crabs.

16,821. You put hoops down?—Yes.

16,822. Do you bait them?—Yes.

16,823. And you catch them in that way?—Yes.

16,824. (*Mr. Lefevre.*) You said just now that oysters spawn in the docks here?—Yes.

16,825. How is that?—The oysters come in with the tide, and I have seen the walls covered all over with very fine oysters.

16,826. Do they ever collect the spat in the dock?—No, they cannot. They do not see it until the oysters have got to perfection.

16,827. (*Mr. Caird.*) In what depth of water do you find that it pays you to dredge for oysters?—It depends upon whether there be any oysters.

16,828. Is there not a depth beyond which it would hardly pay you even if there were oysters?—I have myself been working for oysters in 18 fathoms of water. We are not very particular as to the depth of water if there are oysters to get.

16,829. Generally, in what depth of water do you get oysters?—At Saltfleet the depth averages from three to seven fathoms.

16,830. But the depth of water does not much affect the fishing?—No, but we like shoal water best.

The witness withdrew.

The inquiry was then adjourned until Saturday, December 5th, at Hastings.

Hastings, Sussex, Saturday, 5th December 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | GEORGE SHAW LEFEVRE, Esq., M.P.

MARK BREACH called and examined.

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M. Breach.

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16,831. (*Mr. Caird.*) You are a fisherman here, I believe?—Yes.

16,832. Have you been long acquainted with the state of the fishing business at Hastings?—I have been in Hastings all my life. I was born in Hastings. I am a native of Hastings, and I have been in the fishing trade all my life.

16,833. Can you tell us, taking a period of 20 years back, whether the supply of fish brought to the market here by the fishermen of Hastings now has increased or diminished compared with what it was 20 years ago?—I think there is quite as much fish brought here now as I have ever known. The fishing has been very good, especially this summer.

16,834. Has this been an unusually good fishing season?—It has been a very good fishing season for trawl-fish.

16,835. Can you tell us what different kinds of fish are brought into this place in the greatest abundance?—We get whiting, plaice, and mackerel, and we have had a good supply of soles; indeed, we have a good supply of mackerel, turbot, soles, brill, mullets, skate, and all descriptions of trawl-fish. With regard to herrings they have been rather slack this season.

16,836. With respect to all these different kinds of fish, has the supply, in your opinion, continued to be good, compared with what it was 20 years ago?—Quite as good. It is equally as good, in general, as ever it was.

16,837. Is there any particular kind of fish that, within your experience, has diminished in quantity on the average?—Not any. There has been no diminution in any kind that I have seen, except herrings. We have had an abundance of all other kinds, but we have been slighted by the herrings.

16,838. Can you tell us the number of boats engaged in fishing now, compared with what it was 20 years ago?—I do not know the exact number, but I should think it has increased about double.

16,839. Can you give us the precise figures?—I should think we had 50 or 60 at one time, and now we have about 120 of all classes.

16,840. On the average, are your boats about the same size, or are they larger?—They are much larger. They are double and treble the size.

16,841. Do they carry the same number of men now that they did formerly, or do they carry more?—We have a different class of boats altogether now. The large boats carry from eight to ten hands, and the small ones which are engaged in trawling carry

three. The larger boats do not go trawling; they are only engaged in the herring and mackerel fishery.

16,842. Do you know what number of men are engaged now compared with the number engaged 20 years ago?—Taking them altogether, fishermen and fisher boys, there are about 600 or 700.

16,843. Have you any notion what the number was about 20 years ago?—I think it has increased one-third at least.

16,844. Will you tell us the different kinds of fishing that are practised here. I want to know what the different kinds of boats are, and the different kinds of net and line that are employed?—We use the herring and mackerel net, and the trawl net on the trawl-boats.

16,845. Leaving out of consideration for the present the herring and mackerel-fishing, by what mode of fishing is the bulk of the fish caught?—By trawl-fishing.

16,846. Are the trawl-vessels decked vessels?—No, they are open boats.

16,847. Open boats?—Open boats, belonging to Hastings; they are half-decked boats.

16,848. How many people are there in each of them?—Three.

16,849. Do you know what is the length of the beam of the trawl?—It is about 28 feet.

16,850. Has that long been the size of the trawl beam used here?—No. The beam is larger than it was formerly. The boats are larger now by four feet than they were formerly, and in that way they have increased the length of the beam. It used to be 26 feet long, but now we have got larger boats we have thought it necessary to have larger beams, and the length of the beam now is about 28 feet.

16,851. How many of the boats you have named will be engaged altogether in trawling?—Perhaps there may be about 50.

16,852. Then the great proportion of your fishermen here will be trawlers?—They are trawlers, herring men, or mackerel men, according to the seasons as they come round.

16,853. Are some of the boats employed in the herring and mackerel-fishing as well as in trawling?—Yes.

16,854. (*Mr. Lefevre.*) Are the same men employed?—Yes. When the boats go to the herring and mackerel-fishing they have extra hands to heave the winches. They are not particular who they get to do that. They do not require fishermen for that work.

16,855. (*Mr. Caird.*) Is the largest bulk of the fish caught here caught by the trawlers?—Yes; but they get a great quantity of herring and mackerel here in the season; at the same time I think the greatest bulk caught is caught by the trawlers.

16,856. Have you many line fishermen here?—No; not very many.

16,857. Do they fish with long-lines or with hand-lines?—With hand-lines.

16,858. Has the number of hand-line fishermen here increased or not within recent years?—There are very few more now than there used to be. I do not think that they will muster more than 8 or 10.

16,859. Do you mean 8 or 10 boats, or 8 or 10 men?—8 or 10 boats to go hooking.

16,860. Are they decked boats?—No; they are little open boats that go along the coast.

16,861. Has the quantity of fish caught by these boats increased or diminished within the last 20 years?—The last season they were off the coast here their take of fish increased a great deal. A little boat would go off and bring ashore 30 score of whiting. They have been very numerous here, and have increased in numbers considerably.

16,862. Have you heard any complaint of a general decrease in the catch of fish by the hand-line fishermen?—Not at all.

16,863. Not in recent years as compared with what the catch was previously?—No.

16,864. At the present moment do they make a good business of it?—The fishermen in general are not making a good business at this time, but when they have fine weather for fishing they can get plenty of fish.

16,865. Is the price as good now as it was 20 years ago?—The price is about the same as usual.

16,866. (*Mr. Lefevre.*) Do they catch cod or haddock here at all?—Only very few.

16,867. (*Mr. Caird.*) Do your trawl-vessels go far out to sea?—Some of them fish from seven to eight miles off, and if they have very good weather they may go from 12 to 16 miles from the land.

16,868. What depth of water do they fish in?—About 23 or 24 fathoms of water.

16,869. Are they ever in the habit of trawling in Rye Bay?—Yes; that is the principal ground for trawling.

16,870. Do they trawl there in shallow water?—Yes.

16,871. What kind of fish do they get there?—All sorts of fish; almost every kind of fish you can mention.

16,872. But are they not principally flat-fish?—Yes; plaice, soles, turbot, and skate. They also get whitings, and occasionally codfish.

16,873. Has that bay been trawled over for many years in succession within your recollection?—I believe it has been trawled over for centuries; long before my time. There have been trawlers there all my time, and my father's, and my grandfather's, too.

16,874. That bay has been trawled over, as far as al lrecord goes, as a matter of constant and regular practice?—Yes.

16,875. It has been constantly fished with the trawl net?—Yes.

16,876. Has there been any apparent diminution in the quantity of fish caught, year after year, in Rye Bay?—Not a bit; there are quite as many there now as I ever knew.

16,877. Then, if you were told that the system of trawl-fishing as practised in Rye Bay has caused the fish to become exhausted, you would not, from the knowledge and experience you have of that bay, believe that to be the truth?—I should say that it is decidedly untrue.

16,878. Have you ever heard the line fishermen complain of the injury done to them by the trawl fishermen fishing in-shore?—Not a bit of it. The trawling does not affect the line-fishing at all.

16,879. Would it not affect it by diminishing the fish?—It might do so if the fish had diminished; but now when we get within the bay they are quite as plentiful as ever they were. There are as many codfish, and whiting, and hook and line-fish as ever. As far as we are engaged here, which is not very long, for line-fish, they are as plentiful as I ever knew them to be. We get here a fish called the bream, in the summer season, and they have been more numerous than they were ever known to be before. They have got immense quantities of them with the hook and line.

16,880. Do the trawl-boats bring the same kinds of fish ashore as the line-boats?—They get trawled whiting and trawled bream.

16,881. Are the trawled whiting and the trawled bream in as good condition as similar fish caught by the line?—Yes, they are in quite as good condition, except that occasionally the scales may be a little rubbed off.

16,882. Would you give as good a price for trawled whiting and bream as for hooked whiting and bream?—Yes, I would; and sometimes they will fetch more.

16,883. If the system of trawling was restricted, and abolished altogether in Rye Bay, do you think it would seriously diminish the quantity of fish brought into the market here?—We should scarcely get any at all.

16,884. Would not the line fishermen be able to supply the deficiency?—No, not one hundreth part of it.

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16,885. Then is the great bulk of the fish brought in here caught by the trawlers?—Yes. The town and fisheries of Hastings are supported by trawling, and if you were to take the trawls from them you would create as much, if not more, distress than the great distress which has been experienced in Manchester and the manufacturing districts.

16,886. Would any injury be done if a regulation were enforced restricting the places in which the fishermen should be permitted to use the trawl; do you think that would do any injury to the fishing generally?—No. I think if they were prohibited from fishing during three months in the year, or within three miles of the shore, the fishing generally would be greatly benefitted.

16,887. During what three months should they be prohibited and from what part of the shore should they be excluded?—I think the months of June, July, and August are the three months during which they should be prohibited.

16,888. And from what part of the shore?—All round the coast.

16,889. (*Mr. Lefevre.*) What kind of fishing would you prohibit?—Any fishing whatever.

16,890. (*Mr. Caird.*) In the deep sea or anywhere?—No, not in the deep sea; only within three miles of the shore.

16,891. And during the summer months?—Yes.

16,892. What is your reason for recommending such a restriction?—Because we have had the injury which this sort of fishing does brought so frequently to our notice. In the summer season we constantly see boats trawling within those buoys you see off a place here we call Wapping. These boats come in and land a basket of soles of a middling size, and then another basket of soles about the length of my finger. Now if the boats were not fishing there at that time these small soles would go into deeper water, and they would be catching them now in a condition fit to be caught.

16,893. What do they do with these small soles; are they sold?—Yes, they are sold.

16,894. Do they realise a good price?—No, they are sold almost for nothing; perhaps for 2*s.* or 1*s.* 6*d.* a basket.

16,895. Is there a large quantity of small soles brought in?—Each boat will bring in three, four, or five baskets.

16,896. Is there a larger quantity of these small soles than of the larger soles?—There are many more small soles than large ones. The small ones are not allowed to grow into large fish, but they are caught because they go off the ground.

16,897. What is the proportion of the large soles compared with the small ones?—There will only be one basket of large ones, and four or five baskets of small ones.

16,898. Then the catch at a certain season of the year comprises fish which is sold to the poorer classes?—Yes.

16,899. And sold at a very cheap rate?—Yes; they will sell it for anything they can get for it; just what they can catch.

16,900. But if it is the fact that notwithstanding the catching of these small fish the supply of large fish is not diminishing in Rye bay, but that year after year it seems to keep perfectly good, and is rather increasing than diminishing, what is the injury of which you complain?—Why, I think we should have a better supply still of good fish if these small fish were not taken.

16,901. You think they would grow to be much larger?—Yes; and although we have a considerable increase now, I think we should get double the increase in future years.

16,902. Is there a sufficient quantity of fish caught by your own fishermen here to supply the market at Hastings?—Yes; and to supply other markets as well.

16,903. But do you not get a supply from London?—Yes, when the weather is bad, and our boats cannot go to sea.

16,904. Have you any means here of keeping fish in store, so as to feed the market by degrees?—No, we have no well vessels. All ours are dry-bottomed vessels. Occasionally we can keep a little with ice, and in that way.

16,905. Do the French fishermen come along your coast?—Yes, the French boats come into Rye bay.

16,906. (*Mr. Lefevre.*) Are they trawlers or line fishermen?—They are trawlers.

16,907. (*Mr. Caird.*) Is it in the summer time that they go into Rye bay?—Yes; they go into Rye bay within six or seven miles of the land.

16,908. Do they not come within such a distance of the shore as to enable them to catch these small fish?—No.

16,909. Is there anything to prevent them from doing so?—I believe there is a law that they shall not fish within three miles of the coast.

16,910. Is that law observed?—Sometimes they come and fish for herrings close in, and also for mackerel occasionally.

16,911. Is there any fishery officer or Government officer who regulates the fishing?—I believe that the Revenue cutter has orders to settle any disputes that may arise.

16,912. And to prevent the French fishermen coming within the three-mile limit?—Yes.

16,913. Do you know anything about the size of the mesh of the nets that are used here for fishing?—Do you mean the mesh of the trawl nets?

16,914. Yes?—They are of different sizes.

16,915. Is there any oyster-fishing here?—Not nearer than Eastbourne.

16,916. Do your men go from Hastings to Eastbourne to fish for oysters?—No, they do not go for oysters.

16,917. Are there any other shell-fish caught here?—Very little. Scarcely anything worth speaking of.

16,918. I understood you to say that the herring fishery here has very much declined this year?—Yes, there has been a great falling off in the herring fishing this year on this coast.

16,919. Has the falling off been gradual, or is it exceptional this year?—It is exceptional.

16,920. Have you usually a good herring-fishing here?—Yes, generally.

16,921. At what time do you fish for herrings?—In October and November up to December.

16,922. In what state are they caught during these months; are they in good condition?—Sometimes they are in good condition, and sometimes they are without roes, and are in indifferent condition. It is according to the manner in which the shoals come along. Sometimes we catch them in deep water, and sometimes in shallow water.

16,923. They have had an unusually fine season at Lowestoft and Yarmouth; are you able to say whether there is any rule, that when they have a good season there, you have a bad one here—is it found that a good season in the one place is followed by a bad season in the other?—No, I think not.

16,924. Nothing of that kind has been observed here?—No.

16,925. Is there anything to which you can attribute the bad season here?—No, only to the fact that the fish have not come to this Channel.

16,926. Do you think that there is any mode of fishing practised here that has interfered with them in any way?—Not at all.

16,927. There is no regulation of any kind that can be held in any way to have diminished the herring-fishing?—No, not at all.

16,928. Do you know a place called the "Ridge?"—I have heard of it, but I never was there. I believe there has been a great abundance of herrings off that part.

16,929. (*Mr Lefevre.*) What is the tonnage of the boats you have here?—The large boats will run from

22 to 29 and 30 tons, and the smaller ones from 12 to 14 and 15 tons.

16,930. Are boats of 30 tons the largest boats that can be drawn up on the beach here?—Yes.

16,931. Could you not manage larger boats here?—I think we could haul up a boat of 120 or 130 tons.

16,932. Is there any complaint here of the want of a harbour?—The fishermen want it very much.

16,933. Is it difficult to get the boats off in bad weather?—Yes, very difficult; it is quite as much as we can do. We have to find employment in getting the boats filled. There is a certain amount of ballast to be thrown in and out.

16,934 If there was a harbour here, could your boats go out in any sort of weather?—Yes, and we might have larger and better boats.

16,935. Do the trawlers go out to the North Sea, or do they confine themselves to the coast?—It is only the larger boats that are engaged in catching herrings that go to the North Sea.

16,936. There is the largest class of boats sent off the Yorkshire coast for the herring-fishing?—Yes.

16,937. At what time do they go away?—In September.

16,938. And what time do they come back?—We are expecting them back now.

16,939. Do they bring their fish here?—No, they take them to Scarbro', Whitby, Yarmouth, and other places, but I think their principal market is Yarmouth.

16,940. Do they cure them there and sell them?—Yes.

16,941. The fish here are later, are they not?—Yes; we generally fish up to Christmas, but the fish seem to have taken off altogether this year. Last night one boat put off, and shot her nets, and only got 20 fish.

16,942. Do the herrings spawn here?—I have known them do so sometimes.

16,943. Are they full of spawn when they come here?—Sometimes they are ready to spawn. I have seen them throw their spawn on the deck when they have been brought out of the water on to the boats.

16,944. Do your herrings fetch a good price here?—Yes.

16,945. At what distance from the coast are your herrings caught?—From half a mile to 20 miles. Sometimes we go over to the French coast.

16,946. Can you say whether the boats catch more fish within the three mile limit or beyond it?—That all depends; there is no certainty.

16,947. There is no general rule?—No; we generally get a better catch off our grounds.

16,948. Do the French boats come within the three-mile limit here?—Yes, they come within two miles sometimes.

16,949. Is there anybody to prevent them doing so?—The Preventive men do sometimes. If a dispute arises they will interfere and order them away.

16,950. Who orders them away?—The Revenue cutter.

16,951. Is there a large quantity of fish sent from here to Billingsgate?—Yes. Billingsgate market takes all the overplus of fish, with the exception of what is sent to Brighton. I believe part of the fish goes to Brighton, and part to Liverpool, to Birmingham, and to other places.

16,952. Do all the fish that are sent from here go by rail?—Yes.

16,953. Do any of the fishermen here land their fish in France?—No; the French people will not allow them to do so.

16,954. Do they prohibit it?—They do not absolutely prohibit it. In point of fact, they would allow them to land it if they paid a certain duty, but that duty is so high that the fish is prohibited altogether.

16,955. What duty do they pay?—I do not know exactly, but after paying the duty there would no be enough left to allow the fishermen to realise a profit.

16,956. Then there has been no case of exporting fish to France?—We have sent fish from this market by steamboats over to France in small quantities. For instance, a good deal of mackerel goes from this place to Paris.

16,957. Does that pay a duty?—No.

16,958. Then you do not think that the English fishermen land their fish at Boulogne, and other places?—I do not think they do, although I have sometimes put a few on board a steamboat to go across to the French market.

16,959. Do you think it would be a benefit to the English fishermen if they had the power of selling their fish in France?—I have no doubt of it. It would be a great boon to the English fishermen.

16,960. Have they ever tried to do so since the French Treaty came into operation?—No.

16,961. Why not?—Because we believe the duty is more than the price we could realise.

16,962. But if the duty is not too much to prevent mackerel being sent over, how is it that it would not pay to land the fish there?—Because they go only in small quantities.

16,963. You were speaking of the line-fishing and trawling off the coast in summer time. What number of boats are engaged in that?—Do you mean in line-fishing?

16,964. No, the trawlers trawling a short distance from the shore?—About 50.

16,965. Is there a large quantity of small fish caught there?—Yes, a great deal.

16,966. Does that description of trawling extend far from Hastings?—It goes on from Bopeep Bay right down into Rye Bay.

16,967. Is there any fishing at that time in deep water?—There is some fishing, but it does not pay. It is rather slack fishing then. They do not follow it as they would if they were compelled to go there, and were prevented from fishing in-shore.

16,968. If a stop were put to this in-shore fishing, would it put a stop to fishing altogether?—No, they would fish then on the off-grounds; they would go then and catch all they could on the off-grounds.

16,969. I understood you to say that the fishing off the coast is not so good then?—It is hardly as good but sometimes they get a good fishing.

16,970. You say that the small fish that they catch fetches a small price in the market?—Yes.

16,971. Then does it not pay the fishermen to catch them?—It is generally a small class of boats that fish in-shore; the larger ones fish outside.

16,972. Would not a regulation prohibiting the fishing in-shore prevent a large quantity of fish from being brought to market?—Perhaps it would, but I do not think that the fish they bring into the market is of any good to us; it is rather an injury to those who bring them into the market. We had better never see it at all. It would be far better to let it bide where it is.

16,973. Do the herrings go off the French coast?—Sometimes we have had great shoals off the French coast. I see by the papers that this season they have knocked off catching them. They would not pay the expense of getting them into the interior of the country.

16,974. Have boats gone off from here to the French coast?—I believe there is one off there now.

16,975. Are the boats here adapted to go great distances?—The larger ones will go any distance; the smaller ones go only as far as Yarmouth.

16,976. (*Mr. Caird.*) Do the herring boats that go to Yarmouth in a bad season here find that they have better luck at Yarmouth?—The larger ones make their season there; they seldom fish at home.

16,977. Is Yarmouth a better place for catching herrings?—They want to go to a place where there is a harbour, so that they may be able to get in and out. We have no harbour here.

16,978. Then the want of a harbour is injurious to the fishermen here?—Yes, it does us very great injury indeed,

16,979. Do you think that if you had a good

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harbour here the fishing interest would be much benefited?—I have no doubt that the fishing boats here would increase double.

16,980. Have you a fishing ground here that would attract fishermen in any numbers?—Yes, there is no better fishing ground in the world.

16,981. Do the Torbay fishermen trawl off your coast?—Yes, there are 36 that come here in the summer. They migrate from Ramsgate to Torbay, and they come and make their season here in Rye Bay.

16,982. Do any of your line fishermen complain of injury done to them by the trawlers?—No.

16,983. (*Mr. Lefevre.*) You have no large class of trawlers here, I believe?—No, because we have no accommodation for them to come in.

16,984. If you had a harbour, do you think you could have a larger class of trawlers?—Yes, I have no doubt that we should. We should have trawlers then that would be fitted out like the Brixham and Ramsgate trawlers. They would make this place their head-quarters.

16,985. (*Mr Caird.*) What has been the difference in the average price of fish generally during the last 20 years; what have been the variations?—Fish has increased in value one-third, taking it generally.

16,986. Have all kinds increased in value?—Yes, take it generally.

16,987. Has the price increased much in recent years?—Since we have had the railway here the prices have increased more than they did before, because in those days the expense of the carriage of fish in order to get it to London and different places had to be first thought of in buying fish. Now the fishermen get the benefit of the facilities which have been given for the better conveyance of the fish to market.

16,988. Is a large portion of the fish caught here consumed in Hastings and St. Leonards?—A great deal of it is.

16,989. Is much of it consumed by the lower class of people?—Yes. I suppose, taking All Saints' parish, that the principal food of the people there is fish, when they can get it, and when they can get it cheap.

16,990. (*Mr. Lefevre.*) Do you know how long this fishing for small fish in the summer months has been practised here?—Ever since I recollect.

16,991. But you have not observed that it has produced any diminution in the catch of large fish?—It is certain that we should have more fish if we did not kill the small ones. I do not notice any decrease in the number of large fish caught here, but we must remember that the taking of these small fish has always been practised and carried on. If it was done away with altogether I have no doubt that we should have a much better supply than we ever had.

16,992. Do you know whether any spawn is ever destroyed by any process of fishing?—We never see any spawn itself.

16,993. Have you never seen any brought up in the trawl nets?—I have seen spawn along the shore, but I never saw any in the trawl nets.

16,994. I think you have stated already that nobody interferes with you with regard to your mode of fishing here?—No.

16,995. There is no restriction of any kind as to the mode of fishing adopted here?—Not at all. We have never been interfered with.

16,996. (*Mr. Caird.*) During the herring-fishing are there any trawled fish brought in?—Yes, we get the Ramsgate smacks here; they fish for this market. It is a good market for them then. They get an extra price for their fish, because none of our men are out catching trawl-fish to supply the inhabitants. I believe they come here then to fish because they can make a better price, and do better than they can do in the North Sea.

16,997. (*Mr. Lefevre.*) The Ramsgate trawlers are of a larger class than your trawlers?—Yes.

16,998. (*Mr. Caird.*) Do the pleasure boats fish here?—Yes, the largest boats sometimes.

16,999. Do they catch much fish?—Sometimes they may go and not bring in any at all. At other times they may have a slice of luck, and may bring in 200 or 300 whitings.

17,000. There is no large supply caught by them?—No, it is a mere matter of pleasure and amusement.

17,001. It does not affect the price in the market?—Not at all.

The witness withdrew.

J. Page.

JAMES PAGE called and examined.

17,002. (*Mr. Caird.*) Are you a fisherman or a fish salesman?—A fish salesman.

17,003. Have you been a fisherman?—Yes.

17,004. Have you recently been at sea as a fisherman?—It is 17 years since I was fishing. I served my time to it, and I was 10 or 12 years fishing.

17,005. (*Mr. Lefevre.*) Can you tell us anything more than the last witness?—I know that the fish has increased rather than diminished.

17,006. (*Mr. Caird.*) Do you know from your own business that there has been an increase in the supply of fish?—Yes.

17,007. Is there a larger catch altogether brought in?—Yes.

17,008. Do individual boats bring in as much, or is there an increase only on account of the increased number of boats?—Taking what they brought in 17 years back, they bring in a great deal more now.

17,009. Does each boat bring in more than it did formerly?—Yes.

17,010. And there is a large increase in the number of boats?—Yes.

17,011. Then there must be a large increase in the supply of fish altogether?—Yes.

17,012. Are the fishermen making a better living out of it?—Yes, 17 years ago I used to go fishing for 7*s.* or 8*s.* and now they can get from 15*s.* to 20*s.*

17,013. From 15*s.* to 20*s.*?—Yes.

17,014. As their share per week?—Yes.

17,015. Do they fish by shares?—Yes.

17,016. Is there any fisherman employed by wages here?—Not one.

17,017. Do you know whether or no there is any quantity of young immature fish caught in the summer time near the coast?—In certain months of the year, perhaps during two or three months, there is a great quantity of small fish caught close in shore.

17,018. Is there a larger quantity of fish caught altogether on the whole?—Taking into consideration the larger number of boats that are engaged there is at times a very considerable quantity caught.

17,019. Does any part of it go to London?—Not that I am aware of.

17,020. Is it sold at home?—It is first sold on the beach.

17,021. Where is it consumed?—In different parts of the country inland.

17,022. Does any portion of it go to London?—Not of the small fish. It is very seldom that that is sent to London.

17,023. Does it go into consumption among the poorer classes?—Yes, and a number of inland towns about here take a great deal of that kind of fish every day in the week when they can get it.

17,024. Then if that mode of fishing were put a stop to it would be rather a hardship on the consumers at that season of the year?—I think not; they would have better fish for

17,025. Where would they get the better fish?—Outside, farther off at sea.

17,026. Could they catch it at the same time that they are catching the small fish?—I don't see why they could not.

17,027. But do the vessels go out further to fish at

that time?—Sometimes they go five, six, seven, eight, or ten miles off.

17,028. Do they get plenty of fish there?—Yes.

17,029. Could they make it a profitable business compared with the in-shore fishing?—I fancy it would be more profitable.

17,030. If it is more profitable why do the fishermen follow in-shore fishing?—That is followed by men who have smaller boats, and who do not care about venturing farther out to sea.

17,031. It is practised by a class of fishermen who cannot go far to sea?—They have not got a good craft to go further out, and they prefer fishing in-shore.

17,032. With that inferior craft do they fish further out at sea in other seasons?—In fine weather they may go seven, eight, or ten miles.

17,033. (*Mr. Lefevre.*) Have they a smaller mesh for their trawls?—No, I believe not.

17,034. Is it the same sized trawl as that used by the larger boats?—No, the trawl may be smaller in size, but the mesh is no smaller.

17,035. (*Mr. Caird.*) Is the mesh small enough to enable them to catch the small fish?—Yes.

17,036. Is there any shrimping here?—It is middling at times.

17,037. In the summer time do they catch any quantity of small flat-fish in the shrimp nets?—I know very little of shrimping. I have never been shrimping in my life, and therefore I can say very little about it.

17,038. Has the price of fish altered much within your experience of 17 years as a fish salesman?—It is nearly one-third more.

17,039. One-third higher?—Yes; I have been selling plaice at 2*s.* a basket 17 years ago, and now for four or five years past I have given 4*s.* or 5*s.* for the same quantity.

17,040. That has not arisen from any scarcity in the supply of fish?—No, and there is a great deal more demand for it. The railway has opened out to us districts where it was never sent to before, but to which we send fish regularly now.

17,041. Is a large proportion of the catch of fish here sent by railway?—Yes, all that is not consumed in the town and neighbourhood.

17,042. What proportion is sent by railway, taking the average throughout the season?—I should say that the largest half is sent away to the inland towns.

17,043. Is there as good a catch of turbot as there used to be?—They were never very plentiful on this coast in my time.

14,044. Are they as plentiful as they ever were?—I do not see any difference. I have known fishermen go years ago for a whole twelvemonth, and not catch more than a couple of turbot, while others would hardly catch a dozen.

17,045. Is the mackerel-fishing good here?—It was very indifferent last year.

17,046. What is the season?—We take May, June, and July to be the mackerel season here.

17,047. Was it unusually bad last year?—Yes.

17,048. Have you in average years a good mackerel season?—Sometimes we have a good season.

17,049. Have you any pilchards here?—Very few; sometimes we get 100 or 200.

17,050. It is no great source of advantage to the fishermen?—No, we never put in our nets for the express purpose of catching pilchards.

17,051. Have you any sprats?—We have three or four sprat boats, drift-net boats, that catch a few sometimes.

17,052. Is Rye Bay very famous for its fishing?—There is not a richer ground in the world, according to its extent.

17,053. Does it yield all the kinds of fish that are brought here?—It yields every kind of fish you can mention.

17,054. Do you agree with the previous witness that the supply of fish in Rye Bay has increased of late years, and not diminished?—Yes, there has been more taken out of Rye Bay in 10 months of this year 1863 than in any previous year.

17,055. Do you suppose that the whole of the bottom of Rye Bay has been constantly trawled over?—Yes, thousands of times, and I believe that the more it is trawled over the better it is.

17,056. Have you as a fisherman trawled in Rye Bay?—No, I never went trawling, except for about three years.

17,057. Did you trawl in Rye Bay then?—Yes.

17,058. Did you ever observe that you were trawling over the same ground as a vessel which had just been trawling in front of you?—Yes.

17,059. Did you find that by following in the track of that boat you got fewer fish?—No, we got more sometimes.

17,060. Have you seen a number of boats following in succession, and fishing over the same ground?—Yes, many a time.

17,061. Would all of them do well, and get a good quantity of fish?—Some would, but I cannot say they all would.

17,062. Is it the fact that when one trawl-boat is getting a good take of fish, another trawler will try to follow over the same ground?—Yes, in the same direction, day after day, and week after week.

17,063. The second boat will keep as near as possible to the same ground?—Yes, in the same depth of water.

17,064. Is the ground in Rye Bay good ground to trawl over?—Yes, it is a very soft good ground.

17,065. Is there any particular food there that the fish feed on?—There is when the ground is stirred up by the trawl. We think the trawl acts in the same way as a plough on the land. It is just like the farmers tilling their ground. The more we turn it over the greater supply of food there is, and the greater quantity of fish we catch.

17,066. Are there any mussel beds on this coast?—No, only on the rocks close in-shore.

17,067. Where do the line fishermen get their bait?—We have not much hooking here. Those who follow it have sprats for bait, mackerel for bait, or herring, according to the season.

17,068. Do they ever use whelks?—Yes.

17,069. Whelks are used for bait here?—Sometimes, when they are catching codfish, in the month of October.

17,070. Where are your best cod caught here?—Towards the eastward part of the coast, on the "Hard" as we term it.

17,071. How far from the shore?—Not more than half a mile, but it extends further out in one part than in another. Perhaps in some places it may be two or three miles from the coast.

17,072. (*Mr. Lefevre.*) Do you know what size the mesh of the trawl is?—No, I cannot say; I should think 28 or 30 to the yard; some are not so much. Some will be 26 or thereabouts, but I don't know much about trawl nets now.

17,073. (*Mr. Caird.*) Do you know that there is a size fixed by law?—There was some talk about it some years ago, but I suppose it is all forgotten.

17,074. There has been nobody here to interfere with you?—No, and we keep on our old plan.

17,075. Do you think if the mesh were somewhat larger that these small fish would go through?—The smacks have got a larger mesh than our boats, and they bring ashore as small fish as we do.

17,076. You do not think that any regulation of the mesh will prevent the catching of small fish?—I don't see how anything of that sort could be acted up to.

17,077. What do you mean?—You may have as large a mesh as you like, and yet you will not prevent the catch of small fish.

17,078. Do you think the fish would not go through?—They would not go through unless you had lines across to allow them to go through. We carry lines on our nets. The smacks have a large mesh, but no line to keep the mesh open on each side.

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17,079. Have you a line on your mesh?—Yes, but the smacks have not; and that is the reason that the mesh draws down and shuts up like a tunnel.

17,080. Is there any cod-fishing to the westward; is there cod in Rye Bay?—There are some cod a long distance off, in the Channel. I believe the French fishermen find a good deal of fish there sometimes.

17,081. Are they found on rocky ground?—Yes.

17,082. Do the trawlers go on rocky ground?—No; if they got on the rocks towards Beachy Head they would get their nets torn.

17,083. Are there any line fishermen who go out from here to fish on the rocky ground?—There are hardly any line fishermen here at all. There are a few in the months of October and November.

17,084. Would it not answer?—No, I think not.

17,085. Why?—They would not get half enough fish to supply the town.

17,086. Do you know a description of net called the "kettle" net?—Yes.

17,087. Where are these nets used?—They are used on the coast of Kent, and two miles west of this town.

17,088. What are they used for catching?—Mackerel.

17,089. Will you describe these nets to us?—They are stake nets, about 11 feet high. They run out for about 200 yards, and form a circle of 200 yards round.

17,090. They are stake nets?—Yes, stake nets, about 11 feet high and 8 feet apart.

17,091. What is the size of the mesh?—There are about 32 to the yard; some are more, and some may be less.

17,092. Do you know at what time of the year these stake nets are set?—In May, June, and July.

17,093. Do they catch any salmon trout?—Sometimes.

17,094. But it is chiefly mackerel that they catch?—Yes; they are put up expressly for mackerel.

17,095. Is that the only mode in which you fish for mackerel?—There are drift-boats that go out mackerel-fishing. They are the same boats that go trawling now. They carry mackerel nets in the months of May, June, and July.

17,096. Are the kettle nets used between high and low water?—Yes.

17,097. And they are emptied at low water?—Yes.

17,098. Can you catch a great quantity of mackerel by that means?—Sometimes.

17,099. Is it a more successful mode of fishing than by the drift nets?—Sometimes. In one year I earned not a penny, and in another I may have earned 45*l.*

17,100. Is it an expensive mode of fishing?—It costs 64*l.*, the labour, horse and cart, and attending to it.

17,101. (*Mr. Lefevre.*) How much does it cost?—64*l.*

17,102. For three months?—Yes.

17,103. (*Mr. Caird.*) What will one net catch in the course of the season, taking a fair average season?—That I cannot say. Sometimes the catches may be very large, and then perhaps we may go for a whole season the very next year and not catch anything.

17,104. Do you get much fish in the kettle nets except mackerel and salmon trout?—Sometimes we get a cod, and sometimes a herring.

17,105. Is it an injurious mode of fishing?—No, I think not. They are seining mackerel at the same time, and that is much worse.

17,106. Do you see any objection to the use of that net?—I don't see why it should not be used. There are plenty used from Beachy Head to Folkestone.

17,107. Is it a common mode of fishing here?—Yes, and it has been for a century. I can recollect them 30 years ago myself.

17,108. (*Mr. Lefevre.*) They are used from Beachy Head to Folkestone?—Yes.

17,109. Do you know in what numbers they are used?—No; but they have them on this side of Beachy Head, and right down past Rye up to the Ness by Romney Marshes, and down to Sandgate.

17,110. What distance will they be one from another?—From 300 to 400 yards; but it is not convenient to set them everywhere. Sometimes there is nothing but rocks, and then these nets would be of no use. I had some kettle nets in Bopeep Bay, but I have given them up there because they caught no fish.

17,111. Must you have a sandy beach for them?—Yes. The water must go out a good distance, and that is the reason you require so much net.

17,112. Is there a considerable quantity of fish caught in that way?—In some years there is; in others there is none caught; it all depends upon the weather.

17,113. I understood you to say that it was an expensive mode of fishing?—Yes; and it costs the same to attend to it whether there are any fish or none.

17,114. Have you had your nets out this year?—Yes.

17,115. How many fish did you catch?—The most we caught in one day was 800.

17,116. How much will you catch in the course of a season?—We made 140*l.* this year.

17,117. I thought you said you only made 64*l.*?—That was one share, but it would not come to 64*l.*

17,118. Do you mean that the expense was 64*l.*?—Yes.

17,119. And you earned 140*l.* altogether?—Yes.

17,120. How many were there to share it?—There were only two shares. The first year we had them I lost 64*l.*, I and my partners.

17,121. Has this been a good year?—It was a middling year.

17,122. Do you catch any quantity of other fish besides mackerel?—No.

17,123. No small fish?—A few little smelts and sand eels.

17,124. What size is the mesh?—There are about 32 overcomes to the yard.

17,125. Is it an open mesh?—Yes, every mesh stands out open, with lines both at the top and bottom.

17,126. Is that in order that the small fish may get through?—Yes. If any small fish get in, the biggest part of them get through.

17,127. (*Mr. Caird.*) Has anyone a right to put up a net of that kind without asking leave of the adjoining proprietor, or anyone else?—No. No one is allowed to do so unless he has obtained the consent of the person over whose land he would have to pass.

17,128. Do you pay anything to the person to whom the land belongs?—I do.

17,129. Do you pay for the privilege of going to the nets?—Yes, I pay Mr. Farncombe, who lives about two miles from here, for the privilege of going over his land.

17,130. You pay a rent for the thoroughfare, and not for the privilege of putting the nets into the sea?—Nobody claims anything for allowing me to put the nets into the sea.

17,131. No one levies any charge at all for that?—Not that I am aware of.

17,132. Nobody regulates in any way the number of nets that are to be put up?—No.

17,133. You may put up as many as you like, and as near to each other as you please?—I never knew anything to the contrary.

17,134. I suppose you do not pay much for the right of passing to your nets?—Only 10*s.* a year; I pay it as a sort of acknowledgment to prevent my claiming any right.

17,135. No rent is charged for the ground on which your nets are placed?—No.

17,136. (*Mr. Lefevre.*) Do you find that you catch more in that way than by the drift net?—I do not use the drift net.

17,137. Do you think that more are caught by the kettle nets than by the drift nets?—It all depends; if they come close in we get a good many, but they must come within 200 yards of the shore before we catch them; the drift-net boats do not come so close as that. I have seen the mackerel very close in in Hastings Roads.

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17,138. Do you think the kettle nets are as profitable as the drift-net fishery?—They are not very profitable; I do not suppose that I have had 6*d.* an hour from them ever since I had them. I set very little store by them; I would sell my nets for a very small profit.

The witness withdrew.

ROBERT KENT called and examined.

R. Kent.

17,139. (*Mr. Caird.*) You are a boat builder here, are you not?—Yes.

17,140. Have you been long here as a boat builder?—I have been in Hastings ever since I was born, and I have been working at boat building for about 28 years.

17,141. Are you building boats now of a larger size than those that were built 20 or 28 years ago?—Yes, they are as large again.

17,142. Has the number of boats very greatly increased during these 20 years?—There are a great deal more now than there were 20 years ago, but they have not increased very much during the last two or three years.

17,143. Can you tell us what the increase has been during the last 20 years, or say 10 years?—I should say they have increased nearly one-half during the last 20 years.

17,144. But during the last two or three years there has been no increase?—Not very much, there have been hardly any new ones for the last two or three years.

17,145. What has been the cause of that?—The mackerel-fishing has been very bad.

17,146. Has it arisen from any general decline in the fishing, or only from the mackerel-fishing?—I don't think it has arisen from any general decline in the fishing; the shoals of fish take different routes, so that we are not always able to get at them.

17,147. Have all the different kinds of fish, except mackerel and herrings, continued to progress?—The trawling has been progressive.

17,148. Is the greater proportion of the boats you have built intended for trawling?—Yes.

17,149. What is the average tonnage of the trawl-boats here?—The average tonnage of the trawl-boats is about eight, nine, or ten tons.

17,150. Are they half-decked boats?—Yes, lug rigged; we call them luggers.

17,151. You build nothing larger for the mackerel-fishing?—Yes, we build boats of from 15 up to 20 tons.

17,152. Are the fishermen of your acquaintance improved in their circumstances?—The herring season this year has been a very bad one for them, and the last mackerel season was very bad also; they had three seasons before that, three mackerel-fishings that were very bad, therefore we can see no considerable room for improvement.

17,153. Is the mackerel-fishing a large proportion of the whole fishing along here?—The trawling is the principal fishing.

17,154. Has there been any diminution in the catch of the trawlers?—Not at all; I should say there were more fish caught out of Rye Bay last summer than in any summer I have ever known.

17,155. Then you agree with the previous witnesses that there has been no apparent diminution in the number of fish caught by the trawlers in Rye Bay?—I do.

17,156. Or on any part of the coast that you are acquainted with?—I quite agree with them in that matter.

17,157. Do you think that much injury has been done to the fishery by catching small fish in the summer?—Of course if they catch them when they are so small they never allow them to get large; I do not think that any harm would be done if they fished further off the shore in the summer months.

17,158. If fishing in-shore were prohibited during the summer months would you be deprived altogether of these small fish at that time?—We should catch small fish further from the land, but not in such great quantities.

17,159. Would you get any other fish to make up the loss you thereby sustained?—I think the fishermen would get better remunerated for their services if they went further from the land.

17,160. I believe you are not a fisherman yourself?—Not at all.

The witness withdrew.

EDWARD NOAKES called and examined.

E. Noakes.

17,161. (*Mr. Caird.*) You are a fisherman here?—Yes.

17,162. Have you been long a fisherman at Hastings?—About 51 years.

17,163. What mode of fishing do you practice?—I have been at all sorts; mackerel-catching, trawling, and herring-catching.

17,164. Have you found, as a trawl fisherman, that the quantity of fish you can catch has diminished or increased?—I see but little difference in it.

17,165. Can you get as many now in your trawl as you did formerly?—Not quite as many; formerly I have been getting fish, such as plaice, in the winter time and throwing them overboard because there was no market for them; we find it quite different now.

17,166. Can you sell everything you catch now?—Yes.

17,167. Nothing is thrown overboard at all?—I do not believe there is; we have a market for it now. Before it would not pay us to send it to market.

17,168. Do many persons come here from other places and become fishermen here?—I think not; but the Ramsgate and Torbay men come here fishing.

17,169. Do the Torbay trawlers come here?—Yes.

17,170. Has there been a large increase in the number of fishermen here during the time you speak of?—Yes, they have increased wonderfully.

17,171. Has the increase been chiefly in native fishermen?—Pretty much so; there have been a few strangers, but not a great many.

17,172. We are told that the number has more than doubled within the last 20 or 30 years?—I expect it has.

17,173. And does each fisherman make as good a business of it as formerly?—Yes.

17,174. Does each catch as much fish as was the case in former years?—Yes, I think so at times.

17,175. But take the average?—Yes, I think they catch as much.

17,176. Has any kind of fish fallen off in your recollection?—The mackerel season has fallen off in the drift-net fishing.

17,177. Has it not fallen off in the kettle nets as well as in the drift nets?—I cannot say, there are so many of them; sometimes they catch a great many in certain tides, and sometimes but very few.

17,178. Has the number of kettle nets increased?—Yes, I believe there are more kettle nets now than there used to be.

17,179. Is that a cheaper mode of catching mackerel than by the drift nets?—If they don't come in-shore they cannot catch them in the kettle nets, while the drift nets are in the sea at all times.

17,180. Then you have the advantage at sea?—With a breeze at sea we catch them outside, but if there is fine weather then they are skimming inside.

17,181. Have you been a hook-and-line fisherman?—No.

17,182. Have you ever heard the hook-and-line

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fishermen complain of a diminution in the number of fish they take?—No.

17,183. Do you think they catch as many as they did?—I think they catch more bream than ever they did.

17,184. If any one said to you that trawl-fishing had injured the fishing generally, would you say that that was not true?—I cannot say that any injury has been done to the drift-net fishing.

17,185. Is there any way in which the fishing has been injured?—I don't think there is.

17,186. I believe the great bulk of all the fish that are caught here are caught by the trawlers?—Trawl-fish are caught by the trawlers in Rye Bay. There are sometimes great quantities, and sometimes they are very scarce.

17,187. Are there any French fishermen in Rye Bay as well as English fishermen?—Yes, a great number come within half a mile of the shore sometimes.

17,188. Are there ever as many Frenchmen as Englishmen?—No, there are not as many, but now and then they come in considerable numbers.

17,189. Have they larger boats than yours?—Yes, larger boats and larger gear.

17,190. With a longer beam and bigger trawl?—Yes.

17,191. (*Mr. Lefevre.*) The same as the Ramsgate vessels?—Yes.

17,192. (*Mr. Caird.*) Do they make a good fishing?—No doubt it pays them, or else they would not come.

17,193. Do they go straight home again with their catch?—Yes, as soon as they get a good catch they go home. We have a great deal of trouble sometimes with the French fishermen; they will come where we are fishing. If a Frenchman sees me fishing he will come and put his nets down alongside of me, and he will drive me away if he can.

17,194. Have you ever fished on the French coast?—Yes.

17,195. Have you been interfered with there?—The Coastguard would interfere with us if we went within the three-mile limit.

17,196. Do they come within the three-mile limit on this side?—Yes, they come within a mile of the shore sometimes.

17,197. Does anybody say anything to them?—Now and then the Revenue cutter has ordered them away.

17,198. Have you ever fished on the Dutch coast?—No.

17,199. Do you fare better in a French port with your fish?—I have been in a French port, but never with fish.

17,200. Do you think it would be of advantage if you were allowed to go to a French port and sell your fish?—I think it would be in the herring season.

17,201. Do you think it would be of advantage in any other season?—It would not be of much advantage then. Now and then it would be of advantage to go in in the mackerel season. I have been as far as North Sunderland fishing in the herring season. I went away in July once, but we did not find it answer our purpose and we declined fishing there. We went there for two seasons.

17,202. Why did it not answer; did you not get a good catch?—No, and it was so cheap. We left at the latter part of the mackerel season to try there, but as it did not answer our purpose we gave it up after two years.

17,203. Has the herring-fishing declined much here of late years?—Sometimes there has been a goodish season, and sometimes it has been very bad.

17,204. It varies?—Yes.

17,205. Sometimes it is good and sometimes it is bad?—Yes.

17,206. There has been no progressive decline?—Not any. You cannot tell, one season from another, whether it will be a good one or a bad one until it is ended. This season has been very bad.

17,207. Do the herrings always come here at the same time?—Yes, pretty much. The large boats go away in September.

17,208. They go north?—Yes.

17,209. When do you generally begin fishing off this coast?—We generally begin about October.

17,210. And continue the fishing during November and December?—Yes, during November and December.

17,211. Do you fish in January?—Very seldom.

17,212. Are the fish not in condition then?—No, they are out of season altogether.

17,213. (*Mr. Lefevre.*) Have you a boat of your own?—Not now. I have given up going to sea.

17,214. How long have you given it up?—For the last two or three years.

17,215. Then you had a boat of your own before that?—Yes, two or three. I have nets now.

17,216. Do you let them out?—I send them to sea.

17,217. Do you get a share for them?—I take a share the same as the rest of the men. I take one for the hire of the nets.

17,218. Of what size were your boats?—They were of the smallest class, 25 feet long.

17,219. Did you go out to North Sunderland in a boat of that description?—No, I went in one 30 feet long. Is was not my own boat.

17,220. Was that a half-decked boat?—Yes, it was half-decked, but I have also been there in one that was full-decked.

17,221. I suppose you recollect the time when there were no Ramsgate men or trawlers here?—Yes, I can recollect when they came here very seldom.

17,222. It is about 30 years since they came?—Yes.

17,223. Previous to that time were there any trawlers off here except the Hastings boats?—No, unless the Brighton people came in the spring of the year and fished for a couple of months.

17,224. How long have the French people been in the habit of coming off this coast?—For 20 or 30 years they have come close to the shore, but they generally fish in the Channel. The large French trawlers generally keep the Channel.

17,225. Is it not more than 20 years since they came to Rye Bay?—No, I think not.

17,226. Have they been increasingin numbers of late years?—At times there may be 20 or 30 sail. Sometimes there are only one or two; it all depends upon whether they can get fish on their own shore.

17,227. Then take it all round, there are a great number more trawlers fishing in Rye Bay now than there used to be?—Yes.

17,228. Quite independent of the Hastings trawlers?—Yes; the Folkstone people come sometimes.

17,229. Have there been great quantities of fish caught here?—Yes, and supposing that one boat goes down to the same depth of water day after day it would in all probability get about the same quantity of fish every day as it did on the preceding day.

17,230. You say that the mackerel-fishing has fallen off?—Yes.

17,231. Is that only for the drift-net boats?—I cannot say what is the reason why it has fallen off.

17,232. Do they catch as many mackerel in the kettle nets as they did formerly?—They do at times.

17,233. During the last three or four years?—They have not done so well for the last three years as they did before.

17,234. Then you do not attribute the falling-off in the catch of mackerel to the use of the kettle nets?—No, I don't think they do any injury to the fishing.

17,235. (*Mr. Caird.*) Would you as a fisherman think it any hardship to be excluded in the summer months from fishing with the trawl within three miles of the shore?—Some of the smallest of the boats would consider it a hardship.

17,236. Is there a large number of small boats

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here ?—There is not any great quantity. Sometimes after a strong wind they will put their trawls down close in-shore, and they will get a quantity of small fish. They get some good-sized soles and plaice, but there is a great deal of small fish along with it.

17,237. Have you ever seen great quantities of small fish brought on shore ?—Yes ; I have seen it thrown overboard, and I have been throwing it overboard.

17,238. I thought you said you brought it on shore and sold it ?—We generally pick it.

17,239. Then is there a large quantity thrown overboard ?—Yes, we shovel it overboard alive as fast as we can get it into the sea.

17,240. I thought you told me in the early part of your examination that none was thrown overboard ?—Some of our people do throw it overboard at times.

17,241. Were you speaking then of a different class of fish ?—If we did not throw it overboard occasionally the expense of sending it to market would be more than it would fetch.

17,242. Is it your opinion, and also that of the fishermen with whom you are acquainted, that an injury is done to the fishing generally by catching small fish in summer ?—I have not seen any difference during the last ten years, and there was more small fish caught then than there is now.

17,243. Was a great quantity of small fish caught then ?—Sometimes a vast amount of the brood would be caught, but it was always thrown away.

17,244. Then the system of catching small fish is not at all new ?—No, it has gone on for many years, but a good deal of it is thrown overboard again.

17,245. Do you not agree with the previous witnesses that it would be of advantage to the fishermen generally if that system were put a stop to ?—It might be, but I cannot say.

17,246. (*Mr. Lefevre.*) Do you only catch the small fish close in-shore at that time of the year ?—We catch more then at that time of the year.

17,247. Do you think if it were not caught at that time of the year that the same fish would be caught when they grew larger ?—I cannot say anything about that.

The witness withdrew.

W. Wood.

William Wood called and examined.

17,248. (*Mr. Caird.*) You are a fisherman here, I believe ?—Yes.

17,249. And have been so for some years ?—Yes, for the last 30 years.

17,250. What mode of fishing do you practise ?—All sorts ; both mackerel and herring-catching and trawling.

17,251. Have you found that the supply of fish has increased or diminished ?—The trawling has been better for the last seven or eight years than for a number of years previously.

17,252. Is it continuing every year to get better ?—Yes, the trawling has been getting better for the last five or six years.

17,253. What do you suppose is the cause of that ?—I am sure I cannot say.

17,254. Is it followed with greater assiduity ? Do the fishermen make more of it because the price of fish is better ?—The fish are as good now as ever they were.

17,255. How is the price of fish ?—It is better now than it was ten or a dozen years ago.

17,256. Then is it a more profitable business for the fishermen ?—Yes, the trawling is.

17,257. Do they follow the business with greater assiduity because it is more profitable ?—Yes.

17,258. Do they fish more closely than they did ?—Sometimes they fish closer in and sometimes further off.

17,259. I do not mean closer in shore, but do they fish more constantly ?—Yes.

17,260. In what depth of water do you get the largest catches of fish ?—In about 16 or 17 fathoms of water, about 12 miles off the land.

17,261. Within what bounds east and west do you usually trawl here ?—Rye Bay is the principal place in which we trawl here.

17,262. On this side of Dungeness ?—Yes.

17,263. Between this and Dungeness ?—Yes.

17,264. Is that where the largest proportion of your fish is caught ?—Yes.

17,265. (*Mr. Lefevre.*) Outside the four-fathom sand ridge ?—Yes.

17,266. (*Mr. Caird.*) Is that far from the land ?—12 or 14 miles off.

17,267. Do you ever go as far as the Ridge ?—No, I never go trawling on the other side of Dungeness.

17,268. Do all the trawl-boats from Hastings fish in Rye Bay ? Do they never go eastward of Dungeness ?—No.

17,269. Do you find plenty of fish in Rye Bay ?—Yes, and there has been more for the last few years than there ever was before.

17,270. (*Mr. Lefevre.*) How far do you go westward ; as far as the Royal Sovereign shoals ?—No, not quite as far as that, but pretty handy.

17,271. About 14 miles off the coast ?—Yes, in the middle part of the bay.

17,272. How far when you are off Dungeness ?—Not more than two or three miles then.

17,273. (*Mr. Caird.*) Do you trawl with the tide ?—Yes.

17,274. Does the tide run strong here ?—Nothing to speak of. It runs middling like. The spring-tides run about a couple of knots an hour.

17,275. What has been your heaviest catch, in one catch, with the trawl net in the course of the last four or five years ?—I can hardly tell. Sometimes we have got seven or eight pads, and sometimes with a good tide we have had 14 and 15 pads. I think I have known a smack occasionally catch 16 or 17 pads, and even as high as 20 pads, with a tide.

17,276. What weight of fish is there in a pad ?—I suppose about half a cwt.

17,277. What different kinds of fish will there be in ten pads ?—Plaice, dabs, and all sorts.

17,278. Which are in the largest quantity ?—Plaice is generally in the largest quantity.

17,279. Is there any particular kind of fish that has fallen off at all ?—Not the least bit in the world as far as trawl-fish are concerned ; on the contrary they have increased.

17,280. You say that in trawl-fishing there has not been any diminution ?—No.

17,281. Has there been any diminution in the line-fishing ?—The hook-and-line fishing ?

17,282. Yes.—I am not much acquainted with that.

17,283. Has there been any diminution in any fishery here ?—I cannot see that there has been any decrease at all in the trawl-fishing. When I first went to sea I found it a good job if I got a bushel of plaice in a night ; now I can get seven or eight bushels in the summer time.

17,284. Is that the average catch of all the boats ?—Yes.

17,285. It is within your knowledge that a boat now makes a better catch than 20 years ago ?—Yes, a great deal more.

17,286. And there is a vast increase in the number of boats ?—Yes, there are a good many more people.

17,287. And there has been a great increase, not only from here but from all places fishing in Rye Bay ?—Yes.

17,288. Do you see many French boats fishing there ?—Yes, in the summer time, and Torbay men as well.

17,289. Is there any mode of fishing adopted here which in your opinion is injurious to the supply of fish ?—None that I know of.

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17,290. What is your opinion with regard to catching small fish in the summer season? Do you think that that is injurious?—I do not see that it does any good.

17,291. Does it do any harm?—Of course if you catch the small fish they cannot grow up to be large, and if it were put a stop to it would be all the better for the fishery. I would put a stop to it for two or three months in the summer time.

17,292. Would you put a stop to in-shore fishing altogether?—Yes, in the months of June, July, and August. I believe those are the principal months in which the fish breed.

17,293. Is there any fishery officer here or any authority who interferes with you in your fishing and regulates the mode in which you are to fish?—Not that I am aware of.

17,294. Nobody has ever asked you about the size of the mesh of your nets, or the length of the beam of your trawl?—I never heard of anyone interfering with our fishing in that manner.

17,295. Do you think it is desirable that there should be some officer of that kind?—I don't think it would make any difference. If I had a large mesh I could easily stop the mesh up by not putting lines upon it.

17,296. How would you do that?—By having no lines put on the net. If the meshes are put on straight and have no lines on them they will draw up and close no matter how big they are.

17,297. Then do you think that if there was a regulation fixing the smallest size of the mesh it could be easily evaded in that way?—Yes.

17,298. A fisherman might adopt the regulation size, and at the same time so fish his nets as to catch small fish?—Yes, however large the mesh is we can stop it up if we like.

17,299. How can you stop it up?—By drawing it up close together. It will shut up of itself, but if we have a line down the meshes will remain open. The strain of the fish pulls the meshes together, and closes them if there is no line.

17,300. (*Mr. Lefevre.*) What is the line of which you speak attached to?—It runs up and down the net on each side, and keeps the mesh open. When there are no lines the mesh draws down.

17,301. (*Mr. Caird.*) Then if any regulation were adopted as to the size of the mesh it would also be necessary to have a regulation as to the mode in which lines should be put upon the net?—Yes, if there was no line it would shut up even if the mesh were double as big; it would keep sand in as well as small fish.

17,302. (*Mr. Lefevre.*) Can the small fish get out when you have a line?—Yes.

17,303. Do you use nets with lines?—Yes, but the Torbay men do not.

17,304. (*Mr. Caird.*) The Torbay men do not use any lines on their nets?—No.

17,305. Do their nets drag together then in the way you have described?—Yes, and they catch small fish in consequence.

17,306. Do you think that the Torbay men find it to their advantage to do that?—Yes.

17,307. But you do not seem to find it so?—No, we always have lines.

17,308. You do not want to catch small fish?—No, they are of no good to us.

17,309. What can be the use of them to the Torbay men who are even still further from their markets than you are?—They throw them overboard.

17,310. I cannot see what object the Torbay men can have in fishing in that way?—Every port has a different plan of fishing.

17,311. Is the line upon the trawl net of which you have spoken peculiar to Hastings?—Yes, it has always been used in Hastings since I can recollect.

17,312. Have you ever seen it in any other boat except a Hastings boat?—No only in the Hastings and Brighton boats.

17,313. Have you ever been in a smack fishing?—No, never.

17,314. You say that the object of these lines is to prevent you from catching immature fish?—Yes.

17,315. And they succeed in that object you think?—Yes, they do.

17,316. (*Mr. Lefevre.*) What is the size of the mesh of the trawl net?—I suppose there are about 27 or 28 "overcomes" or meshes to the yard. Some are wider, and some may be 30, 34, or 35.

17,317. (*Mr. Caird.*) If these lines have the effect of preventing small fish from being caught, would a regulation enforcing on all the fishermen here the use of those lines prevent the damage which is said to occur?—I cannot see but what it would do a great deal of good.

17,318. Would it prevent small fish from being caught?—Yes.

17,319. I presume that the nets used in the summer season in shallow water in-shore have no lines; is that so?—No, they all have lines.

17,320. Then how is it that they catch small fish?—Because the meshes are small, you see.

17,321. Do they use a smaller mesh?—No, it is the same size in the mesh, and the same trawls. Sometimes we use the trawl we use in the winter.

17,322. (*Mr. Lefevre.*) What is the size of the smallest fish you catch?—At times they are caught no larger than the nail of your thumb.

17,323. Nothing escapes?—No.

17,324. Even now?—No, the nets will stop anything almost.

17,325. Even when lines are used?—Yes, our mesh is rather small, and it gets blocked up with weed and sand, and all kinds of stuff.

17,326. Suppose you had a larger mesh, say $1\frac{3}{4}$ inches from knot to knot, would that prevent the catch of small fish?—We should not catch as many small fish then.

17,327. Suppose that the mesh of the net of your trawl were of that size, and you also used the lines of which you have been speaking, would a great many fish that you catch now go through?—There would be a wonderful sight go through.

17,328. Do you know that $1\frac{3}{4}$ inches from knot to knot is the legal mesh?—I have heard that there is a size laid down, but I don't know what it is. I know there is a law upon the subject.

17,329. But that law is not observed?—No.

17,330. Have you a boat of your own?—No.

17,331. How long have you been a fisherman?—Nearly 31 years.

17,332. Do you find that you make as much by the business now as you did when you first began?—I can make more in the trawling season, but for the last two or three years there has been a failure at Hastings. The mackerel and herring seasons have been bad.

17,333. Take the last few years, have you made as much in them as you did formerly?—Trawling has been better, but I have been for six months out of the 12 engaged in the herring and mackerel-fishing which has been bad. If I had been trawling all the time I should have done much better.

17,334. The herring and mackerel seasons have been bad for some years?—Yes, they have been bad for these last 10 years.

17,335. Have as many mackerel been caught by the kettle nets as before?—Yes, I think so.

17,336. Then the falling off has been mainly in the drift-net mackerel-fishing?—I do not know whether the kettle nets make much difference. What they catch in the kettle nets we cannot catch in the drift nets. The cause of the falling off is, I believe, that there have not been so many in our channel as there have been in former years. For two months there have been plenty of mackerel here. There have been more mackerel in Rye Bay than ever was known.

17,337. When was that?—Last month and this.

17,338. Why do you not go after them?—We

caught 6,000 mackerel in the herring nets at one time.

17,339. Was that later than usual?—Yes.

17,340. Then to what do you mainly attribute the falling off in the mackerel season?—I cannot answer that; I do not know.

17,341. Do you think there are less mackerel off this coast?—There have not been many mackerel to speak of of late years compared with what they were 10 years before.

17,342. They have been falling off during the last 10 years?—Yes.

17,343. Do they come now at a different season?—Quite at a different season altogether.

11,344. Do they interfere with the herring-fishing?—The herring-fishing for the last two years has been very bad.

17,345. Have you fished off the east coast?—Yes, from the Land's End asfar as North Sunderland. I have fished in Mount's Bay.

17,346. When do you generally go fishing on the east coast?—Generally in the month of July.

17,347. And when do you come back?—We come back again in October.

17,348. Do you stay there for the Yarmouth fishing?—No we went as far as North Sunderland.

17,349. You went to the Northumberland-fishing?—Yes, in the summer season.

17,350. And you came back here for the winter-fishing?—Yes, and then we go in for our own fishing.

17,351. Has that been profitable during the last few years?—No, we have done very badly indeed.

17,352. What is that owing to?—Because we have caught no fish.

17,353. Do you mean the herring season?—Yes, the herring season.

17,354. On the east coast?—Yes.

17,355. Last year?—Yes.

17,356. What has it been this year?—I have not been at it this year.

17,357. (*Mr. Caird.*) Do you as a fisherman experience any disadvantage in consequence of not having a port you can run to in stormy weather?—It would be a great deal better for us if we had a port.

17,358. Do you think if you had a harbour, which you could get into at low water, it would increase the number of your fishermen?—I think it would be of benefit to the fishing of Hastings.

17,359. Would many more people come here?—I think there would.

17,360. Is there plenty of ground to supply any number of fishermen who choose to come?—I think there will be plenty of fish for the trawlers for many years to come.

17,361. Have you ever seen a seine net used here?—Yes, there were plenty here last summer.

17,362. What do they catch in the seine nets?—Mackerel.

17,363. Do they catch any young fish—small fish?—A good deal at times when they draw out on the shore.

17,364. (*Mr. Lefevre.*) A seine net is always drawn out on the shore, is it not?—No, sometimes they close them together and fish them at sea instead of drawing them on shore.

17,365. (*Mr. Caird.*) Is any injury done to the fishing by the use of seine nets?—I do not think they do any harm.

17,366. Does anybody complain of them?—I never heard any complaint but I have no doubt there are always some people who will complain.

17,367. Upon what ground do they complain?—I don't know I am sure.

17,368. You have not observed that any injury has been done by the seine-net fishing?—No, I have never seen any harm done in the least.

The witness withdrew.

William Stonham called and examined.

W. Stonham.

17,369. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, ever since I have been big enough to move my hands.

17,370. Have you practised all kinds of fishing?—Yes.

17,371. Do you agree with the previous witnesses that there has been no diminution in the quantity of fish you can catch now as compared with what you caught when you first began?—No, when I began I went four months for 30*s.* or 40*s.*

17,372. What can you make now?—Sometimes now I make a little more and sometimes a little less.

17,373. You have told us what you made then, cannot you tell us what you make now?—This season I have been three months herring catching for 6*l.* or 7*l.*; the first time I was mackerel catching and I got about 40*s.* for the first four months.

17,374. Do you think that the quantity of fish you can catch has increased or diminished off Hastings?—I don't see much difference in the mackerel and herring. Some 15 or 16 years ago the mackerel were plentiful and the herrings were slight, then the mackerel became slight and the herrings more plentiful, and now for the last two seasons both have been slight.

17,375. Do yo know of anything that does injury to the fishing?—I think if the drawing nets were kept back for two or three months in the year it would do good.

17,376. Is there nothing further of which you complain or which you wish to speak to us about?—No.

17,377. (*Mr. Lefevre.*) What are the draw nets; are they seine nets?—No; a man will go and pull it round to the shore and sometimes they work it at sea.

17,378. What harm do nets of that description do?—They catch small fish.

17,379. What are they fishing for?—For mackerel.

17,380. Do they catch as much small fish as the trawlers do?—No, the small fish are not as plentiful as where they go trawling.

17,381. Do they catch smaller fish when trawling than in these nets?—No, not smaller but a little more altogether; they get bigger lumps of it. Here they only fish a quarter of a mile off.

17,382. Have you trawled in the summer months?—Yes, and in the winter too.

17,383. Have you made much money by trawling in the summer months?—Sometimes we have.

17,384. Do you find that you catch large quantities of small fish?—Sometimes.

17,385. Do you bring it all ashore?—No, not one-third.

17,386. Do you throw the other two-thirds overboard?—Yes, all alive.

17,387. Is it usually alive?—The biggest part is alive.

17,388. Do you think it would be a good thing to put a stop to trawling in the summer months?—Yes, I think it would within two or three miles of the shore.

17,389. Would you catch fish further off at that time?—We must try to do so; perhaps we might not catch quite as much.

17,390. Have you ever tried what you could get by fishing further off?—Yes, five or six or seven or eight miles off at the same time that boats have been fishing in-shore. What we object to is that some will get close in and destroy the brood. If it has been blowing for two or three days there will be a few good soles along with the small fish.

17,391. You do not wish to catch the small fish?—No, we do not wish to see it disturbed.

17,392. Do you bring ashore any quantity of small fish?—Not any great quantity; we pick out the best part of it and let the other go.

17,393. Do you sell it very cheap?—It has not

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been very cheap this last few months. It has not been as cheap as it used to be some time back.

17,394. Do you ever sell any for manure?—I never did sell any for manure.

17,395. Do you recollect any time when it has been sold for manure?—No, but I had some given to me once.

17,396. That is not the case now?—No.

17,397. All is bought for food?—Yes. Last summer I brought a few lots ashore, and picked the best out, and left the rest on the beach, but in general it is all carried away for eating.

17,398. Do you think that the trawlers in general would like to see trawling stopped within three miles of the shore?—Yes, I should myself, and I should also like to see the kettle nets stopped.

17,399. You would not then catch the big soles that come in?—We must stop till they go out again.

17,400. (*Mr. Caird.*) Would you put a stop to all kinds of in-shore fishing?—If I could have my way I would.

17,401. Do they not catch good soles then?—Yes and little ones, which they sell for manure.

17,402. Have you seen any large quantity sold for manure?—Yes, a waggonload.

17,403. Lately?—No, not lately.

17,404. How long ago?—16 or 17 years ago. They were brought to the fish market and then carried away for manure afterwards. That was before we had the railway.

17,405. (*Mr. Lefevre.*) Are there any dog-fish off here?—At times.

17,406. Do they come in after the small fish in the summer?—Not in the summer.

17,407. Are there any fish that feed upon the small fish in the summer?—I believe a good deal of fish do. The fish we throw overboard does good in that way. They eat one another.

17,408. They eat one another?—Yes, they eat some, not all.

The witness withdrew.

R. Adams.

RICHARD ADAMS called and examined.

17,409. (*Mr. Caird.*) Have you heard the evidence that has been given to-day?—Yes.

17,410. Do you agree with what has been stated?—I do chiefly, especially with regard to the trawling system.

17,411. Do you think there is an increase of fish compared with what it was in earlier times?—Yes.

17,412. Of all kinds of fish?—Yes, of all kinds of trawl-fish.

17,413. Is there any mode of fishing practised here which you think is injurious to the general interests of the fishery?—I cannot see that there is in particular.

17,414. Are there any restrictions of any kind on your fishing?—I do not know of any.

17,415. Is there any suggestion you can offer for improving the fisheries?—I cannot see anything you can alter except the fishing in-shore.

17,416. Do you desire to see a stop put to in-shore fishing in the summer months?—Yes, I think it would do none of us any harm if we were prevented from fishing within three miles of the shore.

17,417. You think that in the summer time all the fishing craft should fish a little further from the land?—Yes, I think so.

17,418. Would it be an expensive business to guard the shore so as to carry out such a regulation?—I think not.

17,419. (*Mr. Lefevre.*) Do you trawl at night as well as in the day time?—Yes, that is the time when we catch most fish.

17,420. (*Mr. Caird.*) If a regulation were adopted prescribing that no fishermen should fish within three miles of the shore during the summer months, do you think it could be easily enforced?—I cannot say. You would have to keep a good watch to keep us all clear, and many times you would not be able to tell whether we were within the boundary or not.

17,421. (*Mr. Lefevre.*) You would be obliged to have the Revenue cutters?—Yes, the one on duty here could do it, however. It could stop it generally.

17,422. (*Mr. Caird.*) Do you think it would be of advantage to the general interests of the fishery here if that were done?—Yes.

17,423. Have you any other suggestion to make to us?—No, except in respect of the size of the mesh. I do not think it would make any difference at all if we had it larger, if there were no lines on the net; it would make no difference at all.

17,424. (*Mr. Lefevre.*) You do not think, if the mesh of the trawl net was larger, that it would allow the immature fish to go through?—No, if you have no lines on your net you can pull them just as tight as you like. There would always be a way to get over the difficulty; they would manage the nets so that it would make no difference.

17,425. What is the size of the mesh you use?—About the same as was stated just now. They say 27 or 28, but that is only the half mesh; we chiefly use about 14.

17,426. What is the size?—About $1\frac{1}{4}$ inches.

17,427. Are you aware that $1\frac{3}{4}$ is the legal mesh?—No; nobody ever came to put any law in force. We always use our own discretion respecting the mesh. If we had a mesh that would let a small flat-fish, such as plaice, or a small bream, turbot, or so on, through, we should never stop a whiting or a mullet.

17,428. Do you catch many whitings?—Yes, at times, in the off channel.

17,429. How are they caught?—In the trawl. The whiting is a round fish, they would go through. What would catch a small flat-fish would never stop a whiting, mullet, or anything of that sort.

17,430. Have you a boat of your own?—No.

17,431. Are the boats here mostly owned by fishermen?—Some are owned by fishermen, and some by men on shore.

17,432. How is the owner of the boat paid?—He is paid by the share.

17,433. How many shares do they divide upon?—Four in trawling?

17,434. Are there only three men in each boat?—Yes.

17,435. And the boat takes a man's share?—Yes.

17,436. What does the boy get?—We have no boy; we only carry three men. Three men and the boat make four shares.

17,437. That is in trawling?—Yes.

17,438. How is it in herring-catching?—In the herring season we carry six men and a boy.

17,439. What are the shares then?—We then carry so many nets. Each 14 nets take a share. Some will have 60 and 65 nets. We make altogether 12 shares and a half.

17,440. How many does the boat get?—One share and a quarter.

17,441. Each 14 nets take a share?—Yes, and also each man. The boy has half a share.

17,442. Are the nets chiefly owned by the fishermen?—Yes.

17,443. Some of them let them out, do they not?—Yes, they let them out when they cannot go to the fishing themselves.

17,444. How long do the nets last?—Some will last five, six, or seven years, and some perhaps not one year. Sometimes they get damaged.

17,445. But what is the average?—Four or five years on the average.

17,446. What is the cost of a fleet of nets?—A fleet of 60 nets new top and bottom will cost 120*l.*, as they come from the manufacturers without any dressing to them.

17,447. The price has increased lately, has it not?

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—Yes, they cost two guineas a net, and more than that.

17,448. What will a new boat with a fleet of nets and ropes, all included, cost?—I should say it would cost 400*l.* or 500*l.* altogether.

17,449. As much as that?—All that.

17,450. That is a half-decked boat?—Yes.

17,451. Can it also be used for trawling?—Yes; we call them trawl-boats. The larger ones we call luggers; they only go two seasons, they never go trawling at all.

17,452. Do you find that you can make as good seasons as you used to make?—Yes, I see no difference.

17,453. Are you much interfered with by rough weather in the winter here?—We have no shelter but this beach to run for.

17,454. Do you think if there was a harbour here you would often be able to get protection?—Certainly, and we should go more to sea. We don't stop as long as we should like, but if we stop past our time it is very difficult to get in on account of the rocks.

17,455. Do you see the Ramsgate and Torbay boats trawling off here when you cannot go?—Yes, if it sets in much wind we cannot cope with them. They are fishing when we are forced to be on shore.

17,456. Is any proportion of the season wasted in that way?—There are many times in the herring and mackerel seasons that we might be at sea when we are ashore. We could get out of a harbour when we cannot get off the beach.

17,457. (*Mr. Caird.*) How do you sell your fish? Do you sell them when you bring them ashore?—Yes; we ask a price for them, and then fall by degrees. We come down in our price instead of rising as at a regular auction.

17,458. (*Mr. Lefevre.*) It is a Dutch auction?—Yes.

17,459. (*Mr. Caird.*) Have you as a fisherman found that the price has considerably increased of late years?—Yes; because we have more convenience for sending the fish away.

17,460. For the same catch of fish you can now get more money?—Yes.

17,461. Is there much competition among the buyers?—There are more buyers because there are more fish brought ashore for consumption.

17,462. As a fisherman do you get the full benefit of the increased price?—Yes; we get more for it.

17,463. (*Mr. Lefevre.*) Are your herrings salted and cured here, or are they sent off fresh?—When we take them ashore we sell them to the buyers, who sometimes send them away salted and sometimes fresh.

17,464. Are there any number of fishermen at Eastbourne?—There are about 10 or 12 boats, but there are no trawlers at all.

17,465. What are they?—Herring and mackerel boats; there is also a shell-fish and a sprat fishery there.

17,466. What is the shell-fish fishery?—Crabs and lobsters.

17,467. Are there any oysters?—Yes; they go oystering.

17,468. Then beyond Eastbourne there is nothing until you get to Brighton?—No.

17,469. Is there no fishing at Newhaven?—Not much.

17,470. (*Mr. Caird.*) Is there any at Folkestone?—A little but not much.

17,471. What is there between this and Folkestone?—Nothing except kettle nets, and a few drift herring and mackerel boats at Dungeness.

17,472. Is there much fishing carried on between Folkestone and Ramsgate?—Nothing much.

17,473. Nothing at Dover?—No; very little.

17,474. At Deal?—There are herring boats, but no trawlers.

17,475. Do you know if there are any fishing towns to the west of Brighton?—Yes; there is Worthing.

17,476. Is that the only town of importance?—Yes, the only one.

17,477. (*Mr. Lefevre.*) Where do the French boats generally come from?—Boulogne, Treport, and Dieppe.

17,478. Do you ever go there to sell fish in the French ports?—No.

17,479. Do you know any one who has done so?—No.

17,480. You know of no fisherman who has sold fish within the last two years in a French port?—No.

17,481. Do you think it would be of any advantage to the fishermen here to be able to run to a French port, and sell their fish there?—I think it would at times. They might go across there to fish, and get a market at hand when they could not get here with their fish at all, as they would not be fresh when they got them in.

17,482. Would you like the Frenchmen to come here?—They do come now, but we would rather they did not.

17,483. Is there nothing to prevent them?—No, not at all.

17,484. You know of no one who has tried within the last three years to sell fish in French ports?—No.

17,485. Do you know that the duty on fish in France has very much diminished?—I do not know what the duty is, but I know that the French fishermen pay nothing in England. They land what they like.

The witness withdrew.

The inquiry was then adjourned until Monday, the 7th December, at Brighton.

Brighton, Sussex, Monday, 7th December 1863.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

BRIGHTON.

R. T. Saunders.

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RICHARD THOMAS SAUNDERS called and examined.

17,486. (*Mr. Caird.*) You are chief officer of the Coastguard, I believe?—Yes.

17,487. How long have you occupied that position here?—Three years on the 1st of next month.

17,488. Has your attention been much directed to the state of the fishing at Brighton?—It has principally been directed to it when any complaint has been made to me with regard to the smallness of the meshes of the nets. When such complaints have been made, I have considered it my duty to examine the nets.

17,489. Can you tell us the number of boats engaged in the various kinds of fishing here?—There are about 50 large sea boats, and about 50 herring boats, and about 200 pleasure boats; 50 of these are occasionally employed in fishing; they are adapted for fishing more or less.

17,490. Do you know what number of people altogether are engaged in fishing here?—I think there will be about four to each boat.

17,491. Four men to each boat?—I think that will be about the number, beach men and lads included.

17,492. Are there the same number of men in the large boats and in the herring boats?—Taking them altogether, there are about four in each boat.

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17,493. That would be about 400 men altogether?—About 400 or 500, beach men and all included.

17,494. Are you aware whether the number of men and boats has increased or diminished in recent years?—Since I have been here there has only been an increase of three fishing boats. I do not think there has seen any addition to the number of small boats.

17,495. Has there been any diminution?—I think not, since I have been here.

17,496. Do you know the kinds of fish that are principally caught here?—Whiting, codfish, skate, herring, mackerel, and the principal part of all the fish that are caught in the English Channel. I believe they are all caught and brought here.

17,497. Is it principally hook-and-line fishing, or trawling, that is practised here?—Trawl-fishing.

17,498. Is there any hook-and-line fishing?—Yes, that is generally followed by the pleasure boats. If they are not employed in pleasure, they will take out long-lines, and sometimes fish with hand-lines; they fish principally however with long-lines.

17,499. Do you know whether the quantity of fish caught here now is as great on the whole as it was some years ago?—I do not know personally, but the fishermen say that it is not

17,500. Have you observed any diminution in the average quantity of fish?—I have not observed any diminution myself, I simply go by hearsay.

17,501. Do the fishermen themselves complain that the fish is decreasing on account of the use of seine nets, and of the small meshes that are generally used?—Yes, and the trawlers complain also.

17,502. Are the seine nets used here?—Yes.

17,503. Are there many seine nets used on the shore at Brighton?—Yes, very often during the summer; they are drawing them out throughout the whole of the day.

17,504. Is that only during the summer time?—Yes.

17,505. And in shallow water?—Yes, in-shore.

17,506. Have you observed them being used?—Yes, I have often seen them used.

17,507. Do they catch many small immature fish in them?—Yes, especially mackerel.

17,507*a*. Do they catch young mackerel?—Yes, all that come into the net are caught and brought ashore.

17,508. Do you think that any great destruction of fish has taken place by the use of these nets?—Yes.

17,509. How many months in the year are these nets used?—I think they are used for about seven months—from seven to nine months during the year.

17,510. What is the number of fishermen employed in the use of these nets?—They are all employed more or less, except the fishermen who are engaged in the larger boats. The fishermen employed in the herring boats, I think, use them more or less.

17,511. About one half of the whole of the fishermen here use them?—More than that.

17,512. More than one half of the whole of the fishermen fish with the same nets at certain seasons?—Yes.

17,513. Are these small fish to which you have referred saleable?—Yes, I believe they are all sold. Very few are left on the beach; they are generally sold or taken away.

17,514. Is there any other fish brought to the market in any quantity during the time these small fish are being sold?—Do you mean landed here on the beach?

17,515. Yes.—Oh, yes, they are landed on the beach all the year round; but we have also a great number of fish consumed here that come from London.

17,516. Could the fishermen employed in fishing with these seine nets make as good a business if they went out to the deep sea in the same way as the larger boats?—I cannot say; I would rather leave that question for the fishermen themselves to answer.

17,517. Are you yourself of opinion that fishing with seine nets and the destruction of these young fish have damaged the general productiveness of the fishery?—I am quite sure of it.

17,518. But you cannot speak of your own knowledge of an experience of more than three years?—No, not at Brighton.

17,519. In the course of these three years have you had any experience which convinces you that an injury has been sustained by the general fishery in consequence of the destruction of small fish?—Yes, I think so. We cannot get large fish when spawn is destroyed, and also the fish themselves when they are very young. I believe the operations I have referred to must inevitably destroy the brood of the fish.

17,520. Have you seen any spawn destroyed in the seine nets?—Yes, some.

17,521. (*Mr. Lefevre.*) What spawn was it?—I have seen spawn in the seine nets when they have been drawn in.

17,522. The spawn of what kind of fish?—I don't know.

17,523. (*Mr. Caird.*) But you have seen spawn in the nets?—Yes, and I have seen it on the coast.

17,524. It has been brought in by the seine nets?—Yes, when they draw the seines in.

17,525. Are the seines drawn from the shore?—Yes.

17,526. One man stands on the shore with the end of a line in his hand?—Yes.

17,527. And another man goes out with a net in a boat?—Yes, they surround a piece of water and then draw the line ashore and haul it in on the bank.

17,528. To what extent is this system carried on?—I have seen the seine nets used all along the beach at Brighton.

17,529. Among what class of people do these small fish generally go into consumption?—Generally among the poorer people.

17,530. Are they sold at a cheap rate?—Yes, they are not taken to the market.

17,531. What proportion of the whole of the fish taken by the seine nets will consist of these small fish?—I should think about one-sixth or one-eighth.

17,532. One-sixth or one-eighth of all the fish?—Yes, brought in by the seines.

17,533. So that only one-sixth or one-eighth of the fish caught by the seine nets are small?—About that.

17,534. Are the other five-sixths good fish?—Yes.

17,535. Then if you did not use such nets you would deprive yourselves of that five-sixths of good saleable fish brought ashore at that time?—Yes, I should say it would be about five-sixths.

17,536. Five-sixths are good and mature fish?—Yes, about one-sixth would be bad fish and five-sixths would be good.

17,537. Out of every six fish, one would be small?—Yes.

17,538. And the other five would be good?—Yes.

17,539. For the sake of saving that one fish, do you think it would be right to give up catching the five good fish?—I do not know whether it would be right to give up catching them; but according to my experience this is what happens. Sometimes you will draw the seine with 500 or 600 fish in it, and 100 fish out of the number is a great quantity to be small fish.

17,540. Are we to understand from your observation that, on the average, not more than one-fifth or one-sixth of the catch is small immature fish?—About that.

17,541. Would not the poorer classes of Brighton have great cause of complaint, if for the sake of saving that one-sixth of small fish they were deprived of five-sixths of the supply of fish which they get at present?—I should say not. I think the whole of the fishermen would much rather have the seines done away with throughout Brighton and all over the coast, but as a matter of course they will be able to tell you much better than I can.

17,542. (*Mr. Lefevre.*) What is the size of the mesh of the seine net?—The usual mesh is about $1\frac{1}{8}$ inch long.

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17,543. How many of these seine nets are used?—I don't know.

17,544. Does fishing with the seine nets extend far here?—All along the beach along the Brighton station from east to west.

17,545. How far is that?—A mile and three-quarters.

17,546. Can they only be used on smooth ground?—Yes, not on rocky bottom.

17,547. They are not used if the ground is rocky?—No.

17,548. What fish do they generally catch with the seine nets?—Generally mackerel, I think.

17,549. Do you think that by any regulation as to the size of the mesh the catching of immature fish might be prevented?—I think they complain very much about the seine nets being used at all.

17,550. Do you not think that any regulation as to size of the mesh would have the same effect as putting a stop to the seine fishing altogether?—I think not. I think what the fishermen wish is to have a stop put to it entirely.

17,551–2. Have any complaints been made to you as to the size of the mesh?—I have only had three complaints made to me, and they have generally been by people who have been intoxicated over night. Next morning when I sent for them I could not find them at all in Brighton. It has happened in this way: I have come across a man who has had a little drop of beer, and he has complained that particular persons have been using nets with a small mesh. If I have spoken to other fishermen about it, they have told me to go to him and examine his nets first, adding, that I should find them as bad as any. But the person who made the complaint has never appeared the next day to substantiate it.

17,553. Are you aware whether during the three years you have been here the whole supply of fish has decreased here?—I have heard the fishermen say that it has.

17,554. Does that apply to the three years you have been here?—Yes, I have heard them say that the fish are decreasing.

17,555. Do you think that is to be attributed to the mode of catching fish, or to bad seasons?—I think it is most likely owing to the smallness of the mesh and so on.

17,556. Have any complaints been made to you of the size of the mesh of the trawl nets?—I think the last complaint made to me was about trawl-nets; it was made by a man named Andrews, who has a trawl-boat.

17,557. Are you an officer of the Customs?—No, of the Coastguard.

17,558–9. Have you any authority to look after the size of the mesh?—Yes.

17,560. What instructions have you as to the size of the trawl nets?—These are the only instructions I have; I have all the different Acts of Parliament.

17,561. Is it part of your instructions occasionally to overlook the trawl nets?—Yes, if any complaint is made.

17,562. But not otherwise?—Not otherwise.

17,563. Do you know what the legal mesh of the trawl net is?—It is down in the Act of Parliament.

17,564. Do you know what it is yourself?—No, I cannot tell from memory unless I go to the Act itself.

17,565. Can you say when you look at the mesh of a trawl net whether it is of the legal size or not?—Not without measuring.

17,566. But on measuring it you can?—I can refer to the Act then.

17,567. What distance do the trawl-boats go off from here?—About 20 miles from here.

17,568. Do they go from here to Rye Bay?—I do not know.

17,569. What is the season here for herrings?—The herring-fishing is all the year round.

17,570. They catch the herrings all the year round?—Yes, the herring-fishing is all the year round.

17,571. Is there no season when they go out more than another after herrings?—Yes, now is just the time.

17,572. When does it commence?—About the 1st of October.

17,573. How long does it last?—It lasts during all the winter.

17,574. Has it been a good year here so far?—No, it has been a very bad year. We have had none. It has been pretty good in the north, but we have had none here.

17,575. Has it been an exceptionally bad year?—It has been very bad, I believe. I have never known a worse.

17,576. What is the mackerel season here?—The mackerel season is in the summer.

17,577. What time does it generally begin?—In May or June and lasts throughout the summer.

17,578 How long does it continue?—Until August.

17,579. Have you yourself seen spawn brought up in the seine nets?—I have seen it on the beach.

17,580. When they have been drawing the seines?—Yes, for mackerel.

17,581. Are you sure it is not spawn that has come from the bellies of the fish?—I don't know that; I cannot say where it comes from.

17,582. You have not looked to see whether it has been drawn up in the net or how it has come?—No; after the nets have been drawn and the fish have been taken away, I have seen it there.

17,583. What kind of spawn is it; what does it look like?—It is regular spawn of a yellowish kind; I cannot describe it further than that.

17,584. Is it in lumps or is it thinly spread over?—It is thinly spread; it is not in lumps.

17,585. You are perhaps not well enough acquainted with the spawn of fish to say what it is?—No.

17,586. But you are sure it is spawn?—Yes, I have heard the fishermen themselves particularly complaining about it. They say, "Look at the small fish, and look at the spawn." That has drawn my attention to it more than anything else.

17,587. (*Mr. Caird.*) These printed instructions which you have placed in our hands, and which have been given you for your guidance seems to refer almost exclusively to oysters?—Yes, but there is another.

17,588. (*Mr. Lefevre.*) Have you ever seized any nets on account of their being illegal?—No, as I have said before, whenever a complaint has been made I have been unable to find the man who made it next morning.

17,589. Are you aware that the net used by the trawl fishermen here has a mesh of less than the legal size?—When I have inquired into the matter the men have told me that if I seized one net, I should have to seize the whole of them.

17,590. Then you are aware that all the nets used here by the trawlers are below the legal size?—I think so.

17,591. Yet there is no case within your knowledge in which the nets have been seized?—No, none.

17,592. (*Mr. Caird.*) Is the system of kettle net fishing used on this shore?—No, I have never seen it.

The witness withdrew.

P. Collins.

PHILIP COLLINS called and examined.

17,593. (*Mr. Caird.*) Have you long been a fisherman here?—More or less, from my youth.

17,594. What kind of fishing do you practice?—Trawling and mackerel and herring-catching. I was never seining, but I have seen plenty of it.

17,595. Can you speak from an experience and

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knowledge of 20 years of the place as a fishing station?—Yes.

17,596. Has the supply of fish on the whole increased or diminished during those 20 years?—It has diminished.

17,597. Has the number of boats increased or diminished?—Diminished.

17,598. Were there more boats engaged here in the fishing 20 years ago than there are now?—Yes, there were more larger boats. There are more smaller boats now for the herring-fishing than there used to be 20 years ago. I think there are fewer mackerel boats.

17,599. Are there fewer large trawl-boats?—The trawl-boats are about the same. I do not see much difference in them.

17,600. In what kind of boats has there been a decrease?—In the largest boats of all—about 30 feet long, and from that to 25 or 26 feet.

17,601. Are there fewer of those boats than there were 20 years ago?—Yes.

17,602. Has the whole catch of fish diminished?—Yes.

17,603. Is there any particular kind that more than another has fallen off?—No; I think there has been a falling off in the whole of the fishing.

17,604. What do you attribute that falling off to?—We attribute it in a great measure, in this bay, to the size of the seines with the mesh of a small scale. There are some small scale seines in this place that you will not get the shank of a pipe through the mesh.

17,605. Have they been used during the whole of time you refer to—during the whole of the 20 years within which your experience extends?—Yes.

17,606. Were they used before?—I cannot say; I believe they were.

17,607. Are you aware whether it has been an old habit to use seine nets on this shore?—I was talking to an old seine man some time ago. He has been engaged in seining all his life and he is about 60 years of age. There are about a dozen boats that go seining all the year through.

17,608. What is the name of that man who has been seining for nearly 60 years?—His name is Salvage. I was talking to him yesterday and he seems to be very much against the small scale seines.

17,609. Has there been any alteration in the size of the mesh of the seine in your experience?—I believe there has been an alteration. It has gone smaller in the bunt.

17,610. Smaller than it used to be?—Yes.

17,611. And therefore do you suppose that it is more destructive to the small fish?—Of course.

17,612. Do you think that there is a larger quantity of small fish caught now than in former years?—Yes, I believe there is, because the nets are much smaller than they were.

17,613. Have they much increased in number in recent years?—No, they are about the same in number.

17,614. There are about the same number employed now as formerly?—Yes; I see no difference at all.

17,615. Then on the whole there is no greater destruction of small fish than there used to be in former years?—I believe there is.

17,616. In what months of the year is that system practised?—They use them at times all the year round.

17,617. Are they not used more during some months than in others?—Yes.

17,618. What months are they?—In the autumn and spring.

17,619. And in the warmer weather?—Yes. When the mackerel are shoaling about and come into the bay they will put these small seines on one side and take to the mackerel seine.

17,620. Is that larger?—Yes, but not much. It is about the size of a pilchard scale.

17,621. Have you any notion what quantity of small fish will be destroyed in a day by the use of these seines?—No; the man whose name I mentioned to you says that he has destroyed some lasts of small herrings not longer than my finger—not longer than my little finger.

17,622. Are they not sprats?—No, he told me they were nothing but herrings.

17,623. You have not seen that done?—No, but I have seen a good many small fish destroyed. I can remember mackerel being sold here by the quart not longer than my finger.

17,624. Was the mackerel-fishing injured generally in that year by the destruction of small mackerel?—Yes, I believe it has been a great injury to it ever since.

17,625. Have the mackerel diminished of recent years?—Yes, but not all through the season. I think it has been caused by catching mackerel in the winter time. That is the reason they have been scarce in the summer time.

17,626. What time is the best for mackerel-fishing?—The old fishermen did not go till April, and they left off in June.

17,627. When do they go now?—Early in January, and they do not leave off until the latter end of August.

17,628. If they do that I suppose they find that it answers?—They made it answer at one time, but not lately. They catch the mackerel all in the north now.

17,629. Then it is not mackerel caught off your own coast, but caught somewhere else?—I think this place was a resort for mackerel once, and that they have now spread and migrated further off. I believe there is a native fish in every bay, and if they are destroyed you cannot catch them afterwards. I believe there would be a great many more fish if the mackerel were not destroyed here when young. There would also be more of what I call the native herring, if it were not for these small scale seines.

17,630. Can you yourself distinctly trace any injury to the deep-sea fishing to the destruction of the small immature fish by the seine nets?—We attribute it to that.

17,631. Can you point to any year in which you have particularly noticed a decline?—I believe it is the opinion of the fishermen that it has been getting worse and worse every year.

17,632. Have the fishermen been making a worse trade of it during recent years?—I believe they have.

17,633. On the whole, does not a boat get as good a fishing as it used to do?—No, and another thing is that they do more at it than they used to do.

17,634. (*Mr. Lefevre.*) Do a great many more hands go?—Yes.

17,635. (*Mr. Caird.*) I thought you stated at the commencement of your examination that there were fewer?—Fewer boats. I am not speaking of this place alone, but of others as well. There are more altogether that go fishing.

17,636. Then do you attribute the decrease to the greater number of men who are now fishing?—Yes, throughout the United Kingdom.

17,637. You are a trawl fisherman?—Yes, and a drift-net fisherman also.

17,638. Did you ever trawl in Rye Bay?—No; I have been herring catching there, and I have seen boats trawling in Rye Bay.

17,639. Where do you trawl?—At Brighton.

17,640. How far off the shore?—Sometimes 20 miles; sometimes only five or six.

17,641. Can you get as much fish as you got formerly?—No, we cannot, and we attribute it to the use of the small-scale seine.

17,642. You say you cannot catch as many fish on the ground on which you have been accustomed to trawl, and yet you have not found it necessary to go to other and fresh ground?—It is very seldom that we do.

17,643. Do the French fishermen come upon your ground?—Yes.

17,644. Do they continue to come in as great

numbers as they did formerly ?—Sometimes there are more on our outer grounds than there used to be.

17,645. Has there been a gradual or a constant increase of boats on that ground ?—I cannot say. I know nothing about that.

17,646. Do they on the whole get good fishing on the grounds you frequent ?—If we don't catch fish when we go out we try somewhere else, and they do the same.

17,647. You do not go far from your own ground? —No.

17,648. Do you ever go to the French coast ?—No.

17,649. Or to the Dutch coast ?—No.

17,650. Has the price of fish increased much in your time ?—No, it has rather lessened.

17,651. Do you not get as much for your fish now as you used to get ?—No, not nearly so much.

17,652. Have you any oyster-fishing here ?—Not since the ground was "ridded" of oysters. There used to be some good oyster-fishing between Shoreham and Worthing, but it has all been given up.

17,653. How many boats were there formerly engaged in that fishing ?—30 or 40 sail used to go to Shoreham and Worthing, seven or eight miles off. They dredged the beds continually year after year until they destroyed the spawn altogether.

17,654. Have they fished that ground out ?—Yes.

17,655. Are there no more oysters to be had on that ground now ?—No ; nothing to pay them.

17,656. Are there no regulations adopted for the purpose of protecting the oyster beds ?—No.

17,657. Have you yourself, as a fisherman, been interfered with in any way by the Coastguard officers or others as to the size of the mesh of your net, or the modes of fishing you adopt ?—No.

17,658. Does no one ever interfere with you ?—No.

17,659. Are you aware that there is a legal size for the mesh of your net ?—Yes.

17,660. Do you adopt that legal size ?—No, we do not.

17,661. You pay no attention to it ?—It is not enforced.

17,662. There is no legal restriction of any kind placed upon you ?—No, there is an Act of Parliament, but it is not enforced.

17,663. (*Mr. Lefevre.*) What is the size of the mesh you use in trawling ?—I think each side of the mesh will measure $1\frac{3}{4}$ inches. That will make $3\frac{1}{2}$ from the side bar.

17,664. Do you know that the legal size is $1\frac{3}{4}$ inches? —Yes, about $1\frac{3}{4}$ from knot to knot. Perhaps ours is not quite as large.

17,665. Then what is the size of the mesh you use? —Perhaps $1\frac{1}{2}$ or $1\frac{1}{4}$, somewhere about that.

17,666. Do you ever trawl close in-shore ?—Yes, two or three miles off sometimes.

17,667. Do you ever catch small immature fish with the trawl net ?—A very small number indeed. I never saw many. Sometimes we may get two or three about the size of your little finger.

17,668. You do not as a rule catch small fish ?—No, I do not remember ever catching half a bushel of small fry in my life.

17,669. Do you complain of any falling off in the trawl-caught fish ?—Yes.

17,670. As well as in other descriptions of fish ?—Yes.

17,671. Do you catch as many haddocks as you used to catch ?—No ; and there are more go to it.

17,672. Do you mean more here or more in the United Kingdom ?—More altogether.

17,673. More trawl-boats are employed in catching haddock than were employed formerly ?—Yes, there are more boats, and less large mackerel boats.

17,674. Have you observed whether there are more boats coming from other parts of the kingdom and fishing off this coast than formerly ?—No.

17,675. You have not observed that there are more boats coming from Torbay and trawling off here ?—No.

17,676. Do you observe a diminution in all classes of trawl-caught fish ?—We attribute the falling off in the trawling to the use of the small scale seines.

17,677. Do you observe a diminution in any one class of fish you catch by trawling more than in another ?—We think there is less caught than there used to be.

17,678. Do you catch fewer turbot or soles, or cod, or any particular kind ?—There are less of all kinds.

17,679. Are there fewer plaice than there used to be ?—Yes, they have fallen off in particular.

17,680. Are you yourself the owner of a boat ?—Yes, I have a small boat.

17,681. What is it used for ?—The herring-fishing, and it goes trawling at times.

17,682. What is the size of it?—It is not very large, about 10 tons.

17,683. How many men do you take in her ?—Three men and a boy. Only two sometimes.

17,684. How long have you owned her ?—22 years.

17,685. Do you observe whether you make a less income from that boat now than you used to do ?—Yes.

17,686. How far do you go off this coast for herrings ?—We catch them close in-shore sometimes, sometimes a mile or two off; at other times six or seven.

17,687. Do you meet other boats fishing where you go ?—No, only our own boats.

17,688. How may seine nets are used off this coast ? —Not more than five or six of a very small scale. There are more boats engaged in mackerel-seining.

17,689. When the mackerel season is on do they not use the small scale ?—No, they use one then of about an inch scale.

17,690. Does it pay to fish with the small mesh seine net merely to catch the small fish ?—I do not think it pays those who use them.

17,691. Do you agree with the last witness as to the proportion of large and small fish caught by the seine nets ?—No, I believe a great deal more small fish are caught than he mentioned. I think you will find that instead of one in six being small there is not one in 20 good.

17,692. Not one good fish in 20 ?—No, nor yet one in 100.

17,693. Would the fishermen here like to see the seine nets put a stop to ?—I believe the majority of the fishermen would.

17,694. Would it take away the means of obtaining a livelihood from a certain number of fishermen here ? —No, I believe it would benefit them in the end.

17,695. You do not fish with the seine nets ?—No.

17,696. Have you ever seen spawn brought up in the seine nets ?—Not to my knowledge. I have only seen small fry brought up.

17,697. You have seen the seine nets drawn in ?—Yes.

17,698. But you have never seen the spawn of fish in them ?—No.

17,699. What is the length of the small mesh seine net ?—They have somewhere about 40 yards in the bunt of the net as we call it.

17,700. Is it a much smaller net than the net used for mackerel ?—It is as small as the quill of your pen.

17,701. What is the length of the net ?—140 or 200 yards at the most.

17,702. What is the length of the largest net used for mackerel ?—200 or 300 yards, and there is a scale on that the size of the mesh of a herring net.

17,703. When did you first observe the diminution in the take of mackerel ?—I have not taken any particular notice of that.

17,704. Has there been a gradual decrease in the take ?—Yes.

17,705. Are most of the fish caught here consumed in Brighton itself ?—Yes, I believe so.

17,706. Is there no great quantity sent off by rail? —I believe not.

17,707. Do any boats from Hastings come in here with their fish ?—Sometimes the mackerel boats engaged in drifting will come in here, but not often.

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17,708. Do any foreign boats come in here to trawl?—There may be a Frenchman fish in here sometimes.

17,709. Are there any trawlers belonging to Shoreham?—I believe not.

17,710. They only fish for herrings?—Yes.

17,711. How do you pay the men who fish with you?—They go by shares.

17,712. How do you divide?—We divide into so many shares.

17,713. What proportion does each man get?—If they are trawl-fishing all get alike.

17,714. Do you, as the owner of the boat, get more than the others?—Yes, I get a little more.

17,715. What do you get more?—A share more; but not in trawl-fishing.

17,716. Do you get nothing more in trawl-fishing?—No; I take a share like the other men. I find the nets and boat, and so many men go in each boat.

17,717. Do you not set apart any thing for the boat?—That depends upon how hungry or dry we are.

17,718. Do you pay all the expenses first and then divide?—No.

17,719. Don't you set apart anything for the expense of the boat?—No, the owner takes his equal share like the men; but it is different in drifting.

17,720. You have had a bad herring season here?—Yes; I don't think the oldest man here can remember a worse.

17,721. Was it a good season last year?—It was a very fair season.

17,722. Do you think the mackerel are caught before they come here?—A great many of them. Before the boats used to go down to Plymouth they made good seasons here; but it has been getting worse of late years.

17,723. Do you think the mackerel that used to be caught here are now caught by other people elsewhere?—No; I believe they resort to the deep water for warmth, and go out of the shallow channel, and in the summer time and in warm weather they appear of late years to migrate further about.

17,724. Are the small fish caught in the seine nets sold on the beach?—Some of them, and some are thrown away.

17,725. Is there a large quantity thrown away?—A great deal that is not fit to come to the market. In fact some that they do sell ought not to be sold.

17,726. If the law said that only a certain sized mesh should be used would that put a stop to the catch of small fish?—Yes, if it was enforced.

17,727. Would there be any means of enforcing it?—I think the Government could as easily enforce it as they can enforce the laws against smuggling. It might be done by the same people.

17,728. (*Mr. Caird.*) Are you often prevented by bad weather from going to sea to fish?—Yes, very often.

17,729. Do you pay any attention to the signals hoisted now by the direction of Admiral Fitzroy?—We take notice of them, but if we think it is fit to go we exercise our own discretion.

17,730. Have you benefited by those signals?—Not much here. If the storm signal is flying and we think we can get to sea, we go. If we are forced to come back we come back.

17,731. Have you any harbours to run to?—Only Shoreham, and that is a tidal harbour.

17,732. You cannot get there at low tide?—No.

17,733. Would it be of great advantage to if you had a harbour to which you could run in bad weather?—Yes, it would be much better for every one. We could then go out in a gale of wind.

17,734. Would it be of great advantage to the fishermen employed in these waters if such a harbour were established?—I don't think it would.

17,735. You do not think so?—No.

17,736. Would you not catch more fish if you had a harbour to run to in bad weather?—I don't think so.

17,737. (*Mr. Lefevre.*) Do you pay the men on shore for dragging your boats up?—Yes; we have a horse to drag the boats up. He goes round a capstan.

17,738. What do you pay for that?—Two shillings.

17,739. Every time you come in?—Yes.

17,740. And when you go out?—Yes; some charge 3*s.*

17,741. What do you pay for going out?—One shilling and sixpence for small boats.

17,742. Do you ever take any ice out with you?—No, we never take ice.

17,743. How long do you stay out?—A couple of nights; two or three days sometimes. It depends on the fish we get.

17,744. Are you aware that the trawl-fishing off Hastings has improved very much of late years?—No, I do not think it has. I think it is about the same as here.

17,745. You do not think it is true that the trawl-fishing there has improved?—No; but they may have more drift-net fish.

17,746. But they say the trawl-fish has increased?—They get a great deal more plaice and gurnets than we do.

17,747. Do you ever go off Hastings from Brighton?—Sometimes.

17,748. Are their boats larger than yours?—Yes.

17,749. Do they keep the sea longer?—I do not think they do.

17,750. Can they keep the sea in rougher weather than you?—No, I do not think they can.

The witness withdrew.

J. Andrews.

JOHN ANDREWS called and examined.

17,751. (*Mr. Caird.*) Have you long been a fisherman here?—For 30 or 40 years, and I have been as much at it as any man in Brighton.

17,752. Have you within your experience observed whether the number of boats and fishermen employed here in fishing, has increased or diminished during that time?—I believe that more go to the fishery now. I am speaking now of those seine nets.

17,753. But I mean the fishery of every description?—It is the watermen who go out pleasuring who go with the seine nets. If they see a shoal of fish coming in after food, they will shoot their nets and round them for 200 or 300 yards, and then lug them all up on the beach. There are a great number of small fish with them. I have seen mackerel drawn up not as big round as the shank of a pipe.

17,754. But has not that system of seine-fishing been practised here ever since you have been engaged as a fishermen?—Yes, but it is practised more now than ever it was.

17,755. It is practised more now than it was then?—Yes. They stop all the red mullets not as big as your little finger. Now the drift net would never catch anything of that sort, nor the trawl net. They go out in the middle of the sea trawling, and away down far in the north.

17,756. Have you ever trawled in Rye Bay?—Yes, I have been trawling there for nine or ten years.

17,757. Have you trawled there in recent years?—Yes.

17,758. With your own vessel?—Yes.

17,759. Have you found that the grounds there are not as productive of fish as they were formerly?—Nothing like it; no more are any of the grounds round about here.

17,760. Have you ever, in consequence of finding fewer fish, changed your fishing ground?—The fishermen are always changing their ground. They cannot get as much fish on the rough ground as they can with

the seine nets. The rough bottom tears their nets and everything they have.

17,761. Do the trawl-boats make a worse fishery than they did formerly ?—Yes.

17,762. Do the trawl-boats not bring as many fish ashore on the average as they did ?—No.

17,763. Has any particular kind of fish decreased ?—Yes, turbot, brill, doreys, cod, mullet, and whiting.

17,764. Do you attribute the whole of the injury done to the fish to the use of the seine nets ?—Yes ; I do not believe that any blame is attributable to the drift nets.

17,765. What remedy would you adopt in order to get rid of the evil ?—I believe that the people round Scotland have been petitioning to have these nets abolished.

17,766. They do not complain of the seine nets in Scotland. What they complain of is the trawl-fishing. Do you complain that the trawl-fishing is injurious ?—I think they use a smaller scale of mesh in the trawl net than they used formerly.

17,767. You think the mesh of the trawl net is not so large as it used to be ?—No, not so large as they used to have them.

17,768. Have the meshes of the trawl net been much smaller of recent years ?—Yes.

17,769. When did the change take place ?—For years one has been making it smaller than another.

17,770. What is the size of the mesh of the trawl net ?—Two inches ; it is not more.

17,771. Two inches from knot to knot ?—Not so much. About an inch. It is about a half-crown size. We used to call it a half-crown mesh from knot to knot.

17,772. When did the fishermen begin to diminish the size of the mesh ?—I don't know. Some have reduced it more than others.

17,773. Then do you think that injury has been done to the fishery by the small mesh of the trawl net as well as by the use of the seine net ?—No, I don't think that. They bring all their fish to market. They don't catch small fish like the seine nets. If there is a shoal of fish coming on, the seine nets are taken out in the mackerel boats and fish of all sizes will be hauled ashore. I have seen small turbots drawn up not so big as a half-crown piece, and plaice of the same size. Along Dungeness and Rye Bay they have carried them away by waggonloads. They go down with carts and waggons to the beach and cart the small fish away.

17,774. What quantity of fish on the whole is caught by the seine nets at Brighton ?—I cannot say. I have not been to look after them. I have never interfered much with them.

17,775. You have never been a seine-net fisherman ?—Never in my life.

17,776. Do you think that if the system of seine-net fishing were entirely prohibited it would be of advantage to the fishery generally ?—In my opinion it would.

17,777. Would it not deprive a good many people of their means of livelihood ?—No ; I think it would be better for them in the course of time.

17,778. What other business could they look to ?—They must take up something else. They would not go out with parties off here pleasuring. The people who do that call themselves fishermen, but I don't.

17,779. Are the pleasure boats much used for seine-net fishing ?—They are the parties who follow it so very much.

17,780. Are we to understand that a great portion of the seine-net fishery is carried on by the pleasure boats, and by people in pleasure boats ?—Yes, by parties who go out pleasuring.

17,781. And not by the fishermen ?—No. The fishermen are generally away in the large boats. They will be away down at the Land's End, or at Yarmouth, and Lowestoft, and other places.

17,782. Is there not a certain class of fishermen engaged in the seine-net fishery ?—Yes. They are glad to get any one to engage in that at times. Many of them who are employed at it are not worth anything.

17,783. Do you catch any good cod here with the hooks and line ?—I have seen bushels and cartloads brought ashore here by the seine nets not weighing half a pound. I have also seen red mullets brought in only as big as your finger. Now they are a very fancy fish are red mullets, yet what good can they be when they are only as big as a bit of the shank of a pipe. I have seen lots of them and mackerel also hauled ashore and trampled upon.

17,784. Has the practice of seine-net fishing been greatly on the increase in recent years ?—Yes, a great deal. We never used to see such things as we see now.

17,785. But there has always been seine-net fishing here as far back as the memory of man can go ?—There has been here and there one ever since I can remember.

17,786. But it has much increased ?—Yes.

17,787. It is now much practised by the pleasure boats ?—Yes.

17,788. By people who are not fishermen at all, but who go out for the sake of amusement ?—Yes.

17,789. Do they take some fishermen with them with fishing nets ?—Yes, and I have known the trades-people here have seines of their own and get fishermen to go with them.

17,790. Do they get much fish by that means ?—Sometimes they do with the mackerel seines. They go out with these merely as a hobby.

17,791. Have you ever been interfered with in any way as a fisherman by the Coastguard, or the Custom-house officers, or any officers appointed by the Government as to the size of the nets or the mode in which you should fish ?—Yes. There have been orders against these seines for many years. There has been a law in existence. If any person has gone down and spoken to the Preventive man he has been obliged to go and take the nets. That law has been in existence for years, in the same way that there have been laws against our going across the water and bringing brandy tubs ashore. But of course they will not hurt you if they don't catch you. It is like a man robbing a house. He will not be hurt if he is not caught.

17,792. Then has not the law been enforced here ?—There is a law but it has not been enforced. I believe there is a law against the use of these seine nets.

17,793. (*Mr. Lefevre.*) Have you ever caught any of these small fish with the trawl ?—Very few.

17,794. How near the shore have you fished with the trawl ?—Within two miles, and sometimes nearer. Perhaps sometimes we might be within half a mile.

17,795. Is that frequently the case ?—No ; we generally go out in mid-channel, about 20 or 30 miles off.

17,796. But at times you have fished close in-shore ?—Yes, sometimes.

17,797. Have you never caught any of these immature fish in-shore ?—No ; the trawl never injures any. All the injury it does is in parting the drift nets. Sometimes we tear their nets.

17,798. You have never caught immature fish in the trawl net ?—No; I do not think that any trawl about these parts ever did.

17,799. Are you aware that complaints have been made at Hastings of the trawl fishermen catching small fish ?—No, I don't believe that anybody in the county of Sussex has made any complaint with regard to the trawl nets, nor yet in Kent, nor yet down off Torbay or Plymouth.

17,800. Are your trawl nets about the same as the trawl nets of the Hastings boats ?—Yes.

17,801. About the same sized mesh ?—Yes, or perhaps rather bigger mesh.

17,802. Is the beam of the trawl about the same ?—Yes, about the same; but it varies according to the size of the boat. Some will have then 24, 25, or 26 feet. If you have a boat 30 feet you may want a beam a little longer.

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17,803. What do you call the bay from Beachy Head to Selsey Bill ?—Brighton Bay.

17,804. Is it mostly smooth ground ?—Mostly.

17,805. Is it rocky in some places ?—Yes, a little.

17,806. Can you trawl within a mile of the shore ?—Yes, right across to France.

17,807. Do many of the boats trawl within a mile of the shore ?—At times ; in the winter time they generally go further off.

17,808. Are there many seine nets used on this coast besides those used just off Brighton ?—I do not think there are many ; they work the seines when the mackerel come in ; then they haul them up.

17,809. Taking the coast from Beachy Head to Selsey Bill, are there any seine nets used ?—Yes, down at Mount's Bay, at the Land's End, there are.

17,810. I am talking of between Beachy Head and Selsey Bill. Are there any seine nets used along the coast except at Brighton ?—I believe there are.

17,811. Is there much ground where the seine nets can be used ?—Yes.

17,812. I believe they cannot be used except on smooth ground ?—No.

17,813. Then, is there much ground on which the seine nets can be used, except on the beach at Brighton ?—Sometimes they get entangled here ; they get hold of the rocks occasionally.

17,814. Can you form any opinion as to the number of seine nets used between Beachy Head and Selsey Bill ?—No.

17,815. Do you think there are many except just at Brighton ?—No ; there are a few I think at Seaford, and in one or two places along the Sussex coast I believe they use the seine nets.

17,816. Have you ever been employed in seine-fishing ?—Never in my life.

17,817. Have you ever observed the nets when they have been brought in ?—I have seen them hauled ashore.

17,818. Have you ever seen spawn brought up in them ?—I have seen a great deal at times, and also large quantities of small fish.

17,819. Have you ever seen much spawn ?—I have never been down to see much about it.

17,820. Then you cannot say whether spawn has been drawn up or not ?—No.

17,821. You have never seen it ?—No.

17,822. Have you been to see what the small fish are ?—Yes ; I have seen small mackerel among it—terribly small.

17,823. You have seen that yourself ?—Yes, I have seen cartloads brought in of no use to anyone.

17,824. What particular kinds of fish are included among the small fish ?—It contains all kinds of fish.

17,825. Are there small soles amongst it ?—Yes, soles, turbots, brills, and plaice.

17,826. Are there any herrings ?—Yes, codfish, and herrings, and mackerel too. There is nothing that they do not bring ashore. I have no doubt that in summer time all these fish come close in to spawn as the salmon do in the rivers.

17,827. Are any salmon caught off here ?—Hardly one.

17,828. Are any salmon trout ?—Sometimes they catch a few in the mackerel net the same as mackerel.

17,829. Do you think that any regulation as to the size of the net would prevent the catch of small fish ?—We think so. We have always made a complaint about it.

17,830. Supposing there was a legal mesh established of a larger size than that now in use, would it prevent the catch of small fish ?—I think the seine nets should be done away with altogether.

17,831. Is there a considerable quantity of mackerel caught with the seine nets ?—Yes.

17,832. And of other fish as well ?—Yes, at times.

17,833. Then would not the putting a stop to seine net fishing put a stop to the catching of these fish ?—Certainly it would, if the seining were put a stop to.

17,834. Have you ever heard any complaint from the seine fishermen themselves as to the catching of small fish ?—No.

17,835. What is the cost of a seine net ?—It all depends on the size. I never had any dealing with seine nets.

17,836. Do you not know what the cost of a seine net is ?—No.

17,837. How many men does it take to pull in a seine net ?—Sometimes four or five, but they get helpers to help them in the people who may be standing by on the shore. I have seen tradesmen go down and assist in hauling the nets right on to the beach.

17,838. Have you observed any increase in the number of seine nets used now as compared with what were used formerly ?—There are more mackerel seines. If they see a shoal of fish 30 or 40 yards off they sweep entirely round them, and haul them on to the beach. It does not signify what fish they are.

17,839. Do they catch any sprats off here ?—Sometimes.

17,840. Do they catch them in seine nets ?—Sometimes they go drifting with the drift nets. The fish get entangled by the head in the mesh.

17,841. Has there been a diminution in all other kinds of fish caught here as well as mackerel ?—I believe there has. I think there would be a great many more if it were not for the seine nets.

17,842. Have you yourself given up fishing ?—Yes.

17,843. For how many years ?—10 or 12 years.

17,844. Are you the owner of more boats than one ?—Yes.

17,845. How many ?—Three. I have two down at Yarmouth ; they go down to the Land's End, and from there to Yarmouth.

17,846. How long have you had these boats ?—35 or 36 years.

17,847. Do you find that you make less by them than you did before ?—Yes.

17,848. For how long have you observed that ?—The business has got worse and worse every year.

17,849. Have you bought a boat lately ?—No.

17,850. When did you last buy a boat ?—It is about six years since I had a new one.

17,851. Did you observe any diminution in the takes of fish before that time ?—Yes, at times. We cannot tell what is the cause, but I think it is going fishing so much at Christmas. At one time we never thought of going mackereling before May, and left off in June. Now they go from Christmas up to August, nearly all the year round.

17,852. Were the fish decreasing then in the same way they are now ?—We have always been fancying that there have not been as many mackerel year by year. We have had no good mackerel season here for years.

17,853. Then do you think the mackerel have left this coast for years ?—I don't know.

17,854. Is your principal fishing for mackerel far out ?—Yes, 30 or 40 miles from here.

17,855. Are the mackerel you catch here always off the coast or do you think they come from a distance ?—I cannot answer that question. They come in according to the weather. If there is calm weather they come in.

17,856. Do you think they migrate ?—Yes.

17,857. Had you only two boats before you bought your last one ?—I have had two or three here for the last 30 years. Sometimes they have been down at Scarborough, and at places down in the west, round by the Scilly Islands, or the Land's End.

17,858. Do they go trawling ?—No ; they are only drift-net boats for catching herrings and mackerel.

17,859. Can you say what is the proportion of small fish caught in the seine nets ?—No, I cannot.

17,860. Do you agree with the gentleman just examined that it is only one-sixth of the whole catch ?—I cannot say. It would puzzle anybody to answer that question. As to its being one in six, I should say there are only one in 100 that are good.

17,861. I think you said you have not been down to

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see the seine-net fishing?—No, I seldom go down to see it.

17,862. You only form your opinion from seeing cartloads of small fish brought in?—Yes. I have known small mackerel brought in by cartloads and waggonloads of no use to anyone.

17,863. Are not these small fish sold?—No. A great many are trampled upon and thrown into the sea. They are not big enough to sell. They sell them by the pint, so you may judge by that what size they are.

17,864. Are the fish that are carted away, sold?—Yes, but what they bring at the market I cannot tell. They are wonderfully small. Mullet is a dear fish at times, but I have seen them brought in not as big as my finger. I have also seen codfish caught in the seines that would not weigh more than half a pound each.

17,865. Is there much fishing here for cod with the hook and line?—When it will pay people to go, there is. There would be more fishing, but there are none to be caught.

17,866. What bait do they use here?—Herring, mackerel, sprats, according to the season.

17,867. Do they use shell-fish of any kind?—Shell-fish?

17,868. Yes—mussels?—Sometimes, but there are only very few about here.

17,869. Do the line fishermen complain of the trawlers coming across their lines?—I don't know.

17,870. Do they fish with the long-line or the hand-line?—With both.

17,871. What distance from the shore do they fish?—Two or three miles.

17,872. What length of lines have they?—200 or 300 fathoms; from that down to 100 fathoms, and 400 or 500 hooks.

17,873. Is there any complaint here on the part of the fishermen against the trawlers for cutting their nets?—Yes, great fault has been found with that sometimes.

17,874. Have you yourself lost any nets?—Yes, very often, especially in the mackerel season.

17,875. Have you recovered anything from the trawlers who did the damage?—No, I can never find who they are. They get in among our nets in the night time, and they will be gone before we can get hold of them. You can never get at them. Perhaps we may have two miles of net out when they come in among them. They tear them very much.

17,876. Do the French fishermen come here?—Yes, often.

17,877. And the Torbay boats?—Yes, from Ramsgate; four or five of them at times.

17,878. Do they trawl in this bay?—Yes, but very seldom. We may have three or four at a time, and they stop for a few weeks.

17,879. That has only been of late years?—Yes. We never had as many as we have now, but we don't get many even now.

17,880. Then there has been an increase in the number of trawlers fishing in this bay?—Yes, but I do not think it will pay them to come here.

17,881. Nevertheless they do come?—Yes, at times; but it won't pay them.

17,882. Then there has been an increase of trawlers in this bay?—At times, but there are only very few. I do not think that what the smacks take hurt the small fish.

17,883. (*Mr. Caird.*) Do you ever fish on the Dutch coast?—No.

17,884. You say that no injury is done to the small fish by trawling?—No.

17,885. Do you ever get spawn in the trawl nets?—No.

17,886. Would you say it is incorrect to state that the brood is injured by trawl-fishing?—There are some people who have made complaints, but we have never made any complaint about it here.

17,887. You do not attribute any of the falling off you have experienced to the use of the trawl net?—No, not to the trawl net.

17,888. Nor to the number of fish caught by the trawlers?—No.

17,889. You do not think that diminishes the catch?—No.

17,890. (*Mr. Lefevre.*) Do you think it would be an advantage if the trawl fishermen here were prevented from fishing within three miles of the coast?—That would be according to the time of the year.

17,891. Would it be injurious to them?—I cannot say.

17,892-3. Cannot you form any opinion upon that point?—No, I cannot say.

17,894. You have yourself been a trawler?—Yes, a good many years ago.

17,895. Have you often trawled within three miles of the coast?—Yes, I have been trawling within a mile.

17,896. Do you think it would be injurious to the business of the trawlers if trawling within three miles of the coast were put a stop to?—Many a time the fish get in here close aback of the shore rocks.

17,897. Would it diminish your take of fish very much?—I think it might, but generally speaking there are not as many fish to catch as there used to be.

The witness withdrew.

JOHN WRIGHT called and examined.

J. Wright.

17,898. (*Mr. Caird.*) Are you a fish salesman at Brighton?—No, I am a fishmonger.

17,899. Have you been many years a fishmonger?—About four years.

17,900. Have you had any previous experience of the fishing trade at Brighton?—Yes.

17,901. As a fisherman?—Yes.

17,902. For many years?—Yes.

17,903. Have you, in the course of your experience, observed whether the total catch of fish off Brighton has increased or diminished?—It has diminished, I think.

17,904. Has any particular kind of fish diminished more than another?—Soles, in particular, have, I think.

17,905. When did that diminution first begin to exhibit itself?—It has been going on for some years past, but more so during the last five or six years.

17,906. Has any other kind materially decreased?—They do not seem to have decreased. There are as many mackerel as there used to be, but a number of years ago they used to try for them a great deal more than they do now. It is very rarely now that we can get any of our mackerel boats to go into the Channel.

17,907. (*Mr. Lefevre.*) What is the reason of that?—They go to Plymouth and to the west country, where they think it answers their purpose better.

17,908. (*Mr. Caird.*) The same boats that used to fish formerly in the Channel now go to the west?—Yes. Only a few boats go into the Channel at all.

17,909. Your boats go to the west?—Yes, principally.

17,910. Because they can get better fishing there?—Yes.

17,911. Do you attribute the falling off of the fishing to any particular cause; say, for instance, the decrease in soles?—With regard to soles and most fish, I think a good deal depends on the use of the seine nets. I think they do a great injury.

17,912. Have you ever fished with a seine-net yourself?—Yes.

17,913. What proportion of the fish caught by the seine nets are small and immatnre?—A very great proportion.

17,914. Can you state what the proportion is?—I cannot state the exact proportion. Different small fish

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are caught, such as small soles, little brills and turbots, and small mullets.

17,915. Are they so small as to be of no value for any purpose?—They are of very small value.

17,916. Have you observed, at any particular time, what quantity of the whole catch of a seine net would be so small as to be useless for food?—Perhaps a few bushels.

17,917. A few bushels in one take?—Yes.

17,918. How many bushels would there be in the whole take?—Perhaps they would not get more than 10*s.* worth that would be really of value. I never saw any large catches of small fish. A bushel, however, would be a large catch. I have heard of the fishermen making many hauls of small mackerel and other fish.

17,919. Have you any idea of the number of seine nets that are used on this shore?—Guessing at it, I should say a dozen.

17,920. A dozen altogether?—Yes.

17,921. How many people are engaged altogether in the seine-net fishing?—There are about four to each net.

17,922. About 50 men altogether?—Yes.

17,923. Do those men not go to fish in any other way; are they exclusively seine-net fishermen?—It is only at a particular time that they go to this seine-net fishing. They are men that go to sea, and do odd jobs at other times.

17,924. The same men?—Yes.

17,925. Is it during the summer months that the seine-net fishing is generally practised?—Yes.

17,926. Is it not practised all the year round?—Yes, when they can use the seine net.

17,927. As a fishmonger, do you ever sell these small fish?—No.

17,928. They never come to you at all?—No.

17,929. I presume they go into consumption among the poorer classes?—There is even very little of that. I think they are destroyed in some way. Some are thrown away, some given away. They are disposed of in some way.

17,930. Then it does not pay to catch them?—No, it does not pay.

17,931. Are not the seine-net fishermen paid for what they do?—Their catching these small fish is quite unavoidable. Their scale is too small and when they get the fish in the net they must pull them ashore

17,932. Of the whole quantity they catch is it a fact that a considerable proportion is good fish?—Yes.

17,933. Does that come through your hands as a fishmonger?—Yes, the good fish come to me.

17,934. What proportion of the whole of the fish caught in the summer months off the shore at Brighton is seine-net caught fish, trawled fish and hook and line fish? Is one half of the whole of the fish caught in the summer months caught in the seine nets?—I cannot say; and, unfortunately, to-day most of the fishermen are at sea. There is one proprietor of seine nets here, however. I have a seine net of my own, but I think the small scale does an injury to the small fish when the net is pulled ashore.

17,935. The small mesh of the net?—Yes.

17,936. What size is the mesh of the net?—Many of the nets have a very small mesh indeed. In some of them at the bunt you would not get your little finger through.

17,937. So that the small fish cannot escape?—No.

17,938. Do you think it would be of advantage if that kind of fishing was prohibited here?—I do.

17,939. Would it not be attended by any disadvantages of a serious nature?—I think not. What they make by that mode of fishing is not really a consideration to the few who get it.

17,940. During the whole of the time it is practised you think there are not a sufficient number of fish caught to make it a matter consideration to them?—I do not think it would be a matter of consideration to them if it was prevented.

17,941. And yet you yourself say that there are considerable quantities of good fish caught by the seine nets?—Yes.

17,942. Suppose the system of seine-net fishing were entirely prohibited, that description of good fish would not be caught?—No.

17,943. Would that not diminish the supply of fish to the market in Brighton during the season?—Yes, but I believe it would be much better for the whole of the seine-net fishermen. I wish well to the fishermen and I want to benefit them if I can. I am sure that at present the seine nets destroy small fish in great numbers; but if the nets were confined to a certain scale then those fish would escape before they got them to the shore.

17,944. Then your objection is not to the use of the seine nets, but to fishing with too small a mesh?—Yes.

17,945. You desire to have the size of the mesh enlarged?—Yes.

17,946. You do not wish to prohibit the fishing by seine nets altogether?—No.

17,947. Have you considered what would be a proper scale to adopt?—I do not think they ought to be less than an inch from knot to knot.

17,948. The same as the herring net?—Yes.

17,949. Then do you think that the whole objection which is held by the other fishermen of Brighton would be satisfactorily obviated by a regulation which would fix the size of the mesh of the seine net and not by the prohibition of seine-net fishing altogether?—I believe so.

17,950. And you yourself would recommend an inch scale as the proper size?—Yes, I do not think they would do any injury then.

17,951. As a fisherman, have you observed whether the total quantity of fish brought ashore here by all the modes of fishing has increased or diminished?—I think it has diminished.

17,952. Does that show the necessity for supplying the market from some other place?—We have more boats here now than we ever had.

17,953. I am speaking of all kinds of boats and all kinds of fishing?—The boats have increased.

17,954. Has the total catch by all modes of fishing increased or diminished?—Diminished, I believe.

17,955. Then are you unable to supply the market of Brighton with fish to the extent you formerly were?—Yes.

17,956. Do you find it necessary to supply the vacancy by getting fish from some other place?—Yes.

17,957. Do you import more fish from London and other places than you did formerly?—Yes.

17,958. Do you bring any fish from London now?—Yes, great quantities.

17,959. Did you not do that formerly?—Occasionally, but not so much as now.

17,959*a*. I suppose there is a larger consumption in Brighton now?—Yes.

17,960. The number of people has largely increased?—Yes.

17,961. Then it would not be a just conclusion to measure the diminution in the take here by the quantity brought into Brighton from other places?—No, it would not. I do not think myself that the seine nets are the sole cause of the diminution in the fish.

17,962. What is the other cause?—I think the trawl net has something to do with it.

17,963. The deep-sea trawl?—Yes.

17,964. In what way?—I think the scale is too small.

17,965. You would regulate the size of that also?—Yes.

17,966. What is the present size?—It is very small, smaller than 1½ inches I think. They ought to be 1½, but they are a great deal smaller than that. I am in the habit of going on the beach every morning of my life, and of seeing the fish landed. This summer I have witnessed, I am almost afraid to say the

amount of small soles which have been brought in by our Brighton trawlers.

17,967. Do your Brighton trawlers use a smaller mesh than the larger trawlers?—I don't think they do. I have seen quite as small fish brought in from the London market. I have seen little bits of soles brought in by bushels from London not larger than my hand.

17,968. Are they saleable?—They are sold at some price or other, but it is very low.

17,969. Do any of the trawlers throw fish overboard in consequence of its being unfit for sale?—I do not think they do. I think they bring it all in when they have got it, and make the most of it.

17,970. Do they ever get any spawn in their nets?—I think not.

17,971. What should be the size of the mesh used by the deep-sea trawlers of the smaller kind?—1½ inches. It is in the summer months that they do the injury.

17,972. Do they trawl then in shallow waters?—Yes.

17,973. The injury is not done by trawling in deep water?—No.

17,974. When do they do that injury?—In the summer months. If they would not come within seven fathoms of water I do not think they would do any injury.

17,975. Then all the injury in the summer months you think is done by trawling in shallow water?—I do.

17,976. You do not think it necessary to adopt any small or regulated size of mesh for the trawls used in deep water?—Yes, I think they ought to be confined to a certain size. It should be a larger scale than is used now in the "poke" as we call it.

17,977. Do you think it right that regulations should be enforced, both with regard to the size of the trawl nets used in deep and in shallow water?—Yes, I do.

17,978. Would the fishermen themselves reap an advantage from that?—I think they would; I think it would be to the general good, and that they would very soon all see it.

17,979. It is only in the summer months that they do trawl in-shore?—Yes, in the summer months. I do not think it would be of much consequence in the winter. I am sure the bushels and bushels of little brills and turbots and soles I have seen this summer is something fearful.

17,980. And they have all been caught in-shore?—Yes, close in-shore. In the winter months I do not think it signifies.

17,981. If some regulation were adopted by which trawling would be prohibited within the headlands, do you think that would obviate the evil?—If they were not allowed to come within seven or eight fathoms of water it would benefit the fishing.

17,982. (*Mr. Lefevre.*) How many boats go out after the mackerel from here?—About 24 or 25; perhaps 30.

17,983. They go now further west, off the west coast?—Yes.

17,984. Off Plymouth?—Yes, they do try here occasionally, but not as much as they used to do. They begin the mackerel season earlier now. A few years ago they did not think of beginning it until much later.

17,985. They begin the season earlier now they go to the westward?—Yes.

17,986. Do they take the mackerel to Plymouth or to other ports westward?—Yes, wherever they can find a market.

17,987. They do not fish now off the Channel here?—Not so much. They do occasionally, but they do not give it a fair trial.

17,988. There are not the same number of boats bringing mackerel into this place as there were formerly?—No.

17,989. That comes from catching mackerel elsewhere, and taking them to other ports?—Yes.

17,990. Do you think it would be worth their while to fish for mackerel off here?—I cannot say; we have had a great number of mackerel off here occasionally; I have known immense quantities within half a mile of the shore.

17,991. Has anybody fished for them?—They are caught with the seines; they could not catch them with their drift nets.

17,992. What is the reason of that?—Not in shore; they have tried over and over again, but it is very rarely that they catch them with the drift net.

17,993. Cannot they catch them?—They can, but it is very rare that they can take them at night; they keep to the bottom.

17,994. Then unless you used your seine net on the shore your take of mackerel would be greatly diminished?—I think it would; I believe if they were not caught in the seine net they would not be caught at all, because the drift-boats have tried it over and over again, and they have not succeeded.

17,995. Then do you believe that the whole take has diminished or not?—I think it has.

17,996. Including the mackerel which they catch to the westward?—Yes, I think it has.

17,997. Have you any means of forming an opinion as to the quantity caught?—I used to go a good deal to Plymouth myself mackerel fishing, and I think we got more than they do now; we thought nothing of getting 8,000 or 10,000 in a night.

17,998. Are there more boats employed in fishing off there now?—About the same; perhaps there may be more.

17,999. How far along the coast are these seine nets used?—I believe right down to the Land's End.

18,000. But between Beachy Head and Selsey Bill, are they only used at Brighton?—They have them at Worthing.

18,001. Anywhere else?—At Bognor, I believe.

18,002. Is it only at certain places that they can be used?—I think they are used at Seaford, to the eastward. I do not know of any other places at which they could use the seine.

18,003. Are there any means by which you could enforce the use of a particular mesh?—I think it could be enforced; I believe you would find that the men would fall in with it if it were properly put to them.

18,004. You say that the catch of small fish does not pay the seine-net fishermen?—No, it does not.

18,005. Then would it not be worth their while to fish with a larger mesh instead of a small one?—Yes, I believe it would.

18,006. Do you agree with the previous witness, that there are two sorts of meshes used now, a small one and a large one?—I believe that the mesh of the seine net is too small, and also the mesh of the trawl net.

18,007. We have heard that there are two sorts of seine nets used off this coast, one with a large, and the other with a small mesh?—Yes.

18,008. You say that the catching of small fish does not pay the fishermen?—No.

18,009. Then can you give any reason for the use of the small mesh?—They expect to catch large fish with it as well as small.

18,010. But do they not catch the large fish in the larger seine?—Yes; but they look for smelts and large fish as well in the smelt nets. They might catch them by staking their nets.

18,011. Would they not get a large number of immature fish by using nets of that description?—Only smelts. The other would not go into the net; they would not have power enough to mesh themselves in a stake or a drift net.

18,012. Is the net you are speaking of the kettle net?—No, I do not think there is a kettle net in the place.

18,013. Is there much shrimping off this coast?—It has fallen off very much.

18,014. Do they catch many small immature fish in the shrimp net?—A good many.

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18,015. Could that be put a stop to by any regulation as to the size of the mesh?—It depends on the time of the year.

18,016. Would you put a stop to shrimping at a particular time of the year?—Yes.

11,017. At what time of the year?—If they start any time after March they will do no injury.

18,018. What is the time when most shrimps are caught?—From April all the summer through.

18,019. Is the summer the principal season for shrimping?—Yes.

18,020. Would you put a stop to shrimping during the summer months in order to prevent the catch of small fish?—It is rather difficult to understand that.

18,021. Would you put a stop to shrimping in the summer months in order to prevent the take of immature fish?—I think you might catch the shrimps without destroying immature fish.

18,022. How would you do that?—By employing men who like to go into the water with the shove nets. The nets I am speaking of are used like a trawl net.

18,023. You would only have shove-nets used?—No.

18,024. Would they catch small fish?—Yes; but they would not destroy them. The fishermen would take out the shrimps and then turn the bottom of the net over, so that the small fish could again get back into the water uninjured. The trawl brings in everything, weeds, and shrimps, and everything, and by the time the net is cleared of shrimps the small fish will be dead.

18,025. The small fish would be caught in the shove net, but they would be thrown in again?—Yes; they would not shove far before they would pull up. Perhaps they might get a handful of shrimps, and they would throw the others away.

18,026. Are there a good many boats employed in shrimping with trawls here?—Yes.

18,027. How many?—A dozen or fourteen.

18,028. Such a regulation as that would prevent the use of boats for that purpose?—Yes.

18,029. Is that desired by the fishermen here?—I think they would not like it at first.

18,030. Are you aware that the legal mesh for the trawl net is an inch and three quarters?—I believe it is.

18,031. And that the trawl net used here has a much smaller mesh?—It is much smaller.

18,032. Has there ever been any attempt to enforce the regular mesh, so far as you are aware?—Not that I am aware of. Some few years ago there was some chat about it, but it was never enforced in any way.

18,033. Have you noticed any falling off in the herring fishery here?—That seems to fall off too.

18,034. Is that owing to the herring boats going further off and taking their fish to other markets?—No, I think not.

18,035. Is it the fact that the herring boats do go to a great distance?—Many of them go as far as Yarmouth and Scotland.

18,036. And do they take their fish to the ports there?—Yes.

18,037. Did they formerly bring it in here?—Not that class of boats. They are boats especially for that purpose.

18,038. Has there been an increase in the number of boats here?—Yes.

18,039. Has there been any diminution in the boats that go off to the Channel and bring their fish here?—We seldom have boats that go into anything like deep water at Brighton. Our home boats are very small.

18,040. Except in a very good season, it hardly pays for the small boats to go out?—It is very bad this year, very bad.

18,041. With regard to the trawling in-shore, are there any means by which the trawlers could be prevented from coming within a certain distance of the shore during certain months of the year?—If it could be done it would be of benefit, but I don't see how it could be done.

18,042. Have you ever formed an idea as to how it could be done?—It could only be done by having the lieutenant in command of the Coastguard out at a distance in front of the town at which they were fishing. He would be able to tell whether the boat was within her distance or not.

18,043. That would only prevent injury in front of the town?—No.

18,044. But trawling in-shore would do injury all along the coast, would it not?—Yes, but I think if you imposed a larger sized scale, the boats would not come in-shore to fish.

18,045. You have not formed any idea as to how this injury is to be prevented of fishing within a certain distance of the shore?—No.

18,046. Does trawling here take place by day or by night?—By day and by night too.

18,047. Do many boats come from a distance to trawl here?—Not many; they used to come, but the fish have diminished. They do not come here much now.

The witness withdrew.

J. Salvage.

JOHN SALVAGE called and examined.

18,048. (*Mr Caird.*) Are you a seine fisherman?—Yes.

18,049. Have you been for many years a seine fisherman?—I have been seining for 40 years with a draw net.

18,050. Have the number of people employed in fishing with the seine net increased within your experience?—Yes, my own have; I have had eight hands at a time.

18,051. Are there more persons fishing with the seine nets than there used to be?—Yes, there are very nearly 100 hands after the mackerel in the summer time.

18,052. Do you catch any small immature fish that are unfit for the market?—I have been catching waggon-loads, and as for herring, I have been catching them out of number by waggonloads.

18,053. What do you do with them?—I let them remain on the beach, and they die.

18,054. That will not pay?—No, it will not.

18,055. Then why do you do it if it don't pay?—We shoot after a mullet or a bass.

18,056. Who do you sell your fish to?—To people at the market on the beach.

18,057. Is there a large quantity of the fish you bring ashore that you cannot sell at all to anybody?—We never bring that sort down on the beach.

18,058. What do you do with it?—Anybody picks it up and eats it who likes, or they let it lie.

18,059. Is there much that you get nothing for out of the whole catch you bring in?—Yes, at times.

18,060. Is there one-half of it?—We never bring in that sort.

18,061. (*Mr. Lefevre.*) How many seine nets have you?—Several.

18,062. What is the size of the mesh of those nets?—An inch.

18,063. Is that the smallest?—No, 50 odd across the yard is the small net.

18,064. What do they catch?—Sprats and smelts.

18,065. Would you like to see a regulation enforced that would restrict you to the use of the large-meshed seine?—Yes.

18,066. You think that would be small enough?—Yes.

18,067. Would you like to give up the use of the small-mesh seine?—Yes, and the trawl too.

18,068. Does it not pay to fish with a small-mesh seine net?—I know that it does not.

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18,069. Then why do it?—I may as well fish with it as another person.

18,070. Then why does anybody use it?—That I cannot say.

18,071. Does it not pay with all of them?—How can it pay when we catch fish not as large as my hand.

18,072. Do you catch many of those?—Yes.

18,073. Has the quantity of smelts and sprats fallen off of late years?—Yes.

11,074. Do you not catch them now?—Not many.

18,075. Why is that?—Because the use of the small scale has spoilt the brood.

18,076. Do you think the small scale has spoiled the brood of smelts?—Not the smelts, all the herring and mackerel and soles too.

18,077. Do you catch many mullet?—I have been after them day after day and have not caught one in the summer.

18,078. Have they left the coast altogether?—They are all caught and killed.

18,079. Have you a shrimp-trawl?—Yes.

18,080. Do you use it in a boat?—Yes, and I have done so for years.

18,081. Would you like to see a regulation established that would put a stop to the use of it?—Yes, I would burn mine to-morrow.

18,082. You think it does you no good?—Yes; it does harm.

18,083. Does it catch a number of immature fish?—Yes, a considerable sight of them.

18,084. Do you catch many shrimps in it?—No.

18,085. It does not pay then?—No.

18,086. And yet you have gone on using it for years?—I have not used it for years now.

18,087. Do other people use shrimp-trawls here?—Yes, 20 boats or more.

18,088. Would they all be equally ready to burn their shrimp-trawls?—I cannot say.

18,089. Perhaps they are not as old as yours?—I cannot say; they are as big an evil.

The witness withdrew.

NATHANIEL GUNN called and examined.

N. Gunn.

18,090. (*Mr. Lefevre.*) Have you any observations to make with regard to the evidence which has been already given?—I have a boat, and I should like to see the fishing better carried on; I wish to see the fish more plentiful, so that the fishermen could be better paid for their labours.

18,091. Do you agree with the last witness, that it is desirable to put a stop to trawling for shrimps?—I do, and also to seining. A stop should be put to the small-scale seine nets.

18,092. Would you put a stop to all seine-fishing?—I would, and it would be for the good of the fishermen. Where you see one boat on our beach now you would see three or four, and you would not see young men compelled to take up hand-baskets and go round with small fish for sale, which they are now compelled to do in consequence of the quantity of small fish taken.

18,093. Would you restrict the size of the nets?—Yes.

18,094. Would you go further and put a stop to seine-net fishing altogether?—Yes, unless they had the same scale as the mackerel nets.

18,095. You would prohibit the use of the small scale?—Yes, no brood should be taken.

18,096. And also the shrimp-trawling?—Yes, they catch a great number of small fish in them, no larger than my nail.

18,097. Do they catch much of that?—Yes, more fish in number than our fishing boats altogether.

18,098. More in number?—Yes.

18,099. Do they catch a larger number of shrimps?—Yes, and they catch immense quantities of small fish with the trawl also.

18,100. Do they sell those small fish?—No.

18,101. Then they don't go out to catch small fish, but shrimps only?—Yes, but they cannot help it in the small-scale seines. You may go from Brunswick Square for 2½ miles and you will see a large supply of small fish among the seaweed; the sun perishes it.

18,102. Do they catch small immature fish in the shove nets?—Very few, and they throw them into the water again.

18,103. Then why do they catch so many in the trawl nets?—They fish further out, and they use a larger net. Their net is 14 feet long.

18,104. Where do they trawl?—Just aback of the shrimp men.

18,105. At what distance?—100 or 200 yards.

18,106. Is that beyond the reach of the seine nets?—No.

18,107. What length will they reach?—They are 200 yards long, and they go round in a circle.

18,108. The trawlers fish within 200 yards of the coast?—Yes.

18,109. Then they are beyond the reach of the trawlers?—No.

18,110. The length of the seine net is only 200 yards?—Some are 240, and they will shoot them out for 300 or 400 yards.

18,111. What is the furthest distance you have seen a seine net spread out?—Nearly half a mile out. They tow the net in until it touches the bottom. They tow it in towards the shore with their anchor ahead. They tow it in with boats.

18,112. Is it only of late years that you have noticed the use of the small-mesh seine?—It has been used for very many years. Every year it has been getting worse and worse. The fish have been decreasing every year.

18,113. The fishing has been worse and worse every year?—Yes, by the seines; of course, if you take the eggs and the young away there will be no brood.

18,114. Have you noticed more seine nets year after year?—Yes.

18,115. Do you think the seine nets catch less mackerel than they did formerly?—Sometimes they have a spurt.

18,116. Do they catch more than they did?—Yes, more than they did.

18,117. Then it does not look as if the quantity of fish had decreased?—But they are smaller.

18,118. Do the seine nets catch fewer large mackerel than they did?—No, more.

18,119. Then the quantity has not decreased?—There are fewer large ones caught, but more small.

18,120. Are there really fewer large fish caught?—Yes.

18,121. Then do you agree with the last witness that the take by the seine net does not pay the fisherman?—Yes, it injures everybody.

18,122. Have the number of seine nets used along the coast increased?—Very much indeed.

18,123. You think that each of the nets catches fewer large fish than formerly?—They catch very few of the large fish, but great numbers of small.

The witness withdrew.

The inquiry was then adjourned until Monday, the 21st December, at Torcross.

CROSS.

Pepperell.

ec. 1863.

Torcross, Devonshire, Monday, 21st December 1863.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

ROBERT PEPPERELL called and examined.

18,124. (*Professor Huxley.*) Are you a fisherman here?—Yes.

18,125. How long have you been a fisherman here?—For 20 years, but not at Torcross. I have been living at Slapton.

18,126. Are you a native of Slapton or Torcross?—Of Torcross.

18,127. But you have been living at Slapton for the last 20 years?—Yes.

18,128. Are you acquainted with the fisheries at both of those places?—Yes.

18,129. Do you know how many persons are engaged in fishing at Slapton?—Yes.

18,130. What is the number?—About 20 men, and 15 or 16 women.

18,131. How many persons are engaged in fishing at Torcross?—About the same number, or rather more.

18,132. Are there any other fishing villages in this neighbourhood as well as those you have mentioned?—Yes; Beesands and Hallsands.

18,133. How many persons are employed in fishing there?—At Beesands there are about 20 men, or perhaps more; I do not know exactly, but there are men from Beesands here who can give you evidence upon that matter. The fishermen of the villages of Beesands and Hallsands are engaged almost entirely in crab-fishing. Nothing is done in that way at Torcross or Slapton. It is mostly seine, line, and pilchard-fishing that is practised here, and at Slapton.

18,134. How many boats are employed in the fishing at Torcross?—There are three mackerel seines in Torcross, and six drift pilchard boats. The hooking boats and the small boats vary from about a dozen to 14 or 16 sometimes.

18,135. (*Mr. Lefevre.*) Are they open boats?—Yes.

18,136. What do they catch?—The hook-and-line boats catch whiting, ray, and conger eels.

18,137. Are there any decked boats employed here?—No, they are all open boats.

18,138. (*Professor Huxley.*) How many are there at Slapton?—At Slapton there are five or six hook boats.

18,139. Are there many seine boats there?—There are three at Slapton, three at Torcross, three at Beesands, and three at Hallsands.

18,140. How long are those boats?—From 22 to 24 feet long.

18,141. And none of them are decked?—No.

18,142. What is about the cost of a boat like that?—Do you mean boat and seine?

18,143. Yes; the boat fitted up?—The boat and seine altogether will cost about 120*l.*

18,144. What is the cost of the hooker boats?—The hook boats fitted up will cost from 15*l.* to 16*l.* Those are the small hook-boats. The drift-boats and nets cost rather more than 100*l.* each.

18,145. We have visited this place in consequence of a petition which has been forwarded to us. The first paragraph in that petition contains a statement that persons engaged in the seine and crab fisheries in Start Bay have embarked a capital of 2,000*l.* in it. Do you agree with that statement?—I should think it is more than that.

18,146. Has the number of boats employed in that way increased within your recollection?—The seine-boats have increased.

18,147. Have the hookers not increased?—I think the hookers are about the same, but the crab boats have increased.

18,148. Now, with respect to the quantity of fish you can obtain by your boats, has that quantity of fish increased or diminished, or remained stationary?—The flat-fish have diminished, such as plaice, dabs, doreys, and the like; they have diminished very much; there used to be three craft kept when I was a youngster; that, however, has almost entirely died out, and been given up.

18,149. You are speaking now of flat-fish?—Yes; what we call "tuck netting."

18,150. Were they caught in the seine?—No, in a tuck net, drawn ashore by women and others.

18,151. (*Mr. Lefevre.*) Were they drag nets?—Yes, a drag net with lead on the bottom.

18,152. (*Professor Huxley.*) What do you call a seine?—A seine we shoot as an average distance from the shore from about 60 to 100 fathoms. We seldom shoot them more than that because we have such tides that we could not work them. In the middle of the bunt the net is from 12 to 13 fathoms deep. We have deep water close in-shore here.

18,153. How long are the seines?—The length of a seine will be about 150 fathoms.

18,154. What is the size of the mesh?—The inside part of the mackerel net has a two and a half inch mesh. The bunt is the same as a pilchard net for catching pilchards. We can catch both pilchards and mackerel in the seine. We do not keep two nets for two different kinds of fish.

18,155. How do you use the seine?—We shoot it out, and draw it ashore. We have a man at one end of it, and it is drawn ashore. We never tuck any nets here. They are all drawn ashore on the beach.

18,156. Is the foot rope of your seine loaded?—No stones are slung to the foot rope.

18,157. Everything is dragged ashore here?—Yes.

18,158. You do not practise circle net fishing?—No, we could not do that in consequence of our tides running so hard into the bay.

18,159. What is the difference between a seine net and a tuck net?—A tuck net is very small, and the arms are not more than three fathoms deep. In the bunt they are about four or five fathoms deep.

18,160. Has it any pocket?—No, it has no pocket at all, but it is contracted at the sides. As it is drawn ashore the fish go back into the bunt.

18,161. That description of net is used for catching flat-fish?—Yes; the tuck nets are loaded at the foot rope.

18,162. When you use the seine, does the foot of the seine reach the bottom?—Yes.

18,163. So that in dragging it ashore the foot of it must be dragged along the bottom?—Yes; the mackerel are apt to go over if the net is too low.

18,164. Do you not catch flat-fish in the seine as well as in the tuck net?—Very seldom. We only get occasionally a stray large flat-fish.

18,165. How is it you do not do that if both nets are dragged on the bottom?—We do not go out on to a muddy bottom. We get out to the oyster beds or the cockle beds.

18,166. You have to go out to a muddy bottom when you work with the tuck nets?—Yes, with such nets we sometimes go out for 1,400 or 1,500 fathoms.

18,167. If you thought fit to use your seine nets on a muddy bottom you could catch flat-fish with them?—Yes, but we could not catch as many flat-fish in them as in the tuck nets. The foot ropes do not go to the bottom to drag in the same way as the tuck nets.

18,168. They do not drag in the same way?—No.

18,169. They are not so heavily loaded?—No, the seine is hung down, so that it should not bury itself in the shingle.

18,170. Then does the great difference between the tuck net and the seine consist in the way in which they are loaded?—Yes.

18,171. When you work the tuck net in particular do you not get a great many small fish?—In the summer time we get a great many small fish. I can recollect meshes of all sorts of sizes having been used here. Now we have got to a mesh of $2\frac{3}{4}$; that has been used here for years.

18,172. You say the size of the mesh is $2\frac{3}{4}$; do you measure it from knot to knot?—No, that is the full length drawn out.

18,173. What will be the length from knot to knot?—Half that distance.

18,174. It will be $1\frac{3}{8}$ inches from knot to knot?—Yes.

18,175 Do you think the size of the mesh makes any difference in the catch of small fish?—Yes, I think we ought not to be allowed to use as small a mesh.

18,176. Have you been in the habit of fishing with the tuck net for many years?—The tuck-net fishing used to be practised ten times as much as it is now.

18,177. It has fallen off then?—Yes, on account of the fish being scarce, and I think that is to be attributed more particularly to our catching more small fish in the summer months, and to all the spawn being destroyed by the trawlers and the oyster dredgers in the winter months.

18,178. How long is it since you can recollect large catches of tuck-net fish, when fish of all sizes were caught?—About 25 years ago. There was a great quantity of tuck-net fish caught then.

18,179. Was there any talk then of the tuck-net fish having fallen off in quantity?—No, I do not think there was.

18,180. There were plenty of fish then?—Yes, but there were not one-half or one-fourth of the number of trawlers there are now.

18,181. But still the tuck-net fishing went on?—Yes.

18,182. Do you know how many years tuck-net fishing has been going on here?—No.

18,183. In your father's time was tuck-net fishing practised here?—Yes, I think it was practised in my father's time and in my grandfather's too.

18,184. Has it gone on for 60 years?—Yes, and more than that.

18,185. It has gone on regularly every summer?—Yes, I have heard my grandfather talk about a time when a mesh of $3\frac{1}{2}$ inches was imposed on the fishermen. They used it for some years, but no notice being taken of the nets they went back to what the mesh used to be before.

18,186. Have the fishermen in the bay here been in the habit of catching a great number of small fish every summer by means of the tuck net?—Yes.

18,187. What do you use the seine net for?—Mackerel, and pilchards, and herrings. It is entirely for shoals of herrings, pilchards, or mackerel.

18,188. You do not mesh the fish in the seine nets?—No.

18,189. You sweep them in?—We do not mesh them if we can help it. If they mesh themselves they knock the net down. We have lost a great quantity by using the common herring mesh. The fish mesh in that, knock the nets down, and go over them.

18,190. When you are catching shoals of mackerel and pilchards in the seine net do you not occasionally sweep small fish in?—No, except the small brit and sprats that the mackerel are after; they can get through.

18,191. Do you think the small fish go out under the seine?—No small fish come in here, as they do in most bays. Brit, sprats, launce, and sand-eels come in, that is all.

18,192. How long is it since the flat-fish have fallen off in the bay?—The flat-fish have greatly diminished during the last 20 years.

18,193. Have you found any diminution in the herring, mackerel, or pilchard fisheries?—No, but it is all according to the season. 24 or 25 years ago we got no mackerel or pilchards for several years; then they came in. We have had mackerel scarce this year and last year. Of pilchards we had none last year, and this year they were rather slight. It all depends on how they strike into the bay.

18,194. Then is your complaint with regard to flat-fish?—I do not see what alteration could be made in the nets in this bay, except with regard to the tuck nets.

18,195. What do you number among flat-fish?—Plaice, doreys, ray, and dabs.

18,196. (*Mr. Lefevre.*) Do you take many mullet?—No.

18,197. (*Professor Huxley.*) The falling off in the flat-fish has been noticed for upwards of 20 years?—Yes.

18,198. Has it gradually increased every year?—Yes, last summer was the worst year we have ever known for flat-fish.

18,199. What do you ascribe the falling off to?—We ascribe it to some oyster beds that were found off here. When they were found there were a large number of vessels, steamers and other boats, dredging off the spot, and they took up plaice and dabs and all sorts of flat-fish. They used dredges with a small mesh, and dredged up everything—spawn, and small fish, and everything. The bit of ground on which they worked stretched from Dartmouth Harbour down the bay, and they dredged all over it and destroyed all the spawn of the flat-fish.

18,200. Did that occur last year?—Yes.

18,201. Then that will not account for their having fallen off every year for a number of years?—No.

18,202. What was the first cause of their falling off?—It was on account of the trawlers trawling so much in the bays, and trawling particularly all over the bays in the winter months. By that means they destroyed the spawn, and in the summer months they caught a large quantity of small fish. I have seen some of the trawlers come in and trawl within 200 yards of the shore all over the bay.

18,203. When do they come there?—All through the season.

18,204. Summer and winter?—Yes.

18,205. Do you think the trawlers with their trawls did more harm to the flat-fish than you in working with your tuck nets?—Yes.

18,206. In what way?—They catch more fish in one day than we catch in a month.

18,207. How is that?—They go over so much ground in a breeze of wind. They use a small mesh, and they take up everything.

18,208. But still both classes of fishermen were catching small fish?—No doubt, and so far as we are concerned I think it would be greatly to our benefit if we were to use a larger mesh.

18,209. Do you think that the size of the mesh you use has much to do with the size of the fish you catch?—Yes, the small fish would go through. There are some times in the summer when weeds are about that we might catch small fish on account of the mesh becoming clogged up. The mesh is made of a fine light twine, and when weeds are about they get in and close it up.

18,210. In your opinion both trawling and tuck-net fishing are more or less injurious to the fishing in the bay?—Yes.

18,211. If trawl-fishing were put down would you think it right that tuck-net fishing should also be put down?—Not altogether. We have no other means of catching flat-fish except with the tuck net.

18,212. But the trawlers have no other means of catching flat-fish except by using the trawl?—That is very true, and if they used a fair-sized mesh I do not think they would do much injury.

18,213. The trawlers are required by the law to use a mesh not less than $1\frac{3}{4}$ inches from knot to knot?—All I can say is that some of their inside meshes are not an inch from knot to knot.

18,214. That is altogether illegal. Do you think it would meet all you desire if they were obliged to comply with the law, and have a mesh $1\frac{3}{4}$ inches from

RCROSS. knot to knot?—Yes, I think the flat-fish would be protected by such a regulation as that.

Pepperell. 18,215. You would not like to use a larger mesh than that yourself?—No, I think $3\frac{1}{2}$ from knot to knot is enough.

Dec. 1863. 18,216. But the legal mesh is $1\frac{3}{4}$?—Yes, but I was speaking of it drawn out.

18,217. Would small fish go through that?—Yes.

18,218. We have been told by the trawlers that if the mesh was made larger than that they could not catch soles, because the soles would double themselves up, and go through; is that your opinion?—Yes, soles would go through.

18,218*a*. Suppose the mesh was as large as $3\frac{1}{2}$ inches from knot to knot then the soles would easily go through?—Yes, they would not catch a sole at all if the mesh was larger. A very large sole would go through a $3\frac{1}{2}$ inch mesh.

18,219. What kind of measure would meet your views here; would you have the trawlers kept out of the bay altogether?—The trawlers do great injury to all the fish. They not only injure the flat-fish, but all kinds.

18,220. Let us dispose of the flat-fish question first. Would you have the trawlers excluded from the bays on account of the injury they do to the flat-fish?—If they were not allowed to work in the bays during the daytime flat-fish would be very abundant here. Ours is an open bay, free from rocks.

18,221. Do they do most damage by destroying spawn or young fish?—They do most damage in the winter by destroying spawn.

18,222. When do flat-fish spawn?—From December to February.

18,223. Have you any reason to believe that they spawn in the bays?—Yes, I believe they do spawn in the bays.

18,224. Why do you think so?—I think so because we generally get small fish in the summer months off the oyster beds on the mud ground.

18,225. Do you not think they may come in from the outside?—They may come in from the outside, but we think they spawn in the bay. If we catch plaice in November we generally find that they are about spawning then.

18,226. Do you mean that they are full fish, full of spawn, when you catch them in November?—Yes.

18,227. Do you catch soles full about that time?—Yes.

18,228. Do you think that all descriptions of flat-fish are full in the winter time?—We think that they all spawn from the latter end of the month of December until January.

18,229. Do you cease fishing then?—Yes, we give up all our fishing for flat-fish after October, and we do not commence it again until the beginning of the month of March.

18,230. Is it your opinion that trawling is injurious in two respects, because in the first place it destroys the spawn in the winter months, and in the second the young fish in the summer months?—Yes.

18,231. And on that ground you would like to see a stop put to it altogether?—Yes, on our part we never use the tuck-net after October.

18,232. Why is it that you never use it after October?—We give it up altogether on account of the coarseness of the weather principally.

18,233. (*Mr. Lefevre.*) During what time do you give it up?—From the beginning of November until March.

18,234. (*Professor Huxley.*) Do you find, as the result of your experience, that flat-fish generally come in closer to the land when they are full and ready to spawn?—We generally find that we can take more large fish in the month of November than at any other time.

18,235. Is there much difference?—We get a much greater number of large fish in the latter part of October and in the month of November. At that time we do not see much small fish, but the fish caught then are generally very large.

18,236. (*Mr. Lefevre.*) I thought I understood you to say that you leave off fishing altogether from November until March?—Yes, the seine nets are put away during that time.

18,237. What do the fishermen do then for a livelihood?—They go on the land to work.

18,238. Do they go to work as agricultural labourers?—Yes, a few of them go to work as agricultural labourers. Others go to other occupations. Some do a little oyster-dredging in the winter time.

18,239. (*Professor Huxley.*) Did I understand you to say that there is a great deal of crab-fishing here?—Yes.

18,240. Where does it take place?—At Beesands and Hallsands.

18,241. Is there no crab-fishing at Torcross?—No.

18,242. How is it carried on at Beesands and Hallsands?—Each boat lays down from 50 to 60 pots. I have contracted for five or six years past with the boats at Beesands for the crabs they take, and I send them off to Billingsgate Market. I have known as many as from 6 to 8 and 10 tons go away in the course of a week.

18,243. Is that the average quantity sent away?—Yes. I should say that in the summer months the quantity sent away every week will average that.

18,244. Do you not sell any of the crabs about here in this neighbourhood?—No, none are disposed of in the neighbourhood. They are all sent to London, to Billingsgate Market.

18,245. Is the fish you catch here sold here or sent off to London?—The mackerel we catch is sent to London, Bristol, and other places, but the other kinds of fish are sold here.

18,246. How long have you been familiar with crab-fishing?—Not for many years.

18,247. Do you know whether the number of boats engaged in crab-fishing has increased of late years?—Yes, I believe the number of boats has increased, but I do not know much about it, further than having been occasionally for the last 10 or 12 years where it is carried on. I have also during the last five or six years contracted with boats engaged in the fishing for the supply of crabs they take.

18,248. Have you found that the supply of crabs has been equally abundant every year?—Sometimes the supply has been greater and sometimes less, but generally it has remained about the same.

18,249. What other mode of fishing is practised at Beesands?—There is no other fishing, except with the seines, that we use here.

18,250. Is there any lobster-fishing carried on there as well as crab-fishing?—Yes; they fish both for crabs and lobsters.

18,251. You include crabs and lobsters together?—Yes. There are not many lobsters caught. Crab-fishing is the most productive. There is a far greater supply of crabs than of lobsters.

18,252. Is there any long-line fishing practised here?—Sometimes, in the fall of the year, some of the fishermen will go out with long-lines and fish for conger and codfish.

18,253. Is that at all an extensive fishery in this neighbourhood?—No, it is not.

18,254. Do they catch fish in that way for home consumption, or the London market?—For home consumption principally. It is not sent away to London.

18,255–6. Where do they use the long lines?—They generally set them along the rocky shore.

18,257. Is there any limit placed by the fishermen upon the size of the crabs caught?—No, I do not think there is; but the crabs taken in this bay are of very large size.

18,258. Do you find that any damage is ever done to your crab-pots by the trawlers?—Yes, there sometimes very considerable damage done to them by the trawlers. They trawl away where they know that the crab-pots are lying, and they carry away scores of them. Very great injury is often done in that way.

18,259. Are the crab-pots buoyed?—Yes.

18,260. Then the trawlers can readily see them if they choose to look for them?—Yes.

18,261. Do they come inside the bay at night and trawl?—Yes.

18,262. How near in-shore do they come?—I have known them to be trawling within 100 yards of the shore.

18,263. Were they trawling as close to the shore as that at night?—Yes, they have been as near as that at night.

18,264. Upon such occasions have they gone over the crab-pots and carried them away?—Yes, they go right over the ground where the crab-pots are set, and frequently they do a great amount of damage by carrying them away.

18,265. (*Mr. Lefevre.*) What is the value of a crab-pot?—From 7*s.* to 8*s.*, or perhaps more than that.

18,266. (*Professor Huxley.*) Is there no remedy you can suggest by which the trawlers could be prevented from doing injury to the crab-fishing?—I do not know that there is. The men engaged in the crab-fishing have tried sometimes to put a stop to it. They have gone off with their boats and boarded the trawlers, but they have never been able to make anything of them, although the crab-pots have been torn clean off the ground. The trawl nets have torn them clean off the ground, and have destroyed the fishing altogether.

18,267. Is there any considerable drift-net fishing carried on here in these villages?—There are six drift-net boats kept here.

18,268. What is the length of nets that each boat carries?—About 400 fathoms.

18,269. Are they used for catching herrings or pilchards?—They are used for both, but mostly for pilchards.

18,270. Do you use the same sized mesh for both?—Yes, but we do not do much in the herring-fishing.

18,271. There is a complaint, I find, in your petition against the trawlers for carrying away the drift nets?—Yes.

18,272. Has much damage been committed in that way?—Yes, at times. Damage has been done to some of the drift nets this last season. I remember upon one occasion that a trawler came in and cut through our mackerel seines when they were not 50 yards from the shore; he carried off nearly one-half of them and did considerable injury.

18,273. Were you all in-shore then?—Yes. The wind was blowing a gale at the time from the north-west. We could not see the number of the boat by which the damage was done, but we knew it was a Brixham boat. I went to Brixham subsequently, and found part of the nets, which the trawlers said they had picked up. Altogether it cost me 30*l.*, and all the injury was done within 100 fathoms of the shore.

18,274. Is there no number on the sails of the trawlers?—Yes, they are all numbered.

18,275. Then could you not see the number?—We took no notice of it at the time the injury was done, until we found they were going away again. The wind was blowing a hard gale of wind from the north-west, and we tried to run after them.

18,276. (*Mr. Lefevre.*) I presume you were not able to identify the boat sufficiently to enable you to take proceedings for the recovery of the amount of loss you had sustained?—No, unfortunately we were not.

18,277. (*Professor Huxley.*) But if a man choose to rob your orchard and you are unable to detect him, I do not see what remedy you can have?—That is quite true.

18,278. Do you think it impossible that the trawlers can be allowed to trawl in the bay without doing damage?—Yes; if the drift-net fishermen go out and shoot their nets they do not take the slightest notice of them; they go and cut right through them.

18,279. That is altogether against the law?—I believe it is.

18,280. Are not the trawlers aware of that?—They ought to be.

18,281. If the trawlers do that and an information is laid against them they render themselves liable to be fined; they have no business to come near the drift-net men at all?—They do not take the slightest notice of that here, but they come right across our nets.

18,282. Is there anyone here whose duty it is to look after the fisheries and see that the law is observed?—No.

18,283. Do the Coastguard takea ny notice?—No.

18,284. Are you obliged to have your boats numbered here?—It is only the drift-boats that are numbered.

18,285. (*Mr. Lefevre.*) What is the width of the bay from Start Point to Mewstone?—About 9 miles.

18,286. How many miles is it going along the shore?—It is not much more; perhaps it may be half a mile further.

18,287. How much ground is there in the bay that is fit to be drawn over by the seine nets?—Nearly the whole if it; there is a little ledge of rocks between the village of Beesands and Hallsands, and there is another little ledge below here, not more than a couple of hundred yards wide.

18,288. Is the whole of the remaining ground fished over with the seine nets?—Yes.

18,289. How many tuck nets are there belonging to this place?—It is very seldom that tuck nets are used at all here—at Torcross—except in the spring, and there are not more than two or three used at Slapton.

18,290. What is the best season for the use of the tuck net?—The best fish are caught in the tuck nets from the month of March to May, and again from August to November.

18,291. In the interval do you use the seine net more?—Yes, we use the seine net and practise hooking mostly in the summer months. The tuck net is not much used in the summer months, during June, July, and August; the tuck nets are mostly put by then.

18,292. What do you catch principally then?—Mackerel.

18,293. Is that the best season for mackerel?—Yes.

18,294. When does the drift-net season commence?—It commences generally about the first spring tides in August; we begin to get the boats out then.

18,295. I think you said that you can recollect the fishing here for a period of 27 years?—Yes.

18,296. Have you observed any great increase in the number of trawlers who have been trawling in the bay during that time?—Yes, there has been a considerable increase in the number.

18,297. What is the number that frequent the bay in the course of the season now?—Perhaps 20, 30, or 40 of them will come in and let down their trawls all over the bay; their trawls will stretch all over the bay.

18,298. Can you recollect what has been the increase during the last 27 years?—No, I do not know.

18,299. Are there double the number of trawlers fishing in the bay in a season now as compared with the number that used to frequent it 27 years ago?—Yes, I should say there are.

18,300. Are there more than double?—There must be double at least.

18,301. Are they larger boats than they were formerly?—I think they are differently built from what they used to be, they are sharper and more cutter like built than they used to be.

18,302. Are they generally here throughout the year, or do they only come at particular seasons?—If they know that there is fish to be got in the bay they are constantly here.

18,303. Do they come in the summer as well as in the winter months?—Yes, both winter and summer.

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18,304. Do you ever find that they are fishing here in the winter when you are unable to go out fishing at all?—Yes, we never use the tuck nets from November until March.

18,305. Have you ever heard any complaints on the part of the trawlers that they cannot catch as many fish now as they were formerly in the habit of catching?—No, I am never with them when they are trawling.

18,306. Have you any reason to believe that they do complain?—I have heard that trawl-boats have been sold at Brixham on account of the fisheries not having been as good as they were.

18,307. You have been told that?—Yes, by some of the Brixham men.

18,308. But you have not observed any decrease in the number of trawlers in the bay here?—No.

18,309. Can you account for the fact that they seem to catch fish in places where you do not?—No.

18,310. Do they trawl over the same ground as that upon which you use the tuck nets?—Yes, but we cannot go to so great a distance off the shore as they can with their vessels.

18,311. Do they not come as close in-shore to fish as they used to do?—They come closer in occasionally I think, but at the same time if they choose they can fish further off than we can.

18,312. And I understand you to say that they can catch as much fish in a day as you can catch in a month with the tuck net?—Yes.

18,313. Then do you not think it probable that they catch the fish which you used to catch formerly?—Yes, they catch great quantities of large fish which we could catch if they were not here, but they lessen the fish altogether.

18,314. They lessen the fish because they catch them?—Yes, but the mischief they do is in catching the small fish.

18,315. They commit a great amount of destruction in that way?—Yes; I think it is a great pity that it should be caught, because it is of no value to anyone; in point of fact they throw overboard in the course of a day's fishing cartloads of small fish.

18,316. It would scarcely be worth their while to come here and catch small fish solely for the purpose of throwing it overboard again?—No, they no doubt expect to getl arge fish, but it is well known that they do throw overboard immense quantities of small fish.

18,317. Have you any reason to believe that they have found any diminution in the number of large fish they can catch?—No.

18,318. How are the fishermen paid here; are they paid by wages or by share?—By share.

18,319. How many men are there to a boat?—A seine boat will average 10 men, and generally eight or nine women are engaged in drawing the nets ashore.

18,320. Do the seine nets belong to one person or to more than one?—They belong to different persons; some of the seine nets are held by three or four of the men who work them.

18,321. Three or four of the fishermen?—Yes.

18,322. What share does the owner of the net get?—The owner of the seine takes 10 shares.

18,323. What do the fishermen get?—Every man is counted a share; every woman gets a three-quarter's share, and the boat takes 10 shares.

18,324. Do you find that you make less money than you used to make 27 years ago?—I do not know that there has been any falling off in the seine-fishing at all; the only difference we experience is in the seasons, one season may not be as good as another.

18,325. Taking the year through do the fishermen make less wages than they used to make?—I do not think they do.

18,326. Has the number of fishermen increased or diminished?—The number has decreased in Torcross.

18,327. But has the number decreased taking the bay through?—No, it has rather increased I think.

18,328. Has the price of fish increased or decreased?—It has increased.

18,329. Can you say how much it has increased?—No, I cannot say what the increase has been, but the price of fish has increased since the railway came so near to us.

18,330. Then I presume that a portion of your catch of fish is now sent away by railway?—Yes; we used to send the crabs to Newton when the terminus of the railway was at Newton, but when it came to Totnes crabs went up in price directly.

18,331. Do you send the mackerel you catch here to Totnes?—Yes.

18,332. Do you send any great quantity in that way?—Sometimes. They are packed up in pads, and are sent to Totnes to be forwarded to London, Bristol, and other places.

18,333. How long have you sent them to Totnes?—For the last 10 or 12 years.

18,334. Do you catch any sprats here?—We do sometimes, but we do not make much sale of them here.

18,335. Have you any nets especially for catching sprats?—No; we sometimes catch them with the lanuce net, which is made especially for catching sand-eels close in-shore, generally about the month of April.

18,336. Have you ever been on board a trawler when they have been taking up their nets?—No, I never was on board then.

18,337. Then on what do you found the statement you have made, that they take up spawn in their nets?—I have been led to believe that they do destroy the spawn from what I have been told, and also from knowing that they have been dragging throughout all the winter months over the ground where the spawn lies.

18,338. But you have never seen any spawn taken on board a trawler?—No, I have never been on board a trawler when they have drawn up the net.

18,339. Then, if you have not been on board, it is impossible for you to speak as to the quantity of small fish they take up?—Yes, I cannot speak of my own knowledge.

18,340. What is the size of the mesh of the seine nets you use?—The size of the mesh of the wings of the mackerel net is about $2\frac{1}{2}$.

18,341. Two and a half inches from knot to knot?—No; the full length of the mesh.

18,342. You say that you do not catch any young fish or small fish in those nets?—Not in the seine nets, unless we may occasionally get a plaice or two, or a flounder, along the shore that may have strayed in on to the ground we fish over. With those exceptions, I have never seen any small fish in the seines.

18,343. You only catch small fish in the tuck net?—Yes, only in the tuck net when we go out after the flat-fish.

18,344. What regulation would you propose to enforce in order to put a stop to the catching of small fish by the tuck net?—If the fishermen were compelled to use a mesh sufficiently large that would put a stop to it altogether.

18,345. But you would not like to see tuck-net fishing put a stop to altogether in the summer months?—There is not much done in the summer months. If the mesh were required to be larger I think it would answer the purpose.

18,346. What size would you fix it at?—I think $3\frac{1}{2}$ inches would be sufficient.

18,347. What is it now?—$2\frac{3}{4}$; but for several years we have used it at $2\frac{1}{2}$ inches, which is smaller still.

18,348. I understood you to say that within the last year or two oyster beds had been discovered in this bay?—Yes.

18,349. Where was that?—In a line from Dartmouth Harbour, two miles off; they were in a line with the bay.

18,350. When were they first discovered?—In 1862.

18,351. Were they near Mewstone?—They were inside the Homestone; stretching from the Homestone down to the bay.

18,352. Towards Earlstone, or towards the Sker-

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ries ?—Towards the Homestone rock; just in a line with that stretching down towards the bay.

18,353. About two miles ?—Yes ; but not as far as the Skerries.

18,354. How broad was the bed ?—I think it must have been about half a mile broad.

18,355. Did a considerable number of boats come in the bay to dredge over that ground ?—Yes.

18,356. And the oysters in consequence disappeared ?—Yes ; the dredging destroyed the bed entirely.

18,357. They carried everything away ?—Yes ; they had dredges with a little small mesh, and they have entirely ruined the oyster beds in the bay here. They dredged over the whole length of the bay, and took oysters we had in other beds.

18,358. Was that inside the Skerries ?—We had beds within 300 fathoms of the shore.

18,359. Have they been destroyed too ?—They have been injured considerably, but there are a few places between the rocks where the large vessels cannot tow that are still dredged by our little boats. A quantity of vessels came down here from Southampton and other places, and dredged away all they could.

18,360. Did they carry away both small and large oysters ?—Yes ; they wanted the small ones mostly. They lay them up in the Southampton river, and make natives of them after they have been there for a year.

18,361. Do you think that any means can be devised by which the destruction of the oyster beds may be prevented in future ?—I think the only means of preventing it would be to keep the vessels from a distance from coming here at all. If they would use a larger scale to their mesh they would not carry away so many of the small oysters.

18,362. Do they find the small oysters more valuable than the large ones ?—Yes ; they do not care about carrying away the large oysters. Some of our boats that go out dredging sell their oysters to them by the tub, and they would rather have the small fish.

18,363. Would it not be better to take away the large ones and leave the small ones to grow ?—They take away all together. After they have been dredging for some time they generally find it unprofitable to continue the work, and then they go away for a few years. During their absence the banks get up again ; but they will come again and in one season they will so ruin the beds that they will not be worth dredging for several years. Nevertheless, if they are left alone the oysters will come again.

18,364. Do you know anything about the spawning of oysters ?—No.

18,365. (*Professor Huxley.*) In the year 1817 there was a select committee appointed by the House of Commons who took evidence from this neighbourhood respecting the fisheries in Start Bay. Have you heard of that ?—Yes.

18,366. At that time 55 of the fishermen living in this neighbourhood presented this memorial :—"We, "the undersigned, being persons concerned and in- "terested in the fisheries between the Start and Ex- "mouth Bay, do hereby declare our opinion that it "will materially promote and benefit the said fisheries "if trawl and drag nets are prohibited being used in "Torbay from the 1st day of May to the 1st day of "November, and in Start Bay and Teignmouth Bay "from the 1st day of May to the 1st day of October." Drag nets would include your tuck nets, would they not ?—Yes.

18,367. The reason that memorial was presented appears to have been that the fishermen here were of opinion that the spawning of the fish mainly took place during the summer months ?—Yes.

18,368. From what I have heard from you to-day you are clearly of opinion that the spawning of the flat-fish only takes place during the winter months ?—Yes.

18,369. Under those circumstances such a regulation as that which was recommended by the fishermen in 1817 would have been wholly inoperative as far as the flat-fish are concerned ?—Yes ; I do not think it would increase those fish in the bay at all if no tuck nets were used in the months of June, July, and August.

18,370. Do you think that such a regulation as that which the fishermen thought desirable in 1817 would be of the slightest use now ?—No, I do not think it would.

18,371. Because if it is as you say that the flat-fish do not spawn until the winter months, they would be spawning at the time the drag nets are not used ?—Yes ; we do not use them when they are spawning, from November until March.

18,372. You see that this memorial contemplates allowing the use of trawling and of drag nets between October and May ?—Yes, and they would be used then at the time the spawning is taking place, for the flat-fish certainly spawn in the winter months.

18,373. As I understand you you do not think that the use of trawl nets or of the tuck nets interferes with fish of any other kind ?—No, but I think the trawlers catch a quantity of red mullet at times on account of the smallness of the mesh.

18,374. (*Mr. Lefevre.*) Have you yourself caught many red mullet here ?—Yes, close round the rocks.

18,375. Are they consumed in the neighbourhood ?—No, they are all sent to London.

18,376. How do you catch them ?—We draw a seine close round the rocks.

18,377. Do you think that all the fish caught here goes to Totnes to be sent to the market ?—Yes, all the crabs go there, and generally all the best fish.

18,378. Are there any decked boats at all used in this bay ?—No, we are obliged to haul up all our boats on to the beach, as we have no shelter for them.

18,379. (*Professor Huxley.*) Have you anything more to add to your evidence ?—No, I think not.

The witness withdrew.

J. Pike.

John Pike called and examined.

18,381. (*Professor Huxley.*) Are you a native of Torcross ?—Yes.

18,382. How long have you been a fisherman here ?—I have been fishing here for upwards of 60 years ; for 65 I believe.

18,383. You have heard the evidence of the last witness, Mr. Pepperell ?—Yes.

18,384. Do you agree or disagree with it ?—I think what he said about the mesh is very well ; the small fish ought not to be caught.

18,385. Do you agree generally with what he stated ?—Yes.

18,386. Do you remember the time when there was no tuck netting ?—Yes, not in the summer time.

18,387. When was that ?—Many years ago, when I was a young man.

18,388. There was no tuck netting then ?—Not in the summer time.

18,389. Was there any tuck netting in the winter ?—Yes, but they knocked off during the whole of the summer months.

18,390. Have you noticed any falling-off in the quantity of fish caught here within your recollection ?—Yes.

18,391. When did the falling-off begin ?—The falling-off has been going on for the last 20 years. The quantity has been constantly becoming less and less.

18,392. I suppose as you have been fishing for upwards of 60 years that you recollect very well the year 1817 ?—Yes.

18,393. Can you recollect an inquiry taking place here when Lord Vernon was here ?—I cannot recollect the name of the gentleman who was here.

18,394. (*Mr. Lefevre.*) Do you recollect an inquiry of some sort taking place here ?—Yes.

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18,395. (*Professor Huxley.*) Do you recollect the Hon. Mr. Vernon giving evidence at that inquiry?—No.

18,396. Do you recollect the fish being very scarce 40 years ago?—I do not think there was any scarcity then.

18,397. Then has the only scarcity you can recollect taken place within the last 20 years?—Yes.

18,398. Forty years ago were there plenty of fish here?—Yes. We used to go in a fair year and catch a lot of fish, but we knocked off with the tuck nets in the summer months.

18,399. How long can you recollect trawling going on in this bay?—There has been trawling here ever since I can recollect. There were not so many trawl-boats in former years, but still there was some trawling to a certain extent. They come now in much greater numbers, and they drag across our nets, tearing them all to pieces. I have had nets of my own destroyed by them.

18,400. Then during the first 20 years of your fishing life the trawlers seem to have done no harm?—Yes they did.

18,401. But they did no harm in diminishing the quantity of fish?—Yes they did, and so many of them came in that they did a deal of damage by injuring the nets.

18,402. Did they do any damage by diminishing the supply of fish?—Yes.

18,403. I thought you said you could always find plenty of fish during the first 20 years of your experience as a fisherman?—There has been a greater scarcity during the last 20 years than there was before.

18,404. That has been within the most recent portion of your fishing?—Yes.

18,405. But trawl-fishing has been going on for the last 50 years?—Yes, ever since I can recollect, but there were not as many trawlers formerly as there are now.

18,406-7. (*Mr. Lefevre.*) Do you agree with the last witness that the number of trawlers has doubled?—Yes.

18,408. Do they fish here at all seasons?—Yes, at any time.

18,409. (*Professor Huxley.*) Do you agree with the last witness that it is only flat-fish that have fallen off?—Yes, the flat-fish have fallen off, and I believe the trawlers have injured the pilchards as well. The pilchard-fishing is not as good as it used to be.

18,410. Do you think there are not as many pilchards as there used to be?—Five years ago they were very plentiful, but they are scarce now. Some years we catch a lot, but in other years they are all off again.

18,411. Is there anything you wish particularly to add to the evidence of the last witness?—No, I can say no more than he has said already.

18,412. You agree with him generally?—Yes.

The witness withdrew.

W. Kelland.

William Kelland called and examined.

18,413. (*Professor Huxley.*) Are you a native of this place?—Yes.

18,414. How long have you been a fisherman here?—20 years.

18,415. Did you hear what was stated by the witness Pepperell?—Yes.

18,416. Do you agree generally with what he said?—Yes. I think it would be better if we were not to have any tuck-net fishing for two or three months in the summer.

18,417. Do you think the quantity of flat-fish caught here has fallen off of late years?—Yes.

18,418. How long is it since the falling-off first began?—10 or 15 years ago.

18,419. Was there plenty of flat-fish when you first began to fish?—Yes.

18,420. Is it 10 or 15 years since the decrease first began?—Yes.

18,421. What do you think is the cause of that?—I think it is owing pretty much to the trawlers coming in.

18,422. I understood you to say that you thought the tuck netting had a good deal to do with it?—If the tuck netting were stopped in the summer and the trawlers were kept out for a short time there would be more fish in the summer.

18,423. It is in your own power to leave off tuck-netting if you like?—Yes, but there would be no good in our leaving it off if the trawlers still continue to come in. If the trawlers are kept from coming in the bay and we were to stop tuck netting we should catch more fish and it would be better for all of us.

18,424. The fish the trawlers carry away you don't get, is that the effect of what you mean?—Yes.

18,425. Do the trawlers by coming in destroy the brood and everything else?—They destroy everything. There are sometimes as many as 40 dragging across the bay together.

18,426. Suppose the people here were to take to working their tuck nets very much indeed, would not that greatly diminish the supply of fish?—Yes, in the summer they would get hardly anything but small fish.

18,427. Why is working with the tuck net in the summer more injurious than in the fall of the year?—There are more small fish in the spring of the year and in the summer time. In the fall of the year we generally get larger and better fish.

18,428. Do you think that regulating the size of the mesh would prevent the tuck nets from doing injury?—Yes, they would not take as many small fish then.

18,429. What time of the year do you think flat-fish spawn?—I do not know. I should say in the summer, or just at the fall of the year.

18,430. The summer and the fall of the year?—Yes, we catch most small fish in the spring of the year.

18,431. In the spring?—Yes.

18,432. Has there been any falling off in any kind of fish except the flat-fish?—Yes, the hooking-fish, and whiting, brills, and other kinds, are much scarcer than they used to be.

18,433. Are whiting scarcer?—Yes.

18,434. Are haddocks scarcer?—We never catch any haddocks here.

18,435. But whiting are scarcer?—Yes.

18,436. To what do you attribute that?—I do not know. I think it is owing to the trawlers catching so many of them. They destroy a great deal of small whiting.

18,437. Is there any falling off in the seine fishery; do you work a seine?—Yes.

18,438. Is there any falling off in what it produces?—It all depends on whether the fish come in, the mackerel, pilchards, and herrings.

18,439. In your knowledge of this place during the last 20 years has the number of fishermen increased?—Not here, and there is not much difference taking the number of fishermen all along the shore.

18,440. (*Mr. Lefevre.*) I think Mr. Pepperell said that you do not use the tuck net here in the summer months, only in the spring and the autumn?—No, it is only at Slapton that they are used.

18,441. The tuck nets are only used at Slapton in the summer months?—We use them sometimes. We have tuck nets here.

18,442. Do you think it would be advantageous to put a stop to the use of tuck nets in the summer months?—If the trawlers were kept out of the bays then the tuck nets might be stopped also, but it would not make any difference if the trawlers are allowed to come in, because if the small fish are not caught in

the tuck net they will be caught in the trawl, and sometimes there are as many as 30 or 40 trawl vessels fishing in the bay in one night.

18,443. Have you noticed the same increase in the number of trawlers fishing off here as the last witness?—Yes.

18,444. Do they sometimes trawl close in-shore?—Yes, frequently.

18,445. Do they trawl over the same ground as that upon which you use the tuck nets?—Yes.

18,446. Have you any reason to believe that they have observed any considerable decrease in their catch of fish?—No, on the contrary, I think they catch more.

18,447. Do they catch more or less?—I do not know of my own knowledge, but I believe they catch more. Frequently they will trawl right across the pilchard nets. They will come the night after we have shot our nets and will tear right across us.

18,448. (*Professor Huxley.*) Cannot you ascertain their number?—No, not in the night time.

18,449. Do you carry lights?—Yes.

18,450. Do they?—No, they keep up no light when working in this bay.

The witness withdrew.

JOHN PHILLIMORE called and examined.

J. Phillimore.

18,451. (*Professor Huxley.*) You are a seine owner here, I believe?—I am a seine owner, but at Slapton, not here.

18,452. Do you own many seines at Slapton?—I have one and part of another; I also own some pilchard nets at Torcross.

18,453. Have you been engaged in this business for many years?—No, only for six or seven years.

18,454. Have you noticed any diminution in the quantity of fish caught in the seines of late years?—Not in the seines.

18,455. Are you engaged in any other kind of fishing?—I have tuck nets.

18,456. Did you hear the evidence of Mr. Pepperell?—Yes.

18,457. Do you agree with him that the quantity of fish caught in the tuck nets has fallen off?—Yes.

18,458. Of flat-fish?—Yes.

18,459. At what time of the year are your tuck nets used?—From the beginning of March to the middle of October.

18,460. Throughout the whole of the summer months?—Yes, throughout the whole of the summer months.

18,461. During that time do they catch small fish?—Yes, and it would be better for the tuck-net fishing if the mesh were made of the legal size.

18,462. What is the size now?—$2\frac{3}{4}$ inches, that is $1\frac{3}{8}$ from knot to knot. It ought to be $1\frac{3}{4}$.

18,463. Do you think that if the legal mesh of $1\frac{3}{4}$ were used it would prevent the catching of small fish?—Yes.

18,464. Would not the meshes drag?—They might occasionally. If there was any weed about the shore the small fish might stick in the net, but not otherwise. Dabs worth catching would not go through a mesh $1\frac{3}{4}$ inches from knot to knot.

18,465. You think that if the mesh of the tuck net were of the legal size it might be used throughout the summer without doing harm?—Yes.

18,466. Are you aware that the mesh of the trawl net is the same, namely $1\frac{3}{4}$ inches?—Yes.

18,467. Do you think it might be used with impunity in the same way?—I think if the trawlers were obliged to use a mesh $1\frac{3}{4}$ inches from knot to knot they would not do much harm in the bay in the summer months. It is in the winter time that they do so much damage. They come in when the plaice and dabs are full of spawn. They are full of spawn now.

18,468. At this time?—Yes, from the 1st of November until the 1st of March plaice are not worth having, yet they come in and destroy the plaice in the winter months.

18,469. Are they not good when they are full of spawn?—Yes, but after they are shotten they are worthless and out of condition.

18,470. When do they begin to spawn?—At the beginning of November. If we catch plaice now they will be full of spawn.

18,471. Then what injury do they do by catching them when they are spawning or when they are full of spawn?—I think they do great injury by catching them when they are spawning. They do two kinds of injury, namely, by using too small a mesh in summer, and in the winter by catching them when they are spawning. I think it would be better, far better, if all fishing was forbidden while the fish are spawning.

18,472. You would allow the trawlers to catch them up to the time they are full?—No, I would prefer that the trawlers should be kept out of the bay altogether.

18,473. You would allow the fish to be caught in the tuck nets up to the time they are full?—No, I would say "let the tuck nets stop too." I would take a month when they are spawning, and I would not let a tuck net go from the 1st of November. But in the winter we generally leave off fishing of our own accord. The fish thus have four months during which they are not caught in the tuck nets.

18,474. You would allow the tuck nets to take them until they get full and become ready to spawn?—Yes.

18,475. Does it not amount to the same thing whether the tuck nets take them when they are ready to spawn, or when they are spawning?—Yes.

18,476. As to the amount of damage done it makes no difference whether they take them when they are spawning, or when they are just ready?—Not a bit.

18,477. Then I don't see how your suggestion would benefit the fishing?—I would make the fence months longer.

18,478. But in any case you would take the fish full?—I do not think that would do us much harm if the trawlers were kept out of the bays. Now they rake up the spawn beds after the fish have spawned.

18,479. Do you think that the flat-fish spawn in the bay?—Yes.

18,480. What evidence have you of that?—The other day when they were drawing a seine net ashore they caught several large plaice full of spawn.

18,481. Do you ever get the spawn up in the same place?—I never noticed it.

18,482. Do you think the trawlers get it there?—Yes.

18,483. Do you not think that if the trawlers get it you would also get it in your tuck nets? You say you consider that the trawlers destroy the spawn of plaice by raking it up from the bottom?—Yes.

18,484. Do you think you would not get it up in your tuck nets if the plaice spawn was at the bottom?—I do not think we should as much as the trawlers. The trawlers go outside the rocks where we cannot go with the tuck nets. We are obliged to go where there are no rocks.

18,485. You have no positive evidence that plaice spawn in the bay; it is principally a conjecture?—Yes, it is only a conjecture, but I think you will find that most fish spawn in the bays.

18,486. What depth of water have you in your bay?—40 feet.

18,487. Six or seven fathoms?—About seven fathoms.

18,488. At what time do you see the young fish?—In the spring of the year.

18,489. Do they come into the shallows?—We have no shallows. When they use the tuck nets in the spring of the year they catch large quantities of young fish.

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18,490. How big are they ?—Not longer than my finger.

18,491. How would you obviate that ?—I would make the mesh of the tuck net larger.

18,492. By making it $1\frac{3}{4}$ inches from knot to knot do you think you would not catch as many small fish ?—Yes.

18,493. Do you not think that the same thing would occur with regard to the trawlers if they were compelled to use a mesh of the legal size ?—Yes, I think it would improve the fishing altogether if the mesh were made $1\frac{3}{4}$ inches from knot to knot and the trawlers kept out of the bays during the time the spawning is going on.

18,494. They would not do more harm then than your tuck-net fishermen ?—They would not do more harm to the small fry except that the trawlers would catch more in one day than we should catch in a month.

18,495. But if you could improve your tuck-net fishing so as to catch as much in a day as you do now in a month you would not object to that I presume ?—I do not think that much damage would be done at all if the trawlers kept out of the bay.

18,496. In your knowledge of this place has the number of persons possessing seines increased or have people been led to invest money in them ?—I do not think it is much of a thing for people to invest money in, the fishing has been going back so very much.

18,497. How long has it been going back ?—I can speak from personal knowledge that it has been going back for six or seven years.

18,498. When you first went into the business was it going back ?—There were more fish then than there are now. They have been getting scarcer every year.

18,499. Had it fallen off before you entered the business ?—Yes.

18,500. For howlong ?—I have only been here six years last year.

18,501. Are you engaged in the crab-fishing ?—No.

18,502. Are you engaged in pilchard-fishing ?—I have some pilchard nets.

18,503. Do you notice any difference in the number of fish caught by them, taking one year with another ?—No ; but the trawlers ran into my pilchard boat this year. They ran ran right into her notwithstanding that the men hailed her. They were carrying lights, but the trawlers carried none and they took no notice.

18,504. (*Mr Lefevre.*) Was any damage done to the boats ?—Very little ; about a sovereign's worth. We ascertained the name of the trawler, but did not think it worth while taking any steps in the matter.

18,505. You thought it not worth while to seek a material remedy ?—Yes.

18,506. Has the number of trawlers increased or diminished here ?—They have rather increased in number, but one trawler that must have cost 800*l.* a few years ago was sold for 200*l.* a short time ago. Many have been sold for half their cost and less.

18,507. You have observed no decrease in the number that come here ?—No.

18,508. Have you any reason to believe that those who come catch fewer fish than they did formerly ?—I should think so. The fact that they use a smaller mesh is, I think, a proof of that.

18,509. How do you know they do use a smaller mesh ?—At Brixham they do.

18,510. Do they habitually use a smaller mesh there ?—Yes.

18,511. Have you yourself seen nets used with meshes smaller than the legal size ?—No, I have not seen them myself.

18,512. Have you observed a considerable number of trawlers here in the winter ?—Yes, sometimes they come in very close and sweep the bay from end to end.

18,513. You wish to see a stop put to their fishing here during the winter months ?—Yes.

18,514. During that time no fish would be caught here at all in this bay ?—No.

18,515. No flat-fish ?—No.

18,516. What is the number of trawlers that frequent the bay in the winter months ?—From 30 to 40.

18,517. Do you think that each of them catches as much fish in one day as your tuck net catches in a month ?—Yes ; they sweep over such an immense space of ground.

18,518. Would not the prevention of fishing in this bay by the trawlers put a stop to a considerable supply of fish to the market ?—No.

18,519. How do you account for that ?—Because the fishing would go on in the summer months the same as before. The tuck-men do not fish in the winter time themselves.

18,520. Do you anticipate that the increase in the catch by the tuck-men would be so great as to make up for the catch of 30 or 40 boats in the winter ?—Yes ; the fish would then be allowed to spawn as they like.

18,521. The flat-fish are in season until they have spawned ?—Yes.

18,522. And soles are in season after they have spawned, are they not ?—Yes.

18,523. Plaice are not worth eating after they have spawned ?—No, not for a month.

18,524. They do not at that time fetch any money in the market ?—No.

18,525. Then the trawlers do not come in here for the plaice after they have spawned ?—I think they do.

18,526. Do they catch other fish also ?—Yes.

18,527. Enough to make it pay ?—Yes.

18,528. (*Professor Huxley.*) Do you agree with this Memorial, that it would materially promote and benefit the fisheries here if the trawlers and the drag nets were prohibited being used in the bay from the 1st day of May until the 1st day of November ; would that benefit or do harm to the fisheries here ?—It would stop all the shore-fishing during that time, and that is the time when the fish are best.

18,529. I put that question to you because that was the opinion of a number of fishermen in 1817 ?—It is not my opinion now.

18,530. Do you think that that would not be the opinion of the fishermen generally now ?—Yes.

18,531. (*Mr. Lefevre.*) I suppose the coast here along the bay is not adapted for trawlers ; you have no means of sending out trawlers from this coast ?—No ; we could not send out a trawler because the water is too deep. We should not be able to get a trawler in.

The witness withdrew.

T. Hutchings.

THOMAS HUTCHINGS called and examined.

18,532. (*Professor Huxley.*) Are you a fisherman here ?—I am a fisherman from Beesands.

18,533. Are you the proprietor of any considerable number of crab pots ?—Yes.

18,534. Of a large number ?—Yes ; I have 50 or 60 pots.

18,535. Do you possess the greater number of crab pots which are owned in the village ?—No ; I do not believe I have as many as some.

18,536. Have you been engaged for many years in the crab-fishing ?—Yes.

18,537. Do you consider that it is increasing, diminishing, or remaining pretty much as it was ?—It is just as it has been for many years. There is no increase in it in this neighbourhood.

18,538. Have you any complaints to make with regard to it. Is there anything that injures the fishing to which you wish to see a remedy applied ?—

We only complain of the trawlers coming in and taking the pots away.

18,539. The trawlers come in and sweep your pots away?—Yes; in the night-time.

18,540. Is that to be prevented in any way, except by keeping them out?—No; I do not think so.

18,541. I suppose they cannot see them?—No, not in the night-time.

18,542. Cannot you take their numbers?—Yes.

18,543. Then why do you not summon them before the magistrates?—We have done several times, and they say we can do nothing with them. We have tried to proceed against them and have found that we can do nothing with them.

18,544. You have no remedy?—No.

18,545. (*Mr. Lefevre.*) What distance from the shore do you set your pots?—Two and a half miles, at the back of the Skerries.

18,546. Straight out from the shore?—Yes.

18,547. Do you set a great number together?—Yes, 20 pots will be lying together.

18,548. Do the men from here set their pots about the Skerries?—Yes, just on the back of the Skerries.

18,549. Do the trawlers come over the Skerries?—Yes, right over.

18,550. Is it rocky ground?—No, it is a sandbank.

18,551. Have you yourself lost many pots in consequence of the trawlers carrying them away?—Yes, I have lost many, and so have my sons also.

18,552. How many do you lose on the average in the course of a year?—Sometimes the trawlers will come in, and will take away two or three at a time. Sometimes they will not take any.

18,553. How many have you lost in a year?—I cannot tell. Perhaps taking a few years together I have lost 25 a year.

18,554. Have you never received any compensation from the trawlers?—No.

18,555. Have you ever obtained their numbers?—I have seen their numbers, but I have not taken them down.

18,556. Are you aware that you could recover from the trawlers?—No, they always take the pots away. We have given chase to them, and sometimes we have found that they had the pots in the trawls. Sometimes we have found the lines in their possession.

18,557. But you never took the trouble to take the number of the trawlers?—Others have done so but I never did so myself.

18,558. Is two miles and a half the furthest distance from the shore that you set your pots?—No; about three miles, up to the centre of the bay.

18,559. Do any French trawlers come here?—I never saw any French trawlers here.

18,560. Do any French fishing-boats come here?—I have seen them off the Start fishing with long-lines.

18,561. What time was that?—In the spring of the year.

18,562. What fish do they catch?—Congers and other fish.

18,563. Are there any codfish caught off here?—Yes.

18,564. How many men are engaged in crab-fishing here?—Twenty-eight at Beesands.

18,565. And how many at Hallsands?—About the same number; I cannot say how many boats there are to a boat or two.

18,566. How many pots will each boat have?—About 50; some will have more and some less.

18,567. Do you go on fishing all through the year?—Yes.

18,568–9. Have you any regulation as to the size of the crabs you take on shore?—We are not particular; but if we get a small crab we throw it away again; it is of no use to us.

18,570. What do you make in the course of a year by crab-fishing?—What do we earn?

18,571. Yes.—I cannot tell exactly. We take about $\frac{3}{4}$ cwt. a day, one day with another.

18,572. What do you get for that?—I do not know particularly; perhaps from 10*s.* to 12*s.*

18,573. Have you any complaint to make of the earnings you obtain now; has there been any falling off in your earnings?—No, they have been just the same. Perhaps they have rather fallen off than otherwise, but there is about the same quantity of fish caught.

18,574. (*Professor Huxley.*) Have you taken any notice of any other kind of fishing in the bay?—Yes.

18,575. Have you observed any falling off in the supply of other fish?—Plaice has fallen off.

18,576. When was it more abundant?—Twenty-five years ago it was very abundant.

18,577. It was very abundant then?—Yes.

18,578. And it has been falling off since then?—Yes, little by little ever since.

18,579. How far back does your memory go?—Forty years.

18,580. Then you will recollect very well as far back as the time of the committee which sat in 1817?—Yes.

18,581. Do you recollect that there was any scarcity of fish then?—There was not a great deal of difference; it was about the same as now. There were not as many fish caught then, because there were not as many inhabitants to catch them.

18,582. Up to 20 years ago, was there the same quantity of fish there had ever been?—Yes, there were plenty of fish 24 or 25 years ago.

18,583. Since then has it been falling off?—Yes.

18,584. Do you ascribe that to the trawlers?—I do not know what to ascribe it to. No doubt a great number of trawlers come in and drag away, and they drag up everything. They set their trawls, and drag for miles all over the bay.

18,585. (*Mr. Lefevre.*) How many tuck nets are there used in this bay altogether?—Three at Slapton, three here, three at Beesands, and two at Hallsands.

18,586. That is 11 altogether?—Yes.

The witness withdrew.

JOHN STEER called and examined.

18,587. (*Professor Huxley.*) Have you heard Mr. Hutchings' evidence?—Yes.

18,588. Do you agree with it?—Yes, I cannot say anything against it.

18,589. Have you anything to add to it?—I think that trawling does us great injury.

18,590. In what way?—By the men coming to drag all over the bay, and destroying both the small fish and our gear as well.

18,591. (*Mr. Lefevre.*) Are you principally a crab fisherman?—Yes, I have been a crab fisherman for the last 42 years.

18,592. Have you lost any pots by the trawlers?—Yes, in the course of the last three months I have lost 27.

18,593. Have you taken the number of any of the vessels that carried them away?—I have not been alongside to take their number. The injury is mostly done by night. We see them coming down from the Mewstone 30 or 40 of them in a night. Twenty or 30 years ago we did not see one in a fortnight, or a week.

18,594. (*Professor Huxley.*) Off and on trawling has been carried on ever since you were a boy?—Yes, ever since I was a boy, but it was not a quarter as much then as it is now. There used to be a little now and then, but I have not seen one in the bay for a week or 10 days at a time, and then there have been scarcely more than one or two; now they are here continually.

18,595. (*Mr. Lefevre.*) Do you think that in the last 40 years the trawlers have increased four times in number?—Yes; and they are trawling all over the Skerries. That is quite shoal water, and I believe

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that they destroy immense quantities of small fish. I have been alongside of them when they have drawn their trawls up, and I have seen an immense number of small dabs and small skate just the size of your two fingers. Some of them did not seem to be alive. They were all thrown overboard by the hundredweight. I have seen that done myself.

18,596. (*Professor Huxley.*) Are the crab pots put down in any particular part of your bay?—Yes, there is only one part, just about the centre.

18,597. Do the trawlers know that?—Yes, they know exactly where they are.

18,598. Then why do they not avoid them?—They could do so. There is no considerable space of ground occupied by the crab pots. It is only $1\frac{1}{4}$ miles long, and half a mile broad.

18,599. (*Mr. Lefevre.*) Do you agree with the previous witnesses as to the decrease in the quantity of fish caught by the tuck nets?—Yes, and I believe it is owing to the use of a small-scale net.

18,600. Do you agree with them that they catch small fish?—Yes.

18,601. Considering that four times the number of trawlers are fishing here has the whole number of flat-fish caught diminished?—They have diminished much compared with 40 years ago.

18,602. Taking into consideration what the trawlers catch?—Yes, we never used at that time a mesh of less than $3\frac{1}{2}$ inches. Now when we could have used our long-lines over the Skerries we have had the trawlers come across us and drag our lines right away.

18,603. Does not the trawl go over the long-lines?—No, the trawl takes them all away.

18,604. Does not the line remain at the bottom of the sea?—Yes.

18,605. (*Professor Huxley.*) Have you had your lines carried away?—Yes, and I found out who carried them away. He said he found them and wanted me to pay him for picking them up.

18,606. (*Mr. Lefevre.*) How much of your lines was carried away?—Three lengths, 150 fathoms, were carried away by one of the trawlers. I went to Brixham and found them on board a trawler.

The witness withdrew.

The inquiry was then adjourned until Tuesday, the 22d December, at Plymouth.

Plymouth, Devonshire, Tuesday, 22nd December 1863.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman.) | G. SHAW LEFEVRE, Esq., M.P.

PLYMOUTH.
J. Buchan.
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JOHN BUCHAN called and examined.

18,607. (*Professor Huxley.*) Are you a fisherman here?—I am not a regular fisherman, but from my boyhood up to the present time I have had a boat, and have practised fishing as an amateur. As an amateur I have probably caught more fish than any other person in the neighbourhood. I have frequently visited the trawlers from various fishing ports. What I am now particularly desirous of saying has reference to the trawl-fishing. Some years ago Mr. Perrier was appointed by Sir Robert Peel's Government to make inquiries into these matters. Having seen a small work of mine upon the subject he called upon me and requested my assistance. I gave him all the aid in my power, and I obtained for him from the different small ports around here all he required. I believe that a bill was subsequently introduced into the House of Commons, and that it passed that House, but it was never taken up in the House of Lords.

18,608. At what time was this—to what year are you referring?—I have unfortunately no memorandum with me that states the year, but it will be about 10 or 12 years ago. I was called upon however before then—in the year 1833. That was the first time I took any particular interest in the question, and it was the first time I was asked to assist in anything of this sort. Since then I have made it a kind of hobby-horse more than anything else. Owing to the destruction that was then being committed, I thought I would commit all my information to writing. The paper, which I now hold in my hand, I had printed in May 1836. I was furnished by one of the members for Plymouth with a copy of the report on the Channel fisheries, dated the 16th of August 1833, with the appendix.

18,609. Was that the report on the British Channel fisheries?—Yes, and that report, together with what I knew personally, enabled me to draw up a paper which contained a considerable amount of information.

18,610. Are we to understand that you were furnished in the first instance with the facts contained in the report of the British Channel Fisheries Commission, and that you proceeded to add your own data to that?—Yes, I addressed the following remarks on the fisheries on the south coast of Devon and Cornwall to Sir Edward Codrington and Sir George Grey, who were the first two members for Devonport, and to the members for the West of England generally. It was first published in one of the Devonport newspapers, and afterwards I had several hundred copies of it struck off, and sent to various members of Parliament.

18,611. Will you be good enough to read the remarks contained in that paper?—It states that—"A "bill for the protection of the fisheries, and also for "the preservation of the breed and spawn of fish, "having been brought into Parliament, I am in- "duced to forward you a few observations for your "guidance on this important bill, in order that you "may be as fully prepared as possible with local cir- "cumstances connected with the subject in the "advocating the required rules and regulations for "the protection and preservation of the fisheries on "the southern coast. This is no literary production, "but the offering of one who has long witnessed with "dismay the destructive system of trawling carried "on for some years past. I find from general in- "quiry, as well as from my own personal knowledge, "that up to the close of the late war fish were always "found in great abundance on this coast, and had the "demand been even larger than it was there would "have been no deficiency; if the fisheries had con- "tinued to be conducted on the same principles as at "that period, there would have been now no cause of "complaint. Formerly the fisheries employed a great "many boats and men with hooks and lines, there "being few trawlers, but the latter of late years have "increased, and in the like ratio have the supplies of "fish increased. From calculation, the whole of the "fishing ground without the headlands is scraped "over by those trawlers many times within the year; "and when fish become scarce on those grounds, the "trawlers commence fishing within the headlands, "viz.: In bays and other shoal places, such as Caw- "sand Bay and Plymouth Sound, which has been the "main cause of the present depressed state of the "fish markets by destroying the brood and spawn of "fish." Allow me here to digress for a moment. Mr. Perrier put a question to me when he was making his inquiries which perhaps you may find it necessary to put also, namely, "what had the war to

" do with fishing?" My answer was, that during the war the Channel Fleet were occasionally anchored in Plymouth Sound and Cawsand Bay. When they had their moorings there they necessarily prevented trawling. Now, Mr. Perrier was perfectly satisfied with my explanation. In these remarks I go on to say—"It is impossible to form anything like a correct judgment of the immense destruction and injury committed by the trawlers within the headlands. I have personally witnessed the destruction on taking up the trawls in those places. Formerly excellent fish were caught with hook and line in Cawsand Bay and Plymouth Sound, and within the harbour, but now few of any description are to be obtained. It is painful to observe the now depressed state of the fisheries. Some years since the fishermen were a lively cheerful class of men, now they are full of gloom and misery, and constant applications are being made by many of them for parochial relief. This I state from personal observation, having served the office of churchwarden for two years. If asked why they cannot get the fish, the reply is, 'they are all gone;' and if asked from what cause, they with an aspect of despair say—'It is the trawlers have destroyed almost all 'all the breed by their horribly destructive system ' of trawling within the headlands.' Our markets in lieu of having a supply of good fish, cheap and plentiful, which would not only give all classes a good dinner at a cheap rate, but would be a great advantage to general trade by an increased circulation of money, and what is of more importance, would give employment to a large class of useful and deserving men, are now almost an empty space. Formerly very large quantities (after due supply to the inhabitants of these towns) were sent into the inland markets, principally of the best kinds, but now we get few of any sort for our own consumption. It is an error to suppose that the months of May, June, July, and August, are the only spawning months, and that these months only require protection from the trawlers; it is an admitted fact that nothing less than a prohibition of trawling during the whole year, within the headlands, will be a sufficient protection to the fisheries. The French have an ordonnance preventing any such fishing within three leagues of the shore, from the 15th of April to the 1st September, and two leagues from 1st of September to the 15th of April, which must be convincing that the restrictions pointed out should be provided. It is well known that different fish spawn at different times of the year, and that they spawn in the bays within the headlands, and when grown sufficiently go into deep water; and to protect the spawn the trawls must, at all times of the year, be prevented trawling within the headlands. I beg to refer you to the evidence of James Cornish, Esq. in the Report of British Channel Fisheries, 1833. You have also the evidence of Mr. Fox, of Falmouth, viz.: 'That the pilchard 'fisheries continue to the month of December, which 'is another urgent reason why the trawlers should 'not be allowed within the headlands at any season.' Great complaints were made by the fishermen on the coast about Dover, Folkestone, &c., of the French fishermen, as if they were the cause of the present decline of the fisheries on that part of the coast, but this is not the cause of the evil; it is the want of sufficient protection. What does Mr. Cornish say in answer to the Committee of the House of Commons, 1833, when asked if the French fishermen were prevented,—'That is all stuff and 'nonsense. If you protect the breed of fish, all the 'French, Dutch, and Spanish boats could do no 'harm, and would produce no sort of effect at all.' He also advocates the protection of the breeding ground from trawls during the winter as well as the summer months; see 1447 of the report. There is one part of the remedy important, which I have not yet named, viz., the size of the nets. No net should be allowed to be used by any trawl or drag-net, of less than three inches in any part of it, which net would take fish of rather less size than ought to be brought to market. With regard to the trawlers, towards whom I may be charged as wishing to do an injury, this I must deny; my desire is to benefit them as well as all other classes of fishermen. I boldly state, without fear of contradiction, that the laws and regulations which I submit, if carried into effect, would be for their benefit, and they would catch a hundred fish where they now catch one. There is another restriction which I would strongly recommend, that no fish should be offered for sale below a certain size; the exact size I am not now prepared to state, but would, if required. There was one part of Mr. Cornish's evidence I had forgotten, which is a most important description in support of my views, viz., that on going on board a trawler by accident, he saw poured out on the deck thousands of all kinds of flat-fish, turbots, soles, plaice, and fish of every kind destroyed, and all thrown back into the sea. Here was a most grievous offence. Destruction like this can only be prevented by prohibiting trawling within the headlands; millions of millions of brood fish are destroyed by this practice, for only the young and brood fish lie in shallow waters, the large and full-grown are met with in the deep waters, where trawling only ought to be allowed. In closing my remarks, I trust I shall be excused in expressing my feelings for the welfare of this important branch of trade, in the success of which I feel deeply interested. I submit this to you in the full conviction that you will render to the prayers of the petition of the fishermen of this port your kind attention and support."

18,612. These were your opinions in 1836?—Yes.

18,613. Have you since found any occasion to modify these opinions?—No, rather to strengthen them.

18,614. Has this mode of fishing been going on ever since in that way?—Yes.

18,615. Ever since then they have been fishing within the headlands?—Yes, I have seen them from Drake's Island to Cobbler's Bay; I have seen them as close in as that.

18,616. Have the trawlers gone on repeating this mode of fishing within the headlands every year?—Yes, every year since I have known them.

18,617. As I understand the evidence you have just put before us, it is to the effect that the trawling has put an end to the long-line fishing, as there are no long-liners here now?—Yes, the take by the long-line now is comparatively trifling. I can give you an instance. In Cawsand Bay I have been in the habit of going at ebb tides and always catching fish of different sorts. My man went there last week, and he got none.

18,618. What sort of fish were you in the habit of taking there?—Whiting chiefly, and flat-fish. We used to catch immense quantities of flat-fish, sometimes from 8 to 10 dozen were caught with the hook and line.

18,619. How many long-line fishermen were there from this port in 1836?—I don't know, but there were a great many.

18,620. How many are there now?—I don't know how many there are now, but I know they have fallen off very much.

18,621. Has the number of boats fallen off as well?—The number of boats has fallen off in proportion to the number of men.

18,622. On the other hand, has the number of trawlers increased?—Yes.

18,623. How many trawlers were there fishing from this port at the time you made the statement which you have just read to us?—I know myself of 20.

18,624. Do you know how many there are now?—No.

18,625. Have you any notion of the number?—I have been told that there are 80 here now.

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18,626. Then the number of trawlers has steadily increased?—Yes.

18,627. And these trawlers, increasing steadily in number, have gone on fishing within the bays and headlands?—Yes.

18,628. Then it is to be presumed that they have continued to find fish there?—They find them there when they cannot get fish outside.

18,629. (*Mr. Lefevre.*) Do you mean when they cannot fish outside in consequence of bad weather?—Yes.

18,630. (*Professor Huxley.*) Then it is hardly correct to say that they have destroyed all the brood of fish there?—In saying that, I alluded to the fish in the bays.

18,631. As I understood the document which you were good enough to read to us just now, your assertion was that the trawling had destroyed the fish entirely?—Yes.

18,632. And yet they have gone on fishing in these places ever since?—Yes.

18,633. Surely it would be of no particular advantage to them to trawl where there are no fish?—There are always fish in Whitesand Bay, for instance; I think they come into the bays for protection.

18,634. What evidence have you to show that the trawling in 1836 had destroyed all the fish in the bays?—I have no evidence; it is only an assertion.

18,635. There is a wide difference between assertion and evidence; our business here is to get at the precise facts, and it would be a very important fact for us to find out that all the fish were destroyed by trawling in the bays here in 1836. Now, I cannot reconcile that statement with the fact that the trawlers have been fishing there ever since?—They only fish there occasionally; I believe they never go in there unless the weather is bad without, or something of that sort.

18,636. I think you state in that document that the fisheries were greatly depressed in 1836?—Yes, very much.

18,637. And that the fish were all gone?—At any rate it had got very scarce; last season there was scarcely a fish to be had round the breakwater, and I have often caught as many as a dozen whiting in a day about a mile and a half from the breakwater.

18,638. Have you noticed any difference in the size of the fish caught of late years in the port of Plymouth; have the fish at all fallen off in quality?—Not at all; I believe that this is one of the finest coasts we have for fish.

18,639. You have taken a good deal of interest in the fisheries here?—Yes.

18,640. What kinds of fish are brought in here by the hook and line fishers?—The hook and line fishers generally bring in whiting and flat-fish.

18,641. What kinds of flat-fish are caught by the hook and line?—Such as plaice.

18,642. Are soles caught by the hook and line?—Only rarely; I have caught a sole in Whitesand Bay, but very rarely; but I believe that all sorts of fish may be caught by the hook and line.

18,643. What other fish are caught there?—Whiting, gurnet, plaice, tubs, pipers, but they are seldom caught with the hook and line; they are generally caught in the trawl.

18,644. Are any john doreys caught here by the hook and line?—Not very often; but we have caught them occasionally. The only way you can catch them is by hooking a small fish; the john dorey comes into the bay, and swallows the small fish, and is caught himself.

18,645. Have you taken any notice of the supply of fish to the market here at Plymouth?—Yes.

18,646. Has the supply to the market increased or diminished?—It is nothing like what it was.

18,647. Do you mean the whole supply by the trawlers and the line fishermen here?—Yes; I think they make a greater price by sending the fish into the country.

18,648. I want to know whether the absolute quantity sent into the port is greater or less now than it was in former years?—It is certainly less.

18,649. Absolutely less fish in weight is brought into the market now than was brought here 30 years ago?—Yes, but we do not catch all the fish that are caught off here.

18,650. What I mean to ask is this—is the quantity of fish brought into the port less than it was 30 years ago?—No doubt of it.

18,651. The number of hundredweights is absolutely less?—Yes; for instance, hake, which we catch by the hook and line, has very much diminished. I have seen immense quantities of hake brought here, and sold at the rate of a shilling a dozen; that may be taken as a proof that the fish at that time were very plentiful; now we cannot buy them under a shilling each.

18,652. That is quite compatible with the same, or a larger supply now, if the fish are dearer; in your experience is there a smaller quantity brought into the port now than there was 30 years ago?—I think there is less, but the trawlers bring in the greatest quantity.

18,653. Although you have taken a great deal of interest in the fishing here, you have no clear idea of the number of vessels that existed here 30 years ago?—No, I cannot give you the precise number, but I should think about 20.

18,654. Now have you any clear notion as to the number of fishermen that exist in this port?—No, I was not aware that you intended to meet here until yesterday, or I should have been prepared with better information for you.

18,655. Our meeting was extensively advertised?—Yes, but I did not see it.

18,656. (*Mr. Lefevre.*) Does your experience extend along the coast west and east?—As far as Whitesand Bay to Bigbury Bay.

18,657. Has your experience shown you that the quantity of fish has equally declined in these bays as in Plymouth Sound?—I have no doubt of it.

18,658. Have you yourself had any experience in trawling?—No, none.

18,659. You have never been out trawling?—No, but I have seen the trawlers trawling. I have occasionally gone on board, but I never made it a point to go trawling.

18,660. You cannot speak then of your own knowledge as to whether the trawlers bring up spawn or not in their nets?—I have seen when the trawls have been brought up spawn upon the water like glue.

18,661. Has that spawn been brought up in the net?—Yes.

18,662. Are you sure that it was not spawn that had come from the bellies of the fish when they were drawn up?—I do not think it was. I have seldom seen a fish with a broken belly.

18,663. Was it far out at sea that you saw this?—Six or seven miles.

18,664. It was not in-shore?—No.

18,665. Have you ever heard any complaints made by the trawlers as to the quantity of fish having fallen off further out at sea; or have the complaints you have heard with regard to the diminution in the quantity of fish been confined to the quantity in-shore?—I believe they have complained of the falling off, but there are some trawlers here who will give you that evidence better than I can.

18,666. Have their complaints had reference to the number of fish they catch in-shore or outside?—During these last few years there have been no fish in-shore at all.

18,667. There has been no fish in-shore?—No, comparatively speaking.

18,668. Do any foreign trawlers come here?—No.

18,669. Do any Frenchmen ever come here?—No.

18,670. Are there any trawlers here who come from a distance?—Yes, they come from Brixham and from the westward.

18,671. Do the Plymouth trawlers go any distance

or do they confine themselves to fishing on the fishing grounds here?—They go down as far as Penzance.

18,672. Is there any pilchard fishery connected with Plymouth?—Not much.

18,673. They hardly come so far east as this?—No, we have drift-boats here, but no seine-boats.

18,674. Is there any mackerel-fishing at Plymouth? Not a great deal outside here, but the Penzance boats and others go mackereling and bring their fish in here.

18,675. Are there any boats from Plymouth that go after mackerel off here?—Perhaps there may be a few.

18,676. Have they observed any falling off in the take of fish?—I don't know, but I believe they complain of the trawlers as well as the long-liners.

18,677. I think you said that the quantity of fish brought into the market here has fallen off?—Yes, the fish I have seen in the market has apparently fallen off.

18,678. I suppose a quantity of fish is landed here that does not come into the market at all, but is sent off at once to London?—Yes.

18,679. I presume that in former days nearly all the fish caught off here were sold in the market?—Yes, until the railways came.

18,680. And the price, in consequence of the railroad, has very much gone up?—Yes. I have known bakes sell for a shilling a dozen when there has been a flux in the market.

18,681. Have you heard any complaint of the fishermen's wages having fallen off?—No.

18,682. Do you think the increased price has made up for the diminished quantity?—I have heard them complain that they get very little money, but I have never heard them complain with regard to their wages. I think, however, that the fishermen are generally paid by shares.

The witness withdrew.

Richard Stibbs called and examined.

18,683. (*Professor Huxley.*) Are you a trawler, Mr. Stibbs?—Yes, I have been, but I do not follow it now.

18,684. Are you a trawl owner?—Yes; I have been connected with trawling from my childhood.

18,685. For how many years?—Ever since I was 15.

18,686. You were apprenticed to that trade, I suppose?—Yes, I had an indenture, but I served my time with my mother.

18,687. How long have you known trawling?—Ever since that time.

18,688. Have you always worked from this port?—Not always; I went to Ramsgate at one time, when there was better doings there. Sometimes the fishing fell off here. I have been at other places at different seasons. I was at Ramsgate for three years and in Wales for three years.

18,689. Are you familiar with trawling from the port of Plymouth?—Yes.

18,690. How many trawl vessels are there here now?—I think there are 64 altogether.

18,691. Has that number increased within your experience, or has it diminished?—It has increased.

18,692. Has it increased much?—It has increased more these last 12 years, both as to the number of vessels and the size, than during all my time previously.

18,693. How many vessels were there engaged in trawling when you began to serve your time?—30; there were about 30.

18,694. How many years ago is that?—40 years ago.

18,695. And now instead of 30 there are 64?—Yes.

18,696. What was the tonnage of a vessel engaged in trawling at the time you began trawling?—They would average from 30 to 40 tons.

18,697. What kind of measurement do you refer to?—The building measurement, that is what we go by now.

18,698. What is the tonnage of the vessels now engaged in trawling?—They are now double the tonnage that they were at the time I spoke of. There are a great number of old ones still used, but as new ones are built they increase in size.

18,699. What was the cost of vessels at the time you began trawling?—From 300*l.* to 400*l.*

18,700. Did that include the fittings?—Yes.

18,701. That was the cost of a vessel ready to go to sea?—Yes; or rather say from 400*l.* to 450*l.*

18,702. What is the cost now?—From 700*l.* to 800*l.*

18,703. So that the number of vessels has doubled, and the cost of the vessel itself has been largely increased?—Yes.

18,704. What ground do you trawl upon here?—At Plymouth there is less ground to trawl over than from any fishing port in England. It varies from seven leagues east and west; that will take in all the ground. But when we go to the north we have not above three leagues of trawling ground. There are no grounds in any part of England that are so small for trawling purposes, and there are no grounds that are so constantly fished over. At Plymouth we are engaged in fishing over this ground from the 1st of January to the last day of December; it is not so at other places. In other fishing ports they have their seasons. At Ramsgate, for instance, their season is the summer season, while our vessels are constantly dragging over the ground here all the year round.

18,705. Then as I understand you the trawling ground at Plymouth occupies an area of 21 miles in length, by nine miles in breadth?—Yes, it is about nine miles to the north, and seven leagues to the south. When the fish are scarce we go a little further to the southward, but it is rougher ground, and we mostly like to keep in sight of the Eddystone. We go further out when the fish go into deep water; they get very scarce on our grounds then.

18,706. Then within your experience, which you say extends over a period of 40 years, a number of trawling vessels varying from 30 and 40 to 60 have been trawling over the grounds you mention every day?—Yes, when they have had wind and weather.

18,707. And Sundays excepted?—Yes.

18,708. What is the practice of your vessels; do you come in every night or do you stay out?—In the winter time we stay out two days. We are then engaged in sole fishing which we get chiefly in the night time. In the summer time our vessels generally go out in the morning and come in again at night.

18,709. Do you follow that practice because it is better for your market to do so?—Yes.

18,710. What is the size of the trawl beam that you use?—Our trawl beams are generally about 45 feet long now. Some of the boats have them 42 feet long.

18,711. Have all the vessels in this port a beam 45 feet long?—No, the small trawlers will hardly work a 45 feet beam. They used to have them 30 feet long, but now the beams are worked outside the vessel, and the length of the beam is generally governed by the size of the vessel itself.

18,712. Then, in point of fact, the beam of the trawl and the length of the vessel are in proportion the one to the other?—Yes.

18,713. And it would be injurious to you if you could not make your beam in accordance with the length of the vessel?—Yes, it would be a very great injury to us indeed.

18,714. What is the smallest size that you have the beam now?—40 feet. I think that no vessel has a beam less than 40 feet now.

18,715. Have you any notion that the whole of these beams are illegal?—Not at all.

18,716. Did you ever hear of a Convention between France and England in reference to the fisheries?—No, I never heard anything as to the length of the beam that was to be used.

18,717. Is there anybody here to look after the

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trawlers?—There has been a steamer here to look after the Frenchmen.

18,718. Do the Custom-House officers, or the Revenue officers, ever pay any attention to your trawls?—No.

18,719. Did you ever have the length of your beam measured?—No.

18,720. Would you like to have a regulation enforced that the beam of your trawl should not be more than 38 feet long?—No; England has gone on improving so much of late years that it would be hardly beneficial to compel us to go back again. You might just as well confine an angler fishing in a river to a certain length of rod, as confine us to a particular length of beam.

18,721. If you were compelled to have your beam 38 feet long only, there would be no encouragement to you to build large vessels?—No, certainly not.

18,722. (*Mr. Lefevre.*) Have you ever heard of the regulation that the length of your beam should be 38 feet?—I have heard it spoken of at Brixham that there was a certain fixed length of beam, but I never knew that it was acted upon. Indeed it must be very injurious, and not consistent with our notions of right and wrong. England has always been for improvement, and for a man to say to a trawler, "You "are not to have a large beam, but must fish with a "small one," would be a very great hardship.

18,723. (*Professor Huxley.*) We say nothing about the "hardship" of the existing law; our object is simply to ascertain the operation of that law and its bearing on your interests. I may tell you, however, as a matter of fact, that by the existing law you are bound to have your beam 38 feet long only?—Is there an Act to that effect?

18,724. Yes, and I wish to ascertain if it is carried into force?—No, it is not.

18,725. Can you tell me what is the reason that there should be a proportion between the length of the beam and the length of the vessel?—We like to have the beam come alongside of the rigging. Now that the vessels are larger they are brought up right on-board.

18,726. You like to have the fore end of the beam come on to the fore shrouds?—Yes.

18,727. That enables you to check the fore end of the beam?—Yes.

18,728. Under other circumstances, would you be liable to have your deck swept by the beam if there happened to be a wind blowing?—Yes.

18,729. What is the size of the mesh of your net?—We vary in size, but I believe that the size of our nets is larger than that of any other trawl net in England.

18,730. What is the size from knot to knot?—From three to four inches.

18,731. What part of the net is that?—The square of the back, the wing.

18,732. What is the size at the end of the net?—I should think that would be two inches and a half from knot to knot; that is the smallest part we have in the net.

18,733. Supposing you thought it would contribute to your interest to have the mesh smaller, would you make it smaller?—Yes, if we thought it would be to our interest.

18,734. Are you aware whether there is any regulation upon that point?—Yes, I believe there is a regulation for all the fisheries.

18,735. If you thought it would contribute to your interest to have the mesh an inch from knot to knot, would you think there would be any harm in having it so; are you aware of any law to prevent you from doing so, if you found it advantageous?—I believe there is a law. I believe there is a sized mesh fixed by Act of Parliament.

18,736. But does any Custom House officer, or Revenue officer here, examine your mesh to see whether it is of the right size?—No, there was a talk about it some time ago, but it was dropped again.

18,737. Are all your boats numbered?—Yes.

18,738. By whose authority is that seen to?—By the Custom House.

18,739. Do you carry any particular kind of vane?—Yes, until it blows away; we generally carry a red vane.

18,740. Do you carry the vane of any colour you like?—We generally have it red.

18,741. Do you know any reason why you should not have it blue?—I believe the French have it blue.

18,742. Is there any drift-net fishing going on here?—Yes, more than ever there was.

18,743. Do you ever come into collision with the drift-net fishers?—Yes, sometimes.

18,744. That has happened within your own knowledge?—Yes.

18,745. If you are towing your trawl, and you happen to come across a fleet of drift-net men, what do you do?—We let go the stopper and get the trawl up.

18,746. Suppose they shoot astern of you, what do you do?—If they shot astern of us, and we could get clear, we should not foul at all.

18,747. I am only desirous of ascertaining how far the law is carried out here?—And I am anxious to tell you the truth. You may depend upon it that I will not tell you any falsehood.

18,748. We are anxious to ascertain all the facts. Now, with regard to getting your trawl up and getting away when you come across the drift-net fishermen, have you ever heard of any law on that subject?—Yes.

18,749. Do you know what that law is?—The trawler is bound to get out of the way of the drift-net fishermen. That at times is a very great hardship. Nine-tenths of the fishermen now are trawlers. If the trawlers now and then in the course of a season come foul of one another there is seldom any quarrel. They clear their nets, and if any damage has been done it is all set right again. But they never expect one boat to haul the net up and go away out of the way of another.

18,750. Are there many long-line fishermen in this port?—More than there ever were engaged in bultering, what the Frenchmen call long-lines. There used to be a few boats go off the Start with long-lines.

18,751. With snoods?—Yes.

18,752. The hand-line fishing is carried on to a greater extent than ever it was?—Yes.

18,753. Do you ever come across the ground where the long-line fishermen have laid their lines?—No.

18,754. Do they lay their lines on your ground?—No, they lay them on ground on which we could not go.

18,755. Have you ever heard of the trawlers sweeping over the long-lines and taking them up?—No.

18,756. Is there any great crab-fishing off here?—No; we catch some in the trawls in rough weather. In wild weather they come out from the foul ground, from the rocks, and we catch them. As far as the she crabs are concerned, we sometimes catch a great many of them in the night time.

18,757. I am not talking of catching crabs in the trawl but of catching them in crab pots?—I believe that crab pots are set on the rocky ground.

18,758. What kind of fish do you mostly get with the trawl?—We catch in the trawl turbot, plaice, brill, soles, doreys, skate, ray, and thornbacks.

18,759. Can you give me a rough notion of the proportion of fish that there will be on the average in one haul of the trawl. Of what kind of fish do you get the most?—The most fish we get at times is the hake. At other times we get most big tubs.

18,760. What is a tub?—It is a large specimen of the gurnet. We sometimes get great abundance of it.

18,761. What kind of fish do you get in the greatest abundance next?—Hake and tubs are the most we catch.

18,762. But after these?—We get a great many

gurnets at times. Flat-fish are never very abundant or plentiful.

18,763. Do you get many soles?—Sometimes we get a great quantity of soles, but never more than once or twice. We call one or two baskets a great quantity of soles to catch.

18,764. Do you get many halibut here?—Halibut is a large fish. They here call a brill a halibut. We seldom get a Newfoundland halibut, but we get a good many brill. Halibuts are very scarce, but sometimes we get a halibut, and occasionally a sturgeon. They are, however, very scare.

18,765. How long have you your trawl down at a time?—About six hours—a tide.

18,766. When you haul up your net, in what condition do the fish come up?—They are always in pretty good condition.

18,767. Do they come up alive?—Yes, a great many of them.

18,768. Are there a great many dead?—Some of them are. The gurnets will all be dead, and sometimes a sole, but all of them are in good order.

18,769. Are they very much bruised?—I have never seen them much bruised. If we get a misfortune and have a stone in the net, some of them will sustain injury.

18,770. How long does it take you to get your trawl on board in heavy weather?—Sometimes two hours, but in fair weather we can get it up in three quarters of an hour.

18,771. When you are as long as two hours taking in the net, does it not often happen that the fish are very much washed about?—No, not unless there is a stone in the net.

18,772. Do you gut your fish as soon as it comes on board?—Sometimes we do.

18,773. Do you ever observe that the gall bladder is burst?—No.

18,774. You have never seen that?—I have in some cases seen the bladder burst when they have been gutting them.

18,775. But it has not been burst in bringing the fish up in the trawl?—No.

18,776. You have never seen the fish so much bruised as to be rendered unfit for the market?—No.

18,777. Do you get as good a price for your trawl fish as the long-line fishermen get for theirs?—The trawlers do not get the same kind of fish as the long-line fishermen.

18,778. (*Mr. Lefevre.*) What kind of fish do the long-line fishermen catch?—Mostly codfish, skate, and ling.

18,779. Do they get many codfish?—Now and then they have a good take.

18,780. (*Professor Huxley.*) Do you ever bring up spawn in your net?—I never saw any in it, more than that which was in the fish.

18,781. Do you mean the fish spawn squeezed out of the fish themselves?—Yes. The hake is the fish that we catch in the greatest quantity, and I really do not know what the spawn of the hake is.

18,782. Do you get a large quantity of small unsaleable fish?—Sometimes we have got a large quantity of small gurnets, but we do not take them in; the crab-pot men take them. We used to throw away all the small rays and skate, but now they are used for the crab pots.

18,783. Have you not heard it stated that the trawlers catch a large quantity of small fish that is of no use for the market, and that it is thrown overboard?—Yes, I have seen it so stated.

18,784. Is that the result of your experience?—No, nor has any one experienced it anywhere else.

18,785. The great proportion of the fish you get is all saleable, marketable fish?—Yes.

18,786. Within your knowledge, what has been the increase in the quantity of fish brought into the port of Plymouth?—When I was a boy there were two fish carts that used to go from here; one of them went from the London Inn.

18,787. You are speaking now of 40 years ago?—Yes. An old gentleman of the name of Cornish used to take the best fish, and send it to London, Bath, and other places. There were two carts that went away then in the course of a week.

18,788. What amount of fish did they carry?—Two horseloads each.

18,789. What weight would that be?—10 or 12 cwt., or perhaps from 12 to 15 cwt.

18,790. Suppose we take it at a ton?—That would be the outside.

18,791. Were they two-wheeled or four-wheeled carts?—They were light carts built for the purpose. Some of the fish went to Bath and Bristol, and some of it was posted as far as London.

18,792. How often did the carts go?—Twice a week. The boats then used to go out in the early part of the week, and come in on the Wednesday afternoon, and they would come in again on the Friday afternoon.

18,793. What is the average quantity of fish brought in now?—Why, where 1 cwt. went away when I was a boy, there are tons and hundreds of tons going away in a week now. The quantity of fish sent away has enormously increased.

18,794. What is the average you bring ashore in your boat?—I am not able to tell you that, it varies so much.

18,795. But cannot you give us a fair average, taking one week with another?—Sometimes a boat will bring in five or six maund of fish.

18,796. How much is a maund?—The maunds now are getting smaller than they used to be. Formerly they held 24 hake, and now they hold only 15 or 16.

18,797. But what is the weight; how many cwt. would you catch in a fair day's fishing?—Sometimes a ton and a half, that would be a very good catch; it would be about 30 maunds. A maund will hold nearly 1 cwt. Then perhaps on other days they would only bring in 3 or 4 cwt.

18,798. Would three quarters of a ton be a fair average?—Yes, or rather say half a ton.

18,799. How does that fish go away from Plymouth now?—There is a great deal of the coarse fish taken away into the country by hawkers.

18,800. Do you send much to London?—We send a great quantity of hake sometimes, and the greatest part of the prime fish goes to London, Bath, and Bristol.

18,801. Is it sent away by railway?—Yes.

18,802. Do you think the railway returns would help us much to understand the quantity of fish brought into the port?—Yes, I think they may.

18,803. But, as I understand you, a large proportion of the fish would not be accounted for in these returns?—A large proportion goes away to different parts. They branch off between this and Exeter. The greatest portion of what used to go away by carts now goes off by rail, but a great deal also goes by cart to Bolt Tail, and Saltash, and all round.

18,804. What makes you go to fish in the bays at times?—We have but little bay-fishing here. The boats go into Whitesand Bay sometimes, and I should say it would be a great deal better if they did not.

18,805. But, as a matter of fact, they do go there to fish?—Yes, they do at times, but very little.

18,806. Why do they go there?—When they are lying outside in the summer time trawling for hake just off Plymouth, and down as far as Fowey, if a wind comes in the night time off the shore from the northward, they go into Whitesand Bay and make a haul, while at the same time they are in the calm out of the bad weather. But it is not two or three times in the course of a year that they go into the bay, and then only when they cannot fish outside.

18,807. Have you ever been fishing in Whitesand Bay yourself?—Yes.

18,808. Have you found that you have brought up a large proportion of small fish at that time?—Yes.

18,809. Then I presume it is not to your interest to fish within the bays if you can avoid it?—Not at all. I think it is a great pity that we should ever go

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there. In Whitesand Bay I have seen scores of small turbot and small soles taken up.

18,810. At what particular time of the year do you get most of the small fish?—We get small fish at all times of the year, but sometimes we get it in greater abundance than at others. Sometimes there is no fish outside, and then we go into the bays.

18,811. It is commonly small fish that you get there?—Yes. It is not the same in all the bays. I have been in Mevagissey Bay; there are very fine fish to be got there, but they are all small fish in Whitesand Bay.

18,812. You are not yourself concerned in the long-line fishery?—No; with regard to the spawn I think it is not all kinds of fish that have spawn. The ray has a kind of purse. The gentleman who gave evidence just now says he has seen spawn brought up. Now I have never seen any. All I have seen brought up has been a sort of white dirt in the bay that we call "skulch." In Wales, in Carmarthen Bay, we could hardly haul up our trawls for a kind of blubber stuff that they have there. I have seen that brought up, and also a flimsy sort of thing which we shake away, but I have never seen any of what you call real spawn. The hake has a spawn, and so has the plaice, but they do not spawn where our trawling is carried on. They do not lay their spawn carelessly on any sort of ground; they require a quiet place on which to deposit it and in which to breed their young. I believe it is impossible for any fish to be caught with a trawl net where they deposit their spawn. If they shot their spawn and had their brood upon our trawing ground we should clear it all off in a week. Down at the northward I know they say that our fishermen here have swept our own coast and are now going there, and that in three years we shall sweep all the fish off theirs. Now I think that cry has originated in nothing but a desire for monopoly on their part. They and the herring fishers wish to have the fishery to themselves and to drive away all the trawlers. In other places they complain of the seines, and they want to do away with the pilchard fishery down at St. Ives. If they could only succeed in that, these long-line fishermen would have no further opposition. It is a downright monopoly that they desire and nothing else. I have seen a paper published by some one or other in which he wants to have all the trawling put a stop to, and whoever he is I think he ought to have his ears cut off.

18,813. When you have been trawling off this ground, have you ever seen as many as 40 sail of boats trawling on the same ground?—Yes.

18,814. Are you obliged to keep pretty much in each other's track?—Sometimes we get foul of one another. One may want to get ahead of another. Sometimes I have seen 60 vessels towing their trawls off Looe, so near together that they could halloo from one to the other. Now if a sovereign had been at the bottom of the sea when they were trawling over it one after the other I think it would have been picked up, let alone spawn.

18,815. Under such circumstances did you ever find that the headmost vessel caught more fish than the sternmost?—Perhaps they do sometimes. They think they do catch more when they are first; but sometimes I have seen the sternmost vessel get the most fish.

18,816. Then you do not think it makes much difference whether a boat engaged in trawling is fishing first or last?—I would rather have the headmost berth. It is the same in that as in all human nature, we all like to be first. But the boats a little further astern and even the sternmost often come better off.

18,817. Having known the fishing ground you speak of for 40 years are you able to say whether there has been any falling off, or whether there is still as much fish now as you were in the habit of getting in your early days?—There is as much now as we used to get, but it varies at times. I can honestly swear to the truth of what I say, and I never swear to a falsehood. At Brixham during the last two months they have had great takes of fish. That is the place from which all these men have gone who have gone down to the northward and who they say have caught all the fish on the coast. They are the men who have gone to Hull where there are now about 300 vessels. The long-line fishermen there say that they have caught all the fish on their own coast and that they have killed all the spawn. Now at Brixham within the last two months they never had more fish than they have been taking. There is an old saying that it is of no use to carry coals to Newcastle. But a few months ago a Brixham vessel came in here with a very large quantity of hake, and the consequence was that it knocked the price of that fish down to a shilling a basket.

18,818. You have been trawling here for a number of years?—Yes.

18,819. Then I presume that you know most of the trawl owners?—Yes.

18,820. Is it a common thing for a man to begin life as a fisherman working on board a trawler, then by-and-by to save money and get a share in a trawl boat, and ultimately to become the owner of a trawler is that a common occurrence here?—Some of them do it at times, but it depends on perseverance. He is a very lucky man who gets on in that way and succeeds in getting his own vessel; he must be a very industrious and persevering man. I never saw a lazy man in my life that was accounted a lucky man. A man must persevere, and then he stands a very good chance of doing well. At this very time there are many men who will get a good living while others will not.

18,821. Are the owners of the trawl-vessels here for the most part fishermen themselves, or do they live on shore?—There are a great many vessels owned by fishermen, but there are many of the owners also who live on shore.

18,822. Are they people who have saved money and invested it in trawlers?—Yes.

18,823. (*Mr. Lefevre.*) Are they people who have saved money in their professions, and put it in trawlers?—Yes, and I believe that they are very sorry for having done so. I think there is a gentleman now present who will quite agree with that.

18,824. (*Professor Huxley.*) Is he sorry that he has invested his money in trawlers?—Yes, I believe he is.

18,825. Why does he regret it?—Because they have not paid their way. It requires a fisherman to make a trawl-boat answer, and he should be a young man also. If he is a fisherman, and is steady and persevering, he will get on, and probably obtain part of a vessel. By-and-by he may get one or two of his own, but that is the extent to which he goes, and as he gets old he will find that his profits will diminish. I do not think there is anyone who will ever make a fortune by trawling alone.

18,826. One man whom we examined at Brixham stated that most of the wealthy men about Brixham had made their money by trawling?—I do not think they made it by trawl-net fishing.

18,827. If the number of your trawl-boats has increased from 40 to 60 within the last 40 years, and the expense of the vessels has doubled, the money must have come from somewhere?—Yes, but during the last few seasons we have had very bad years. During the last winter we have lost great quantities of fish in consequence of calms. Our boats are not like steamers. A fisherman must have a wind in order to enable him to tow his net. Then again, we are liable to meet with heavy gales; there has been a gale recently, and a great deal of damage has been done by it. We cannot fish in a heavy gale any more than we can fish in a calm.

18,828. Do you think that the great drawbacks to trawling here have arisen from the weather?—Yes, I do.

18,829. And not from any falling off in the supply of fish?—No, I think we have suffered more injury from the weather. If we had had weather, I believe

we should have been able to have got as much fish as ever we got.

18,830–1. (*Mr. Lefevre.*) Are you yourself the owner of trawl-boats ?—Yes.

18,832. How many have you ?—We are two brothers and two sisters-in-law, and we have 10 vessels altogether engaged in fishing among the four of us.

18,833. Did you begin life as a sailor ?—Yes, I commenced as a fisherman.

18,834. And did you save money ?—Yes, I got on by perseverance in the first place ; then, after I got one vessel, I got more by buying and running the fish into market than I ever did by catching them. I used to take the fish to other markets where there were railroads.

18,835. I believe you do not go to sea now ?—No, I do not.

18,836. How long is it since you have been to sea ?—I have not been to sea for two or three years, but I have been a pilot for some years.

18,837. Do you find that you make a good profit by your trawling ?—There are some of the vessels we have that do not pay their way, but then again we have others that do.

18,838. Do you find that the large boats pay better in proportion to their size and cost than the small ones ?—Yes, we can always command better crews in large vessels.

18,839. Do you pay by the share ?—Yes, the money goes in seven shares ; the master gets one and a half.

18,840. How much does each of the men get ?—Each of the two men get a share ; the boys' shares belong to the owner.

18,841. What share goes to the owner of the boat ?—Three shares, so that if they get 7*l.* three shares out of that will go to the vessel or to the owner of the vessel. I have known many a man leave a small vessel in which he had the skipper's berth, and go as second hand in a larger boat.

18,842. Do you find that the large boats catch more fish than the small ones ?—Yes, they have a larger beam, and they can stay out in worse weather. If we were forced to have a beam of 38 feet and a smaller boat, it would do us very great injury. Everybody now-a-days is for improvement, and I think it would be very hard if the fishermen were to have restrictions placed upon them.

18,843. Do you think it would be unadvisable to be restricted to a 38-feet beam ?—Yes, it would do us great injury. I think it would be very unfair to say that I with a large boat should not have a larger beam than another man with a much smaller boat.

18,844. Do these men you speak of mainly confine themselves to fishing off the harbour here ?—Yes.

18,845. Do they fish in Whitesand Bay ?—Yes.

18,846. And in Bigbury Bay ?—Not often.

18,847–8. Do they ever go to Start Bay ?—Never. A Plymouth fisherman is a home fisherman ; he seldom goes anywhere else.

18,849. Do your fishermen fish in the night-time ?—If there is no wind in the bay they do, but in the summer time they will try the hook to catch hake.

18,850. Do they catch the most fish by night or by day ?—At night, if there is any wind, they will catch hake, which swims at the bottom.

18,851. Do you catch a different kind of fish at night from that which you catch in the day ?—Yes.

18,852. I understood you to say that it is against the interest of the fishermen to go into the bays to fish ?—Yes, I think it is greatly against their interest to go into Whitesand Bay. They catch there a great deal of small turbots and small soles.

18,853. Do you think that the catching of these fish diminishes the fishing generally ?—No, I have not observed any diminution, but if they were not taken when they were small they would become bigger, and we should catch them then when they were really worth selling. I have often heard a fisherman say, when he has brought up one of these small fish alive, "Heave he overboard again ; we may not get him, "but somebody else may."

18,854. Then am I to understand that you do not want to fish within the headlands ?—No, I do not.

18,855. Do you think the trawlers generally would not object if they were prohibited from doing so ?—I do not think they would object.

18,856. And it would be the same with regard to Whitesand Bay and Bigbury Bay ?—Yes.

18,857. Do you trawl much in the harbour, or rather in the Sound ?—Not once in a month ; not five times in the course of a year.

18,858. Do you trawl in Cawsand Bay ?—Yes, sometimes. There used to be fish in the Sound years ago, but after the breakwater was built they became very scarce, and there are not many fish to be found in the Sound now.

18,859. Do you think that trawling has had anything to do with the diminution of the fish in the Sound ?—No.

18,860. Have you ever heard any complaint of the fish having fallen off in Whitesand Bay and Bigbury Bay ?—Not at all ; sometimes they can go and get fish there, but at others they cannot.

18,861. Do you observe that you catch a larger proportion of fish at particular seasons in these bays ?—No, I have never observed that myself, but I never fished but once in Bigbury Bay in my life.

18,862. Do you think any difference is made by the particular time of the year at which you fish in the bays ?—No, I think if we were restricted from fishing in the bays some injury might be done. There are bays where very fine fish are constantly caught ; for instance, there is Whitby Bay and Rye Bay.

18,863. Do you know anything of the trawling in Start Bay ?—No, I never was trawling there. I have laid there at anchor, but I have never been trawling there.

18,864. Do vessels come from a distance to fish here ?—Yes, I think we are pestered more at Plymouth than at any other place.

18,865–6. Where do the boats come from ?—From Brixham and from the west.

18,867. Do any Frenchmen come here ?—Yes, at times.

18,868. Do they fish in-shore or more out at a distance ?—They fish in a line from Mewstone up to Start Head ; they are not engaged in trawling, but they fish upon the rocky ground.

18,869. Do they ever come here to fish for mackerel in the night time ?—Yes.

18,870. Do you come across their nets when you are fishing near them ?—At times ; not often.

18,871. In fishing off the Start do you ever come in contact with the Brixham trawlers ?—We may get foul sometimes, but not very often.

18,872. (*Professor Huxley.*) Did I understand you to say that your impression was that trawling may still be made to pay well if carried on by a man who is a trawler ?—Yes.

18,873. It would pay a trawler to work his own vessel ?—Yes, I think any young man, with perseverance and industry, if he has a trawl of his own, will make a living and pay his way.

18,874. But on the other hand you do not think it is a good speculation for persons who are not fishermen themselves, and who would have to pay others to work for them ?—No, I do not think it would pay them.

18,875. Like all other businesses, if a man knows something about it he is more likely to get a return for his money ?—Yes.

18,876. (*Mr. Lefevre.*) How far south do you trawl ?—It depends on whether there is scarce fishing. Seven leagues is generally as much south of the Eddystone as ever we go.

18,877. Do you find rough ground if you go further off ?—The further we go off we get faster to the bottom. It may not be all rock, but if we go much further out we are apt to tear our craft.

18,878. What is the greatest depth of water that you fish in ?—About 40 or 45 fathoms.

18,879. Not deeper than that ?—There is not much

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deeper water than that across from here to the French coast. If we go further off, although the ground is rough, we get great catches of fish. We think that the fish go there and spawn, because they can find quiet places there for that purpose.

18,880. Do you think that the fish spawn out in the deep water?—Yes, I think the deep-sea fish spawn in the deep water.

18,881. Do you think that the young fish come inshore?—I have seen small soles and turbots in Whitesand Bay, I have seen them very small, but I have not seen any other small fish to speak of.

18,882. Do you throw overboard any of the small fish you catch?—Sometimes we throw over little gurnets. They are quite fit to eat, but it would be a great trouble to clean them, and therefore we throw them overboard.

18,883. Do you throw overboard any large quantity of that fish?—No; just a basketful at times. There is no great abundance brought up in our trawls, and of spawn I have never seen any at all. I have seen a great deal of spawn inside the herring boats.

18,884. Have you ever sold any small fish for manure?—No, never.

18,885. (*Professor Huxley.*) Can you tell me whether there is any particular difference between the price you get now, on the average, for your trawl-fish, as compared with what you got for it 20 years ago?—No; it depends a great deal on the quantity we catch; 40 or 50 years ago the fish were quite as dear as they are now, sometimes they were dearer then. With regard to soles, we had a particular size at which we sold them; we had a measure of 12 inches. If they were 12 inches long they were called tailed soles, and they would fetch 3*s.* a pair. Turbots were all sold by weight. I have seen 6*d.*, 8*d.*, and even as much as 2*s.* 6*d.* a pound given for turbots four years ago. Now they are sold by hand. Two or three months ago we had great quantities. Each boat would catch five, six, eight, or ten, and one boat had eleven in one day, and then they did not average more than 3*s.* each. With regard to doreys, there were quantities caught here two months ago—greater quantities than have been caught within the memory of the oldest fisherman. Of course the consequence was that they sold very cheap.

18,886. Then, if I understand you rightly, the average price you get now, or rather the average price you have got for fish during the five past years is not sensibly greater than it was for the five years taking 20 years previously?—Not at all; but there are exceptions. For instance, the fish have made more this morning on the quay than they generally do make. Turbots have brought more than they have brought for years; they have made as much as 17*s.* or 18*s.* apiece. Of course the buyer knows the state of the market in London. He can soon get a touch of the telegraph wire and know everything that is taking place, and whether he would be justified in giving a high price for the fish. All I know is, that the turbots this morning have been sold for from 17*s.* to 18*s.* apiece.

18,887. We are not interested in these exceptional prices; all that concerns us is the average price?—I should say that the average price is not greater than it was when I was a boy. When it is higher it is merely owing to some difference in the catch. Bad weather, for instance, makes the fish sell higher. If they are unable to fish out from Hull, if they have bad weather there, we soon hear of it, and then we are sure to have good markets; but taking it altogether, on the average it does not bring us more in than it did in former times, and sometimes not so much. It has only been within comparatively recent years that there have been so many vessels fishing from Hull.

18,888. (*Mr. Lefevre.*) Do you think that every trawler brings in as many fish as he did 20 years ago or more?—Taking a fair day's fishing, he may bring in rather more. But of course there are a great many more boats, and altogether they bring in a considerably larger quantity.

18,889. The boats have also doubled in size?—Yes. If the boats that existed in former years, even when I first started fishing, had been in the habit of catching as much as they do now they would not have been able to get the fish to the market. Now we can send it by train, whereas they could not have sold it then at all.

18,890. Are your prices more equal now than they were formerly?—Yes, I think they are.

18,891. You do not think that each boat brings in more than a boat did 20 years ago?—No; but still a great deal more comes ashore altogether.

18,892. Notwithstanding the fact that the boats have increased in size?—Yes, notwithstanding that, they do not catch more than they did then, although they are so much larger. But ours is naturally a small fishing ground. We are continually fishing over that ground, 50 or 60 of us at a time. Of course all of us would hardly take as much fish per boat as only 10 fishing there formerly would take. But still there is a great deal more fish brought ashore at Plymouth than there ever was.

18,893. Do the vessels of a larger size stay out for a greater number of days than the smaller ones?—No.

The witness withdrew.

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THOMAS FOSTER, sen., called and examined.

18,894. (*Professor Huxley.*) Have you been a fisherman from this port?—Yes.

18,895. For how many years?—For 47 years.

18,896. What kind of fishing have you practised?—Always trawling.

18,897. You have never been a drift or line fisherman?—No.

18,898. Have you heard the evidence of the last witness, Mr. Stibbs?—Yes.

18,899. Do you generally concur in the statements made by Mr. Stibbs?—Yes, I do.

18,900. Have you any comment to make upon the evidence which he has given us?—No.

18,901. Then you agree altogether with what he stated?—Yes.

18,902. There is nothing of any kind that you wish to add?—Nothing more than that I think the boats ought to be kept out of Whitesand Bay. I believe that the turbots go in there to spawn.

18,903. Do you think that the working of the trawl in Whitesand Bay is injurious to the fishing?—Yes.

18,904. Do you think that it is injurious to all the fishing as well as the trawling?—Yes.

18,905. What is it that renders it injurious?—I think it does a great injury in consequence of the boats catching small turbots and small soles. The shrimp trawlers also hurt the fish as much as anything. They catch a terrible lot of small fish, sometimes no longer than your thumb.

18,906. Is there anything else you wish to add?—No.

18,907. (*Mr. Lefevre.*) Do you find that the summer or the winter season here is the best for trawling?—They are both pretty much alike.

18,908. You have never observed any great difference in that respect?—No.

18,909. Have you noticed any falling off in the number of fish caught by the trawlers?—No. The fish come in regularly in their season, the same as our hakes and gurnets. They come in quite right in the season.

18,910. Do you think that each trawl catches as many fish as were caught by a trawl-boat, say 10 years ago?—I think it does.

18,911. Then the fishing in Whitesand Bay has not caused any diminution in the quantity of fish

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caught?—I think they have not been there so much during the last two years, and during that time there have been a great number of turbots caught.

18,912. Have more been caught since the trawlers went less into Whitesand Bay?—Yes.

18,913. Is there a great deal of shrimping carried on in Whitesand Bay?—Yes.

18,914. And in Cawsand Bay also?—Yes, but not so much. From Rame Head down to the Wrinkle shrimping is carried on, and I think all along that way is a nursery for turbots.

18,915. Have you trawled in the Sound?—Yes.

18,916. Do you agree in the statement that the number of fish caught in the Sound has diminished?—No, I have not observed that.

18,917. You do not catch less fish there?—No.

18,918. Do the trawl-boats go there as much as they did formerly?—Just about the same.

The witness withdrew.

WILLIAM FREDERICK COLLIER called and examined.

W. F. Collier.

18,919. (*Professor Huxley.*) Are you engaged in the fishery here?—Ours is a very old house in Plymouth, and my father before me used to hold large shares in the pilchard fisheries both in Cornwall and Devon.

18,920. In the seine fisheries?—Yes. We used to export the pilchards to Italy. The shares in these fisheries have descended to me, but none of the profits. I only wish to remark that I have had shares in pilchard seines in Bigbury Bay, Whitesand Bay, at Looe, and at Menabilly, but they have had no catches there of any great importance for years. The catches have begun to diminish very much to the eastward. We first lost the fish in Bigbury Bay, then in Whitesand Bay, and lastly in Menabilly. At St. Ives there are still very large catches, but as we come eastward they have gradually fallen off. I have heard my father say that in the olden days the catches of pilchards to the eastward were enormous. Very large quantities indeed were caught in Bigbury Bay.

18,921. Have you any notion of the cause of the falling off?—Not the least.

18,922. Since your father's time have the drift-net fishers become more numerous?—Yes. All the fishermen below have drift nets, and they always have had I think. I do not know what is the cause of the falling off.

18,923. Do you happen to know on what part of the coast the drift-net fishing first begins, westward or eastward?—No.

18,924. You have never yourself had property in drift nets?—No.

18,925. The pilchard seines are very expensive, are they not?—Yes, they cost a great deal.

18,926. What is the average cost?—I cannot tell what the cost of a new one is. I have only had to deal with them since they have been old. But I think you will get all the information you require in reference to the pilchard fishery in Cornwall. I believe that the whole plant of a pilchard fishery is very expensive indeed. There are two or three large seines, and the tuck net, and two or three large boats required.

18,927. Do you think that the total supply of pilchards altogether has fallen off?—Yes, because the quantity caught with the drift nets cannot be compared with the quantity caught by the seines. One inclosure by the seines has filled 20,000 hogsheads.

18,928. Are you concerned in the exportation of pilchards now?—I have been within the last six or seven years, but am not now.

18,929. Have the pilchard fisheries become a bad property in consequence of the fish having fallen off?—Yes.

18,930. (*Mr. Lefevre.*) Have you no means by which you can account for the falling off?—No.

18,931. Do you think that trawling in Whitesand Bay or in Bigbury Bay has had anything to do with it?—I cannot give you any opinion, and I think that most of the opinions that you have had are merely guesses, and not scientific opinions at all.

The witness withdrew.

THOMAS FOSTER, jun., called and examined.

T. Foster, jun.

18,932. (*Professor Huxley.*) Are you a fisherman here?—Yes.

18,933. How many years have you been engaged in the fishery here?—About 24 years.

18,934. Have you always fished from this port?—Yes.

18,935. In what kind of fishing have you been engaged?—In trawling, and I have drift boats and long-line boats as well.

18,936. Then you are interested in all kinds of fishing practised here?—Yes, although I have myself only been trawling.

18,937. You have heard the evidence which has been given by Mr. Stibbs touching the trawling?—Yes.

18,938. Have you any comment to make upon that?—Nothing, except with regard to the length of the beam.

18,939. What do you think upon that point?—The vessels we have now-a-days would not do with a 38-feet beam. They would trawl a beam of that size so fast through the water that they would have no means of stopping it.

18,940. Then you agree with Mr. Stibbs in the conclusion he came to, that it would be injurious to the trawl fishermen to be compelled to use a 38-feet beam?—Yes.

18,941. Then if the present convention were put in force you would be sufferers?—Yes. A little vessel of 45 tons would be better off than a large one of 60 or 70 tons that costs double as much money.

18,942. Have you any particular weight for your head irons?—Yes.

18,943. What is the weight you have?—Three hundred-weight.

18,944. Three hundred and thirty-six pounds?—No, 300 pounds. We do not go by hundred-weights.

18,945. Have you ever heard of any regulation upon that point?—No.

18,946. Would you think it a hardship to be required to use any particular weight?—Yes, and I can give you my reason. Some vessels are more powerful than others in towing. Some of our vessels of 60 tons are built very fine and sharp, and they will not tow the weight so steadily as a thick full bottomed vessel will. They are therefore obliged to have an additional weight to check their progress.

18,947. If you go too fast your trawl lifts?—Yes, and the consequence is that we catch nothing.

18,948. Then I gather from what you and Mr. Stibbs have stated, that you prefer being left alone?—Yes, a great deal.

18,949. Have you any other remark to offer in reference to trawl-fishing?—I could say nothing more than what I have heard Mr. Stibbs say, except with regard to Whitesand Bay. I should like to corroborate his evidence in that respect. I think that very great injury is done by trawl-fishing in that bay.

18,950. Did you ever trawl in the Sound?—Never, except on two occasions.

18,951. What is the reason you do not trawl there?—In the first place, it is full of rocks, and they would tear our nets so often that even if we were able to get fish there we should suffer much loss by being detained.

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18,952. In former years was there more trawling in the Sound than there is now ?—I don't know.

18,953. How many drift-net boats do you own ?—Only one.

18,954. What is the size of your drift-net boat ?—About eight tons.

18,955. How many nets does she carry ? — 10 herring nets and 10 pilchard nets.

18,956. What is the length of a fleet of nets here ?—400 fathoms.

18,957. She carries a double set of nets ?—Yes.

18,958. What is the difference between the construction of a drift herring net and a drift pilchard net ?—One has a larger mesh than the other.

18,959. What is the size of the mesh of the herring-net from knot to knot ?—It should be about the size of a two-shilling piece.

18,960. Is the mesh of the pilchard net much smaller ?—Yes, it is what we call a shilling mesh from knot to knot.

18,961. Does anybody inspect your nets here ?—No.

18,962. No one ever comes to examine them ?—No one ever has.

18,963. What is your season here for catching herrings ?—We begin about November.

18,964. And how long do you continue fishing ?—We fish up to January and February. In February, or the beginning of March, we generally go away.

18,965. In what condition do you catch the herrings in November ?—They are full of spawn then.

18,966. Do they remain full fish up to February ?—Yes, but I believe they may catch them full fish to-night and the night after they may find them all shotten. Then a few nights after they will get nothing but full fish again. That has been the case here within the last two months.

18,967. Do you ever catch them full as late as the middle of January ?—Very rarely indeed.

18,968. When do they mostly begin to be shotten ?—I believe they began to be shotten last week for the first time.

18,969. Towards the end of December ?—Yes.

18,970. And is it rare to get a full fish in the beginning of January ?—Yes.

18,971. Do the herrings swim in shoals after they are shotten ?—Yes.

18,972. For any length of time ?—For six weeks, or probably for two months, according to the weather.

18,973. Are they the same sized fish as the others you have caught ?—Yes.

18,974. They are not young fish coming on ?—No.

18,975. They are the old shotten fish ?—Yes.

18,976. And they still keep in shoals ?—Yes.

18,977. Where do they spawn here ?—Between the Whit and Yealm Point is where they catch them spawning.

18,978. You say that you catch full fish sometimes one night, and that they are shotten the next ?—Yes.

18,979. Is that outside the harbour ?—Yes.

18,980. Is it rocky ground ?—Yes.

18,981. Can you trawl over it ?—No.

18,982. Do you ever get any spawn up from the bottom ?—No, none.

18,983. Is the herring that you get in the Sound here the same that you get outside ?—Yes, I think so.

18,984. Is it of the same size ?—Yes, but it becomes narrower in consequence of its being shotten.

18,985. But the fish you get in the Sound is, in your opinion, the same fish ?—Yes ; in my opinion they are all of the same length.

18,986. Are you aware of any place about here where a different kind of herring from the common one is got ?—No, I am not.

18,987. Did you ever drift for herrings in Saltash Bay ?—No.

18,988. Did you ever know anyone who did ?—I have seen them drifting there.

18,989. Do you think it is the same herring that they get ?—I don't know.

18,990. Then with regard to line-fishing ; do you own a long-line boat ?—Yes.

18,991. How many lines does she carry ?—600 or 700 fathoms of line.

18,992. How far apart are the snoods ? — One fathom, or a little more.

18,993. Where do you shoot them ? — Off the Dodman.

18,994. On coarse ground ?—Yes, where there is rocky ground.

18,995. Is that the practice of the line fishermen here generally ?—Yes.

18,996. Then, as a rule, they cannot be interfered with by the trawlers ?—No, they fish for congers.

18,997. And congers are found on rocky ground ?—Yes.

18,998. Are there any codfish caught here ?—Very rarely.

18,999. How long have you practised line-fishing ?—For three years.

19,000. Are there many line fishermen here ?—50 or 60.

19,001. Do you mean line fishermen or line-fishing boats ?—Line-fishing boats.

19,002. How many men will each boat carry ?—Some will carry only two, and others three.

19,003. (*Mr. Lefevre.*) What is the size of each boat ?—From 8 to 10 tons.

19,004. (*Professor Huxley.*) What would be the cost of a boat ?—Do you mean with the lines ?

19,005. Yes ?—About 130*l.* That is, however, without any nets.

19,006. Has the number of line fishermen increased within your experience ?—Greatly.

19,007. How many were there 20 years ago, when you began fishing ?—There were not more than eight or nine boats in Plymouth.

19,008. (*Mr. Lefevre.*) What length of ground do you fish over ?—We fish from the Bolt to the Dodman, on the rocky ground off the coast.

19,009. (*Professor Huxley.*) Do you hear any complaints on the part of the line fishermen as to the falling off in the quantity of fish they catch ?—No. My boat has brought in more this summer than she ever did before. She has brought 7, 8, or 9 cwt. at a time, which is more than she ever brought in before.

19,010. One of the witnesses whom we examined to-day has informed us that the total supply of fish has fallen off as compared with what it was 30 years ago. Is that your opinion ?—No, it is not.

19,011. What is your view of the case ?—I think there is a great deal more. I am able now to load a vessel for Cornwall with pilchards, and one for Portsmouth with hake. Last week I took 130,000 pilchards, and I also took from 200 to 300 dozens of hakes to Portsmouth.

19,012. In your experience of trawling has there been any falling off in the supply of fish within your knowledge ?—No, on the average, I think not.

19,013. Is it the same ?—I think it is about the same.

19,014. Is there any regulation in existence which you consider injurious to the fishing here ?—No.

19,015. Or is there any mode of fishing practised that is injurious ?—None that I am aware of.

19,016. (*Mr. Lefevre.*) You sent the pilchards you caught to Cornwall ?—Yes.

19,017. Was that for exportation ?—Yes, for exportation to the Mediterranean.

19,018. What bait do you use for the long-lines ?—The bait we use is squid.

19,019. Do you find any difficulty in getting bait ?—No.

19,020. Have you ever fished in Whitesand Bay with the trawl ?—Never, except on three occasions.

19,021. Have you often observed trawlers fishing there ?—Sometimes.

19,022. Do you go there in bad weather ?—No, only fine weather, and with the wind from the northward.

19,023. What is the depth of water there, taking a line from the two headlands ; what is the depth of

water in the middle of the bay ?—We can go into about 2 fathoms of water, and into about 10 fathoms.

19,024. Taking a line from the headlands, what is the distance to the centre of the bay ?—Not a mile.

19,025. Have you yourself ever observed that a considerable number of small fish have been caught there ?—Yes, I have.

19,026. Are there any mackerel among them ?—No.

19,027. Or any herrings ?—None.

19,028. What are they mostly ? — Small turbots, small brills, and small soles.

19,029. Do you agree with the previous witness, that a considerable number of young fish are caught by the shrimpers ?—Yes, I have seen them take them up.

19,030. What number of shrimpers are there along that bay ?—I don't know.

19,031. Are there a considerable number ? — I cannot say. I don't know. And with regard to spawn, I have seen more spawn last week in my herring boat when she came in than I have ever seen in all the trawlers I have been on board of in the whole course of my life.

19,032. Do you consider that it would do any damage to the trawlers if all of them were prevented from trawling within the bays on this coast ?—No, I think it would be of great advantage to them.

19,033. Do you think they would catch better fish outside than they do now ?—Yes, I think it would benefit them very much if they were prevented from fishing in Whitesand Bay and Bigbury Bay. They ought to be kept out of these bays.

The witness withdrew.

THOMAS JONES STEVENS called and examined.

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19,034. (*Professor Huxley.*) You are secretary to the Fishery Club here ?—I am secretary to the Trawlers' Association.

19,035. You are therefore well acquainted with trawling here ?—Yes, pretty well.

19,036. How many years have you held that post ?—About 20 years.

19,037. Is it a voluntary association of trawlers ?—Yes, it is a voluntary association.

19,038. Do all the trawlers enter into it ?—No, not all.

19,039. Do the great majority ?—Yes, the majority do.

19,040. Has that always been the case since the association was established ?—Yes.

19,041. Then practically, you represent the trawlers here ?—Yes, practically I do. There are certain restrictions that keep out certain parties, but the large majority belong to the association.

19,042. What is the qualification for becoming a member of the club ?—Belonging to the port of Plymouth, and having served their time out of the port—being fishermen, and men who have served their time out of the port.

19,043. Then supposing a landsman in Plymouth had saved money, and invested it in trawling, he could not become a member of your association ?—No, there is an objection to that.

19,044. So that the whole of your members are practical fishermen ?—Yes, they are practical fishermen without exception.

19,045. What was the number of members that belonged to your club when you first knew it ?—About 40.

19,046. How many are there now ?—There are at least 70.

19,047–8. Do all the vessels which belong to your club fish from this port, or go to other ports and fish from thence ?—They fish from this port.

19,049. The amount of capital invested in the club, I presume, really represents the capital invested here ? Yes, it represents a large portion of it.

19,050. At a rough guess, what was the amount of capital invested in trawling 20 years ago by the members of your club ?—It would be something like 20,000*l.*

19,051. And now what do you estimate it at ?—Double.

19,052. At least double ?—Yes.

19,053. Is that on account of the increased number of vessels, or on account of the increased tonnage ?—It is partly on account of the increased tonnage, and partly on account of the increased number of vessels.

19,054. Has the expense of the nets increased of late easy ?—Yes.

19,055. So that there has been a constant investment of capital from some source or other since your first acquaintance with the club began until the present time ?—There has been.

19,056. Then it may be imagined that the pursuit of trawling as a business has increased here ?—It has paid the fishermen, but not those who are not practically acquainted with fishing. Some parties have speculated in fishing, and have not succeeded.

19,057. Is that owing to the nature of the employment itself, or from persons going into a business which they did not understand ?—I think it arises from both causes.

19,058. Is the yield of fish not as great as it was formerly ?—Sometimes I have heard complaints that the yield of some particular kinds of fish has not been in such great abundance as before.

19,059. Suppose you take an average of years, one year being a bad year and one year being a good year, is it your opinion that on that average of years there has been any particular decrease ?—I don't think there has been any particular decrease. There may have been a decrease in some particular kinds of fish, but not as a whole.

19,060. What is the kind of fish that has fallen off ?—The better class of fish. The megrim, for instance, has been deficient. The large kinds of soles have not been so abundant, and turbots are not caught so frequently.

19,061. On the whole, contrasting the yield of the last five years with that of the first five years in which you were connected with the club, do you think there has been any absolute falling off in these kinds of fish ?—No, I do not think so. Bearing in mind the number of trawlers there are now in excess of the number that were in existence when I first became connected with the club, I do not think that the yield has decreased on the whole.

19,062. Has the yield per boat decreased ?—I do not think it has—not per boat ; but there may have been some vessels, as is always the case, that have been more unfortunate than others.

19,063. There is another element that enters into the trawling trade, namely, the condition of the weather. Do you think that that has much to do with the fishery ?—If the weather is very severe they cannot fish, and if that severity of the weather continues for some time it must necessarily affect the entire year's work.

19,064. On the average, has the weather been favourable for fishing during the last 10 years ?—The weather has been very severe. Indeed there seems to be quite a change of the seasons.

19,065. Do you reckon that as an important element in depreciating the value of trawling property—do you think that that has more to do with it than the decrease in the supply of fish ?—The weather has some little to do with it, but occasionally a want of success prevents persons from engaging in the fishery. Sometimes, in some seasons when the success is not so great as in others, the fishermen will go away to other parts of the country.

19,066. We have been told that it is habitual for the trawlers here to work over a comparatively narrow area of ground, about 30 miles long by about 9

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wide: is that so within your knowledge?—I believe that a piece of ground of that extent is termed the usual fishing ground, and that they generally confine themselves to it; but the area they go over depends on the state of the weather. If the wind is in one position, then they go along as far as they can in one direction, but if it is a contrary wind then of course they go in another direction, so that the area they fish over frequently varies, and may occasionally be enlarged.

19,067. But on the average, will that be a fair statement?—Yes.

19,068. You spoke just now of a certain falling off in different kinds of fish. Has that falling off in any year been so great that you would be justified in speaking of the exhaustion of the fish on that ground, or of anything approaching exhaustion?—I am not speaking practically, but only from hearsay. I have heard the fishermen complain that there has been a decrease in the number of the megrims that they catch, and also in the larger kinds of turbots and soles. I do not consider it an exhaustion, however, because although in some weeks they may not take any, in others the fish will be abundant.

19,069. Is your association an insurance society?—Yes.

19,070. (*Mr. Lefevre.*) And is it a benefit club?—It is established on the same principal as the Brixham Society.

19,071. Is it a benefit club?—No, it is not exactly a benefit club, except that the fishermen are assured from total loss, and they assist each other in the event of an accident arising. There is no doubt a certain benefit arising from belonging to it.

19,072. (*Professor Huxley.*) There is one question that I should like to put to you, but you can answer it or not as you like. It was answered without hesitation at Brixham. I wish to know if the trawling vessels insured in your society are to any extent mortgaged?—You can always acertain that at the Custom-House. I should say myself that there is not one per cent. of the property of the Plymouth trawlers mortgaged. My reason for being able to answer that question so promptly is this; there is a regulation in our club which prohibits a tradesman from becoming a member of the club; hence it is that a vessel partly owned by a fisherman and partly owned by a tradesman is only partly insured by the club, namely, the fisherman's part.

19,073. Therefore you would be cognizant of the fact if a vessel were mortgaged?—Yes; it would be necessary to present papers to us to that effect, because if there was any mortgage which had not been made known to us, and the vessel was lost, the insurance would be vitiated.

19,074. (*Mr. Lefevre.*) Do you know whether any money has been borrowed upon them, not in the form of a mortgage?—That I am not prepared to say.

19,075. (*Professor Huxley.*) You are unable to say whether money has been borrowed upon the trawling vessels that does not appear in the shape of a mortgage?—No; but as a rule I think the property is in the hands of none but fishermen. It may so happen that a man may occasionally be so situated as to be compelled to require the aid of a friend, but as a rule the property belongs to the fishermen themselves.

19,076. Do you think it a common occurrence here for the fishermen by degrees to save money and then become the owners of trawl-boats?—That depends in a great measure upon their intelligence and perseverance.

19,077. Is it of common occurrence here?—Yes, I believe it is.

19,078. I ask this question in order to ascertain whether the yield of fish has been tolerably constant, because it all comes to that in the long run?—There does not appear to have been any very great decline.

19,079. If the fishermen are prosperous and there are no mortgages upon their vessels, the money must have been made up from the fish in some way or other?—Yes.

19,080. Have you any knowledge of the price of fish?—Only as a consumer.

19,081. Do you know whether it is higher than it was formerly?—Yes, I think it is higher.

19,082. Is it much higher?—There is no more difficulty now in obtaining the better class of fish than there was 10 or 12 years ago.

19,083. Are you of opinion then that the fishermen obtain more money for particular kinds of fish than they did formerly?—Yes, I think so.

19,084. To what do you ascribe that?—To the all absorbing influence of London.

19,085. Do the fish go up by rail to the London market?—Yes, almost every description of fish. Owing to the facilities afforded by the railway every kind of fish is now sent to London.

19,086. (*Mr. Lefevre.*) Was not that the case 10 or 12 years ago?—Decidedly not.

19,087. (*Professor Huxley.*) It has only been the case since the railway afforded such facilities?—Yes. First we had one railway, and then we had a competing railway, and the rates have been lowered in consequence. Persons have been induced to come here and purchase the fish in order that it may be sent to London by rail. Only within these last 10 days I have seen what I never saw before—that is, herrings sorted in bulk in a railway truck and sent to London.

19,088. Were the fish sorted in travelling, like the letters in a railway post office?—No, it was done at the railway station. They are sorted as they are brought from the quay, and sorted as they are put into the trucks. A few years ago they would never have dreamt of sending herrings to London.

19,089. For what reason—because they would not have paid?—Yes; besides, 15 or 20 years ago the price of fish in London was fabulous, in consequence of the difficulty of getting it there. But now, owing to the different railways, it is brought from all quarters. There is a much greater demand, and the price is less.

19,090. We have had it stated to us that the absolute quantity of fish brought into this port is less than it was 25 years ago. Is that your opinion?—No, it is not. Considering the number of vessels that have been employed, I believe it is possible that each vessel does not take as much fish in proportion as it did in former years, but I believe the aggregate quantity of fish caught will be much about the same.

19,091. Do you think there has been an increase in total amount?—I do not think there has been much increase, and there has not been much decrease. The fishing, from what I have been given to understand, is about the same; but considering that there are now 80 vessels at work where previously there were only 40 working, it is evident that each one of the 80 does not obtain as much fish as each one of the 40 did previously. At the same time I believe the aggregate quantity taken by the whole number is about the same.

19,092. So that the total amount of fish caught by each vessel must have been diminished nearly one-half?—Yes, I think so.

19,093. Under these circumstances, as the amount of money made by fishing here has not decreased, do you attribute that to the rise in price?—In a great measure I attribute it to that.

19,094. To the rise in price?—Yes, to the advance in the price of fish and the greater facilities we have for sending it away.

19,095. The quantity of fish taken has remained as nearly as possible the same?—I am not prepared to say that exactly. My intercourse has been more of an official than of a practical character. But from what I hear, and from what I gather from the fishermen at our various meetings, I do not think there has been much decrease. There has been, as I said before, some decrease in certain classes of fish, but that decrease has been compensated for by an increase in the rougher sorts.

19,096. One witness stated that each trawl would bring in half a ton of fish at a time. As there are 80

trawls, that would make 40 tons of fish. But suppose we call it 30, will that be about the quantity caught in a day?—I have seen the quay lined at times with trawled fish in hampers, baskets, or maunds; but the catch frequently varies. Sometimes there is only half the quantity. Sometimes it may be double.

19,097. Suppose the vessels 20 years ago, when there were no such means of communicating with London and distant places as there are now, obtained the same quantity, namely, 30 or 40 tons a day, how was it distributed or got rid of?—Principally in the locality. The better kinds of fish were always sent away, they would always realize larger prices in the inland towns, and they would be posted to Exeter, and thence be taken by rail.

19,098. Do you think, in the absence of railways, the means of distribution were sufficient to take from this port 25 or 30 tons of fish a day?—I think so. I think the consumption here was greater than it is now.

19,099. The consumption in the port itself?—Yes.

19,100. To sum up what you have stated to us, your meaning is, that the quantity of fish remaining the same, the distribution has differed?—Yes.

19,101. And the price has differed?—Yes.

19,102. Do the fishermen with whom you are brought into contact seem to desire any modification or alteration of the existing laws, or is there anything that they complain of for which they desire a remedy?—I do not think that they complain of anything; but I have heard them occasionally say that it would be better for their own and for the general interest if there was a sort of prohibition to prevent them from trawling within the bays.

19,103. But is not that much in their own hands. Supposing your trawling club thought fit to prevent them, would they not do so?—They might pass a resolution, but would it be binding?

19,104. But could it not be done by common consent?—No. The association is established for a particular purpose—for insuring against loss—not to regulate the mode of fishing.

19,105. It is not in the nature of a trades' union?—No, it is merely for insurance purposes.

19,106. (*Mr. Lefevre.*) Did you sustain any severe losses last year?—No; last year we were particularly free from loss.

19,107. I thought you said the weather had been bad?—It has been bad, but it was of such a nature as to prevent the vessels from going out to sea.

19,108. The vessels from this port do not go to the east coast?—Very seldom. They have gone there occasionally, but I think the Hull people have generally drawn their resources from Brixham.

19,109. What is the total number of fishermen at Plymouth?—There are somewhere about 80 trawlers, I believe.

19,110. And how many men to each?—Five, including three men and two boys. Besides the trawlers there are a large number of hooking boats, of which I know nothing.

19,111. You can only speak of trawlers?—Yes.

19,112. Is it your opinion that the trawlers on the whole are making money?—I imagine as a rule that the fishery is profitable.

19,113. Have many boats been sold out of the club during the last year or two?—There have been some sold.

19,114. Have more been sold than usual?—Not more than usual. They have been sold because they have been superseded by a better class of vessels, larger and more powerful.

19,115. What is the average tonnage of the vessels now?—About 35 or 40 tons. I am speaking of the registered tonnage, not of builders' tonnage.

19,116. Are there still many vessels of the small class left?—There are some of the old boats still existing.

19,117. How many of them?—I should think about one-fourth. There will be from one-fifth to one-fourth of the old boats. They belong to the owners of vessels who have added to their vessels by a better class of boats, and yet are still working the small ones.

19,118. Of your own knowledge do you know anything of trawling in Whitesand Bay, and the bays generally?—No, except that I am constantly going on to the quay, and I hear complaints at times of the fishing in the bays.

19,119. Have you observed on the quay any large quantity of small fish?—No, the boats here appear to have been particularly free from bringing in small fish.

19,120. Do the boats throw any overboard, or do they bring in all they catch?—I believe they throw none overboard. Occasionally, as the trawl is lifted, there may be some thrown overboard that are not considered fit to be brought into the market, but as a rule there is no considerable quantity thrown overboard.

19,121. Is there a sale in the town for small fish?—No, there is no sale in the town for them.

19,122. (*Professor Huxley.*) Have you any acquaintance with the drift-net fishing?—No, except I am sometimes brought into connexion with them. I have held no correspondence with them.

19,123. Is there any drift-net fishing here carried on by strangers?—I think not, unless there may be some mackerel-fishing in the season.

19,124. That will come under the head of drift-net fishing?—Yes, although the number of herring boats and mackerel boats is comparatively small, there are immense numbers that come here in the season following the shoals of fish. Sometimes the fish strike the the shore at one place and sometimes at another Although there are very few vessels that fish for mackerel out of Plymouth, at times we have 200 or 300 mackerel boats off here.

19,125. (*Mr. Lefevre.*) Are immense quantities of mackerel brought here at times by other boats?—Yes. Our facilities for getting the fish away from here are so great that they are brought up from the westward of us. If the fish strike in eastward of us, between Exeter and here, they are brought back to this port. The boats make this port their head quarters. Although we have a large number of trawls, and some herring, mackerel, and pilchard boats of our own, yet in the season we sometimes have 200 or 300 from Hastings, Yarmouth, and other places fishing off here.

19,126. Have there been more within the last few years than there were previously?—Yes.

19,127. They have increased in numbers?—Yes. The seasons vary very much. Sometimes the fish strike in in November, sometimes not until January. Sometimes they strike in to the eastward of us, and sometimes at the Land's End.

19,128. The returns of fish sent off by rail from here would not altogether give us a notion of the quantity of fish caught by the trawlers and the line fishermen off Plymouth?—They would give you a very good idea, I think.

19,129. But they would also comprise an enormous quantity of herrings and mackerel caught by other boats?—Yes, but being fish of a perishable nature they must be fish that have been caught within a short distance of the port. As this port is very accessible, and easily made at all times, and a very easy port to go out from, these fishing boats make it their place of resort, although they do not really belong to the port of Plymouth. Perhaps in the course of a season we may have as many as 400 sail of boats from Cornwall, Brighton, Hastings, Yarmouth, and other places.

19,130. (*Professor Huxley.*) The returns from the railways would all relate to the fish caught within the fishing district off this port?—Yes, although it might not be fish caught by Plymouth vessels.

The witness withdrew.

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WILLIAM SAMUELS called and examined.

19,131. (*Professor Huxley.*) Have you been a fish buyer here for many years?—Yes, for 20 years.

19,132. Have you noticed any considerable modification or change in the supply of fish brought to the market here?—No; sometimes there has been plenty, and sometimes it has been scarce, and that has been the case ever since I have been a fish buyer.

19,133. Has the number of fish buyers at Plymouth increased during that time?—Yes, fivefold, if not more than that.

19,134. There are five times as many as there were formerly?—Yes, and ten times as many. They come in here from all parts of the country to buy.

19,135. Do you think the total amount of fish supplied to the market has remained the same, or has it increased during the 20 years you have observed the market?—I think it has increased.

19,136. If there are sufficient fish now to supply five fish buyers where only one was supplied before, that, I take it, must be a sign of increase?—Yes.

19,137. Do you think the increase has been very important?—Yes, it must have been so, seeing that it was only enough 20 years ago to support five, and now it is enough to support ten times as many.

19,138. Have you been in the habit of buying all sorts of fish?—Yes.

19,139. Trawled fish and hooked fish?—Yes, both trawled and hooked fish.

19,140. Do you prefer one kind to the other?—No, I take whatever I can get the most out of.

19,141. Do your customers prefer trawled fish to hooked fish?—I have different customers, and some require hooked fish, and some trawled fish.

19,142. That is because they are different kinds of fish?—Yes.

19,143. But if they were the same fish, how would it be then. Suppose you had a fish caught by the trawl and a similar kind of fish caught by the hook, which would they prefer?—I do not think they could tell the difference.

19,144. Can you tell a hooked fish from a trawled fish?—Yes.

19,145. How?—Sometimes they are brighter.

19,146. Do you mean that they have more slime on them?—Yes.

19,147. Will your customers pay more for hooked fish than for trawled fish of the same kind?—No.

19,148 Have you had occasion, when the fish were brought in by the trawlers, to refuse to buy any quantity of them on account of their being damaged?—Sometimes there may be a broken one at the bottom of the maund, but it is very rarely the case.

19,149. Did you ever refuse the whole on that account?—No, never.

19,150. You had never any experience of that kind?—No.

19,151. Surely it is a kind of thing you would have taken notice of if it had occurred?—Yes, but I never had occasion to refuse a whole maund; I have frequently refused one or two fish, but never a whole maund.

19,152. Do you notice any difference in the supply of different kinds of fish; are there, for instance, fewer soles than there were formerly?—I think this year has been the scarcest we have known for a number of years past, but it has been owing principally to the weather. Sometimes it has been blowing a gale of wind, and sometimes there has been a calm, both of which are injurious to the fishing. The weather has been very unsettled during the last 12 months.

19,153. With regard to the price you pay for the fish, do you pay a higher price now than you did 20 years ago, taking one kind of fish with another?—That is according to the quantity caught.

19,154. If a large quantity comes in, you buy cheaper?—Yes.

19,155. Taking the year round, do you pay more this year, 1863, than you paid in the year 1840?—I think we have done so, and I will tell you why; owing to the weather fish have been scarce. Turbots, soles, and brills have made more this year, 1863, than I have ever known, taking the average all the year through.

19,156. How was it in 1862?—We paid nothing like the price we have been paying this year.

19,157. Was the price you paid in 1862 much higher than the price you paid in 1840?—I am sure I cannot tell.

19,158. But if it had been strikingly higher you would have been able to tell?—Yes, perhaps I might. But 1840 is rather before my time. The railway has made the price of fish come up.

19,159. But it is principally the buyers who have got the benefit of that. I am talking of what you pay to the fishermen. I want you to tell us in a general sort of way whether you pay more now than you did in former years?—I tell you as nearly as my memory will allow me, that, taking the whole time I have been a fish buyer, the price of fish this year, 1863, has been higher than I have ever known it to be.

19,160. I daresay you can recollect what was the price you paid in 1861 or 1862. Was that higher than it was 10 years ago?—No.

19,161. Was it pretty much the same?—I do not think the fishermen made much in 1861.

19,162. Shall I be right in saying that from 1851 to 1861 the price of fish ruled pretty much the same?—That is quite right.

19,163. (*Mr. Lefevre.*) Have you kept books which will show the prices you paid?—No.

19,164. Then you could not refer us to them?—No. I buy certain lots of turbots, brills, gurnet, large gurnets, red mullets, soles, and other fish, and what I pay I put down to the parties for whom I buy it.

19,165. You have no books you can refer us to for the last 10 years?—No.

19,166. (*Professor Huxley.*) But still your knowledge upon the subject is sufficient to enable you to tell us that there has not been a rise, for example, of 30 per cent.?—No, I am sure there has not been. But we are governed by the London market; if there is a scarce supply of fish there the price of fish here goes up directly. In such a case, if our fishermen have been able to get out and get a little fish, we buyers that buy for the London market give a good price for it and send it there.

19,167. I want to be able to understand quite clearly from you whether, for example, in 1861 you did not pay 30 per cent. more for your fish here than you did in 1860?—No, I did not.

19,168. You are sure about that?—I am quite certain.

19,169. (*Mr. Lefevre.*) Does a great quantity of fish go from here to London, or do you send much to the inland towns?—A great quantity goes away from here.

19,170. To the inland towns as well as to London?—Yes.

19,171. What towns do you send it to principally? Bristol, Bath, Taunton, Bridgwater, and Weston-super-Mare. In point of fact we send fish to all the towns down the Great Western line.

19,172. Do you send most of your best fish to these towns, or to London?—The best fish go to London, Bath, and Bristol principally. If the small country towns write for a basket of the better kind of fish we manage to send it to them, but not unless they do.

19,173. Do you buy sprats here?—Yes.

19,174. Where are they caught?—Generally up the Tamar, by the Saltash fishermen.

10,175. Is there a considerable quantity caught?—Yesterday and the day before there were great quantities caught, but nothing like the bulk they catch up in Torbay.

19,176. Do they fish for them with a stow net?—They use a seine, I do not know whether it is a tuck-seine, or whether they haul it ashore on the land up the river Tamar.

19,177. Have you observed any quantity of small

fish brought in by the trawlers?—Yes, scores of times.

19,178. Have you bought any yourself?—No, it would not pay to send away small turbots, brills, and soles.

19,179. Where are they caught?—I have been informed that they have been caught in Whitesand Bay. I have frequently asked the question. I have asked, pointing to a lot of fish, if they were Whitesand Bay fish, and have been told that they were.

19,180. What proportion of small fish have you observed?—I have seen at different times hundreds of little turbots, brills, and soles.

19,181. Are they caught at the same time as the larger fish, or is the whole take sometimes small fish?—You do not often see a turbot of 10 lbs. or 12 lbs. among them, not once out of a dozen times, but you may occasionally.

19,182. Do you think it would be injurious to the trade if fishing were prohibited within the headlands?—I think if the fishermen kept out of the bays it would be of advantage to them. Indeed, I have heard the fishermen say so themselves; but they say that if one goes in then of course another must.

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19,183. Do you think that if they did not go into the bays they would catch more fish outside?—Turbots have been very plentiful during the last year, and the fishermen have not been in the bays as often as they have been before.

19,184. What is the reason of that?—I do not know whether they have been prohibited by the Coastguard or not; that I cannot tell. There was a little rumpus a few years back about their going into the bays, but whether the Coastguard are now keeping them out or not I cannot tell.

The witness withdrew.

James Stibbs called and examined.

J. Stibbs.

19,185. (*Professor Huxley.*) Are you a fish buyer here?—Yes.

19,186. And brother of the witness whom we have already examined today, I presume?—Yes.

19,187. How many years have you been a fish buyer here?—I have been a fisherman and fish buyer for 30 years.

19,188. Have you yourself been a fisherman?—Yes, I served my time to fishing.

19,189. What kind of fishing?—Trawl-fishing.

19,190. Have you any clear recollection of the price of fish when you began to be a fish buyer—how many years is it since you began to be a fish buyer?—About 20 years. I am not a fish buyer ashore; I buy them to run into Portsmouth and other places.

19,191. Have you been cognizant of the prices which fish have realized?—Yes.

19,192. Do you think the fishermen get more per ton than they did formerly?—They get more per dozen for the common fish than they used to do. With regard to the hake, for instance, I have sold hundreds of dozens at Portsmouth for 2*s.* or 3*s.* a dozen, and now I can get double that.

19,193. Do the best fish make that?—About the same price.

19,194. Such as soles?—Yes, soles, turbot, and brill.

19,195. Taking one kind of fish with another, what do you think would be the increase of price per cent. to the fishermen now compared with what it was 20 years ago; is there an increase of 20 per cent. to the fishermen?—No, I think not.

19,196. Is there an increase of 10 per cent.?—I think there is an increase of more than that.

19,197. What is your estimate of the absolute quantity of fish brought into the port, I mean the quantity of all kinds?—Last Friday, of herrings alone 200 tons went away by railway.

19,198. But give us an average catch. What would be a fair estimate of the catch of a trawler per day?—Half a ton, or 15 cwt.

19,199. Twenty years ago, did they catch more or less in a day's fishing?—I think it was about the same then as now.

19,200. Then as there are 40 or 50 more vessels, they must catch more now?—Yes, I think there is double the quantity of fish landed now compared with what there was at that time.

19,201. Have you heard the evidence given before us to day?—No, I only heard part of it; I heard what my brother said.

19,202. Do you agree with him—has your experience been the same?—Yes.

The witness withdrew.

Captain William Hawker, R.N., called and examined.

Capt. W. Hawker, R.N.

19,203. (*Professor Huxley.*) Have you been a fisherman, Captain Hawker?—Only in a small way; I am a naval officer.

19,204. Are you now harbour-master of this port?—Yes.

19,205. How long have you been harbour master?—24 years.

19,206. Have you known the port for a long time?—I have been settled here since 1814; I married and settled here.

19,207. Apart from your official duties, have you paid any attention to the fisheries here?—I have had to pay attention to them. I was charged with a copy of the Convention, and I had to look after these matters. I was allowed a trawl with my own vessel.

19,208. Is that the Convention of 1843, about 20 years ago?—Yes.

19,209 Were you desired by the Government to see that the conditions of that Convention were enforced? No; a copy of it was forwarded to me only. I have been supplied with all the Acts of Parliament connected with my profession.

19,210. In your capacity of harbour-master?—Yes, I have had instructions to keep things right.

19,211. Were you expected to exercise any control over the fishermen?—Not particularly so.

19,212. Were you to inspect them, in order to see that they complied with the provisions of the Convention?—No.

19,213. Is there anybody whose duty it is to examine them?—I don't think there is.

19,214. Have the fishermen, within your own knowledge, ever paid attention to the Convention?—Not at all; all they have paid attention to is their own general interests.

19,215. And there has been nobody to look after them to see whether they do pay attention to it or not?—No, nor has the French Government sent any vessel. An immense number of vessels come here, and instead of catching fish they have bought them and taken them away.

19,216. Do the French fishermen ever come fishing here?—Not within three miles of the coast; our Revenue cruisers would prevent that.

19,217. Have you ever heard of their interfering with our fishermen. I have heard that they have done so off Jersey, and also off the north coast.

19,218. But not here?—No.

19,219. What did they come to fish for; were they trawl-boats?—They had nets and lines, but they found it more profitable to purchase our fish at a low price than to wear their own nets.

19,220. (*Mr. Lefevre.*) Was that before or after the Convention?—Principally before.

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19,221. Since the Convention has been published they have not come?—Not much.

19,222. (*Professor Huxley.*) As harbour-master you will be acquainted with the number of vessels that come to this port?—I was a master in the navy off this station in 1810, and I ought to know.

19,223. Have you heard the statements which have been made here today?—Yes.

19,224. Do you agree with the witnesses that there has been an increase in the number of trawlers?—Yes, and they might have added that the tonnage of the vessels has almost doubled.

19,225. Has there been any increase in the number of drift-net fishermen?—The number of drift-net fishermen and hookers has increased in proportion, and the proportion has almost doubled since I first knew Plymouth.

19,226. The fisherman have increased in proportion?—Yes.

19,227. Have you known much of the masters or owners of these vessels in your capacity of harbour master?—I have been necessarily brought into contact with them, having been harbour master for so long a period.

19,228. Is it within your knowledge that the fishermen frequently rise to be owners themselves?—Yes, I agree with Mr. Stibbs that a steady man may rise and become the owner of a trawl-vessel.

19,229. Are you of opinion that if a trawler works steadily, that it is quite competent for a steady hard working man to raise himself from the position of a sailor on board and to become a proprietor?—Yes.

19,230. The occupation is sufficiently remunerative to enable him to do that?—Yes. If it were not so there would not be so many vessels.

19,231. We have been told in other places that trawling has been a bad speculation, and that people have been losing money by it for years?—I have no doubt they will have told you that at Dundee but that is not the place from which you ought to draw a conclusion. This is a harbour of refuge where they can obtain shelter at any time under our lee. I have paid attention to the fisheries all round the British Isles. I have even been to the Hebrides, and I know something of the fishing.

19,232. Have you noticed the supply of fish brought in by the trawlers?—Yes.

19,233. Do you think the supply of fish per vessel has increased or diminished?—It has increased amazingly. It must be so. I will give you my reason for saying that. In former times the trawlers were small vessels, and it took a whole day to get out on the trawling ground. Some of them could not get out at all at times. Now they have such beautiful fast sailing vessels that they get out in half the time. They have also much larger trawls, and I imagine that the quantity of fish they take must be in proportion to the size of the rake they use.

19,234. Have you paid any attention to the price of fish?—Yes. I gave a lecture in this place about 12 years ago upon the subject. "Short Notes on Fishing" I called it.

19,235. Are you of opinion that the price of fish to the fisherman has increased, diminished, or remained stationary; is the price 5 per cent. more now than it was formerly, or is it less?—It is double as much.

19,236. You think that the price obtained by the fisherman is double?—Yes. I have frequently known a hake sold in the market place for 1*s.* 6*d.* Forty years ago I could have bought hakes for 4*d.* and 6*d.* Now I have to pay 1*s.* and upwards for them. I pay that now for my own consumption.

19,237. Has it been the same in proportion with respect to other fish?—Yes.

19,238. (*Mr. Lefevre.*) Fish of a better quality?—Do you mean such as turbot?

19,239. Yes?—I don't know. It varies. These fish are generally sent away, or purchased for dinner parties at the large hotels.

19,240. Then your opinion is the reverse of that of the last witness, who gave us to understand that at the outside the rise of price to the fishermen was 10 per cent.?—Perhaps if you had asked the fishermen what 10 per cent. meant they would not have been able to have told you. Sometimes the market is glutted, and at others you cannot get any fish at all.

19,241. Then you think there is a larger quantity of fish, and that the price is higher also?—Yes.

19,242. Then, under the circumstances, the trawlers ought to do pretty well?—Everything else is dearer. I think I can venture to say that some of these vessels will cost from 700*l.* to 800*l.*, where formerly they cost 250*l.*, or 300*l.*, or 400*l.* They were very inferior vessels indeed.

19,243. Do you think there has been any failure in the fishing grounds off Plymouth, or any sign of their being worked out?—There is no chance of their being worked out. There are plenty of fish in the deep waters. The French go away to fish out of sight of land altogether. They put in here sometimes, and I occasionally converse with them. They carry salt with them, and they salt their fish in the hold. They go away far to the westward of the British Isles, and do not return till they have a full cargo.

19,244. The fishermen here say they have been trawling here year after year. I want to know whether the grounds have shown any signs of exhaustion?—No, they have not. The fishermen generally fish over the same ground, to avoid tearing their nets to pieces by getting on rougher ground.

19,245. The ground shows no sign of exhaustion?—I think not, and they are constantly going over it with their trawls. If a man falls overboard and is drowned, he is sure to be picked up in the trawls.

19,246. Did you ever know a case of that kind yourself?—I am aware that it has been done. I knew a pilot who fell overboard, and was brought up again in that way. I think if you were to lose your watch overboard it would be picked up if the meshes were small enough to allow it to remain in.

19,247. With respect to the hook-fishing, has that fallen off?—I think not. On the contrary, I believe that it has increased.

19,248. Has the drift net fishing fallen off?—The pilchard-fishing has. I should like to say a word about that.

19,249. We shall be very glad to hear you.—I was for a long time at sea, and was master of a man-of-war. I was master of a man-of-war for two years before the breakwater here was thought of, and there was a pilchard fishery in the Sound in those days. Great quantities of fish were caught there, and I believe that pilchards have been caught in the Catwater. I was a member of the Natural History Society, and a member of the British Association here, and I was on one of the committee appointed to make inquiries of that kind. My attention was, therefore, drawn to the subject, and as regards Plymouth Sound, I ascertained that it was a well-known fact that pilchards were formerly caught in Plymouth Sound in large quantities; now there is not one to be seen. There must be some cause for that.

19,250. What is the cause?—I know what it is perfectly well.

19,251. What is it?—It is owing to the breakwater. The bottom of the Sound was sand and gravel. The pilchard is a fish that frequents a sandy bottom. When the breakwater was raised above the level of the sea smooth water was produced, and there were no gales of wind to affect it. The consequence was that solid matters held in suspension by the action of the waves were brought in in a turbid state and deposited. We have now two or three feet of solid mud where it used to be all sand and gravel.

19,252. It is filling up, I suppose?—It is. There is no mistake about that. You will find that there is a total change. All along the coast you find that herrings go into the muddy creeks and deposit their spawn. I apprehend that the breakwater is a great place for herrings now. I lived out at the end of the breakwater for 10 or 12 years, and I had a fishing net which I have set for herrings, and we have caught

great quantities. I have also found the net occasionally covered with that kind of slimy matter which Mr. Stibbs mentioned. Now that slimy matter is the spawn of herrings. I examined it microscopically.

19,253. (*Professor Huxley.*) What time of the year was that?—The end of the year.

19,254. What depth of water have you inside the breakwater where they deposit the spawn?—About 30 feet at low water; from 30 to 36 feet in the deepest part. The place I speak of is close in the sheltered part of the Sound, out of the tide; I believe that they go into Yealm Creek and Fowey to spawn, in the same way.

19,255. Do you think the building of the breakwater has been the cause of the pilchards keeping out of the Sound?—They do not frequent a muddy ground at all.

19,256. (*Mr. Lefevre.*) Is it not the fact that they have also abandoned Whitesand Bay?—No; Whitesand Bay is a sandy bay. The pilchards have not frequented this coast so much as they did in former years, although there have been great quantities caught this year; at least I have read so in the newspapers. The young herrings bring the mackerel in here. They come into Plymouth Sound in great quantities, and into all the harbours here after the young brill.

19,257. (*Professor Huxley.*) Is there any considerable mackerel-fishing here?—The most considerable mackerel-fishing is in the offing.

19,258. Are they caught with nets?—Yes, and the French catch them with lines too.

19,259. Is there a considerable fishing for commercial purposes?—The Plymouth people do not catch many, but the Yarmouth and Shoreham fishermen come here. I have seen 150 vessels going out of this harbour on a Monday morning, and at least 100 of them would be strangers.

19,260. Then there is an abundance of mackerel off this coast?—Sometimes; not always.

19,261. Is there generally?—Yes.

19,262. (*Mr. Lefevre.*) Are they line fishermen you are speaking of?—No, net fishermen.

19,263. (*Professor Huxley.*) Have you paid attention to the natural history of the fish here?—Yes.

19,264. Do you know of any except one kind of herring here?—There is one kind they call scad, I believe.

19,265. That is a horse-mackerel?—No, a scad, a herring.

19,266. Is it larger than the common herring?—I think it is. It is very thin.

19,267. Do you know of any smaller herring?—No.

19,268. (*Mr. Lefevre.*) Do you agree with Mr. Stibbs as to the quantity of small fish caught in these bays?—Yes. I believe that the young fish in every part of the world take shelter in-shore, in smooth water if they can.

12,269. Does the catching of these small fish affect the catch generally?—I think it does necessarily. They would become large fish if they were not caught when young.

19,270. But you have not observed any falling off in the catch of large fish?—No; but if we were to preserve the small fish in our seas as we do in our rivers, I believe there would be a greater number of large ones caught.

19,271. Do not the large fish in the sea eat a great number of the small ones?—Yes, no doubt. I have seen eight pilchards taken out of a large hake. My coxswain opened his waistcoat for him, and there they were.

19,272. Do you think that a large number of these small fish would ever live to be caught in the trawl-nets?—These small fish when they are caught are destroyed. They are killed or thrown away. If they are caught in a trawl there is no chance for them, because the trawl catches along with them small stones and large shells, cockle-shells, and so forth.

19,273. If any regulation were established to prevent trawling within the headlands, would there be any means of carrying that out, or would the law become a dead letter?—To do any good you must enforce it.

19,274. But could it be enforced here?—Certainly, if proper persons were authorized to do it, with the assistance of the Coastguard men.

19,275. Would it necessitate the employment of cruizers?—The coast is guarded by men with boats at present, and if they had instructions they would carry them out.

19,276. (*Professor Huxley.*) Do you think the Coastguard could manage that?—Yes.

19,277. (*Mr. Lefevre.*) Do you think they would if such a regulation were established?—Yes, and I am fully of opinion that the spawning grounds ought not to be disturbed.

19,278. Do you think that the fish spawn in-shore?—I have no doubt of it. The herrings come here in spawn in immense numbers from the north. They enter all our creeks and bays, and there they spawn. I think they ought not to be disturbed. At the same time there may be some erroneous views with regard to the bays. For instance, in Whitesand Bay and Bigbury Bay there is not so much spawning as you may imagine, because these bays are pretty shallow towards the land. Wherever the sea breaks, you may depend upon it that no fish will spawn, because a breaking sea disturbs the bottom. I believe the bottom is disturbed even at the depth of 14 fathoms. I know of one instance in which a disturbance took place 14 fathoms deep. That was to the westward of the Lizard. I was sent down there to inquire into the loss of a vessel. I believe the captain had gone to sleep and that the vessel drove to the westward, and washed about so much that she went down. The wreck interfered very much with the fishing, and the west country people petitioned the Lord High Admiral to have her raised on account of her being in the way of the fishing. As the matter was one of immense importance to Cornwall I was sent down to make inquiries. I found that the vessel had sunk in 14 fathoms of water. I ascertained from the Coastguard man that the place where she had sunk was a place called Gunwalla Cove. I knew that we could not send our vessels down to a vessel of that kind to raise her, because if we had attempted to raise her we should only have lost our own boats and craft. I communicated with some crab-pot men to ascertain her position. They told me that the vessel had broken up. She was loaded with slate from a quarry in North Cornwall. I asked them how they knew she had broken up. They told me that they had shot their crab-pots and had brought up portions of the slate that had come out of her. From that I know that even at that depth the bottom of the sea is positively set in motion.

19,279. You know a great deal of the coast of the south of England?—Yes.

19,280. Are there a considerable number of bays where the trawlers catch great numbers of large fish, such as Rye Bay?—They catch great quantities of whiting there.

19,281. Then would not a general regulation forbidding trawling within the headlands be injurious?—Certainly it might be in some places.

19,282. Is it within your knowledge that large quantities of small fish are brought into the harbour by the trawlers?—Yes, small gurnets and little bottom fish that are caught by the trawlers. All that are worth selling at all are brought in; many are given to the boys. The squid is given to the boys, and it is only the very poor people who buy them.

19,283. Are they caught in the bays?—No, in the deep water outside. Great numbers of them are raked up. I have been trawling there myself, and have seen what has been brought up in the trawl. All kinds of things are brought up—shell-fish, young fish of every description, many of them torn to pieces. The trawls rake up everything—small stones, broken shells, oyster shells, and everything.

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19,284. Notwithstanding that they take the small fish, you have not observed any decrease in the take of the larger fish?—No; on the contrary, there is a greater quantity of large fish taken. I should think there are four or five times as many caught now as were caught 40 years ago, because the means of catching them are so much increased.

19,285. Does each vessel bring in more than it did 20 years ago?—The large trawlers will catch twice as much; they go out in half the time and come in in half the time, and they consequently have their trawls down double the time. All other things being equal, they must necessarily catch twice the quantity.

19,826. Do you think that every trawler catches double the quantity now?—That depends upon what kind of trawler it is. No man would put his foot now into some of the old ones.

19,287. Is it only the improved trawler that catches more fish?—Yes; they cost a great deal more money now.

19,288. (*Professor Huxley.*) Do you think the amount earned by the trawlers has been made by the increased price of the fish, or by the increased quantity of fish they have caught?—By both. I think it is rather a better living than it was. When I was assistant master lieutenant in Devonport Dockyard, I was told that many of the people were obliged to apply for parochial relief in the winter time. They are rather better off and more respectable now altogether.

19,289. Are the young fish now caught in the bays the young of the fish caught by the trawlers?—They are young fish.

19,290. They are not the young of the herrings, and mackerel, and other fish?—Yes.

19,291. And the young also of turbots, plaice, dabs, and so forth?—Yes; they keep coming along the shore. I have seen the Cove of Cork full of them.

19,292. Are most of the French boats that come here trawlers or line fishermen?—The French boats are pretty well supplied with gear; they have long-lines, and lines for mackerel as well. They fish differently from our fishermen. They tie a set of long-lines together and have snoods.

The witness withdrew.

M. Dunn.

MATTHEW DUNN called and examined.

19,293. (*Professor Huxley.*) Are you a fisherman from this port?—From Mevagissey, in the port of Fowey.

19,294. You are a Cornish man, then?—Yes.

19,295. How long have you been a fisherman at Mevagissey?—Since I was nine years of age.

19,296. How long is that?—I am 33 now.

19,297. What kind of fisherman are you?—A general fisherman. I have been trawling, I have been drift-net pilcharding, I have been drift-net mackereling, and I have been hooking. I have never been trawling since I was 12 years of age, but I have noticed when I have been trawling in-shore in the spring months of the year that the trawl has been covered at times with a slimy substance that hung down like globules. My father told me it was spawn, and he told me that I was not to go and fish in the bays at that time of the year, as he was conscious that it was injurious to the larger fish; he told me that it was spawn which the larger fish had deposited there, and he said that if ever he went trawling when it was about it was only because he was obliged to go from necessity. He said it was decidedly wrong to do so, and he was sorry to see either himself or any other fishermen doing it. When I say that I went trawling in-shore, I mean that I was in Mevagissey Bay in-shore. There was smooth ground there on which we could use our trawls.

19,298. Then you think that trawling in the bays is injurious?—Yes, it injures the spawn of the fish.

19,299. Is there anything else you wish to tell us in addition?—There was a remark made by a gentleman here that trawling did not lessen the size or the quantity of the fish taken. Now we had a trawler in our family, and we kept an account. The book is at home now. It states that the fish dropped off to that extent that we were obliged to give up trawling in the bay.

19,300. In Mevagissey Bay?—Yes. We had four trawlers, and now we have only one. We almost destroyed all the soles.

19,301. Did you catch other fish in considerable numbers?—Yes, we caught plaice, and a fish we called "marysole," and lampreys.

19,302. Do you not think that it was unwise thus to cut off your supply of fish?—Yes.

19,303. What is the condition of the fishery now in Mevagissey Bay; is there enough to afford sport to the trawlers?—There is only one trawler there now.

19,304. (*Mr. Lefevre.*) What was the size of the boats you have been speaking of?—They were from 28 to 35 feet long.

19,305. Were they open boats?—Yes.

19,306. What was the size of the mesh?—I cannot say.

19,307. Was it smaller than the legal size?—The Coastguard men were there to see if there was anything wrong; it was their place to rectify it. We had our first trawl made by a Plymouth man.

19,308. What was the length of the beam?—It was 25 or 26 feet long.

19,309. Was it large enough to go out here?—I used to go out on the same ground. The same sized boat went to Whitby and Scarborough last year.

19,310. You have given up fishing in this bay?—Yes.

19,311. Do you now use the boats for trawling?—No, we don't use the trawl at all now. I have the irons at home.

19,312. What do you fish for now?—I am here in the herring-fishing now.

19,313. You have not been engaged in trawling since you were 12 or 14 years old?—No.

19,314. Was this trawling you speak of carried on in the bay when you were 12 years old?—Yes.

19,315. When was it given up?—In 1848.

19,316. (*Professor Huxley.*) Are you of opinion that trawling in the deep sea does any harm?—I have no experience on that subject.

19,317. Is there anything else upon which you wish to make a remark to us?—No.

The witness withdrew.

J. Easton.

JOHN EASTON called and examined.

19,318. (*Professor Huxley.*) Are you a drift-net fisherman?—Yes, I am at present, but I served my time to trawling.

19,319. Have you been long a drift-net fisherman?—For seven or eight years.

19,320. You are well acquainted with the drift-net fishing then?—Yes; I have been mackereling, herring-ing, pilcharding, hooking, and trawling.

19,321. Is there a great deal of mackerel-fishing here?—Sometimes they are caught in the seines and in the drift nets.

19,322. Do you use the same kind of mesh that you use in the herring-fishing, or a larger mesh?—A larger mesh.

19,323. What is the size of the mesh?—27 or 28 to the yard.

19,324. The working of the net is the same as a herring net?—Yes; the out-sea fishers use the same.

19,325. Are there many persons engaged in the mackerel fishery here?—They are mostly strangers.

19,326. Are there not many boats belonging to Plymouth?—No; there are a few from Mevagissey, and a few from Brighton.

19,327. What is the size of the boats?—They are open boats, half-decked boats. There were some decked boats, but they have dropped off.

19,328. How many people are engaged in the fishery here?—We have turned our pilchard boats into herring boats of late years.

19,329. How many of them are there?—About 40.

19,330. Forty herring boats?—Yes.

19,331. What is the crew of each boat?—Four men.

19,332. Are there any boys?—No.

19,333. What is your fleet of nets for each boat?—We have eight nets of 45 fathoms on the average.

19,334. What is the size of the mesh from knot to knot?—There are 34 to the yard.

19,335. Does anybody ever examine the mesh of your net to see that it is according to the law?—No. We are only young fishermen here. We only took it up last year.

19,336. Nobody does examine your nets?—No.

19,337. Have you had net herring-fishing here at Plymouth for a number of years?—It has not been followed up.

19,338. What time of the year do you find herrings in abundance here?—About this time.

19,339. Do you ever find them earlier than this?—Very seldom, and they only last for a short time.

19,340. How long do they last?—About five or six weeks.

19,341. Do they go into January and February?—They mostly shoot their spawn then, and we sometimes get one or two shotten fish.

19,342. In what condition are they now?—They are full fish, but we have a few shotten.

19,343. Then the fish are spawning now?—Yes; we have caught shotten fish one night, and the next they have been full of spawn.

19,344. If you catch them at the end of January, do you get them full fish or shotten?—Mostly shotten.

19,345. Do the fish go in large shoals after they are shotten?—Yes, very large.

19,346. (*Mr. Lefevre.*) Is it only during the last year that you have gone after herrings?—No, for the last two or three years.

19,347. Did not the herrings come off this coast before?—I don't know. We are quite novices here. We never tried before. We knew they were in the bay. Some of the Mount's Bay men followed them, and we have gone after them now. But they have become more numerous of late years. Some years they come, and some they do not. Like the pilchards, they are plentiful at one season and very scarce at another.

19,348. (*Professor Huxley.*) Did you ever know sprats to be found in this harbour?—There have been great quantities in this harbour, but they are not as plentiful as they are further off.

19,349. How do you catch them?—In seines. We draw the seines up the harbour.

19,350. Are they true sprats?—I cannot say. I never caught them myself.

19,351. Are there any number of men engaged in sprat-fishing?—Seven or eight.

19,352. When are they engaged?—About now. I never saw them drag their nets. They are generally engaged about Saltash. We don't see them here.

19,353. Is the sprat trade here any considerable trade?—They do not last very long, I believe.

19,354. Do the mackerel boats from the eastward bring their fish here?—Yes, when they fish here.

19,355. There are only two or three mackerel boats at Plymouth?—Yes.

19,356. Have the mackerel boats from the eastward always come down here for many years past?—Yes, I was fishing in them myself 20 years ago. They used to take pilots when they first came to pilot them about the harbour, and I have been sailing with them in that capacity.

19,357. Have you been a pilchard fisherman?—Yes.

19,358. Have you known the pilchards taken in the harbour here?—No, they have been taken here in my father's day, but not since the breakwater was built.

19,359. You agree with Captain Hawker on this point?—Yes.

19,360. Do you find from your own knowledge of the hooking fishery that there has been any falling off in the quantity of fish taken?—No, I think the fishermen are more enlightened now, and take more fish, they have also larger trawls. As Captain Hawker says, the craft we used to have were very poor.

The witness withdrew.

THOMAS FOSTER, jun., recalled.

T. Foster, jun.

19,361. (*Professor Huxley.*) You wish to make some addition to your evidence?—Yes. The man who was just examined, and who belonged to Mevagissey, said that no marysoles are caught there. Now I can assure you that is not true. In the spring of the year we may go down there and catch two or three parts of a maund in the course of a day.

19,362. (*Mr. Lefevre.*) In a trawl?—Yes.

19,363. (*Professor Huxley.*) In the bay?—No, two or three miles off.

19,364. Then their killing them in the bay has not affected them outside?—Not in the least. We never go into the bay. I do not think any of the fishermen ever shoot their nets there.

19,365. Do you find that the fish outside the bay have decreased?—No.

19,366. Is there anything else you wish to remark upon?—No, except with regard to the sprats. You were asking just now about the sprats. They are much larger than the sprats caught off Spithead. I have had opportunities of seeing both, and I know that they are considerably larger.

19,367. Are they real sprats, or something else?—I think they are real sprats. But the sprats caught off Spithead are very small.

19,368. Do you know a sprat when you see it?—I think I do.

19,369. Do you know a sprat from a young herring?—Yes.

19,370. And you know that these are larger sprats than those to the eastward?—Yes; to-morrow morning they will be brought here, and then you can see for yourself.

The witness withdrew.

The inquiry was adjourned until Wednesday, the 23rd of December, at Exeter.

Exeter, Devonshire, Wednesday, 23rd December 1863.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

EXETER.

JOHN EYRE KINGDON called and examined.

J. E. Kingdon.

23 Dec. 1863.

19,371. (*Professor Huxley.*) What is your occupation here, Mr. Kingdon?—I have no occupation at present. I am only an idle fellow. I am a captain of volunteers, however.

19,372. I believe you take a great interest in the fisheries here?—Yes, and I always have done all my life.

19,373. Have you been acquainted with the fisheries here for many years?—Yes, for 55 years.

19,374. I believe you wish to lay some statement before us?—I presume that you wish to take evidence as to the state of the fishing from the mouth of the river and outside the river to where it flows?

19,375. Quite so?—Then I may as well commence with a description of the river. The tide comes into our river at Exmouth and flows about 10 miles as far as Salmon Pool to within about one mile of the city of Exeter. At Lympstone at high tide the whole river is about $1\frac{1}{4}$ miles wide. When it comes to low tide the channel is narrowed to about 20 or 30 yards. The bottom is composed of fine sand, and in various places there are large banks of mud with narrow streams of water, forming gullies, running through them. I am of opinion that the fish go to those streams for the purpose of spawning, and that is the general impression here. Those places have been found out by the fishermen, and there the fish are taken up in large quantities. They are caught in many cases by hand in small nets, and since it has been the custom to take them the quantity of fish has materially decreased. I propose, before I proceed further, to state to you the different kinds of fish that are caught here, and to divide them into three classes, namely, fish for the poor, fish for the rich, and shell-fish. I will then take the fish caught outside the bay and inside the bay. Among the fish for the poor I enumerate mackerel, grey mullet, herring, pilchard, basse, gurnard, bream, whiting pouting, small whiting, hake, flounders, dab, plaice, conger, skate, sprat, ray, and sand launce. The fish for the rich are turbot, brill, soles, john dory, whitebait, whiting, surmullet, cod, pollack, haddock, sea lamprey, sea trout, and sturgeon. They are all fish that frequent our river. I have left out the salmon, because there is a special Act of Parliament in reference to the salmon fisheries.

19,376. Is the river lamprey found here?—No, not the river lamprey, but we get the sea lamprey. Perhaps we may catch 100 in a year of the sea lamprey at Salmon Pool. There is a weir there where they come to spawn.

19,377. Where does the fresh water begin?—It begins at that weir—at Salmon Pool weir. It is met there by the tide, and the tide rises three, four, and five, and even nine and ten feet high, so that we have our river varying from one foot in depth to nine and ten feet. Not long ago we caught a sturgeon seven feet six inches long, and a fine specimen it was. With regard to the number of fishermen, in order to explain the state of the fishing, I think I had better begin at the mouth of the river at Exmouth. There they have six trawlers.

19,378. Are they large boats?—No, the average tonnage of each will be from four to five tons.

19,379. What is the length of the beam?—The beam of three of them is 25 feet long, and of the other three it is only 12 feet long. They have, in addition, about 30 small boats which they employ in drifting for herrings. There are no seine fishermen. They are not entirely dependent upon fishing for a livelihood, but they act as lumpers and pilots as well. I come now to Lympstone, which is about midway up the river. At Lympstone seven seines are used for river fishing, and they go out every day for the purpose of catching small fish, which I will explain more particularly in a few moments. I think I forgot to say that in addition to the fish for the rich and the fish for the poor which I enumerated just now, we also get several descriptions of shell-fish—namely, crabs, lobsters, prawns, cockles, shrimps, mussels, scollops, periwinkles, and oysters. The fishermen at Lympstone get mussels, cockles, and winkles. They also get oysters. I go on next to Topsham. I cannot tell how many fishermen in number there are at Topsham, but there are persons here from Topsham who will give you that information. All the men there are employed in a great measure in using the seines all over the river at low water, and you will perceive, in consequence of the narrow channel at low water, how easy it must be to rake the whole of that channel with the seine and take up all the fish. I am sorry to say that the fish they take out now are of so small a character as to be scarcely worth bringing into the city for sale.

19.380. Are there no fishermen at Starcross or at Powderham?—Mr. Drew, the steward of the Earl of Devon, is here, and he will give you all the information you require in reference to the state of the fishing there. The fishermen of Topsham go out to fish at low tide, and they use seines with a very small mesh indeed. The fishermen at Lympstone do the same, and when I tell you that they take small fish and when I show you the centre of the bunt of the nets they use, you may readily fancy that it is impossible for anything to go through that mesh that would be worth having.

19,381. What is the size of the mesh from knot to knot?—From knot to knot on the square, not lengthwise?

19,382. No, on the square?—It is half an inch from knot to knot.

19,383. Is that the size of the bunt?—Yes, and I believe that some are smaller than that.

19,384. What is the size of the wing of the net?—About one inch. It is what is called a shilling mesh. If you take a shilling and measure it you will find that although it is called a shilling mesh it is as near as possible an inch square. That is commonly called the herring seine. The fishermen here drag with those nets right through the whole of the river from one end to the other at low tide, and it is of no odds to them whether the stream is running fast or slow, for we have freshets in our river. If it is running fast all they do is to put on heavier leads. I have been many times out with my boat when I have been obliged to take up the anchor and let the seines pass by, when I was not able to see a single cork floating on the water.

19,385. How is a seine constructed; what is the length of it?—My seine at Salmon Pool is 45 fathoms long.

19,386. What is the depth?—30 feet.

19,387. Is there a pocket in the bunt?—No, I do not think they have a pocket.

19,388. Is it loaded at the bottom with lead?—Yes, according to the rate at which the current is running, because we have freshets in our river. At low tide the current will be considerably altered. They have extra leads that they put on, and those leads will sweep everything from the bottom, almost the sand itself. I will show you what it is they catch. There is a fair flounder caught by the hook and line, which I bought yesterday at Lympstone. I have caught thousands of them with the hook and line myself. I have been in the habit of going down the river, and I have caught a great market basket full of them, but within the last three or four years if I catch half-a-dozen when I go down I am quite content. This is what is caught now in the seines, and it is not one half the size it ought to be.

19,389. What is the length of the flounder you

have in your hand?—4½ inches from the head to the stream of the tail.

19,390. Is that the average size of the flounders caught by the nets?—There are many that are a great deal less than that; some are not more than two inches over.

19,391. Are there many much larger?—Some of the larger size are caught as well.

19,392. They are caught in the seines as well?—Yes.

19,393. Can you give us any idea of what is the proportion of large fish caught in the nets as compared with the small?—The small to the large is tremendously out of proportion, and for this reason, I believe the small fish come in from the sea to get upon those beautiful banks we have here, in order to be out of the way of their enemies, and also because where the river joins the tide it makes the water one degree warmer than it would be otherwise. There are beautiful warm places for the fish to lie in in our river, and plenty of food as well. They go backwards and forwards in a great measure with the tide. I have found, when I have been fishing in a dead low tide, that for about a quarter or half an hour I cannot take a single fish. The moment the tide turns the fish run out, and I can catch them again.

19,394. Will you describe the mode in which the seine is worked. I understood you to say that it was 45 fathoms long?—Mine is.

19,395. What is the width of your river at low water?—About 20 or 30 yards.

19,396. Then at low water an average seine net will stretch across the whole of the river?—Yes.

19,387. How is it worked?—We take our stand at a point and send a boat round, after which we take the net in. We draw it down to the point from which the boat started; we draw it right down until we come into close contact. The net is then drawn gradually in, and in the bunt of it everything is taken.

19,388. How long do you allow the seine to stand across the current?—Not long, we take it in as quick as we can. We go as fast as we can for the purpose of catching the fish. We make the haul round, and all that are not good the Topsham fishermen throw out on the bank instead of throwing them into the water again. They will not take the trouble to return them to the water, and the consequence is that the birds come and destroy them. Many of them are fish only the size of half-a-crown, and some of them are even less than that. They take them out of the nets and leave them on the banks, where the birds come and destroy them afterwards. We have various sea birds here, gulls, shags, cormorants, and herons, and they are very destructive to fish, as a matter of course. In addition to small flounders, the fishermen catch little herring and even shrimps in the seines. These (*producing a basket of fish*) I bought on Saturday last. I went down to Lympstone after I had seen Mr. Holdsworth, the Secretary to the Commission, and I bought the fish from the fishermen as they came in. You can imagine what their net must be if they will not let little fish of this sort go through. This (*pointing to the fish in the basket*) is a whiting, this is a gurnard.

19,389. Which are the young herring you referred to?—The fishermen assured me that a great number of the fish in the basket are young herring. There were even a number of shrimps in their nets. This is a whiting, and I am quite sure you will agree with me that it is of no use to anybody. Here is a small gurnard, and we get a great number of what we call small "tom cods," which are very small fish.

19,400. Do you consider the contents of that basket a fair specimen of the fish caught here?—I will give you my word of honour that I went down by chance, that I seized a basket of fish as it was brought in, and bought these out of it. They were brought in for sale. I come now to the fishing outside of the bar. They are celebrated for cockles at Lympstone, and have been ever since I was a boy; I used to call at Lympstone whenever I could to get some of their celebrated cockles. Dozens of boys and women have been employed there in gathering cockles. But what is the case now? By a little bribery yesterday, I got a few big ones taken out; here they are; they are the celebrated Lympstone cockles. At one time nothing would have been considered worth having that was less than that. I have bought some thousands of them. I took the baskets as they came in yesterday, and bought all they had; and here is the description of cockles I got. There is not one larger in the whole basket than that. The large ones I have here I simply brought to show you what Lympstone cockles were a few years ago. But nearly the whole of those fine cockles are gone now, and why is it that they have been destroyed? It is because they have been allowed to be taken at all seasons of the year, no breeding season being left for them; they are all destroyed indiscriminately.

19,401. Do you get any oysters here?—Yes; I am now coming to the oysters. I think you will say that these oysters (*producing a basket of oysters*) are as fair a sample of oysters and as good oysters, except the real natives, as you can obtain. Many of these oysters are very fine. I bought 300 or 400 yesterday. I picked out the first I came to, and I have brought them here in order to show you what our oysters are. These oysters all come from Falmouth; they go down to Falmouth for them, and they have been in the habit of bringing in to Lympstone about 200 tons of those oysters every year. The same practice has been followed at Starcross. There they have also been in the habit of bringing in a great number of the Falmouth oysters and laying them down. The oysters down at Falmouth have a very copperas taste, but they grow very fast, and being brought up to our river they suit the river exactly and do remarkably well. But oysters are much dearer now; I have given 2*s.* a hundred for oysters that three or four years since I could get for 1*s.*

19,402. The oysters you have here are not natives?—No, they are brought here to improve.

19,403. (*Mr. Lefevre.*) Have you no oysters that are natives?—None at all; at least nothing to speak of.

19,404-6. (*Professor Huxley.*) They do not breed here?—No, never. All the oysters we have had here have been brought from Falmouth, and now on inquiring of the fishermen, I am told that they have had none for two years. They say that what they used to give 2*s.* a tub for the Frenchmen now come over and take away, giving 12*s.*, 13*s.*, or 14*s.* a tub for them. The consequence is that, unless there is some alteration, we shall lose all our oysters about Starcross and Lympstone in the course of a year or two at the furthest. They will dispose of all they have now, and not being able to renew the supply, the beds will become exhausted.

19,407. How many oysters does a tub hold?—Two bushels.

19,408. How many oysters are there in two bushels?—About 1,500, if you will take the general run of them. I think I have now told you as far as I can what the river produces with the exception of the fishing in the neighbourhood of Topsham. There are large quantities of winkles obtained there which are sold for 10*s.* 6*d.* a sack, a sack containing eight pecks. They have been selling immense quantities of winkles at that place, but the supply is now decreasing in a most wonderful way, because there have been such quantities of them taken.

19,409. Where do you find the periwinkles chiefly?—All over the river; from Topsham all down. There are thousands and hundreds of thousands and millions of them. When I was a boy, I used to be very fond of gathering winkles. I have frequently been up to my knees in mud gathering them, and now they have decreased to such an extent that they can scarcely get any. The next shell-fish we have is the mussel. We have been in the habit of obtaining very large quantities of mussels from the mouth of our rivers and of putting them down on the

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Lympstone side of the river. There they have increased to a wonderful extent, and we have sent away tons upon tons every month by the South Devon Railway to London. Now, unfortunately for our fishermen, the Hollanders are enabled to send over better and cheaper mussels, and the only use of our mussels now, at present, is to make bait for catching whitings outside the bar. In speaking of the oysters, I ought to say that some of our fishermen have informed me that in Jersey they have a harbour-master, who carries a ring with him, by which he measures the oysters. Every oyster that passes through the ring is required to be replaced on the beds. Now, that seems to me to be a very good plan, and I think it might be adopted here with advantage. I will now bring your attention to the trawlers outside. Here (*producing a basket of fish*) is a specimen of the fish they catch. This a sole.

19,410–11. To what trawlers do you refer?—To those who come from Brixham, and the Exmouth trawlers as well. They both bring in the same quality of fish, and I believe that they use the same mesh as near as can be.

19,412. There are trawlers at Exmouth?—Yes.

19,413. How many trawlers are there there?—Six, I believe.

12,414. What is the tonnage of the vessels they use?—The tonnage of their vessels is about four or five tons.

12,415. What is the length of the beam?—The length of the beam of three of them is 25 feet and the rest carry a beam 12 feet long.

19,416. (*Mr. Lefevre.*) Do they fish mainly outside the bar?—Yes, outside.

19,417. Where is the bar?—Here (*pointing to the map*) at the entrance, right across. A bar of sand goes right across. Where the tide flows the river becomes very narrow, but they trawl backwards and forwards.

19,418. (*Professor Huxley.*) Do they trawl backwards and forwards off your river?—They go out to suit their own purposes. If they get good luck they go out further.

19,419. Do they keep mainly in the offing off the river?—They keep off the river outside altogether. They cannot come inside the bar. There is a very heavy bank of sand there which would prevent them. They cannot come near that, and therefore they are obliged to go out and get into the open sea.

19,420. Do they habitually trawl in the space in the offing off Exmouth?—Yes, that is the place in which the trawlers fish.

19,421. They do not go furthr?—No, there is ae great curve, at one end of which is Brixham and Berry Head. There is Berry Head on one side, and they could go on towards Sidmouth and Portland on the other, but they do not go so far out.

19,422. They keep to a radius of 20 or 30 miles from Exmouth?—Yes, they never go beyond that.

19,423. (*Mr. Lefevre.*) Are there any more of these small trawlers here?—I believe there are only six at Exmouth. That information I obtained from Mr. Hawkins, the head of the Coastguard at Exmouth.

19,424. Are there any at Dawlish?—No, there are none there, I believe.

19,425. Are there any at Teignmouth?—There is only one there, I believe. There are several at Shaldon, which is on the same river, the river Teign. With regard to the size of the fish caught by these trawlers, I may say that I went into the market at Exmouth the other day, and bought a turbot. Here it is. Now I am quite sure that you will agree with me that no such fish as that ought to be taken by a trawler.

19,426. What is the size of that fish?—10 inches is the full length. I went into the market here this morning, and from a person there who had just come from Brixham, I got all these soles. I picked them out of his basket as he came up from Brixham. He gave me the choice of them to take what I pleased. He told me he could not sell such a fish as that at home.

19,427. (*Professor Huxley.*) Then why did he buy them?—He said they had been sent to him as a basket of fish.

19,428. But if a man were supplied with a considerable quantity of fish of that decription, would he deal with the same trawler again?—Yes, I suppose he takes his chance. Of course all the fish he has are not like that. I have brought home a good many fish myself, and I have got rid of it in the city of Exeter afterwards. When the trawlers come in at Exmouth the fish they have caught are placed in baskets. There are so many soles and so many whiting. They are put away together. Then the small fish are put by for the poor people. They are put in another basket, and then the gurnards are put to the back by themselves. Every trawler as he comes in has got everything ready in baskets, so that the moment he comes in every basket he has can be put on the quay. Then you have a female autioneer who knocks down the fish to any person who will bid for them. So many pairs of soles are knocked down to one person, and so many to another. One man will buy two or three baskets of soles, and they are put in altogether. He is obliged to take them as they come, and frequently the result is that he obtains a lot of fish which he knows he is unable to sell to a tradesman's family. A tradesman with a family will probably have a leg of mutton for dinner to-day. To-morrow he will have hashed mutton, and with a good pair of soles if he could get them for 6*d.* or 9*d.* he would be able to make a good comfortable dinner. When mackerel and other fish come in plentifully, he will frequently have a good dinner of fish. In my time that used to be the ordinary course of living which a tradesman and his family would adopt; but quite a different state of circumstances exists at present. In my day the things that are sold now would have been scouted if they had been offered in the market, and they would never have been looked at. We used in those days to get a moderately sized pair of soles for 6*d.* or 9*d.* Now for the same sort of fish we should have to give from 2*s.* to 2*s.* 6*d.* For a very large pair that we would give 1*s.* 6*d.* for formerly, we should now have to give 4*s.* 6*d.* The consequence is that among the middle classes there is comparatively little fish eaten. It is found better to buy meat even at its dearest price.

19,429. Very true; I apprehend that fish has become dearer, but that hardly bears upon our present inquiry. We do not propose to inquire into the course of trading here. If there is a larger demand for fish the price will naturally be dearer?—They say there is a less quantity of fish caught now than used to be caught formerly, and that being less it is consequently dearer. Indeed it has become so dear that the middle class of society are comparatively excluded from buying fish at all.

19,430. (*Mr. Lefevre.*) Do you mean that there are less fish caught altogether than were caught in former years, or only that there are less caught here?—There are less caught in the river Exe. At one time I used to be able to go out and catch an abundance of fish easily, I have often come home with a large basket full. I cannot do that now. The circumstances are altogether changed; but I think it would be much better if we could have the fish as we used to have them a few years ago. The fish used to come in regularly and we could always get a good fishing. I went to Lympstone the other day, and what was it that I saw there? I met a poor creature hawking a basket of herrings. There was a cold chill wind blowing as if it would blow through her, for she was only half clothed, and she was shivering and miserable. I examined her basket and found that the fish in it absolutely stunk. There was a tear in her eye. I gave her a piece of money and she was gone. That was not so formerly, yet the fishing has come to that miserable state in Lympstone, and I am quite sure it is the same in all the other places round here. There is hardly bread and the common necesssaries of life to be obtained by those who go out fishing. I went into

the fish market this morning, and here (*producing a fish*) is a sample of the brills I got.

19,431. (*Professor Huxley.*) What is the length of that fish?—It is exactly a foot long, and here is another the same size. That also is 12 inches long.

19,432. Who are the people who buy those fish?—I obtained these from Mr. Saunders, a fishmonger here. "This," he said "is what I get up from the Brixham "men, and if I do not have it I get nothing." Feel the thickness of that fish. There is nothing at all in it. It is not sufficient for a quarter of a meal for any man living.

19,433. But who will buy such fish of the fishmonger?—Nobody. That is his complaint. There is no one who will buy it of him and yet he is obliged to take it himself.

19,434. (*Mr. Lefevre.*) What do they ask for fish like that?—They will take almost anything they can catch for it. It is a decided loss to them. Perhaps they will ask 6*d.* for a brill like that.

19,435. (*Professor Huxley.*) Do the poor of this place buy fish of that description in any large quantities?—No, it is too dear for them. They buy the flat-fish and sprats, herrings, hake, and fish of that sort. They do not buy brills.

19,436. But the fishmonger must surely find his account in the matter, or he would not go on dealing with the trawlers?—The effect it has upon him is that he is obliged to charge double what he used to do formerly for the better class of fish. That is the only answer I can give to your question. I can assure you that no later than this morning one of our fishmongers was complaining to me of the difficulty he had in disposing of fresh fish. He told me that if he could get rid of selling them altogether, he would do so with all his heart. He says that he can sell vast quantities of dried fish, such as herrings, but that he has the greatest difficulty in making his own of the fish sent to him fresh by the trawlers, which include such fish as I have just shown to you.

19,437. In point of fact, I suppose there is a great demand for fish, and the fishmonger is obliged to take what he can get?—Yes, that is so.

19,438. But that is only like all other branches of trade when there is a large demand?—I know it is the same in other trades; but what I complain of here is that the trawlers are restricted by law to the use of a certain size of mesh, yet they openly use too small a mesh, and no notice is taken of them, and no steps are taken to put a stop to the violation of the law.

19,439. That is altogether another question?—Then again the nets used inside the river are all of an improper mesh. You will naturally ask me what cure I would propose for that. In my opinion the remedy would be a very simple one. I remember having the honour of being questioned upon one occasion by Sir William Jardine. I told him that I thought there would be no great hardship in allowing a person to go into any of the mills in order to ascertain if there were any engines that were contrary to the law. His answer was that that would be an interference with the liberty of the subject. "But," I said, "the "liberty of the subject is already interfered with. "What do you do with the public houses on the Sun- "day morning? The police have the right to enter "them, and if they choose they can search all round "the house. It could be no greater interference with "the liberty of the subject to allow a person to visit "a mill." Sir William Jardine said he was obliged to me for the suggestion, and I believe that a measure of that nature was subsequently carried in Parliament.

19,440. That was with regard to salmon?—Yes. I think a very simple cure could be applied to remedy the evils of which we are now complaining. I have frequently seen the Preventive men,—the Coastguard men, performing their duty, and a more intillegent and better behaved class of men I never saw in my life. Their chief officer at Exmouth, Mr. Hawkins, is not only talented and clever in his profession, but affable to all who are brought in contact with him. Every information he can afford I am satisfied he is always ready to give with the greatest possible pleasure, and it is the same with all the men under him. I am perfectly sure that any stranger who goes to Exmouth, or any of the Preventive stations, will always be kindly treated. I say this because I know there is a general impression abroad that they are an arbitrary set of men, and that they are of very little real service. No greater mistake could be committed.

19,441. Do you think they are persons who might be entrusted with restrictive powers?—Yes. Mr. Hawkins told me only yesterday, that they already have orders to go in and examine the boats and nets used for salmon. They are also obliged to board every vessel that comes into port in order to search for contraband spirits and tobacco, and it is part of their duty to keep their eye on every boat that goes outside the bay for fish. If they see one go near any vessel that may be passing by then they board it when it comes in to ascertain if anything illegal has been placed on board. Now I will take the liberty to suggest to you that if the size of the mesh of the nets was made larger by Act of Parliament, and particularly in the rivers, and if during the spawning season, for instance, from the latter end of November until February, except for herrings and sprats, the fishing for which ought not to be interfered with, no seines were allowed to be drawn at all, the fishing generally would be greatly benefited. When the time arrives for the use of the seine, then the mesh should be of a certain description, so that the nets would not take all these small trumpery fish. I would further suggest the propriety of having some regularly constituted authority to look after the nets and see that the law is not infringed.

19,442. What size would you have the mesh?—I do not think that you ought to have it a bit less than the mesh of the salmon seines.

19,443. What size is that?—2 inches across.

19,444–5. (*Mr. Lefevre.*) Not from knot to knot?—Yes, from knot to knot. It will be 4 inches when elongated. A shilling mesh from knot to knot will be 2 inches across.

19,446. (*Professor Huxley.*) If you pull two sides of the mesh together so that no chink is left between, one side will be exactly half the length of the whole mesh when pulled out?—Yes; and with regard to the mesh of the seine nets, I would make it 2 inches from knot to knot, the same as the salmon seines.

19,447. Would it be possible to catch a flounder in a net of that kind?—Yes, I think so, very easily.

19,448. Would not a good sized flounder go through a mesh as large as that?—I think not. All the big ones that were worth having we should get still. I have caught hundreds half the size of that (*pointing to a fish in the basket*).

19,449. We have been informed by practical trawlers that if the mesh of the trawl net were larger than $1\frac{3}{4}$ inches from knot to knot it would allow a fair sized sole to pass through. Are you of the same opinion?—The sole I have here is 3 inches across.

19,450. (*Mr. Lefevre*) Yes, but we have been told that a sole will double itself up into a very small space, and that it will pass through a small mesh?—If this were doubled up it would still be $2\frac{1}{2}$ inches across.

19,451. (*Professor Huxley.*) We only wish to put before you the statements which have been made before us in evidence in other places, and among other things we have been told that a full sized sole is capable of doubling itself up so as to get through a mesh $1\frac{3}{4}$ inches from knot to knot; is that your opinion?—No, I do not agree with that at all. In drawing my seine net down at Salmon Pool I have often caught fish of that size, but it was with the old net. Now our net will be 2 inches across.

19,452. With what sized mesh was that fish you have in your hand caught?—It was caught in a regular trawl net and if they will catch fish of that size in the trawl, is it not time that their mesh should be altered and made larger?

19,453. That is another question. The mesh they

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use is rather less than $1\frac{3}{4}$ is it not?—Yes, I have seen some considerably less than that.

19,454. Do you think if the mesh were 2 inches from knot to knot it would prevent the evil of catching these small fish?—Yes, and particularly inside the rivers. If the legislature were only to allow one sized net to be used inside the rivers for all fish, except herring and sprats, namely the salmon net, I think the evils of which we now complain would be remedied to a great extent. I think it would be both wise and right to adopt the salmon mesh for all fish with the exceptions I have named.

19,455. Do you not think that when the seine became a little choked with large fish, you would catch a great quantity of small fish, in consequence of the stopping up of the meshes?—No, I think not.

19,456. That is an objection which has been mentioned to us in other quarters?—I should only like to see the fisherman have the chance of catching small fish in that way. Even if they did catch small fish, it would be a very simple matter to return them to the water again.

19,457. We have been told that it would be impossible to prevent the catching of small fish altogether however much the size of the mesh may be enlarged?—The small fish could be put back again. At Salmon Pool, I have caught from 12 to 15 salmon at one haul, and they were not bad fish either, yet I have been obliged to throw them overboard again. Some of them would be fish of 15 lbs weight. Lots of little ones would get into the net at the same time, but they would pass out easily.

19,458. Then what remedy would you suggest?—If I had any voice in the matter I should say that the Preventive men should board every boat and see that the mesh of every net was of the right size, and they should see also whether all the fish the fishermen had in their basket were right, the same as they now look after a keg of brandy or anything of that sort. I believe there would be no difficulty in the matter. Mr. Hawkins himself aasures me that the Coastguard could perform the duty. They have very little to do now during half of their time. They could go off readily and examine the nets of the fishermen, and their fish also; if they found fish of an improper size itshould be thrown overboard, and the parties using illegal nets should be summoned and fined.

19,459. Would it be necessary to have a series of Preventive men up your river?—No, I think not, our coast is surrounded by them at present.

19,460. If a fisherman is working from Topsham to Lympstone, what is to prevent him from catching small fish and sending them in?—The Exmouth men see everything that comes inside the bay. The Topsham men must go out, and the Coastguard at Exmouth would see every one of them.

19,461. Could the suggestion you make be carried out without any addition to the present Preventive staff?—I think so. Directly opposite the river, at a place called Hangstone Point, there is a Preventive station; then there is another at Teignmouth, and another at Dartmouth. Every night the whole of the coast is perambulated by the Preventive men. I think there would be no difficulty whatever in the matter. They could easily perform this duty in addition to their ordinary work. Indeed, Mr. Hawkins himself says, "Give me the order to search the nets "and the boats, and you shall have no trouble or "expense in the matter."

19,462–3. There are two things you desire; in the first place you are of opinion that the mesh should be 2 inches from knot to knot, and in the next place you think that all fish below a certain size ought to be seized?—Yes.

19,464. Is there anything else you desire?—No.

19,465. Would you have any close time?—Yes, I would have a close time.

19,466. What time would you fix?—You have a close time now for salmon from the 1st of September to the 1st of February; then why not have a close time for the sea fisheries, say from the 1st of November. I would give them the opportunity of fishing till that time, and then I would not let them put a seine in the mouth of the river when the fish come in to spawn.

19,467. How long would you prevent them from fishing?—Until February or March.

19,468. From November to February?—Yes.

19,469. Then how would you catch sprats?—I would make an exception of sprats and herrings.

19,470. But if you catch sprats will not a good many small fish of other descriptions get in?—Not if the Preventive men are there to see what the fishermen take ashore. Other fish might be taken, but of course they would be returned to the sea again. I should not fear that any small fish would be taken.

19,471. Do you think that permission could be given to catch sprats without interfering with other fish; do you think that sprats could be caught without catching other fish with them?—I think the fishing might be so regulated that no injury would be done to other small fish.

19,472. Have you anything else you wish to suggest?—I have only to add this, that I hope you will do your best, and I trust Her Majesty's Government will do their best for the middle classes of society, to which I belong. At present we find ourselves unable to buy fish for food, and if we ever have it at all, it is only as a matter of luxury.

19,473. There are some other modes in which the fisheries here have suffered upon which we may require further evidence. You have spoken of the loss you have sustained in your oyster beds in consequence of not being able to obtain a supply from Falmouth, and you have stated that that is owing to the French demand being so great that the Frenchmen can afford to pay a higher price for the oysters than our own countrymen?—Yes, that is so.

19,474. How do you see your way in that matter? What remedy would you apply?—I would have a harbour master, as they have in Jersey, and I would not allow any oysters to be removed from the beds that were under a certain size.

19,475. Would you prevent the taking of oysters fit to be laid down on breeding grounds elsewhere?—At present they take the smallest oysters it is possible to dredge up.

19,476. Do the Frenchmen who get those oysters lay them down on their own beds?—Yes; but in taking them up they destroy all the small brood, and all the spawn as well. They take away oysters which in another year would grow larger, and be spawning themselves.

19,477. You do not propose to prohibit the export of oysters from this country to France, but you think they ought not to be allowed to be taken away under a certain size?—Yes, just so. I do not see how we could prohibit the export of oysters to foreign ports altogether. The principles of free trade would interfere with us there.

19,478. Then I do not see how you would be benefited here at Exeter, because if they are not to be allowed to be taken away under a certain size, the prohibition will hold as good with regard to this place as with regard to France?—I am aware of that, but I think we should be enabled to get superior oysters by giving a little more money for them, and that I think we should be contented to give.

19,479. Could you afford to give the large prices which you have mentioned to us, and which you say are given for oysters at Falmouth by the Frenchmen?—I question whether we could; but I think you would drive the foreigners away in a great measure, and then our fishermen would stand a better chance of obtaining oysters at a reasonable price.

19,480. But if there is a great demand for oysters in France, would not that demand still remain?—Yes, it might.

19,481. Then what advantage would you derive?—Although the demand for oysters might continue as great in France, yet if they knew that they could only get them in this country of a certain size, I

think they would find it hardly worth their while to send over for them.

19,482. (*Mr. Lefevre.*) Are not the best oysters, and those which obtain the largest price from consumers, those which are removed from the original breeding grounds, and laid down on other beds that they may grow up?—I cannot answer that question. I do not know.

19,483. (*Professor Huxley.*) There was another question you raised in reference to the mussel fishery here. I understood you to say that you had a fishery for mussels here at one time, but that of late years it has been ruined in consequence of Dutch competition?—Yes, that is so.

19,484. Then how do you propose to remedy that?—I cannot say. In that case I would leave the remedy to wiser heads than mine.

19,485. Do you think that it is possible to apply any remedy to that?—No, I do not know any remedy for it. Mussels are very little used in this part of the world. When we had a sale for them they generally went to London. We consume hardly any here.

19,486. (*Mr. Lefevre.*) Are the mussel beds here increasing?—Yes, but the quality of the mussels themselves is growing worse, I believe.

19,487. What is the reason for this?—I do not know. I cannot pretend to say what is the reason. Then again with regard to the cockles, I think some steps ought to be taken to prevent the injury that is now done to the beds. Of course if you or any other gentleman go down with your family to the sea side you are fond occasionally of having a good basket of cockles. But that is impossible here now in consequence of the way in which the beds have been fished. At one time there was no place more celebrated than this for the fineness of its cockles.

18,488. Are the cockles you get here now not fit to eat?—No, there is nothing in them.

19,489. But they are eaten, are they not?—Yes, they are eaten, but unless something is done to regulate the mode in which they are to be taken there will soon be none left.

19,490. What do you propose as a remedy for the evil of which you complain?—I think that no cockles ought to be allowed to be taken up under a certain size. You would then have only those that are worth eating and are really nutritious food.

19,491. How would you prevent small cockles being taken with the larger cockles?—I would require them to be run through a sieve, and those that passed through I would have placed back again in their proper places on the beds.

19,492. (*Professor Huxley.*) Within your recollection have you found that the quantity of fish sent from this place inland has increased or decreased?—According to my notion it has decreased considerably.

19,493. Do you send any fish by railway to London?—I think not. I believe that no fish goes from this place to London by railway at all.

19,494. None at all?—I think not, but large quantities go from Brixham. I have seen them bought there over and over again for the inland towns. They send them to Bath, Bristol, and Taunton principally, I believe.

19,495. The railway people here do not send any to London?—No, I think not. In point of fact we can get fish down here from London cheaper than we can buy it here. If I choose to send up to London for fish I can get it down for two-thirds of the price, even after paying the railway carriage and all the expenses that I should have to pay here. We have a respectable innkeeper here at the Half Moon, and whenever he happens to be called on to provide for a large party he always sends up to London for turbot and for his fish generally. I believe he is able to get it down for half the price he would have to pay if he bought it in the city.

19,496. Do you consider that the falling off in the quantity of fish caught here is due entirely to the wasteful mode of fishing that is practised?—Yes, I do. I believe that if the mode of fishing was regulated the fish would soon become plentiful.

19,497. Do you think that if all the small fish which are now caught were allowed to escape they would all grow up to be big ones?—Yes, I think they would generally, but of course you must always make allowance for the number of small fish that are destroyed by the large ones. The greater part of those which are now destroyed when small by the mode of fishing practised would in my opinion soon become large fish fit for the market.

19,498. Is there any other subject upon which you can give us information?—There is one thing to which I wish to call your attention. So far I have particularly avoided saying anything about the salmon.

19,499. We are only empowered to enquire into the condition of the deep-sea fisheries?—I am aware of that, but there is one remark with regard to the salmon which I think I may be allowed to make. I am happy to say that since the recent Act of Parliament was put in force the salmon here have been increasing in the most wonderful manner. I have myself seen dozens in the pool trying to get over the weir. I never saw such a thing in my life. I know of my own knowledge that, owing to the regulations which have been imposed by the legislature, the salmon here have increased at a most astonishing rate. About April or May all the young of the salmon go down and stay in the river for several days, perhaps a week, in the brackish water. I suppose that is in order that they may become accustomed to the change of water before they go into the sea direct. If you allow small fish to be taken, what is to become of these graveling, when they are lying down in the pits in the river. It is well known that they do lie there before they go out into the sea, and do you suppose that a Topsham fisherman when he is taking an old fish or a salmon peal will not take these little graveling? They take anything that comes within their reach, and are not at all particular. Therefore I am of opinion that they interfere very considerably with the salmon fishery, and that they destroy a large number of the young.

19,500. (*Mr. Lefevre.*) You were speaking of oysters being brought here from other places, and laid down on banks?—Yes.

19,501. Are the banks to which you refer private banks?—Yes, the bed of the river is the place where they are laid down, and the Lympstone fishermen divide out the banks.

19,502. But are they private property?—Yes.

19,503. Do the fishermen pay anything for the right of laying down the oysters?—Yes.

19,504. Who claims the property?—Sir Drayton Drake is lord of the manor at Lympstone, and the Earl of Devon is lord of the manor at Starcross.

19,505. Have the oysters ever bred there?—No, I think not.

19,506. Have you ever tried whether oysters will breed in the bed of the river?—No, the breeding of oysters about here is very little, I believe. I have myself been out dredging here, but if you catch a great oyster it is easy to see that it is not the sort we have. There are a few, I believe, got down in the bight between Exmouth and Lympstone.

19,507. If you were to lay down oysters in the bed of your river have you any reason to believe that they would breed there?—I do not know. I cannot answer that question.

19,508. I think you said that the whole quantity of fish caught about here has decreased of late years, compared with what it was formerly?—Yes.

19,509. Has the number of men engaged in the fishing decreased also?—I think the number has decreased slightly, but I cannot say positively.

19,510. Have you any means of getting that information with regard to the number of fishermen?—Certainly, it can be obtained if you wish to have it.

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19,511. And also a comparison of the number engaged in the fishing now with what it was 15 years ago?—There will be no difficulty in supplying you with that information.

19,512. Then perhaps you will be good enough to forward it to the secretary?—Yes, with pleasure. My only object in appearing before you to-day is to do all I can to increase the productiveness of the fisheries. I am quite sure that if we can succeed in doing that we shall do a great amount of good to the poor men engaged in them.

19,513. I think you said that a great number of small trawlers come off this part to trawl?—Not directly off this port. There are only six trawlers here and not one at Lympstone.

19,514. Then do the trawlers to which you referred come from other parts?—Yes.

19,515. Where do they come from?—I think Brixham is the principal place.

19,516. Are there not a number of small trawlers belonging to the ports in this neighbourhood?—Exeter is one port, Teignmouth is the next. There is nothing at Dawlish, I believe. The next is Budleigh Salterton, and they have one there, I think.

19,517. The trawlers are open boats here, are they not?—Yes, they are open boats. If we had a harbour for them we might have larger vessels, but having no harbour they could not go out and in.

19,518. Do you mean that they cannot be dragged up the beach?—Yes; they could not be dragged up. The smallest of them will be from four to five tons.

19,519. But we have seen larger boats than that dragged up on the beach in other places?—I do not think that could be done here.

19,520. What is the size of the mesh of the trawl net used by the trawlers from Exmouth?—I do not know the exact size, but I should say it is from $1\frac{1}{2}$ to $1\frac{3}{4}$ inches from knot to knot.

19,521. Are you aware whether that is a legal mesh or not?—No, I cannot tell.

19,522. Have any means been taken to ascertain whether the trawl-boats used at Exmouth carry nets with a legal mesh or not?—I cannot say; but if not, means can easily be taken to ascertain that fact.

19,523. Have you ever heard of the nets being examined?—No.

19,524. You have never heard that there has been any inspection of the nets of the trawl-boats?—No, I think they have never been inspected by anybody. If you inquire particularly into the matter I think you will find, if you go to Exmouth, that they have a large number of seines there, which they use in drifting for herrings, and in the centre of all those nets they use the small mesh. I believe it is considered desirable by everybody that the small fish should not be caught, and I believe there is an Act of Parliament which fixes the size of the mesh that is to be used in fishing for herrings. Under those circumstances I think it would be wise to have that Act carried out, so that the fishermen should not be aollwed to use a herring mesh less than the proper legal shilling scale.

19,525. Are there any shrimpers along this coast?—I believe there are only very few; but there appears to have been a slight increase in the take of prawns. I have had more prawns this year from a man at Exmouth than on any former occasion, but I believe that the prawn fishery here is not of much consequence.

19,526. Do the persons engaged in catching prawns take many small fish in their nets?—Hardly any at all, I think.

19,527. What sort of nets do they use?—They are small round nets about 3 feet across. They are let down the ledges of the rocks and are pulled up again every now and then.

19,528. Do the men who fish with the seine nets bring in the fish dead or alive?—They are all alive.

19,529. Then in that case the fish could be thrown back again into the sea without being destroyed?—Yes. We draw in the seines very rapidly.

19,530. How long does it take to draw in one of your seine nets?—We can draw in a seine in five minutes. We always draw them in as fast as we can. We see at once what we have got. We keep all the fish that are of any use to us, and we throw the rest back again into the sea. What I complain of is, that some of the fishermen will not stop to do this. They throw them out of their nets on to the mud banks or anywhere. They do not care whether they put them back into the water or not, and the consequence is that the gulls and the shags and other birds come and eat them.

19,531. I think when you said you would put a stop to fishing with nets with a small mesh during a certain fixed time you made an exception of the sprat net?—Yes.

19,532. Why did you make an exception of it?—I think we must make an exception of the sprat net. The sprat is a very valuable fish for our poor people here.

18,533. What ought to be the size of the mesh of the sprat net?—I do not know the exact size, but it must be a small mesh to catch sprats. What is used here is what we call a capelin net, if you know what the capelin mesh is. But when they are fishing for sprats I think the Preventive men ought to be about in order to see that they do not take anything else.

19,534. Would you have Preventive men on the watch to see that the fishermen threw back into the sea all the other fish they caught?—Yes.

19,535. What is the number of persons who are engaged in the sprat-fishing here in the course of a season?—All the men go out fishing for sprats. The sprats generally come into the harbour, and as soon as they do so all the nets and men are out after them.

19,536. Have you any notion of the number of men employed in the sprat-fishing?—No, I have not.

19,537. Are there as many as 40 or 50?—There are five or six boats.

19,538. Do you think it would be feasible to have them looked after by the Preventive men?—Yes, certainly. I would have every one that goes out looked after, gentle or simple. Their nets should be examined to see that they were of the proper size, and that they take in nothing but what they are intended by the Act of Parliament to catch.

19,539. Would it not be necessary to have men specially appointed to look after the fishermen?—Not at all. The Preventive men know them all very well, and if they knew they were likely to be examined they would not dare to fish illegally.

The witness withdrew.

S. Willesford.

SCOBLE WILLESFORD called and examined.

19,540. (*Professor Huxley.*) What is your profession?—I am a solicitor.

19,541. A solicitor in this town?—Yes.

19,542. Have you been acquainted with the town and neighbourhood for a lengthened period?—For more than 20 years.

19,543. Have you taken much interest in the fishery question here?—Yes, I am secretary of the Salmon Fishery Association.

19,544. I presume you are aware that the object of our inquiry is the deep-sea fisheries, and not the salmon fisheries?—Yes, but I am anxious to call your attention to a point which has already been referred to by Mr. Kingdon, namely, to the fact that a considerable destruction of small sea-fish of all classes, such as turbot, soles, brills, &c., is constantly going on. Such fish must inevitably be caught owing to the size of the mesh used by the fishermen. Now, I apprehend that you will experience considerable difficulty in dealing with the question of the size of the nets, and

in prohibiting those of a certain class. Seeing that such a difficulty does exist, I would take the liberty of offering a suggestion.

19,545. What would you suggest?—I would suggest this: that any legislative enactment that may hereafter be made, to be of any practical utility, must embrace stringently this point, namely, the possession of fish under a certain size. It should be distinctly laid down that if turbots, or soles, or whiting, or any other fish, are caught by the men, and found in their possession under a certain size, the fact of having them in their possession would subject them to a penalty. It is notorious, as Mr. Kingdon has already told you, that thousands and tens of thousands of small fish are taken here and wantonly destroyed. The moment the larger fish are taken out of the nets these small fish are shaken upon the banks and there they are allowed to perish. They are either eaten by the birds, or they die and are destroyed in other ways. Of course there must be considerable difficulty in dealing with the question of the size of the mesh. You must allow these men to catch sprats, and when they are engaged in catching sprats their nets will catch anything else that happens to get into them. It is absolutely necessary then, in that case, that they should be allowed to catch other fish in obtaining the fish they really require for the purpose of sale. To do that properly they must be allowed to fish with nets of a certain mesh. Therefore if you can get an Act of Parliament passed so as to enable the proper authorities—either the Coastguard, or the police, or any other body—to institute a constant inspection of the boats with a view of ascertaining the nature of the fish caught, I think that would be sufficient. Of course there must be a penalty imposed for the possession of fish under a certain size.

19,546. Are you of opinion that that would remedy the evils complained of here?—Yes, I think that would be your only remedy, provided you find that you cannot deal with the question of the size of the mesh of the nets, which, I must admit, is an exceedingly difficult question to interfere with.

19,547. Is there any other suggestion you wish to make?—There is only one thing which I wish to add. I think Mr. Kingdon is quite mistaken in supposing that oysters do not breed here. My opinion is that they do breed here, but the fishermen take up the oysters at an improper time and without exercising due care. The consequence is that they take the shell of the oysters entirely uncleaned of the young which may have been adhering to them. At certain seasons of the year the shell of the oysters here is found covered with a number of small oysters. Probably, upon every oyster taken up, there may be from 8 to 10 or 12 of these small oysters attached to the shell. A scheme has been suggested for the preservation of these young oysters, and I believe that it has already been acted upon in the Menai Straits, where means have been adopted for disconnecting these small fish from the larger ones, and they have been returned to the water. Every shell has been cleaned, and the consequence is, as I have been given to understand, that where one oyster is got up for the market more than 20 are dropped back again, in order to enable the beds to renew themselves. Now I think there is a possibility of doing that with the same success in the estuary of the Exe; I have no doubt that, at one period, the Lympstone and Starcross oysters were considered an article of great delicacy and luxury.

19,548. You are of opinion that oysters would breed here if proper measures were taken to protect them?—Yes, from the inquiries I have made, I have no doubt that they would breed here, and that the oyster fisheries, in the course of a few years, could be made almost self-supporting. I am not aware that there is anything further I can tell you. My friend Mr. Kingdon has already taken up all the ground, and has left nothing to be added.

19,549. A question suggests itself in connexion with the remarks you have just made in reference to the oysters. You say that you would have the oysters cleaned as they are taken from the beds, and the young oysters returned to the beds?—Yes.

19,550. Do you not think that the necessity for doing that on the part of the fishermen would oblige them to spend a vast amount of time over the fishing?—No doubt the fishing would occupy more of their time than it does at present, but there would be a corresponding saving in obviating the necessity for procuring oysters from other places. In consequence of the deficient supply here, they are obliged now to bring considerable quantities from Jersey, Guernsey, the coast of France, and the coast of Holland. That can only be done at great expense, and if, by protecting the brood, they could always be sure of an adequate supply here, they would save a considerable sum in the expense of shipping as well as in the cost of the oysters they are compelled to purchase. In my opinion, that would be more than an equivalent for the extra labour they would have to perform in cleaning the oysters on the beds here, added to which, they would be saving the common wealth instead of destroying it.

19,551. I have no wish to dispute the excellence of the plan you suggest, but I put it to you, as a practical man acquainted with the mode in which dredging for oysters is carried out, whether it would not involve a considerable amount of additional labour to the men engaged in the fishing?—No doubt it would.

19,552. I have been out oyster dredging, and I have seen the oysters taken up in large masses and placed in the bottom of the boat. The men themselves are glad to get back to shore in coarse weather. It therefore suggests itself to me that the cleaning of the oysters as they are dredged up would take considerable time, and might be found very inconvenient?—It might be found inconvenient, but, as I have already remarked, there is another element which ought also to be borne in mind, and that is the saving of expense. If the fishermen here could obtain a sufficient supply of oysters from their own beds, they would save a considerable sum in the cost of shipping and obtaining oysters from other places.

19,553. Then, with respect to the sprat-fishing, you say that you would permit the use of a small-sized mesh in that fishing, but you would prevent them from taking other small fish?—Yes.

19,554. Do you think that it would be possible to carry out such a regulation?—Yes, I do not think there would be any difficulty.

19,555. Would you have it a summary process before the magistrates?—No.

19,556. Then how would you proceed?—I would give to some particular authority, such as the Coastguard, the power of entering the boats in order to ascertain whether there had been any violation of the law or not. At present that is the great difficulty we have to contend with. There is no power of seizing the small fish after they have been caught, and what we want is an Act of Parliament that will give that power and enable the offenders to be summoned before the magistrates. I think that would be the best summary we could have. The penalties attached should be small in the case of a first offence, but they should be gradually increased in the case of fresh commissions of the offence. I also think that in the case of an incorrigible offender the magistrates should have the power of awarding imprisonment. I need not tell you that to these men as a body a fine would be a mere nothing; they would raise the sum among themselves, and would repay themselves by doing the same thing subsequently. Under those circumstances, if they got hold of an incorrigible offender, I would suggest that imprisonment should be added after a certain number of convictions.

19,557. Do you not think that a sprat fisherman using his net in good faith, may mix up with his sprats small fish of the prohibited kind?—Most unquestionably he would do so; he would bring up small fish of other descriptions as well as sprats; but

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I think there would be no difficulty, if he chose to take sufficient trouble, in returning the fish that would be prohibited into the water again. I think that could be done with very little difficulty.

19,558. I presume you are aware that sprats are often taken in a very large mass in the sprat nets?—I am quite aware of it.

19,559. Then to sort them in order to remove small fish of other descriptions would occupy considerable time?—Yes, it would.

19,560. Would it not seriously impede the fishermen in their occupation?—I do not think it would; and as there is a possibility of the fish being returned to the water again without injury, I think it ought to be done. All these fish are, I believe, very tenacious of life; a sole will live for a considerable time after it has been taken out of the water.

19,561. (*Mr. Lefevre.*) There is one question I wish to put to you in reference to the breeding of oysters. Do they breed below the low-water mark?—On the banks just at the edge of low-water.

19,562. Just below low-water mark?—Yes.

19,563. Are they the oysters that are brought here, or are they indigenous oysters?—They are indigenous oysters.

19,564. Do you agree with the last witness that the oyster will not breed here?—No, I do not agree with him; I think the indigenous oyster here is an article that may be made of great value.

19,565. Is the whole of the river here private property?—One portion belongs to the Earl of Devon, and the other to Sir Drayton Drake.

19,566. Does the bed of the river belong to anybody?—I have a strong opinion that it does not, but that is a question of law.

19,567. Are there any portions of the bed of the river where private persons have the exclusive right of oyster fishing?—The oyster beds are let out in certain portions by Lord Devon and Sir Drayton Drake. They are not breeding places, however, but merely places where the oysters are deposited.

19,568. In order that they may fatten?—Yes.

19,569. With regard to the breeding of oysters, are there any places where private persons can put down oysters for breeding purposes, and prevent other persons from dredging them up?—No.

19,570. Are there any means by which such places could be provided in the bed of the river?—I am not sufficiently acquainted with the subject to be able to tell you that.

The witness withdrew.

J. Drew.

JOHN DREW called and examined.

19,571. (*Professor Huxley.*) You are steward to the Earl of Devon, I believe?—I am.

19,572. Have you acted in that capacity for many years?—Yes, for 20 years.

19,573. You are very well acquainted, I presume, with the west shore of the river?—Yes.

19,574. And you are acquainted with the condition of the people engaged in the fishing there?—Yes.

19,575. Are they in a great measure tenants of Lord Devon?—Yes, the greatest part of them on the west side.

19,576. How many persons are there engaged in the fishing on the west shore, in Starcross, for example?—That is a fishing village, but I believe that the number of fishermen there are reduced in number very considerably; there are very few there now who can be termed fishermen.

19,577-9. Have you any notion of what the number is?—There are not half a dozen there who get their living by fishing.

19,580-1. Are there any at Powderham?—There are none at Powderham, I believe.

19,582. Starcross is the only place that contains any fishermen worth speaking of?—Yes.

19,583. Within your recollection, was the number of fishermen there much greater than it is now?—Yes.

19,584. What was the number 20 years ago?—I do not know the exact number, but it was two or three times as large as it is now.

19,585. Was there a proportionately larger number of boats?—Yes, I think so.

19,586. How many boats are there at Starcross now?—Do you mean fishing boats?

19,587. Yes.—Not more than three or four, I believe.

19,588. Are they very small boats?—They are boats of about 4 or 5 tons, or something like that. Perhaps they may be less than that; I do not know much about the boats.

19,589. Has the condition of the people there become depreciated since you have known the place?—They have had other means of getting a living since the railway was introduced there. A great number of the fishermen have applied themselves to the business of taking passengers across the river; that has turned the attention of many of them away from the fishing.

19,590. So far as it depends upon the fishing, would their condition have been much depreciated?—I have no doubt that it would.

19,591. What in your opinion is the reason of that?—The scarcity of the fish.

19,592. Within your own recollection, can you speak of an abundance of fish in the river?—Yes.

19,593. Were the fish much more abundant 20 years ago?—Yes, they were much more plentiful than at present.

19,594. Considerably so?—Yes, I think so. I used to see them brought about then in much larger quantities than now; one rarely sees a basket of fish caught in the river now, but it was frequently the case then.

19,595. Was any quantity of the fish caught then sent inland to market?—It was not sent to any long distance.

19,596. How was it disposed of?—It was generally hawked about by people in the neighbourhood.

19,597. Is there any fish sent away from Starcross by railway now?—No, I think not unless there is a considerable quantity of herrings caught. They would be sent away by railway.

19,598. To what cause do you ascribe the falling off of fish in the river?—I cannot, from my own knowledge, give you any reliable information on that subject, but I have heard that it is owing to the smallness of the nets, or rather of the mesh of the nets, used by the fishermen.

19,599. Are you aware whether that is the opinion of the fishermen themselves?—I believe it is. Those who really wish well to the fishermen have told me so, and they say it is desirable that the use of nets of so small a mesh should be prevented.

19,600. (*Mr. Lefevre.*) Are there any seine fishermen in attendance here?—I have brought a couple of men with me who will be able, I believe, to give you a much better account of the actual working of the fisheries than I can.

19,601. (*Professor Huxley.*) Has Lord Devon any interest in the oyster beds here?—Yes, he is lord of the manor, and he owns the soil of the Exe, within certain limits from Darling's Rock to Exmouth and to Cheekstone, within the bar.

19,602. The foreshore over that extent is owned by Lord Devon?—He owns the bed of the river and the foreshore as well.

19,603. Has there being any question raised as to the rights of Lord Devon in that respect?—Yes, a question was raised, and it has been decided in Lord Devon's favour.

19,604. (*Mr. Lefevre.*) The bed of the river is the the property of Lord Devon as well as the bank?—Yes.

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19,605. (*Professor Huxley.*) Have the oyster beds here diminished in value of late years?—I cannot answer that question. The value to Lord Devon has not diminished. He only received a nominal rent.

19,606. What rent has he received?—He has received a nominal rent of 1*s.* a year for a certain space marked out, so as to give the people of the place engaged in the fishing, an opportunity of protecting their own property. The rent has not been charged by Lord Devon with a view to any personal benefit to himself.

19,607. Has the value of the oyster beds to the people who rent them fallen off?—Yes, considerably.

19,608. Do you agree with Mr. Kingdon in the statement he has made to us as to the cause of the falling off?—Yes.

19,609. That it is in consequence of the increased price of oysters at Falmouth?—Yes.

19,610. The cause of the falling off has nothing, in your opinion, to do with the fishing in the river?—Certainly not.

19,611. Have the oysters here much fallen off?—Yes; the breeding of oysters in the Exe has fallen off considerably during the last 25 years. There was a time when the water bailiff of Lord Devon used to prohibit the fishermen from dredging for oysters in the river, except between Michaelmas and Christmas, and then they were only permitted to dredge for two days in the week.

19,612. (*Mr. Lefevre.*) Has Lord Devon a right to the oyster-fishing in the river?—Yes.

19,613. You say that the quantity has very much fallen off?—Yes.

19,614. Is that the reason there are no restrictions as to the fishing now?—Yes, the quantity in the river has become so small that the water bailiff does not look after it now at all. In former years the boats used to come in to dredge twice a week between Michaelmas and Christmas, and the water bailiff took a certain amount of toll from them.

19,615. Are you enabled to state what is the cause of the falling off?—No.

19,616. You can form no opinion?—No. It is because the beds have been destroyed in some way.

19,617. I understand, from what you have already stated, that Lord Devon has at present the power of limiting the amount of dredging, and that he can exercise it if he desires?—Yes.

19,618. Then the falling off has not, in your opinion, been the result of the river having been overfished?—I think it must have been overfished at some time, but how the scarcity has really occurred, I cannot, of my own knowledge, state.

19,619. Do you think that the oysters no longer breed there?—No.

19,620. Do you think that they do breed there?—Yes, they do breed there.

19,621. But they do not grow to the same size they did formerly?—In fact, they are not allowed to do so.

19,622. How is that?—The oysters are not protected as they were in former years, and they are taken away before they are allowed to come to any size.

19,623. Would it not be worth while for Lord Devon to enforce regulations as to the time during which the fishermen should dredge and the mode in which it should be carried on?—In fact, when restrictions were imposed it was found that the fishery caused a great deal of trouble and very little profit.

19,624. I presume that Lord Devon has an ancient charter giving him an exclusive right to the oyster-dredging in the river?—Yes.

19,625. (*Professor Huxley.*) Has he any control over the other fishing?—He has no control over the seine-fishing.

19,626. Does he own the bed of the river?—All within the manor of Kenton.

19,627. But it does not lie in his power to exercise any control over the destructive modes of fishing which you have described to us?—Not over the seine-fishing.

19,628. (*Mr. Lefevre.*) Only over the oyster-fishing?—Yes.

19,629. Has he ever attempted to limit the number of persons who were to dredge for oysters?—Yes.

19,630. In what way?—The right of dredging used formerly to be limited to the people who lived within the manor.

19,631. But of late years there has been no attempt to limit the number?—No.

19,632. Does Lord Devon still claim the right to regulate the fishing and to limit the number?—Yes.

19,633. But he does not think it worth while, in order that he may keep up the breed, to do so?—No.

19,634. (*Professor Huxley.*) Was the supply of oysters in the river at any time of consequence to the town of Exeter; would it be of any material consequence to the town that there should be a supply in the river?—No; not to the town of Exeter, but to all the neighbouring villages it was a matter of consequence.

19,635. You think that the people in the villages in the neighbourhood are really worse off from the want of being able to collect that article of food?—I think there is no doubt about it.

The witness withdrew.

W. S. McLaughlin.

William Scott McLaughlin called and examined.

19,636. (*Professor Huxley.*) Are you a fisherman?—Yes.

19,637. Where do you live?—At Powderham, near here.

19,638. On the west shore?—Yes, opposite Lympstone.

19,639. Is there any fishing going on there?—I am a fisherman there, and there is also my brother, who is a fisherman. I believe that is all.

19,640. Two persons?—Yes.

19,641. Do you and your brother support yourselves entirely by fishing?—Yes.

19,642. Do you cultivate the land at any time?—No; we have shell-fish boats as well.

19,643. Do you act as labourers?—No.

19,644. You support yourself entirely on the water?—Yes.

19,645. How long have you been employed in that way?—I have never done anything else.

19,646. How long is that?—About 30 years.

19,647. Was your father a fisherman?—He was.

19,648. When you first began, were there many more persons engaged in that business than there are now?—Yes, hook-and-line fishermen.

19,649. Did they fish outside?—They fished in the river.

19,650. How many were there?—I have seen as many as 50 hook-and-line boats fishing in the river.

19,651. Did they all come from Powderham?—No, from Starcross, Exmouth, and Lympstone, principally. There were never more than two from Powderham.

19,652. But you have seen as many as 50 together?—Yes.

19,653. They came from all the villages round about?—Yes.

19,654. Were these boats hook-and-line boats altogether?—Yes, they were hook-and-line fishing boats.

19,655. Were they the same persons as those who fished with nets at other times?—Some were, and some were not.

19,656. What was the total number of fishing boats at that time, at a rough guess?—About 50.

19,657. How many are there now, altogether; I suppose you know them all?—I do not believe there is any regular fisherman.

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19,658. Nobody but yourself and your brother?—Yes; we get the bulk of our living from shell-fishing.

19,659. I am speaking now of all kinds of fishing; how many persons are there who get their living by fishing as much as yourself and your brother?—Perhaps 20 or 30.

19,660. Then I shall be safe in saying that there are not half the number that there were in former years?—Yes.

19,661. What is the cause of that?—I have not been out fishing with hook and line for four years as I used to do, and for this reason, that I cannot catch anything when I go out.

19,662. Were you ever a seiner?—I have never kept a seine of my own, but I have got a herring drift-net.

19,663. What is the cause of the fish having fallen off?—Because the small fish have been allowed to be caught.

19,664. Did you hear Mr. Kingdon's evidence?—Yes.

19,665. Do you agree with it?—Yes, the whole of it.

19,666. Have you seen the destruction he referred to going on?—Yes, and ten times more of it.

19,667. When did they begin to seine at Topsham; how many years ago?—They always worked the seines.

19,668. Did they work them when you were a boy?—Yes.

19,669. When did the supply of fish begin to fall off?—When they began to use the little seines.

19,670. Were the seines of a different sized mesh when you were a boy from what they are now?—No, but the men who used them were of a different mind then from what they are now; they only fished for the large fish; they catch all the small ones now. If they caught them when I was a boy they put them back again. Of course it took a great deal of time. I should say that they were ten times longer picking the small ones out then they were in making the haul. I have heard my father say that frequently.

19,671. How many seines were there 30 years ago when you began fishing?—There were the same number that there are now.

19,672. Have they neither increased nor diminished?—I do not think they are more or less.

19,673. Were they worked by the same men as those who worked the hook and line?—A great many of them at Lympstone, Starcross, and Exmouth, but not at Topsham.

19,674. What are they at Topsham?—They are seiners altogether.

19,675. Did the other men object when the small seiners destroyed so much small fish?—No, when they began, one and all did the same.

19,676. But at first they fished fairly?—Yes.

19,677. They took great pains to pick out the small fish?—I have heard my father say that it took ten times as long to pick out the small fish as to make the haul.

19,678. When did they first become careless about it?—The fish began to get scarce about 10 years ago.

19,679. Do you date from that the time when they began to be careless?—Yes.

19,680. Were they not aware that they were injuring their own interests?—Yes, and I think that if there was an Act to make them fish fair they would not object to it. If one of them would fish fair, I think the whole of them would.

19,681. They refrained from picking out the small fish because they wanted to get back to market sooner?—Yes, they used to throw it out on the bank instead of taking it into deep water.

19,682. Are you of opinion that if there was a prohibition against these persons having small fish in their boats it would be sufficient to remedy the evil? Do you think in that case that the fishing would return to what it was formerly?—Yes, I do.

19,683. Do you think it would be necessary to increase the size of the mesh?—I think if you were only to use a salmon mesh you would not catch small fish.

19,684. Have you also used a seine net?—I have never kept a proper seine, but I have sometimes been out with one.

19,685. Have you ever been trawling outside?—No.

19,686. You have altogether confined yourself to the river fishing?—Yes.

19,687. (*Mr. Lefevre.*) I think you are principally engaged in the shell-fishing?—Yes, and I go over the bar for the shell-fish, and for hook-and-line mackerel, in different seasons of the year.

19,688. But you mainly fish for shell-fish?—Yes.

19,689. What shell-fish do you get principally?—Oysters, mussels, and winkles.

19,690. Do you agree with the first witness that the demand for mussels is not so great as it was some time ago?—No, it is not, and we have not been getting many good fish for the last year.

19,691. Have they increased in number?—Yes.

19,692. And they have diminished in size?—They have not diminished in size, but they were not fat fish.

19,693. How do you account for that?—I don't know how to account for it.

19,694. For how many years have you noticed this?—During the last two or three years. I think if we got our mussels fat fish again we should get the same market for them at Billingsgate that we used to have.

19,695. Have you noticed any falling off in oysters?—Yes; we cannot get many to lay down now without giving 10*s*., or 12*s*., or 14*s*. a tub for them, and that will not pay us. A few years ago the price was only 2*s*. up to 4*s*. a tub.

19,696. It does not pay you at 12*s*. or 14*s*. a tub to bring them here and place them on your beds to fatten?—No.

19,697. What price did you formerly give for them?—Three years ago I got them for 3*s*. a tub.

19,698. What are they now?—From 10*s*. to 14*s*.

19,699. Has the trade been drooping since then?—Yes.

19,700. Have you ever dredged for oysters in the bed of the river?—Yes.

19,701. Are there many to be found there?—Not enough to pay for the work.

19,702. Are there men who have dredged there habitually for oysters?—Yes, more or less. I saw a man dredging there to-day as I came along.

19,703. Do you think the oysters breed there?—Yes.

19,704. Are there as many as there were formerly?—No, because when I was a boy we were able to catch from 15 cwt. to a ton per day.

19,705. Do you think the falling off has been occasioned by over-dredging?—No, they don't breed so much, I think. Formerly they used to throw over all the small ones; now they catch and bring everything away.

19,706. That is much about the same thing as over-dredging?—Of course, if you carry away the brood they will not breed on your beds.

19,707. Then would it be better to leave the large oysters for breeding purposes, and take away only the small ones?—Perhaps it would, but the young ones spawn as well as the large ones.

19,708. At what time of the tide do the seine fishermen here begin fishing?—At half ebb.

19,709. What is the width of the river at the lowest tide?—At some places it is not more than 20 or 30 yards across, and in others from 40 to 50 fathoms.

19,710. What is the average width?—Something between the two.

19,711. Can they put the seine right across?—Yes.

19,712. And draw it to one side?—Yes.

19,713. And they can sweep every fish out of the river?—Yes.

19,714. What is the nature of the bottom of the river below low-water mark?—Sand and mud.

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19,715. Are the banks muddy ?—At the high part of the bank, but at the lower it is sand.

19,716. Has the mud increased ?—No, it has decreased, there is more sand.

19,717. Has there been any difference in the number of different kinds of fish ; has there been a decrease in one kind more than in another ?—I think not.

19,718. There has been a decrease ?—Yes ; about 20 years ago I could catch a cwt. in a day's fishing.

19,719. Has it decreased very much ?—Now I cannot catch 100 fish in a day.

19,720. Have sprats decreased ?—There has not been a London sprat in the river for many years, but the river has been full of herring sprats.

19,721. Do not the real sprats come into the river now ?—No ; they have not been here for eight or ten years I think.

19,722. Do you mean to say that the sprats in the dish are all young herrings ?—There are no London sprats.

19,723. Has there been no sprat-fishing here in the river lately ?—No, but at Teignmouth they have got a great quantity of sprats. They come into our river only very seldom.

19,724. Then the sprats we have heard of are mostly young herrings ?—Yes, I do not remember sprats here more than two or three times in our river for the last 30 years. I have seen as much as one hundred tons brought ashore where I used to live in one day.

19,725. Do the herrings spawn in the river within the bar ?—Yes, all up and down the river.

19,726. Do they come in as great quantities as they did formerly ?—I think they do.

19,727. Do you think there are more herrings caught now than were caught formerly ?—Yes, because there are more people to catch them.

19,728. Are there still great quantities of young herrings caught ?—Yes, our river was full of young herrings, all the last season.

19,729. How many men were engaged in taking them ?—When the herring sets in, the seine herring men here stop at home as well, but if there are no fish to catch they are off to sea again.

19,730. Do they catch full sized herrings with the seine net in the river ?—Yes, and the young herrings too.

19,731. Do the mackerel come much within the bar ?—They come close to the bar but not into the river.

19,732. Do you catch them off the bar ?—Yes, they are a sea fish.

19,733. Do you think that there has been any diminution in them ?—Not in the least.

19,734. Has there been an increase ?—I fancy there has been. We see plenty off the shore, but they won't take the hook, and they do not come near enough to the shore to be struck with the seine.

19,735. Are there any seine nets used about Dawlish and along the coast ?—Yes, the number has increased within the last 10 years.

19,736. Do you think the young mackerel come up the river here ?—No.

19,737. You have never caught any ?—I have seen a few but nothing to speak of. It is a rare thing for mackerel to come into the river.

19,738. What number of seines are used at Dawlish and along the coast for catching mackerel ?—There are three or four at Dawlish, and perhaps 10 at Teignmouth.

19,739. Do they catch much mackerel ?—Sometimes.

19,740. Do you think the supply has increased ?—Yes, because we have more nets now, and better nets too.

19,741. Do they send off their fish by railway ?—Yes, to all parts.

19,742. (*Professor Huxley.*) Do you get the full-sized herring in the river here ?—Yes.

19,743. Is the full-sized herring you get here as large as those caught at Yarmouth ?—Yes.

19,744. Is it the same fish ?—Yes.

19,745. Do you get a small kind of herring here ?—Yes, the same as you saw to-day.

19,746. They are all young fish ?—We get them from that size up to full-grown fish.

19,747. Do you get a full herring smaller than the common size ?—We get them of all sizes.

19,748. You know what a full fish is ?—Yes, full-roed.

19,749. Have you ever found in the river here a full-roed fish much smaller than the ordinary full-roed fish ?—Yes, I think so. If we find the fish in the sea, we generally find that we have the same in the river.

19,750. Have you ever heard your fishermen here say that they have caught any kind of herring different from the ordinary sea herring ?—No, it is always the same fish. When they strike the coast, they strike the river.

19,751. When do you fish for them ?—Generally from Michaelmas to Christmas.

19,752. When are they full of spawn ?—November is the best month.

19,753. Do you get them full in January ?—No, they are going off fast now.

19,754. Are they shotten now ?—Yes, a great many of them.

19,755. You were speaking just now of the seining here ?—Yes.

19,756. Do you catch them with drift nets ?—Yes, mine are drift nets.

19,757. Do you set them here ?—No, outside the bar. In the river they are caught with the seine.

19,758. Do you consider that it is one and the same fish that you get at both places ?—Yes.

19,759. Has there been much seining for herrings in the river for many years past ?—Yes, there always has been.

19,760. And of herring sprats ?—Yes.

19,761. Is there a large quantity taken off here ?—Yes, of London sprats. I have seen 100 tons of London sprats at once.

19,762. Is any large quantity of herring sprats taken ?—No, they do not catch them if they can possibly prevent it. They think it better to let them come to perfection, but in hauling up the seines they kill a lot.

19,763. You do not think that for the last four or five years many London sprats have been caught here?—No.

19,764. But you have caught small herrings ?—Yes, in the mesh there are small herrings that come with the larger ones. They draw them into the boat altogether.

19,765. (*Mr. Lefevre.*) You do not fish purposely for the small herrings ?—No. If they thought they were going to catch nothing but herring sprats, they would not go out to catch them at all.

19,766. You say that when you were a boy you fished with the line ?—Yes.

19,767. What did you catch ?—Flounders, plaice, turbot, cod, halibut, and other fish.

19,768. Have you observed a diminution in all these kinds of fish ?—Yes.

19,769. What paid the best ?—Flounders. I have caught in my days hundredweights of flounders, and a few bass, eels, and cod. There was a large quantity of eels.

19,770. Do you catch them now ?—They catch them very small indeed.

19,771. You have not observed any diminution in the herring or mackerel ?—No, because they are sea fish.

The witness withdrew.

EXETER.

J. Challis.

23 Dec. 1863.

JOHN CHALLIS called and examined.

19,772. (*Professor Huxley.*) Are you a fisherman?—Yes.

19,773. You are engaged in fishing in the river here?—Yes.

19,774. Of what place are you a native?—I belong to Lympstone.

19,775. What kinds of fishing have you practised there?—All sorts of fishing.

19,776. How many years have you been engaged in fishing?—For the last 30 years.

19,777. When you first began to fish how many boats went out from Lympstone?—Just about the same as now.

19,778. There has been no increase or diminution?—There may be one more now.

19,779. There is now only one more than there was when you commenced fishing?—Only one more.

19,780. Is that engaged in seining?—Yes, there is one more seine.

19,781. What was the total number of people employed in the fishing when you began 30 years ago?—About 30.

19,782. How many are there now?—Somewhere about the same number.

19,783. Has the supply of fish which these persons catch very much fallen off of late years?—The flounders have fallen off.

19,784. Has there been any falling off in the other kinds of fish?—I do not think there has been. Sometimes we have had less herrings, but the herrings when they come in come in in a bulk. It is the flounders that have fallen off most.

19,785. In former years was there a large supply of flounders here?—Yes, we have had very large takes.

19,786. How were they taken then?—They were taken by the hook mostly.

19,787. Did you use the seine then?—Not so much as it has been used since. The small fluke seine we used with a herring scale.

19,788. The size of the mesh was the same as the mesh of the herring net?—Yes, it was a large seine. At that time there were very few small fish destroyed. When we had a take we sorted out the small and put them back into the water. They do not take as much trouble now-a-days as we did then.

19,789. Were you in the habit of seining for herrings every season?—Yes.

19,790. Did you take a considerable quantity of small fish in that way?—Yes.

19,791. Have you found that that has diminished the number of herrings you can obtain every year?—The herring is a very uncertain kind of fish. Sometimes you will not get any and sometimes they are very plentiful.

19,792. Suppose that you take a great quantity of herrings in your seines one year, do you find that you get fewer herrings the next year?—No, but one year they may be very plentiful and the next year we may have none.

19,793. You do not find that the quantity you take in your seines in the course of one season's fishing causes any diminution in the quantity you catch another year?—Not at all.

19,794. Then, in your opinion, the use of the seine-net does no harm to the herring-fishing?—Not at all.

19,795. Are the fish that are caught in that way much bruised?—No.

19,796. How do you work the seine?—We land with one end on the banks of the river and shoot the nets round.

19,797. Do you land again with the other end?—Yes, we land again and haul the net in.

19,798. You drag the fish on shore?—Yes.

19,799. You do not work the net as a circle net?—Yes we do; it is a circle net.

19,800. Tuck-net fishing is pulling a net round the fish and lading them out into the boat, not dragging them on shore. You drag all your fish on shore?—Yes.

19,801. Do you find that in doing that the fish ever become injured or damaged in any way?—No; no harm comes to them.

19,802. Have you a good market here for your fish?—Yes.

19,803. Do you practise that mode of fishing, namely, seining, a good deal here?—Yes.

19,804. Do you ever find that when you draw in your nets there is any considerable mixture of other fish with them?—Yes, there may be at times.

19,805. What sort of fish do you find mixed up with them?—Various kinds. Sometimes there are a few small pollacks no longer than my finger.

19,806. Do you ever catch any small turbots with the herrings?—Sometimes.

19,807. Any small flounders?—Yes.

19,808. And plaice?—Yes, sometimes we get very small plaice.

19,809. I suppose that you get a considerable quantity of small fish sometimes?—Yes.

19,810. Would it interfere with you much in your trade if you were bound to pick out these small plaice and flounders, and return them to the water?—That would be very difficult when the herring season is on. The herring season sets in in September, and it generally lasts until January. After that is over I think there ought to be a larger scale used for flounders. They would not catch any small fish then.

19,811. You think if a larger scale was used no injury would be done to the small fish?—Yes.

19,812. A suggestion has been made here by one of the witnesses, that if persons engaged in fishing take fish, such as flounders and the like, of too small a size, they should be fined for so doing. I wish to know whether the carrying out of that regulation would be any hardship to you as a practical fisherman?—No, I think not.

19,813. If any officer were to come down upon you and say: "You have got a great quantity of "small fish here, I must have you fined" would you consider that a hardship?—No, I think it would be a benefit to us if it were done in a proper manner.

19,814. Do you think that the clearing out of these small fish would take a great deal of time?—Well, if we were obliged to do it, it would be done. We should all be compelled to do it.

19,815. Do you think that the time taken up would interfere seriously with your occupation?—It would take a little longer of course.

19,816. But it would not interfere seriously with you?—I think after a little time we should obtain a benefit because the fish would be a great deal larger.

19,817. But suppose that nothing but the herring fishing is dealt with, do you think that the trouble of picking out the small fish would be so great that it would interfere seriously with your trade?—No, because most of us catch herrings a long way down, and most of the flounders are caught up the river. We do not catch a great many flounders with the herrings. It is along the flats and about the lakes that they are caught.

19,818. Then you do not think it would interfere with your interests?—No.

19,819. Do you agree with what you have heard stated to us as to the falling off in the supply of fish in general, apart from the sprats?—There are not a quarter as many flounders as there used to be, and those that we do get are very small indeed.

19,820. Do you ascribe that to catching the young fish?—Yes.

19,821. Do you think that could be obviated by making the mesh larger?—Yes, after the herring season is over, or unless a shoal of sprats comes in. The London sprats sometimes come in, and then we are obliged to have a mesh according. I have a sprat bunt now, but I do not use it unless the sprats come in the river.

19,822. (*Mr. Lefevre.*) Do you recollect the time when the fishermen threw back the small fish?—Yes, a great deal more than they do now.

19,823. Why do they not do it now?—I don't know.

19,824. Do they sell the small fish more than they did?—They sell what they can.

19,825. Was there no trade for it formerly?—People would not have it when they could get larger fish.

19,826. Then you could not sell small fish at all then?—No, because there were plenty of large fish.

19,827. But you can now?—The fishermen cannot get any others, and they get what they can for that.

19,828. Do you never catch the large flounders at all now?—No, they are all small.

19,829. Do they not live long enough to become large?—There are a few, but they are a very small quantity.

19,830. Does it pay you to catch the small flounders?—No, I have not been out hooking for 10 years.

19,831. Are flounders caught by the hook?—Yes.

19,832. Does it answer to use a seine for these small fish?—I only go out seining for herrings.

19,833. You do not catch a very large number of small fish then?—There are not many flounders where we get the herrings. When the herrings strike in the flounders are higher up the river.

19,834. You do not practise seine-fishing higher up the river?—No, that is done by the small seines which go from January all the year round when the herrings are all over.

19,835. Are they made like your seines?—Yes, they are just as deep, but have a smaller scale.

19,836. You do not use a net of that description yourself?—No, I have not got one.

19,837. Is there any one here who does use it?—Not that I know of. There are no Topsham men here. There were two, but they have gone away. I believe that the Topsham herring men do not hold with the small nets.

19,838. If they cannot sell the small fish they catch for anything, why do they go out fishing for them?—They do sell them, but they make very little by them. People do not buy them for eating. They have been carried over to Salterton to bait the lobster pots with.

19,839. How many men are engaged in fishing with these fluke nets?—A dozen at Topsham.

19,840. Do they catch large fish at times?—A few, but they catch nearly all small.

19,841. They do not catch enough large flounders to make it pay?—I do not think they do.

19,842. Do they sell the small flounders?—They sell what they can, but people will not buy them except to take to Salterton for baiting the crab pots.

19,843. Is there a large demand for small fish for that purpose?—At times there is.

19,844. Are there about a dozen men employed in that trade?—Yes, but there are not a dozen fluke seines. There are only about half a dozen.

19,845. Does it require two men to work each net?—It takes two and three, or four sometimes.

19,846. (*Professor Huxley.*) As I understand you, the people of Lympstone are doing about as well as they used to do when you first knew the place?—About the same.

19,847. Only instead of fishing in one way they fish in another?—Yes.

19,848. (*Mr. Lefevre.*) None of the regulations suggested to us to-day would affect you at all?—Not at all, they would rather benefit us than otherwise; I believe they would benefit all.

19,849. You do not fish for the small fish?—No. What is the use of catching them.

19,850. But there are men who are engaged in fishing for these small flounders in order to sell them?—Yes, they may have a few large ones, but the greatest part is small. Sometimes they gave them to the pigs, and at others they take them to Salterton for baiting the crab pots. As to oysters, I have been in the habit of having from 500 to 600 tons from Falmouth in the course of a season.

19,851. Do you agree with the other witnesses that the brood of oysters has fallen off?—Yes, because the men dredge up everything. The oysters have fallen off on the French coast, and now the Frenchmen flock into Falmouth harbour, and they, together with the London merchants, are taking away an enormous quantity. They are dredging up everything.

19,852. Have you any allotment of an oyster bank yourself?—I have an oyster bed at Lympstone.

19,853. Have you given up laying down oysters there?—I have about 50 tubs left.

19,854. Do you recollect the time when there were a great number of oysters indigenous in the river?—I recollect when there were a great deal more than there are now. That was because, as Mr. Drew has stated, the Earl of Devon interfered then. Since it has been made a free river, anyone can dredge in it, and there is nobody to interfere.

19,855. How long is it since it was made a free river?—Since there was a trial carried on here.

19,856. Since then there has been no protection?—No, it is now a free river like at Falmouth.

19,857. Do you wish to see any regulations enforced as to the number of men who shall be allowed to dredge in the river?—At that time none of our side were allowed to dredge on the Starcross side.

19,858. Would it be a benefit to you if you were allowed to dredge there?—No.

19,859. Were you in the habit of buying small oysters that were dredged from the bottom of the river?—They did not take small oysters then. They threw them overboard to breed from. Now all are taken up, and nothing is left but the sand. They have left some in Falmouth Harbour, but I cannot buy an oyster there now. They are now getting from 11*s.* to 14*s.* a tub for them, and they cannot get a tub a day where they used to get 10, 12, and 14 tubs.

19,860. Would you like to see any regulation carried out as to the size at which the oysters shall be taken?—Yes; the small oysters ought to be allowed to remain. There were 50,000 tubs taken out of Falmouth Harbour about three years ago.

The witness withdrew.

EDWARD SEARLE called and examined.

19,861. (*Professor Huxley.*) Are you a fisherman at Starcross?—Yes.

19,862. How many years have you been a fisherman there?—I have been a fisherman there for nearly 50 years.

19,863. What kinds of fishing have you practised?—I have been seining a little. That is the last fishing I have been at.

19,864. Have you been a hooker then?—I have been seining for 15 years, but I have also been hook-fishing, and drifting for herrings, shell-fishing, and dredging for oysters.

19,865. Do you not seine for herrings?—Yes.

19,866. But do you not seine for other fish?—We seine for herrings and we drift for herrings too.

19,867. What was the number of fishermen at Starcross when you first knew the place 50 years ago?—There were four large seines that belonged to the place then.

19,868. How many fishermen were there?—There were eight men to each net.

19,869. That would be 32 altogether?—Yes, but they were not confined to that sort of fishing.

19,870. What did they do besides?—At times they went to sea.

19,871. How many people were there who got their livelihood altogether from the fishing?—20 or 30.

19,872. Twenty or thirty got their living wholly and solely by fishing?—Yes, in the winter time.

EXETER.

E. Searle.

23 Dec. 1863.

19,873. How many are there now ?—At this time there are but very few. There are not more than four or five ; perhaps there may be five or six, taking the shell-fishing and everything.

19,874. How has that come about ?—The river has altered a great deal.

19,875. The river has altered ?—Yes.

19,876. In what way ?—It has filled up with sand. Where there used to be good land for oysters, good plain ground free from dirt and sand, it is now filled up. The people, since I can recollect, used to go dredging on the Earl of Devon's rights. They dredged for oysters. The large ones they caught they took to the market, and the small ones they threw back again.

19,877. Have you ever been engaged in oyster dredging ?—Yes, I have been out 20 years ago.

19,878. What did you catch then ?—I have got as much as two boats in a day of good large oysters, and there were no fellows to them in England as to their flavour.

19,879. That fishing has come to an end now ?—Yes. Where there is any ground now for the oysters to breed upon the fishermen go and take up the small oysters as well as the large ones. They would not take them up unless they were as large as the palm of your hand when I went a fishing, not before they got a certain age and became pretty thick.

19,880. Do they take them much less now ?—Yes, very much less. They take them up now when they are only as large as a five-shilling piece, and it is that that injures the breed. But the filling up of the river has also had a good deal to do with it. In places where I have been dredging years ago, where I have got from seven to eight or ten bushels, there is now seven or eight feet of sand.

19,881. How is it that the fishermen now are permitted to take the oysters up at all times of the year ?—Because there is nobody to look after the fishing.

19,882. But are you not aware that that is against the law ?—Yes. There used to be a water bailiff at Starcross.

19,883. (*Mr. Lefevre.*) Are you speaking now of that part of the river over which Lord Devon claims jurisdiction ?—Yes. We used to be bound to go dredging then at particular times. The boats were only allowed to go in at certain times, and we had to come in at such a time in the evening. Two days a week only were allowed to us from Michaelmas to Christmas.

19,884. Was the fishing open to all the fishermen about here ?—No, only to the people who belonged to Kenton manor.

19,885. You were only allowed to fish for two days a week ?—Yes, only on the two first days in the week. If we could not go out on those days, they would not let us go out on the two days afterwards in order to make it up. We were obliged to go out at stated times, and according to what we got they took out some of the best oysters as an acknowledgment. If we took any of the small ones they seized them and put them back again. At these times the people here could catch oysters.

19,886. (*Professor Huxley.*) Were you also engaged in hooking at that time?—I have been hooking off and on from the time I was nine years of age.

19,887. Did you ever catch many fish with the hook ?—Yes, a good many fish were caught by the hook 40 years ago.

19,888. What kind of fish ?—There were plenty of fine flounders and plaice then.

19,889. Can you catch any quantity now ?—You may go out from morning to night and not catch six-pen'orth.

19,890. What is the reason of that falling off ?—There are so many seines now. We have 25 or 30 of them dredging all over the mud. They put a boy out, go round, and draw in the net, getting everything there is, eels, and anything else they can get. They put out boys, generally youngsters, who will not work for their living, and they rob me and other men who have to work hard. They go round in a circle with the net. Then they land and they haul the net ashore taking everything that is in it, and they sweep everything clean out of the river.

19,891. (*Mr. Lefevre.*) Are you talking now of the seine fishing higher up the river, at Topsham ?—Yes. There is not so much mud where they go fishing in the lower part of the river.

19,892. (*Professor Huxley.*) Were there no seines when you begun fishing, when you were a boy ?—Yes, there were seines long before my time.

19,893. Were there as many then as there are now ?—I don't know.

19,894. Have you noticed much difference in that respect ?—There are a great many more herring nets.

19,895. Did they work the seines more carefully when you were a youngster ?—Yes ; I have seen them when they have only had half a maund of fish drop all the young fish into the water again. Instead of doing that now they drop them out for the birds to eat.

19,896. Do you think that the decrease which has taken place in the quantity of fish you can catch is owing to the wasteful mode of fishing practised ?—Yes, I certainly do.

19,897. Do you think that if the small fish were put back into the water as they were formerly, the fishing would be restored ?—Yes. It is the small seines that commit the destruction. They sweep in everything.

19,898. Do the big seines commit as much destruction ?—No.

19,899. Do they very rarely catch small fish ?—Yes, they rarely catch a fluke at all. I weighed some of the fish they catch in the large seines, and after they have been cleaned they have weighed 5 lbs. apiece.

19,900. Do you ever go spratting ?—No, I have not been spratting. We have no seines in our place for that.

19,901. Did you hear the evidence of Mr. Kingdon ?—Yes.

19,902. Do you agree with it generally ?—Yes.

19,903. You are of opinion that the views he expressed are the views of the fishermen generally ?—Yes.

19,904. (*Mr. Lefevre.*) Is the diminution you speak of in the fish principally confined to flounders ?—Yes, except sometimes when there are a very few mackerel.

19,905. You spoke of a general decrease in the number of fish ?—Yes.

19,906. Is that merely in flounders and plaice ?—Yes, the flounders and plaice do not strike our river.

19,907. In what other fish have you observed a falling off ?—In flounders the falling off has been wonderful.

19,908. But what other fish have fallen off ?—I don't know that there is any other fish in particular. There is nothing except the river fish. It is mostly the river fish.

19,909. Do you agree with the last witness that there has been any diminution in the herrings caught here ?—I don't think there has been any difference in the herrings.

19,910. Or in the mackerel ?—No ; we may catch plenty some days, and then we get none.

19,911. Do you go out fishing off the bar ?—Yes, in the summer time.

19,912. Have you observed any decrease in the fish you get there ?—No. For one hour or two hours we may haul in as fast as we like, and then they go away and we catch none. It is the same with the herrings.

The witness withdrew.

T. Danning.

THOMAS DANNING called and examined.

19,913. (*Professor Huxley.*) Are you a fisherman ?—Yes.

19,914. Are you engaged in fishing from any of the villages about here ?—Yes, from Lympstone.

EXETER.

T. Danning.

23 Dec. 1863

19,915. How many years have you been a fisherman there?—About 40 years.

19,916. Do you agree with what you have heard stated here to-day?—Yes.

19,917. As to the falling off in the quantity of fish you are able to catch?—Yes.

19,918. And do you agree with the previous witnesses as to the cause of that falling off?—Yes.

19,919. Is there anything we have omitted to inquire into upon which you can give us any additional information?—Not in the least.

19,920. Do you think we have had a pretty fair case laid before us?—Yes, you could not have a better.

The witness withdrew.

FREDERICK JOHN WALKER called and examined.

F. J. Walker.

19,921. (*Professor Huxley.*) You are living in this neighbourhood, I believe?—Yes.

19,922. How many years have you resided here?—I have been living here about 12 years, and I have been in the habit of spending from six weeks to two months in the year down at Teignmouth, boating, yachting, and fishing. I have been on the water from six to seven hours a day.

19,923. Have you taken any interest in the fishing in the river?—Only in the salmon fishery; I am one of the conservators.

19,924. Have you taken no interest in the other fisheries?—I have been fishing a great deal at times.

19,925. Have you noticed any falling off in the quantity of fish taken?—What sort of fishing?

19,926. I speak particularly of flounders?—I do not know much of the fishing in the estuary of the Exe, but I am acquainted with the fishing in the neighbourhood of Babbicombe Bay, Teignmouth, and that neighbourhood.

19,927. We have already inquired into the condition of the fishery at Torbay, but we should be glad to hear anything you can say in reference to Teignmouth.—A remark has been made with regard to the number of seines used. 12 years ago there were not more than one or two seines used.

19,928. At Teignmouth?—Yes.

19,929. How many are there now?—There will now be 15 or 16, but they are not only much larger boats, but they adopt a different principle of dredging. They now attach three or four ropes, shoot the seines out much further, and haul them to the shore.

19,930. Do the seines they use have a pocket?—No, a new system of seining has been introduced during the last two years; they drag out the nets much further; they attach ropes to the two ends and get all the fish in deep water. Some years ago we used to go out, and we could catch a basket of dabs and flounders in a day. Frequently you might have seen as many as 30 or 40 boats out, but that is not the case now. I have not seen three boats out this year, and those that do go seldom catch anything now.

19,931. Do they still contrive to catch a good deal of fish by using the seine?—Not dabs and flounders.

19,932. Then, in your opinion, has the excessive seining which takes place along the shore caused the same falling off in the quantity of fish as that which is complained of here?—Yes, I think so. There is one remark I should like to make in reference to the mackerel. This year, on account of the smallness of the mesh of the seines, they have been destroying, to an enormous amount, the small mackerel, what are called locally "joeys."

19,933. (*Mr. Lefevre.*) Does the destruction you speak of go on at Teignmouth?—Yes, and in the whole of the neighbourhood all round from Langton Point to Babbicombe Bay. In one boat, according to a calculation we made, there were 20,000 of these young fish. They brought them in and offered to sell them for 6*d.* a hundred, whereas the large mackerel are worth 8*s.* a hundred. Some of the fishermen send them, I believe, to Bridgewater for sale, but being so tender, and being shovelled about, they are much injured before they arrive at their destination, and are altogether unfit for food.

19,934. (*Professor Huxley.*) But if there is no sale for fish of that description surely the process is not likely to be repeated?—Notwithstanding the circumstances I have mentioned the catching of these small fish went on day after day, and a very large quantity of young mackerel were taken and destroyed. Now, if the nets used by the fishermen had a larger mesh, the small fish would have escaped and only the large ones would have been caught. But for the sake of taking 200 or 300 full-sized fish these men destroy at least 20,000 or 30,000 small fish that are of no use to anybody.

19,935. Do you think that did a great injury to the fisheries generally?—I have no doubt that if the same destructive mode of fishing is allowed to continue it will do very great injury to the fisheries eventually. At present there has not been sufficient time to allow the evil to be felt. The system only began very recently.

19,936. (*Mr. Lefevre.*) How long is it since it commenced?—Only three or four years at the outside.

19,937. During that time have you noticed any great diminution in the take of mackerel?—I cannot say that I have noticed any decrease in the take generally as yet. Although the system has been practised for three or four years it has not been so extensively carried out, and so many small fish been taken, as during this last year. It is hardly possible, therefore, for the system to have been in operation a sufficient length of time to enable its injurious effects to become apparent. You may judge, however, for yourself what the result is likely to be when I tell you that it was not one boat alone that had 20,000 or 30,000 of these small fish, but that there might be 10 boats following the same course of fishing at the same time, each of which would bring in that number in one day.

19,938. Then, in speaking of this mode of fishing as injurious and destructive, you speak of the future rather than of the past?—Yes.

19,939. Do the mackerel go up the estuary at Teignmouth?—I have seen them caught in the harbour there.

19,940. At the mouth of the harbour or far up the estuary?—Not far up; not more than 200 yards. I believe, however, that they have been caught as far up as the bridge.

19,941. Are these mackerel seines used for catching flounders or only for mackerel-fishing?—There are no flounders caught there now.

19,942. Do you not catch the small flounders?—No, I have not seen a net drawn for them.

19,943. Has the flounder deserted the place altogether?—I suppose it has, and I believe that that is the reason they do not draw for it. You can bring up nothing but dog-fish now.

19,944. Are there as many as 15 seines used for mackerel?—I think there as many as that used.

The witness withdrew.

SCOBLE WILLESFORD recalled.

S. Willesford.

19,945. (*Mr. Lefevre.*) You wish to add something to your evidence in reference to the mackerel?—I only wish to say that the mackerel do not go up the Exe for the purpose of breeding. They are seen up the river at times, but only when there is a glut of them on the bar or outside. Perhaps they may have

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been pursued by dog-fish or other enemies. But, in my opinion, they never go into the river of their own accord. It is not a breeding place for mackerel.

19,946. Are young mackerel not found in the harbour at all?—No, they are found outside. They are a sea fish. They do not breed in the river at all.

19,947. Then may we not take it that the use of the seine net in the Exe and the Teign really does harm to the river fish, and not to the sea fish?—Pardon me, there is a great destruction of our best fish, such as soles and turbot, which come in for the purpose of breeding. They are ground-fish, and they come in close to the shore. These men catch thousands of turbots, soles, and brill of a very small size.

19,948. Have you ever caught large soles and turbot in the estuary of the Exe?—Yes, sometimes a foot in length.

The witness withdrew.

J. C. Wilcocks.

JAMES CARROL WILCOCKS called and examined.

19,949. (*Professor Huxley.*) You are one of the conservators of the river?—Yes.

19,950. You wish to make some statement to us as to the fisheries, I believe?—I only wish to corroborate what has been stated by Captain Kingdon in reference to the Coastguard service. I believe they might be made very effective for the preservation of the fish. I believe there are great complaints at present as to the manner in which the Topsham men fish. I hope the small seines they now use will be done away with entirely, because when they are used they not only take in the small dabs and flukes, and so forth, but all sorts of fish that are in the river. I have watched them frequently, and I have seen them out—two men and a boy—with a boat, when the tide is down low. They go down the river and cross it. One man and a boy remain in the boat, and the other lands with one end of the net. The boat then goes down the river for a quarter of a mile, or perhaps only half of that distance, according to the weight of the net. They turn the boat round, throw a rope ashore, and pull in gradually until they land all the fish they have got. They actually scour the river. Nothing escapes them. I have seen them draw up a very large quantity of fish—from a peck to half a bushel—of every description of fish that can be found from Portland down to Berry Head. I have already given evidence to this effect before Mr. Eden, the Commissioner, when he was here. He said that further inquiry should be made into the matter. If the mode of fishing now adopted is not soon put a stop to, I believe that the fine fisheries we have all round here from Torbay will be very materially injured.

19,951. In point of fact, you concur in the general tenor of the evidence we have already had to-day?—Yes.

19,952. (*Mr. Lefevre.*) Do you think there has been any diminution in the take of fish outside the bar here?—That is a point upon which I am not competent to speak.

19,953. Have you yourself ever been out fishing?—Yes, I have been out trawling, and I know the way in which it is managed. The practice, when I have been out, has been to draw the net up to the mast; the cod of the net was then taken on deck, and down all the fish would fall upon the deck. One man stood on the left and another on the right; one would throw all the good fish into his basket, and the other would shovel all the small fish overboard.

19,954. Is there anything else you wish to say to us?—There is one thing which I think has not been named to you in reference to trawling. I think that no trawling should be allowed to be carried on within a certain limit of the shore. They should not be permitted to come into any place where the water is shallow, because when they do they take up all the small fish, which are generally found in shallow water, and they do great injury.

19,955. How far do you think they ought to be kept from the shore?—In my opinion they ought not to be allowed to trawl within a mile or more of the shore.

19,956. You cannot say, from your own knowledge, whether there has been any diminution in the quantity of fish caught by the trawlers?—No, I cannot, but I believe it has decreased.

19,957. Do you think the number of fish caught both in shallow water and in the estuary here has decreased?—Yes, I have no doubt of it.

19,958. Has there been any increase or diminution in the price of the fish?—The price of fish has more than doubled within a very few years indeed. For instance, fish are sometimes so dear in Exeter that it is a constant habit to send to London for a supply, and have them sent down by rail.

19,959. (*Professor Huxley.*) Do you agree with Captain Kingdon that there is a considerable quantity of fish sent up to Exeter in that way?—Yes, it may be brought to Exeter cheaper from London, Bath, and Bristol than it can be got in Exeter itself.

19,960. There are many places which, in consequence of the facilities the railway affords them, now send up their fish to London and other large towns. You do not consider that that is the case here?—No; this place is inland itself and there is no market to which it could be sent where it would realize a better price.

19,961. (*Mr. Lefevre.*) Do the Topsham men fish mainly for small flounders and small plaice?—Yes, many of them. They use the herring net also.

19,962. In consequence of fishing high up the river they mainly catch small fish?—Yes, and they catch the graveling and salmon trout.

19,963. Do they fish mainly for small fish?—Everything they can catch they bring in. A great deal of the small fish brought in by the Topsham men is got rid of by the women. There is a public-house where you can see the women come with their baskets, and in those baskets they have all descriptions of fish.

19,964. Do you agree with the previous witnesses that it is mainly small fish these men catch?—I believe that they catch an immensity of small fish; of course they do not go out to fish solely for small fish; they go out to catch as large as they can. The very small fish they turn out on the shore where they perish. They must destroy from 100 to 150 tons weight of that small fish in the course of 12 months. If it had been allowed to live, in three years time it would have made 20 times as much.

19,965. Do they not sell these small fish?—They sell as much of it as they can.

19,966. Can you form any opinion as to the quantity they sell?—No; I cannot form any opinion.

19,967. Do you agree with a previous witness that a considerable number are sold for baiting the crab-pots?—Yes, I have no doubt they are, and likewise for bait for other purposes.

19,968. Are they also sold to the poor?—It is only the poor who buy them; but I believe if these nets are not done away with the law in reference to salmon will be much injured. I agree with Captain Kingdon as to the migration of the smolt or the small salmon, "graveling" as we term them. They meet together like the swallows, and before they go to the sea they congregate in particular places in the river.

19,969. Is it not illegal now to take the smolt?—Yes, it is illegal, and we have recently convicted some of the Topsham men.

19,970. (*Professor Huxley.*) Is it the practice to lay down the native oysters here?—We have two sorts of oysters; the dredge oyster and the Falmouth oyster. The Falmouth oyster is very copperas, but our river is an excellent place for breeding oysters

and for the spawning of oysters brought here. I have no doubt if the beds had been protected properly immense quantities of oysters would have bred here, and an excellent business might have been made out of it. I am confident of that, and I think I shall be borne out by other people here.

The witness withdrew.

JOHN EYRE KINGDON recalled.

19,971. (*Professor Huxley.*) Can you tell us anything in respect of the crabs and lobsters here?—We do not get anything like the number of crabs and lobsters we used to get.

The witness withdrew.

HENRY SAMUEL ELLIS called and examined.

19,972. (*Professor Huxley.*) Are you a resident here?—Yes, I reside here.

19,973. Have you been here many years?—Yes, all my life.

19,974. Have you taken great interest in the fisheries here?—I have in this way: About 12 months ago I took considerable trouble to obtain information respecting the oyster, mussel, and cockle fisheries of the Exe. I read a paper upon the subject at our Natural History Club, but the greatest portion of the information I collected has already been repeated here. I learned that there were many oyster dealers and merchants on the Lympstone side who were in the habit of getting oysters from Falmouth and laying them down in the river Exe. I also ascertained that although great care was taken by the Custom House officers in seeing that the oysters brought up were properly laid down there was no care exercised in seeing that they were not removed in the close season. I learned that during the close season tons of oysters were sent to London and other parts of England. I can positively state that 19 tons were sent away in the month of July 1862 from the town of Lympstone.

19,975. Were they taken from the oyster parks?—Yes, they were the Falmouth oysters which had been laid down recently before.

19,976. Were the oysters you speak of within the tide marks?—Yes, they were oysters laid down for the purpose of being fed, and to have their coppery character removed.

19,977. Have you any evidence that oysters breed there?—I have come to the conclusion that the Falmouth oysters never breed there. I had a quantity of oysters submitted to me by Mr. Saunders, an oyster dealer and fishmonger in this town during the year 1862. As late as October, November, and December, I have had oysters in spawn given to me for examination with the microscope. I think that as many as one in every 30 or 40 oysters on some occasions have been found full of spawn.

19,978. What oysters were they?—From Falmouth.

19,979. From Falmouth direct?—No, they came from Lympstone to me.

19,980. How long had they been at Lympstone?—They require to be there a year in order that they may lose their coppery colour.

19,981. The oysters you examined had been on the Lympstone beds for a year?—They had, as far as I could judge from their having lost their coppery appearance.

19,982. Did they continue spawning?—They were full of spawn in the months of November and December. They were in spawn in that year unusually late.

19,983. (*Mr. Lefevre.*) I suppose that the oysters from Falmouth are never laid down in the bed of the river below low-water mark?—I think not. If you examine the beds at Lympstone, I should say they are not such as oysters would breed in.

19,984. Has anyone tried the experiment of laying them down below low-water mark to see if they would breed?—I believe it has never been tried. I believe the oyster, in the bight where they do breed, is a different oyster. Those I have examined I have found quite different from the Falmouth oysters which are laid down in the river.

19,985. (*Professor Huxley.*) Different in what respect? In shape?—Yes, in shape and in thickness. Those which attain any age in the bight have a thick shell—a flat thick shell.

19,986. The oysters you had from the artificial beds here were full of spawn?—Yes, in the month of November.

19,987. On what ground do you base the conclusion that they do not breed there?—I cannot find any young oysters.

19,988. Do you think the spawn comes to nothing?—I think it is entirely wasted.

19,989. They come to a certain ripeness, and are then wasted?—Yes; at a certain season I have found all the oysters full of spawn on the beds at Lympstone, but the whole has been wasted.

19,990. (*Mr. Lefevre.*) Is that on account of being placed on beds where they will not breed?—The water retires and leaves them exposed.

19,991. And exposed to the frost?—Yes; great care is taken that they shall be laid down. The Coastguard officers report that the oysters brought from Falmouth have been laid down on the beds. I think it is very important when such care is taken that they shall be laid down properly, that similar care should be exercised in seeing that they are not removed again. At present there is nothing to prevent their being laid down one week and removed another. They are brought in boats from Falmouth.

19,992. They are private property?—Yes.

19,993. Then are not the owners the best judges when they should be sold?—But I understand there is a law which absolutely prohibits their being removed.

19,994. (*Professor Huxley.*) There is a regulation against fishing oysters in a certain season?—Yes.

19,995. (*Mr. Lefevre.*) But there is no law against their being sold when they become private?—No. In October, November, and December they are full of spawn.

19,995. If they are unfit for eating when they are taken they would not fetch any price?—For what reason they are taken up and sent away I cannot say. They may be sent to London to be laid down on other beds. I have been informed by the railway company that in July 1862 19 tons were sent to London, and that they have been sent away in other seasons in the same proportion. The quantity has lately decreased in consequence of not being able to get them from Falmouth, and therefore very few have been laid down.

19,997. Are you of opinion that the oysters were unfit for food?—I have not come to any conclusion on that point.

19,998. (*Professor Huxley.*) When you speak of finding spawn was the spawn in the body of the oyster or between the two valves of the shell; between the mantle lobes?—It was full of spawn, mostly white, but some of it was black.

19,999. Was it between the mantle lobes, not in the body?—Yes.

20,000–1. The spawn had been laid and had passed out of the body of the oyster between the lobes of the mantle?—Yes.

20,002. Did you see embryo oysters in the eggs?—Yes, they were moving about.

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20,003. They were impregnated ova?—Yes.

20,004. It is not the fault of the brood or of the oyster, but of the subsequent exposure which destroys the embryo?—Yes. I had drawings made which I shall be happy to submit to you.

20,005. (*Mr. Lefevre.*) Has there been a great falling off in the oysters since Lord Devon ceased to exercise any control over the beds?—From information I have received from all the persons of whom I have made inquiries I think it has fallen off very much.

20,006. Do you yourself know anything about the case in reference to the oysters which has already been spoken of?—No; but I learned last year that the Lympstone oyster dealers are in the habit of being to the bight and taking away many tons.

The witness withdrew.

J. E. Kingdon.

JOHN EYRE KINGDON recalled.

20,007. (*Professor Huxley.*) You are anxious to make some addition to your evidence?—Yes. There is a canal running down to near Powderham. The fresh-water runs out on the Powderham side into the salt water. There these small fish are found in May about an inch or 1½ long. They increase in June to about 3 inches, and you may catch as many as you please of them. There are a great number of people who resort to that place. They get their tea and whitebait. I have myself caught millions of whitebait there with a sort of square net.

20,008. (*Mr. Lefevre.*) Are they the true whitebait?—They say they are. The Londoners have examined them, and have come to the conclusion that they are the true whitebait. We never find any of them with a roe in them.

20,009. They never have any roe?—No, the largest of them in the winter time is very small.

20,010. Do you conclude that they are the young of other fish?—No, we think they are the regular fish which come to the entrance of the canal for a certain time; then as they get larger they go up to spawn. They come in May, and in August they are all gone.

The witness withdrew.

W. R. Scott.

WILLIAM ROBSON SCOTT called and examined.

20,011. (*Professor Huxley.*) Have you paid attention to this question of the whitebait which is found here?—Yes.

20,012. What is your opinion as to the nature of the fish?—In my opinion it is the true whitebait, although that opinion differs from the opinion of Professor Owen and Dr. Günther. You find the whitebait in Fowey River, in the Southampton River, and now you have the connecting link in those which are found in our own river. I cannot recollect just now what the particular objections were which were stated by Dr. Günther as to their not being the true whitebait.

20,013. Probably they had reference to the distribution of the teeth?—I think that was so: the teeth and the palate were submitted to Mr. Couch, and he was satisfied that they were the true whitebait.

20,014. (*Mr. Lefevre.*) Are large quantities taken here?—Yes, immense quantities.

20,315. Have they been taken for some years, or only lately?—For some years past.

20,016. (*Professor Huxley.*) Is there any particularly large traffic here in whitebait?—No.

The witness withdrew.

The inquiry was then adjourned until Thursday the 24th of December, at Wyke Regis.

Wyke Regis, Dorsetshire, Thursday, 24th December 1863.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

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WILLIAM THOMPSON called and examined.

20,017. (*Professor Huxley.*) You are a resident in Weymouth, I believe?—I am.

20,018. Have you known Weymouth for many years?—Yes, for about 13 years.

20,019. Are you acquainted with the fishing carried on there?—Yes, very well indeed.

20,020. What is the nature of the fishing that is carried on principally at Weymouth, not including the West Bay?—You are speaking now of Weymouth Bay proper?

20,021. Yes.—Including the bay here and at Smallworth Sands, we have trawling, seine-fishing, and hook-and-line fishing, besides lobster and prawn-fishing, and oyster-dredging.

20,022. What kinds of fishing are practised in the West Bay?—Mostly mackerel-fishing.

20,023. Seining for mackerel?—Yes, they catch mackerel in the mackerel seines.

20,024. How many trawl-vessels are there that go from the port of Weymouth?—There are two trawlers from Weymouth, I think, but most of the trawlers that hail from here belong to Portland.

20,025. How many trawlers are there that go from Portland?—I cannot say.

20,026. Have you any general notion of what the number is?—They are under half-a-dozen, I think.

20,027. Are they large vessels?—They are moderate sized vessels; they are not so large as the Barking trawlers; perhaps they will be about 50 tons.

20,028. What is the size of the beam they use?—I cannot say; I think you had better get that information from the fishermen themselves.

20,029. Is there much seining carried on here?—Not much in the winter months; the seining mostly practised here is the mackerel-seining in the summer time.

20,030. Is there much line-fishing?—Yes, there is a great deal of line-fishing.

20,031. Do you know how many persons are employed in Weymouth in line-fishing?—I cannot tell you that.

20,032. Are you aware whether there has been any falling off in the catch of fish in the Bay of Weymouth of late years, or whether it has increased or remained stationary?—I believe there has been a very great falling off in the number of fish caught.

20,033. Does that apply to all kinds of fish?—Yes, to the fish that have generally been caught here. Of course it does not apply to herrings or mackerel, which are fish of passage, and it has nothing to do with the local fishing; but the other fish, such as whiting, and the different descriptions of flat-fish have very greatly fallen off of late years.

20,034. Is that within your own knowledge?—

Yes, there has been a great falling off within my own knowledge.

20,035. Has it ever been the practice to send fish from this place to London?—It mostly goes to Bath, I believe, but there is not much sent away at all.

20,036. Is there a great falling off in the quantity sent away, as compared with what was sent away in former years?—I believe there is a much greater quantity of fish consumed in Weymouth itself now.

20,037. To what cause do you ascribe the falling off?—To the destruction of the small fry, and to the small size of the mesh of the bunts of the net.

20,038. Do you mean the small size of the mesh of the seines?—Not of the mackerel seines, but of the seines which they haul in the bay here. You may very frequently see a very large number of the fry of different kinds of fish brought ashore and destroyed when they are hauling in these seines.

20,039. Have you seen that yourself?—Yes, I have seen it constantly.

20,040. Are the small fish that are brought up in that way altogether wasted?—Yes, they are left on the beach dead. Sometimes the children will pick them up and carry them away.

20,041. Are the large fish picked out, and the small left to die?—Yes; some of them are used as bait for catching lobsters and crabs; those that are required for bait are picked out and sorted, but after that is done there is a large quantity of small fry that are useless for any purpose whatever, and are only wasted.

20,042. Has the practice of seining in this neighbourhood increased within your recollection?—No.

20,043. When did you first begin to notice a falling off in the quantity of fish taken?—I daresay it will be seven or eight years ago; but there has been a gradual diminution for some years back.

20,044. You have noticed a gradual increase for seven or eight years?—Yes.

20,045. Did you notice whether the decrease in the quantity of fish was coincident with the increase in the number of the seine nets used here?—No, I did not notice that.

20,046. How many years has it been the practice of the fishermen here to use these seine nets in this bay?—I have no doubt they were used here long before I visited Weymouth.

20,047. Why do you ascribe the falling off in the quantity of fish to the use of the seine nets, if the practice of fishing with seine nets has been going on for a great number of years?—I ascribe it to that from having myself seen the large number of fry that are destroyed by the seine-fishing.

20,048. But do you not think that in former years the fry were destroyed in the same way?—No doubt seine-fishing has always been destructive to small fish.

20,049. In fact, the fry have been destroyed in the same way ever since the seine nets have been used?—Ever since I have seen the seining I have noticed that a quantity of fry has been destroyed by the nets.

20,050. (*Mr. Lefevre.*) How many years have you been acquainted with the fishing here?—I think it must be 13 years or more now.

20,051. (*Professor Huxley.*) If seining in this manner is the cause of the destruction of the fish, one would expect that the falling off in the supply of fish would be of long standing; but according to your impression, it has only been going on for seven or eight years, or at most 10 or 12 years?—I can give you an instance of the destruction that has been occasioned; and that is in the case of the silver whiting. At one time large quantities of silver whiting were caught in this bay, off the wreck of the Abergavenny. My men have frequently caught a dozen in one tide. Last year there was not a single whiting to be obtained. This year I have had my trammels out during the greater portion of the fall, and my men have only taken three whitings.

20,052. But do you not think that that is one of the fluctuations that happen now and then with regard to all fish?—I am not prepared to say that it is not; I am only telling you what the fact is.

20,053. Have you any suggestion to offer as to the mode in which this catching of the small fry could be prevented?—I think if the fishermen had any consideration for their own interests, they would know very well that it was against their interest to use nets of so small a character. It would be much more advantageous to them to use nets with a larger mesh at the bunt.

20,054. You think it would answer their purpose better to catch none but large-sized fish?—Certainly.

20,055. What is the size of the mesh that they use now?—I do not know.

20,056. We shall be able to get that from the fishermen themselves?—Yes.

20,057. Would you like to see some restriction placed on the size of the mesh?—Certainly; I think that is what is required.

20,058. What is the minimum size you would allow?—About 2½ inches.

20,059. Two inches and a half from knot to knot, or two inches and a half diagonally?—2½ inches from knot to knot.

20,060. Would that enable them to catch flounders?—I don't think it would prevent them catching flounders.

20,061. Would not a large flounder get through a mesh 2½ inches from knot to knot?—No, I do not think a large one would.

20,062. Not what you would call a marketable fish?—No, and I think the fishermen themselves would be disposed to fall in with my plan. They have no wish to use these small meshes if there were any general law regulating the fishing.

20,063. Then why do they not adopt some regulation among themselves if they think that the present mode of fishing they follow is injurious to their own interests?—I cannot say why it is, but it has generally been found that there is some person or other who will stand out and prevent any agreement being come to among themselves. I believe that if the fishermen would only be unanimous, they might do a great deal for their own interests.

20,064. Is there much lobster and crab-fishing in the bay?—Yes, a great deal.

20,065. Has that fallen off of late years?—It falls off occasionally. I hear great complaints at times of the fish being scarce.

20,066. How do you account for the falling off?—I don't think there is any reason that can be given for the falling off in the crab and lobster-fishing.

20,067. Is there much oyster-fishing in the bay?—Yes, a great deal. With regard to the lobster-catching, perhaps I may be allowed to say that some of the lobsters brought to the market are, in my opinion, almost too small to be of any use. Some of them are very small indeed.

20,068. You do not think that there has been much falling off in the lobster fishery?—No; it is a kind of fishing that varies very much. Sometimes the catch may fall off for a short time, and then, in all probability, it will improve again.

20,069. Have you ever heard many complaints made by the fishermen against the trawlers for coming into the bay?—I never heard any complaints made against the trawlers on the part of our fishermen.

20,070. I think you said that there is an extensive oyster fishery in this bay?—Yes.

20,071. Is it in a good condition, or is the supply falling off?—The supply of oysters is falling off very much indeed.

20,072. What is the reason of that?—I believe it is owing to strangers coming here from different parts and destroying the oyster beds. They take the oysters away when they ought not to be removed.

20,073. Is there any close time observed here with respect to oysters?—Yes.

20,074. What are the months?—They are the regular months, I believe.

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20,075. The regular close time is observed here?—Yes.

20,076. You ascribe the falling off of the oyster fishery here to the taking away of the oysters and the destruction of the oyster beds by strangers?—Yes.

20,077. Where do the strangers to whom you refer come from?—We have boats from Colchester and from Poole that come here.

20,078. Do they carry the oysters away to lay down in other parts?—Yes, and more than that, they carry away the young oysters when they are too small for laying down.

20,079. In that way do they destroy the beds?—They not only destroy the beds by removing the oysters that are already there, but they destroy the whole of the spawn.

20,080. You consider that a wasteful and destructive mode of fishing?—I have no doubt it is a destructive and wasteful mode of fishing. Many of the oysters they carry away are of no use to them. By the time they get them to the beds on which they desire to lay them one half of them are useless. I frequently see their vessels lying about here until they get a cargo.

20,081. (*Mr. Lefevre.*) That is not in the close months, is it?—I cannot say that it is.

20,082. Do you know what number of seine nets are used in the bay?—There are not a dozen I think altogether.

20,083. Has there been any increase in the number of late years?—I cannot tell you that; the fishermen here will be best able to answer that question.

20,084. Has the same course of fishing been carried on here from the earliest time you can recollect?—Yes.

20,085. Do you know what amount of ground is fit for seining here—how much of the bay?—They can use the seine on the whole of the Smallworth Sands, unless there happens to be a wreck in any particular part. Wherever there is a wreck they cannot drag their nets.

20,086–7. Is there not a great deal of ground between here and St. Alban's Head that is unfit for seining?—I don't think they could haul a seine even at Ringstead. There is a ledge of rocks there that would prevent them.

20,088. When they are fishing for mackerel, do they catch many small fry in the seines?—I do not think that the mackerel net would hold much small fry. I never saw many fish in the mackerel nets that ought not to be there.

20,089. Do they ever catch any young herrings when they are fishing for mackerel in the bay?—They may do so occasionally, but they catch nothing to speak of.

20,090. Do they ever catch any young mackerel?—Sometimes they may catch a young mackerel. I saw one hooked the other day, only 10 days ago, at Portland.

20,091. Do the small fry caught in the seine nets mainly consist of flounders and small soles?—There are a large number of small mackerel caught towards the end of the season.

20,092. But not in the seine nets?—The seine nets would take them.

20,093. Do they take them as a rule?—They do not fish for mackerel specially with the seine nets.

20,094. Are the small fish you speak of principally flounders?—Yes, and different species of whiting. There are also small brill and small turbot.

20,095. Do they catch at the same time fish of a larger size?—Yes, the fish there run a little larger. Of course they do not fish for the small fish. The small fish are caught in the net when they are fishing for larger fish.

20,096. Do they sell these small fish for baiting the lobster-pots?—Yes, and that is another part of the evil we complain of. There are men in Weymouth who fish in the backwater more especially for bait for the lobster-pots. The nets they use are set nets. They reach across the channel. They have a man to stir up the bottom and drive the fish into the net. That is a trade of itself here.

20,097. Is there a great demand for these small fish for the lobster-pots?—I cannot say. The men who have the large seines would not employ them in fishing for bait alone. It would not be worth their while to do such a thing. They fish in the open sea.

20,098. Is there any seining of this description carried on in West Bay, or is there only mackerel and herring-fishing carried on there?—I believe there is seine-fishing, but they generally shoot their nets late in the evening. I have not seen them seining there.

20,099. What distance are the oyster beds you have been speaking of from the shore?—About three miles or three and a half.

29,100. Are there any that are more than three miles?—Perhaps some of them may be more. The bay being a semicircle, some of them may be more than three miles and a half from Weymouth, but still within a much less distance from the land.

20,101. Where are they taken?—Off the breakwater and under Whitenose.

20,102. Do they mainly lie in a line from the breakwater?—They lie in irregular patches off the breakwater.

20,103. Do you from time to time find fresh beds of oysters in the bay?—Yes, we are constantly finding new beds.

20,104. I understood you to say that there is a great demand on the part of boats from a distance for small oysters?—Yes.

20,105. Do you know what number of men from Weymouth are engaged in dredging in the course of a season?—No. I believe they do not dredge regularly. Most of them who engage in dredging have something else to do. I believe there are seven or eight boats altogether.

20,106. Are they large boats?—No, they are not of very large tonnage.

20,107. Has there been any diminution in the number of boats engaged in oyster-dredging?—I do not think there has.

20,108. Has there been any increase?—I think not, the fishermen do not think it worth their while to enter into the business.

20,109. Is there any measure you could suggest to us that you think would have a tendency to preserve the oyster beds?—Do you mean to protect the oysters on the beds?

20,110. Yes.—I think that object would be attained if an Act of Parliament were passed to prevent the oysters being destroyed when they are of small size.

20,111. You think that some regulation ought to be enforced to prevent the small oysters being taken away?—Yes.

20,112. Are there any oyster banks in this neighbourhood where the small oysters are laid down?—The late Lord Ilchester had some, I believe. I do not know whether the present Lord Ilchester has, but the late Lord Ilchester used to lay down a few in the Fleet water.

20,113. Where is that?—Inside the Chesil beach.

20,114. Is there much ground there fit for oyster beds?—I think that excellent oyster beds might be laid there.

20,115. Would the oysters breed there?—I don't see why they should not. There is a nice gravelly bottom upon a portion of it. Perhaps there is hardly fresh water enough to make them very good beds.

20,116. Is there any stream running into it?—Yes, there is one that runs down by way of Portisham.

20,117. I think you said that the strange boats carry away the spawn as well as the small oysters. I suppose you mean that they carry away the young oysters?—What I mean is that they carry away the dead oyster shells and different things of that description with the spat upon them. For instance, one oyster shell may have a dozen spat upon it,—a dozen little oysters the size of a fourpenny piece each.

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20,118. They would be young oysters already formed ?—Yes.

20,119. The oysters here spawn during the close season, I presume ?—Yes, they spawn regularly.

20,120. (*Professor Huxley.*) Have you any other observation that you wish to offer ?—Yes, I think there ought to be some restriction as to the fishing in shallow water at certain times of the year in the spawning season.

20,121. On what modes of fishing would you place the restriction ?—I think the fishing ought to be stopped when the fish come in to deposit their spawn. During the time the fish are spawning I think there ought to be a cessation of fishing, at all events, for a time.

20,122. Do you think there ought to be a cessation of all kinds of fishing at that time ?—Yes, in shallow water. I think the greatest quantity of the flat-fish deposit their spawn in shallow water.

20,123. Would you also put a stop to hook-and-line fishing during that particular spawning season ?—No.

20,124. Why not ?—Because if the fish are not in good health I do not think that they would bite much.

20,125. You would put a stop to seining during that time ?—Yes, certainly.

20,126. (*Mr. Lefevre.*) Do any of the French boats come here to dredge for oysters ?—I do not know that any French boat has been here.

20,127. They are mainly boats from the Thames ?—Yes, they are mostly from the Thames, or from Colchester and Poole.

20,128. When did the boats from a distance come in the greatest numbers fishing for oysters in your bay ?—I think the greatest number we ever had, we had about three years ago.

The witness withdrew.

J. Somers.

Joseph Somers called and examined.

20,129. (*Professor Huxley.*) Are you a resident here ?—Yes, I was born and bred here.

20,130. How many years have you been engaged in fishing ?—I have been fishing for more than 50 years.

20,131. What sort of fishing have you practised ?—Mackerel-catching and herring-catching chiefly.

20,132. Have you followed drift-net fishing or seining ?—Seining.

20,133. Herring-seining?—Yes, herring-seining and mackerel-seining.

20,134. Have you ever been a hooker at all ?—Very little.

20,135. Have you ever used the small seine in the bay ?—Yes, I have used the small seine for catching red mullet.

20,136. You say it is about 50 years since you began fishing ?—It will be more than 50 years now.

20,137. How many fishermen were there fishing in Weymouth Bay when you were a boy ?—There were as many then as there are now.

20,138. About the same number ?—Yes.

20,139. Were there about the same number fishing in West Bay ?—No, there are four times as many now fishing in West Bay as there were at that time.

20,140. Then the number fishing in Weymouth Bay has remained just the same, while in the West Bay it has greatly increased ?—Yes.

20,141. Have you noticed any falling off in the quantity of fish caught ?—Some years the fish will be very plentiful, and in others we do not catch as many.

20,142. But, taking one year with another, have you noticed any falling off in the quantity you catch ?—They have not fallen off much taking one year with another. If they fall off at all, in all probability they will come back again the next year.

20,143. You have been fishing mostly in West Bay, I believe ?—Yes.

20,144. What do you principally catch in West Bay ?—Mackerel, herrings, and sprats.

20,145. Do you use the small seine ?—Yes, the team seine.

20,146. What do you catch with that ?—Mostly red mullet.

20,147. Do you seine for red mullet along the Chesil Bank ?—Yes.

20,148. Is there as much red mullet to be caught now as there was formerly ?—Yes, I think there is rather more if anything.

20,149. You do not get flounders there ?—Yes, I do.

20,150. Do you get many ?—No, not very many flounders. We get more dabs than flounders.

20,151. Do you get plenty of soles ?—No, very few.

20,152. Do you ever get any other kind of fish in the team seines ?—Yes, we catch all sorts of fish.

20,153-4. What do you catch ?—Our nets are made to catch everything, from a sprat up to a whale.

20,155. Altogether, you have not much to complain of here?—No, taking one season with another. It is all according to the season. I believe the flat-fish have fallen off which those fishermen catch who go upon Smallworth Sands, owing to the construction of the breakwater.

20,156. Do you think the formation of the breakwater has done you harm ?—Yes.

20,157. How has it done you harm ?—It has kept the fish out.

20,158. What is the size of the mesh that you use in the team seine ?—Some part of the net is about 7 inches.

23,159. What part of the mesh of your team seine is 7 inches ?—The outside wings.

20,160. Do you mean that it is 7 inches from knot to knot, or across ?—Across.

20,161. How long is the team seine ?—Some have got longer seines than others.

20,162. But taking the average run, how long are they ?—Perhaps 70 or 80 feet long.

20,163. How deep are they in the bunt ?—From 14 to 18 feet.

20,164. There is only a bunt, no pocket ?—No, there is no pocket.

20,165. Do you cork the top ?—Yes.

20,166. Do you load the foot ?—Yes.

20,167. With what ?—Lead.

20,168. What does a seine net such as that cost ?—It costs a good bit of money.

20,169. How much ?—Before it is ready to work it will cost 20*l.*

20,170. How many are there used in West Bay now ?—God Almighty knows, I cannot tell.

20,171. How many do you think ?—Perhaps 40, but they are not all from this place.

20,172. But they are all used there ?—Yes.

20,173. How many more are there now than there were when you were a boy ?—Going back to my first remembrance when I was boy, I can recollect when there was only one mackerel seine.

20,174. How many team seines were there ?—Not more than one or two.

20,175. Then there are 20 or 30 times as many as there were formerly ?—Yes, I think so.

20,176. How do you use the team seine; how many men does it take to work it ?—It takes five men.

20,177. Does it require two boats ?—No, only one boat.

20,178. Do you make one end fast to the shore ?—No, a man bides on shore with it.

20,179. And then you take the seine out with you in a boat ?—Yes.

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20,180. You work round with it?—Yes.

20,181. And haul it ashore?—Yes.

20,182. How long are the mackerel seines?—About 150 fathoms long.

20,183. How deep are they in the deepest part, in the bunt?—58 feet.

20,184. Is there any pocket?—There is a bag.

20,185. A bag instead of a bunt?—No, a bunt and a bag as well.

20,186. Both?—The bag is put into the bunt.

20,187. How deep is the net in the bunt part?—58 feet.

20,188. Do you load that with lead?—Yes, with lead and with stones too.

20,189. How much does a net of that kind cost, fitted up with corks, lead, and everything else?—It will cost well up to 100*l.*

20,190. How many of these nets are there in West Bay now?—God knows; I know how many there are at Wyke.

20,191. How many are there here?—There are 10.

20,192. Are there any further up the coast?—There are 10 at Chickeral. I consider there may be 60 up to Bridport.

20,193. There are about 60 between here and Bridport?—Yes, there will be 60 at least.

20,194. How many of these seine nets were there when you were fishing as a boy?—I cannot tell.

20,195. Can you make a rough guess?—There was not more than one at Wyke; there might be one or two at Chickeral; there were only 4 at Portland, and now there are 20.

20,196. Should I be right in saying that at that time there were a quarter the present number?—Yes.

20,197. Has there been a great increase in the number of fishermen also?—Yes, of course there has, or else we could not work the seine nets.

20,198. Then you have been flourishing?—Yes, since the peace, and since they put a stop to smuggling.

20,199. Putting a stop to smuggling has increased the number of fishermen?—Yes; they had something else to do before that they liked better.

20,200. That has been better for everybody, has it not?—I don't know that.

20,201. You really have nothing to complain of on this side of the water?—Not with regard to catching the fish in the season. Some seasons it is very bad. Then some seasons it may be middling. Then again all boats do not do alike. Some will do well, and some of them do badly; but it is all according to the way in which the fish come to the net.

20,202. Taking it on the whole, the value of your nets having steadily increased, and the number of fishermen increased, I suppose you catch quite as many fish as you did formerly?—Yes; but formerly there were not as many to catch them.

20,203. But you get more fish in proportion to your nets?—Yes, we get more in proportion.

20,204. Have you anything to complain of at all?—No.

20,205. Does anybody meddle with your nets?—No.

20,206. Do the Coastguard men ever look at your nets?—Yes, some of them will come up occasionally, when we are catching fish, and if we require their help in this bay, they give it to us. We cannot catch fish at all times, there is so much sea on, and if we had no bay we should catch none.

20,207. Then you and the Coastguard men are good friends now?—Yes, very good friends.

20,208. Does anybody ever look after the size of the mesh of your nets?—No.

20,209. Do you use what mesh you like?—Yes, they are alike over here.

20,210. What is the size of the mesh of your mackerel seine?—6 or 7 inches.

20,211. Is that in the bunt?—No; in the outside wing.

30,212. What is it in the bunt?—2½.

20,213. Two and a half diagonally, not from knot to knot?—Yes.

20,214. Is this (*producing a net*) the size of the bunt of the mackerel-net?—Yes.

20,215. That is only about half an inch?—We have only one part of the net of that size.

20,216. This is about half an inch from knot to knot?—I suppose it is.

20,217. Do you make use of the same seine for catching herrings as for mackerel?—Yes, it is all one thing, and we catch sprats with it also.

20,218. Do you catch many sprats here?—Yes, sometimes we get a great quantity.

20,219. What time of the year do you get them?—About October.

20,220. How long is the bag of your mackerel seine, how many fathoms long?—It is about 3 fathoms long.

20,221. Where are your fish principally sent to?—They go to all parts.

20,222. Do you sell it to the dealers?—Yes; some of them come from London.

20,223. Does a great deal of your fish go to London?—Most of the mackerel goes there.

20,224. Has the price of fish improved of late years; do you get more money for it than you did formerly?—I do not think there is much difference.

20,225. Is not the price better now that you have a railway and can send the fish direct to London?—That is the way they send it now.

20,226. But do you not get a better price for it in consequence of that?—No, I think not.

20,227. Do you not get more for it now than you did 50 years ago?—No, we do not one quarter as much. I have been selling mackerel on the beach at 7*l.* the cwt. Now it is difficult to get 1*l.* a cwt. All we get is 15*s.* or 18*s.*, and sometimes we even get less than that, if there is any great quantity caught.

20,228. I presume you could not find a sale for all the produce of your 40 or 50 seines unless you had the railway?—A small quantity was caught at the time I speak of, and we never found any difficulty in getting rid of it.

20,229. But if you had caught the same quantity then would you have been able to dispose of it without the railway?—We should have got a great deal more money for it if we had.

20,230–1. (*Mr. Lefevre.*) Do any trawlers come in here?—None of them come in to annoy the fishermen here. They trawl away further to the westward.

20,232. What is the character of the bottom here; is it sandy or rocky?—It is rocky.

20,233. Then it is not good for trawling?—No.

20,234. Are all your boats open boats?—Yes.

20,235. You have no decked boats?—No.

20,236. Are there any oyster beds in West Bay?—I don't know. We never used to dredge there.

20,237. Did you ever see any boats dredging for oysters there?—No; but there used to be a fine bed of oysters away off the Bill 10 or 12 years ago, but these countrymen came and they cleared them all away.

20,238. Has any one dredged for them lately?—No.

20,239. Whereabouts was the bed you speak of?—Just off the Bill of Portland, on the west side of the Bill of Portland.

20,240. Do you use drift nets for mackerel?—No.

20,241. Do you catch them entirely with the seine?—Yes, and the draught net.

20,242. Do you catch flounders in the seine?—No, very seldom. We very rarely catch any small fish at all. Sometimes we catch a few fine dabs.

20,243. Do you catch any flounders?—No.

20,244. Any young whiting?—It is very seldom that we catch young ones at all.

20,245. Do you fish for the whitings with hook and line?—No.

20,246. Not in West Bay?—No.

20,247–8. Is it not worth your while?—No.

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20,249. You have not many herrings off here?—No.

20,250. Have you any herring nets?—Some of the fishermen have, but it won't pay. We seldom have them hauled in here at all. Some years there are a terrible quantity of herrings here, and then we may go for several years before we see any again.

20,251. Do you catch them sometimes in the seine nets?—Yes.

20,252. When does your mackerel season begin?—We don't often catch any before April.

20,253. How long does the season last?—We may catch a few until October.

20,254. Have you observed any falling off in the mackerel-fishing of late years?—No.

20,255. Do you think they come as far eastward as they did in former years?—Yes, I think they do.

20,256. (*Professor Huxley.*) At what time are the mackerel full of roe?—They spawn in the beginning of June. In April and May they are in spawn.

20,257. Do you find small mackerel here all the year round?—No.

20,258. Do you not find them in-shore?—No; we rarely see small mackerel till after Midsummer.

20,259. (*Mr. Lefevre.*) How far along the bay do the Wyke Regis men fish?—They fish in all parts of the bay; they go as far as Bridport sometimes.

20,260. Do they meet other fishermen there?—Yes.

20,261. Does your experience tell you that there is anything in the fishing that ought to be altered?—No.

20,262. Is there anything that does you harm?—No, and I do not see what alteration can be made, except it be with regard to the fastenings we have about here along the beach.

20,263. What do you mean by "fastenings"?—Rocks and old wrecks.

20,264. (*Professor Huxley.*) Sunken wrecks?—Yes.

20,265. Do they interfere with your fishing?—Yes, they tear our nets all to pieces. If there is a wreck, and we get a flood tide and shoot off, the tide heaves us up, and then we tear all our nets to pieces.

20,266. The wreck at the bottom of the sea tears your nets?—Yes.

20,267. Would it be of great advantage to you if the wrecks you speak of were blown up?—Yes, that would be the best thing that was ever done for us, it we could get rid of these fastenings.

20,268. (*Mr. Lefevre.*) If it were not for the wrecks you speak of, would there not be good ground for trawling along the West Bay?—Yes, perhaps it might.

The witness withdrew.

RICHARD WILLIAMS called and examined.

R. Williams.

20,269. (*Professor Huxley.*) Are you a fisherman here?—Yes.

20,270. How long have you been a fisherman here?—I knew all about it when I was a little boy, 50 years ago.

20,271. I believe you heard what the last witness told us?—Yes.

20,272. Do you agree with what he stated?—Yes, I quite agree with him.

20,273. Is there anything you wish to add to what he said?—Nothing at all.

20,274. (*Mr. Lefevre.*) Are you a Wyke Regis man, or a Weymouth man?—I am a Wyke Regis man.

20,275. Do you know anything of the fishing in the Bay of Weymouth?—Nothing, except the fishing with the small team nets in the bay.

20,276. (*Professor Huxley.*) At what time of the year do you do that?—In the fall of the year.

26,277. What fish do you catch in that way?—Mackerel and flat-fish.

20,278. You get flounders?—A few.

20,279. Soles?—Sometimes.

20,280. Do you get any plaice?—A few.

20,281. Do you catch a great quantity of small fish when you are using the seine?—Sometimes we catch a few; we cannot avoid it.

20,282. Do you catch a great many?—Not very many. Sometimes we may haul ashore scarcely 10.

20,283. But sometimes you haul more ashore?—Yes.

20,284. At what time of the year do you haul ashore the most?—I cannot tell.

20,285. Do you use this team seine only in the fall of the year?—Yes.

20,286. Am I to understand from you that the proportion of small and unsaleable fish you catch is very small compared with the rest of the fish you catch?—Yes, and we throw it into the sea again after we have picked out the saleable fish.

20,287. Does it not sometimes happen that you leave it on the shore to be picked up by the gulls?—Very seldom.

(*The witness Thompson.*) Perhaps I may be allowed to explain. The complaints which are principally made are not against the fishermen of Wyke, but against the fishermen of Weymouth. The fishermen of Wyke, even although they use the seine, take more care than the others. It is the Weymouth men who are so constantly out with the small seines, and who cause so much destruction.

RICHARD WILLIAMS' examination continued.

20,288. (*Professor Huxley.*) Do you practise any hook-fishing?—No.

20,289. Is it not practised in the bay?—Not from Wyke.

20,290–1. Do no fishermen out of Wyke use the hook?—No; perhaps they may be out for an hour or so in West Bay.

20,292. Is there not good ground off here for long-line fishing?—Yes.

20,293. Then why is it not followed?—Because we have never been in the habit of following it. I believe every place has its own way of fishing.

20,294. (*Mr. Lefevre.*) Do you find that you can make money by fishing in the mode you do?—We make very little at times.

20,295. (*Professor Huxley.*) Then why do you not take to the long-line fishing?—We could not launch a boat here in all weathers. We are obliged to fish here in a very heavy sea at times.

20,296. Your boats are all open boats, are they not?—Yes.

20,297. Is there anything that you wish to suggest to us?—No.

20,298. There is nothing you wish to add to the evidence of the last witness?—No.

20,299. (*Mr. Lefevre.*) How long have you used a net in Weymouth Bay?—Ever since I was a boy.

20,300. Have you used one every autumn?—Yes, we generally go in the autumn. Sometimes we catch a few little fish, and sometimes none.

20,301. How long do you fish in the bay in the autumn?—Up till about now.

20,302. Until nearly Christmas?—Yes.

20,303. Two or three months?—Somewhere thereabouts.

20,304. You have done that every autumn since you can recollect?—Yes.

20,305. Have you observed any falling off in the number of fish?—Not at all.

20,306. There has been no falling off?—No; they are just about the same as when I was a boy as far as I can see.

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20,307. You are sure that you catch as many fish in that way now as you caught when you were a boy?—Latterly we cannot catch as much on the Smallworth Sands on the west part of Weymouth Bay.

20,308. Is that in the bay?—Yes, it is all in Weymouth Bay as it were.

20,309. (*Professor Huxley.*) That is the mouth of the Fleet, is it not?—Yes.

20,310. (*Mr. Lefevre.*) But in the other parts of the bay you catch as much as you did when you were a boy?—Yes.

20,311. There are more men fishing now than there were when you were a boy?—Yes.

20,312. Then the whole quantity of fish caught there must be more than it was in your earlier days?—Certainly it must be, because there are more boats.

20,313. And each boat catches as much as it did?—Perhaps not quite as much on an average as they did 10 years ago.

20,314. You think they do not catch quite as much?—No, not quite as much on the average. Down on our sands here it has been very bad this last season.

20,315. What do you attribute that to; to a bad season, or what?—Since the breakwater has been made it has taken away all the sands.

20,316. Is there more mud now?—Yes.

20,317. And not so much sand?—No. I have known 3 feet of sand, and now there is scarcely a bit of sand to be seen.

20,318. Then the building of the breakwater has had a great effect on the fishing?—Yes, it is all mud and shingle where it used to be sand.

20,319. Is there no current to carry it away?—No, there is no current at all.

20,320. Then you think that the falling off in this part is due to the breakwater, and not to the catching of small fish?—It is altogether owing to the breakwater. There is a wide difference there as compared with what it used to be.

20,321. Do you sell the fish you catch in the team nets in the bay, or do you send them by railway?—We hardly catch enough to supply the inhabitants of our own coast.

20,322. Do you sell any to the lobster catchers?—None at all.

20,324. Do you not sell small fish at all?—No, we never take any small fish home. We only take saleable fish.

20,325. You throw the rest out into the sea?—Yes, we turn the bunt inside out, and let them go into the sea.

20,326. Have you any complaint to make of those who do catch them and leave them to rot on the shore?—No, they hardly know what they catch.

20,327. Does it do any harm to your fishing?—No, I think not.

20,328. You have not observed any falling off?—No.

20,329. Is there anything else you wish to say?—No, except with regard to the fastenings in the bay. There are several wrecks up and down the beach, and frequently when we are shooting our nets if we get hold of them it may throw us out of earning 40*l.* or 50*l.* The nets get fast to these fastenings, and we are brought up until the tide slacks. Then we are obliged to take the nets into the boat again, and perhaps there may be 5*l.* or 10*l.* damage done to the nets themselves, let alone what we may lose by losing our day's work.

20,330. Is that in West Bay?—Yes.

20,331. Are there a great number of wrecks there?—Where we fish there are four.

20,332. Are they old wrecks?—Some of them are old wrecks. One in particular has been there since the remembrance of man, and has done thousands of pounds' worth of damage.

20,333. (*Professor Huxley.*) Would it not be worth your while to subscribe and blow it up?—We cannot do that.

20,334. Surely it would be better to do that than to lose 40*l.* or 50*l.* every now and then?—I don't know about that.

23,335. Is it an old wreck?—Yes.

20,336. What depth of water is it in?—About 8 fathoms.

20,336. Then it could not be got at without a diving bell?—No.

20,337. (*Mr. Lefevre.*) Does the shore fall very rapidly?—Close to the shore you get into 5 fathoms.

20,338. Does it fall very rapidly from the bank?—It goes gradually down to the centre.

20,339. What depth of water is there 100 yards out?—100 yards out you get into 3 fathoms.

20,340. What depth is there 200 yards out?—You get into 10 fathoms then.

The witness withdrew.

T. Sprackling.

THOMAS SPRACKLING called and examined.

20,341. (*Professor Huxley.*) Are you a fisherman here?—Yes.

20,342. How many years have you been a fisherman here?—For more than 30.

20,343. Did you hear the evidence that was given by the last two witnesses, Somers and Williams?—Yes.

20,344. Do you agree with it generally?—Yes.

20,345. Is there anything you wish to add to what they have already stated?—Not in the least.

20,346. Is there anything that you desire to remark upon?—Not in the least.

20,347. (*Mr. Lefevre.*) Do you fish mainly in West Bay or in Weymouth Bay?—In West Bay. Sometimes I fish in Weymouth Bay for red mullet or any other fish that will come to the net.

20,348. You do not fish, like Williams, in the autumn in Weymouth Bay?—Yes, just the same as he does.

20,349. Do you agree with him that the fish have not fallen off in Weymouth Bay?—Yes, but I think that owing to the westerly winds we get less at this time of the year. The more westerly winds we get at this time of the year, the less fish we catch.

20,350. In Weymouth Bay?—Yes, when the wind is in the east the more fish we catch, both silver whiting, herrings, and everything else.

20,351. Taking an average of years, do you catch as much fish in Weymouth Bay now as you were in the habit of catching formerly?—Perhaps not quite so much, but it is all according to the season. I have known the time when we caught 7,000, 8,000, or 9,000 whitings in one haul.

20,352. Do you think the breakwater has anything to do with the falling off?—Yes, the breakwater and the winds. The wind beats the fish right out of the bay.

The witness withdrew.

T. Bye.

THOMAS BYE called and examined.

20,353. (*Professor Huxley.*) Are you a Weymouth fisherman?—Yes.

20,354. How long have you been fishing from Weymouth?—It is about 40 years since I first began.

20,355. What kind of fishing have you practised during that period?—Hook-and-line fishing, and dredging.

20,356. Dredging for oysters?—Yes.

20,357. What else?—Before that I have been catching quins.

20,358. What are they ?—Little scollops. I have followed that for 40 years.

29,359. Do you use a dredge for them ?—Yes, and a hook and line. I had a set net once, but I am getting old, and I don't trouble about it.

20,360. Have you ever worked a team net, a small seine ?—No, never.

20,361. What did you catch with the line-fishing when you first began ?—Whiting, and different kinds of fish.

20,362. Did you get plenty of silver whiting ?—Sometimes I caught a few off the wreck of the Abergavenny.

20,363. Did you get many when you began ?—Sometimes I got a good catch.

20,364. And sometimes not ?—And sometimes not. The reason has been that we have sometimes had a winter when it has not been fit to go out to catch them. That is the reason why we have not been able to catch them.

20,365. Do you think there are as many fish now as there ever were ?—The fish seem as plentiful as they ever were before. Some of the fishermen went off the other day, and they had a good catch, but they have not had favourable weather for going again.

20,366. (*Mr. Lefevre.*) Do you go outside the breakwater ?—Yes.

20,367. (*Professor Huxley.*) When the weather is favourable, do you catch as many silver whiting as you ever did ?—It depends on the herrings. The silver whiting generally follow the herrings and sprats. If we have a good sprat season it is also good for the silver whiting.

20,368. Have you caught more in former years than you do now ?—We have caught a great many more in former years.

20,369. Do you think on the whole that the supply of silver whiting has fallen off ?—Yes, it has fallen off a great deal, compared with what it was years ago.

20,370. Has the catch of any other fish fallen off ?—I do not find much difference in what we call the coal whiting or the pollack.

20,371. Do you get the pollack here ?—Not a great many of them.

20,372. Is there much line-fishing now practised in Weymouth ?—Yes.

20,373. How many persons are employed in it ?—Never more than two, and sometimes they go out singly.

20,374. I mean how many follow that fishing altogether ?—I am sure I cannot tell you. Mostly all our men go at times, if they have nothing else to do.

20,375. How many are there altogether, at a rough guess ?—Perhaps there may be a dozen.

20,376. Were there more when you were fishing as a boy ?—No, not half as many. They had other employment.

20,377. Then the number of line fishermen has increased ?—Yes, but I suppose it is because they have had nothing else to do.

20,378. Do they contrive to get a living out of it ?—They get a living, but not much of a living. Nevertheless, something is something, and they manage to rub through the winter with the summer.

20,379. Is it your experience as a fisherman during the last 40 years, that, taking one thing with another, there is as much fish as there was formerly, or that there is less ?—I have caught more fish years back than I can catch now.

20,380. How long ago did you catch more ?—Thirty years ago I caught considerably more with the hook and line.

20,381. Has there been a very remarkable falling off ?—I don't know that, but there are not as many as there used to be. We, however, put it down to there being so many more fishermen to catch them.

20,382. I will ask you about the cause by-and-by. I want the fact now. Do you think there are less fish caught altogether now than there were 40 years ago ?—I do not think there is. An individual may not catch as many, but there are so many more fishermen now engaged in fishing that I should think there are pretty nearly as many caught as there ever were.

20,383. Is there as much fish brought to the market now by all the boats as there were 40 years ago, or is the quantity brought to market less ?—I don't believe that there are as many quite.

20,384. You do not believe that all the men fishing now catch as much as the few men formerly caught ?—No.

23,385. What is the reason of the falling off ?—I cannot tell.

20,386. Have you any notion or idea on the subject ?—No, I cannot tell what the reason is.

20,387. Has the scollop-fishing fallen off ?—There never was a great many caught here.

20,388. Are there as many caught now as there were formerly ?—I cannot tell. Since the last hard winter we had they seem to have fallen off. That hard winter killed them all around and below the breakwater. I have caught them on both sides, both on this side and below the breakwater.

20,389. How many persons in your knowledge have been engaged in the scallop fishery ?—Not more than three or four. There are not many who care about going out. If we catch one, two, or three dozen, we think we do very well. It is not a fishery that pays.

20,390. Have you ever been oyster dredging ?—Yes.

20,391. Are there as many oysters now in the bay as there were formerly ?—No.

20,392. How has that come about ?—I will tell you. I think it is just the same as a bird that has a nest and lays its eggs in it. If you go and kill the old bird, and destroy the eggs, you cannot expect the young ones to come.

20,393. Do you think that that is what has taken place ?—Yes, the brood have been taken out of the bay.

20,394. Who has done that; who has taken your brood away ?—The vessels from Feversham and the east country.

20,395. They have taken away all the spawn, and the small oysters ?—Yes.

20,396. Everything they could get ?—Yes, and I may tell you that if they had not come and taken that brood of young oysters away, the Weymouth and Portland boats would not have been able to have fished out the beds as long as they lived. We only catch what is saleable. We throw the others back again. We have very frequently, after we have caught oysters, brought the brood down and thrown it over inside the Abergavenny, thinking that the east country boats would not go there, yet they have even found that place out, and have gone and cleared all the oysters away.

20,397. They have come and taken the oysters you have put down there ?—Yes, we threw them out, as we went along, and spread them over the ground.

20,398. Do you think it a hardship that these oysters should have been taken away by the east country boats ?—Yes, I think if they come here to dredge, they ought only to take away what is fit for the market, and fit to eat, and that they should be compelled to throw the others overboard. If they did that they would make the beds larger, and they would be able not only to work them, but to obtain fine oysters. The oysters would have a much better opportunity of growing than they have now.

20,399. Is that the chief thing you have to complain of in Weymouth Bay, or is there anything else that does you harm; do you think that the use of the small seines or team nets does you harm ?—I cannot say anything about that. It is all according to the way in which they are worked.

20,400. What is a good way of working them, and what is a bad way ?—If they drew up the small fish and threw them in again that would do no harm.

20,401. They would do no injury to the fishery if they did that ?—No.

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20,402. Have you noticed the small team seiners here take a quantity of young fish ashore and leave it to rot there?—It does not matter what sort of mesh you have in these small teams because the weeds get in and fill the meshes up, so that the fish cannot get out.

20,403. Then that was so much fish destroyed?—I cannot say. I have not had much to do with the team nets. But of course there must be some destroyed.

20,404. But do you think that the destruction which is caused in that way has been the cause of the falling off in the supply of fish in the bay?—I do not think that it has.

20,405. (*Mr. Lefevre.*) You yourself never take up the small oysters, do you?—No.

20,406. You do not carry them away?—No.

20,407. You do not sell them to anybody?—No, they are of no good to us.

20,408. Cannot you sell them to the Colchester men when they come here?—No, they are not fit for anything.

20,409. They are not large enough for eating?—No.

20,410. But they are large enough to place on beds?—For that purpose the smaller they are the better. They go down to China rock in the east country and lay them down; one tub of oysters will produce three in the course of 12 months.

20,411. And they are better for eating after they have been laid down?—Yes, they are better for eating after they have been laid between the fresh water and the salt.

20,412. Are they better than the large oysters here?—Those we have had here which have been eatable are very good; they are very fat fine oysters.

20,413. Are there any places in the Fleet where you can lay them down?—We have never tried to do so. If we were to lay them down in the harbour, we should have them stolen from us.

20,414. Are there no private rights here?—Yes, I believe there are.

20,415. Do they let out the right of laying down oysters?—No; one old man here caught some and brought them in, and laid them down again near the quay against the bridge at the southern side, and I believe he sold those oysters. He sent up two bushels as a sample, and by-and-by down came these vessels. He went on catching them at 3*s.* a bushel. He caught 18 bushels of small stuff in one day, and he carried it away to these vessels and sold it.

20,416. Then there is, in fact, a market for the sale of these small oysters?—No, we do not sell them at all—none of us who go catching them; they are of no good to us.

20,417. Do you from time to time find fresh oyster beds in the bay here?—We have found two or three new beds, but these boats have destroyed them.

20,418. As soon as you find a fresh bed, do these boats from a distance come and carry the oysters away?—Yes, certainly.

20,419. Both the old and the young?—Yes, but they take the small ones in preference.

20,420. Do they not leave enough to breed from?—No, they have destroyed the whole lot. If I went there all day now, I should not catch 200, perhaps not 100.

20,421. How long ago is it since you last found any to speak of?—It must be three years ago now.

20,422. Do you think that those which have been left behind have not been breeding?—No, they are thin.

20,423. Then, am I to understand from you that there has been no oyster-dredging here for the last two or three years?—No, no more than this, that occasionally people have gone out oyster-dredging from motives of curiosity.

20,424. They have not gone out to make a livelihood of it?—No; sometimes they go out to collect those curious things that you put in bottles. I am a hooker and a dredger myself; I have nothing at all to do with nets.

20,425. For the last two or three years it has not been worth while for anybody to go dredging for oysters in the bay?—No.

20,426. Do you think the making of the breakwater has had anything to do with your fishing here?—Perhaps it may have had; I cannot say. The fish have more shelter now; they get about the breakwater a great deal; they run for it as a harbour, like a vessel at sea.

20,427. Have the pollacks increased about the breakwater?—Yes, and the mullets; one fisherman caught 2,000 mullets with a hook and line.

20,428. Close to the breakwater?—Yes, close in among the piles.

20,429. Do you go outside the breakwater to catch whiting?—Yes.

20,430. Do you catch more outside the breakwater than within?—That depends on whether the tide is at the ebb or the flood.

20,431. In former times did you go more outside the bay?—It is just this: if you have a field on shore, you put up a hedge or wall in order to keep the cattle in. It is the same here. The fish run where they they have a thoroughfare all up the passage and down. They used to come into all parts of the bay; now they must come through the open, or they are otherwise stopped out, unless they go round, and then probably the tide will have altered, in which case the fish would strike away.

20,432. Then you do not think there is the same opportunity now for the fish to come into the bay that there was before the breakwater was built?—No, not along here about the Smallworth Sands; but all around the breakwater there is a considerable harbour. They have plenty of fish there, and very large ones too.

20,433. Whiting?—Yes.

The witness withdrew.

J. Fowler.

JONAH FOWLER called and examined.

20,434. (*Professor Huxley.*) Have you been engaged in the fishing here?—I have been engaged a little in dredging and line-fishing, but not much in seine-fishing.

20,435. You have done a good deal, I believe, in catching those little curiosities that the last witness spoke of?—Yes, I have done a little in that way at times.

20,436. You are acquainted with the fishing that goes on here?—Yes.

20,437. Do you agree with the previous witnesses with regard to the supply of fish in Weymouth Bay?—There is not the fish there used to be, but there are more fishermen to catch them. I think the breakwater makes a wonderful difference; the fish harbour round the breakwater, and it is not all the fishermen who can go there. The fish that are there now I think used formerly to be found around the Weymouth shore.

20,438. You think the fish harbour round the breakwater?—Yes, more than they ever did.

20,439. Is it not rather a benefit to the fishermen to have them there?—No, it is a benefit to the fish. You cannot use the teams and seines there. They don't come to Smallworth Sands.

20,440. But you can use the hook and line very well?—Yes, all along there.

20,441. Then the hookers ought to be all the better for it?—Yes, they are at times.

20,442. As regards the other kinds of fish in addition to those caught by the hookers, has there been any falling off there?—I have not been accustomed to use the seines myself.

20,443. But you know what goes on among the

fishermen ?—There are some little seines used about here, but I do not think that the seines or the big ones used on the Smallworth Sands do much harm. The little seines used in the harbour leave the fish to die, and they do a great deal of harm. The small fish they catch are left on the shore, and there they perish.

20,444. What are the little seines you speak of ?—I mean the little teams. They are little things 30 or 40 fathoms long. Two men and a boy work each of them.

20,445. Are they legal seines ?—I think so.

20,446. Have you observed much small fish hauled ashore by the little seines ?—I have seen some at times. Dozens of people have seen the same thing.

20,447. Is there a great quantity of small fish destroyed in that way ?—Sometimes there is as much as half a bushel of young fish destroyed when at the same time if they turned the net the other way, and allowed the fish to go into the water, they would all have lived.

20,448. Do you think this is a practice destructive to the fish in the bay ?—Well, fish are things that breed very fast. I should not say that it would injure the fish much, although it might injure it a little. A fish that is very small, will in the course of a few months be very much larger. In point of fact, I know of nothing that grows so fast as a fish.

20,449. (*Mr. Lefevre.*) Is half a bushel a large catch of these small fish ?—Yes, but I have known them to have a much larger catch of good fish on our sands. I have known them to have three or four bushels of flat-fish, all of which were saleable fish. Frequently they have had three or four bushels of good sizeable flat-fish in a net—flounders, dabs, and brill—all of them have been saleable. The smallest has been 9 inches long. But now they go into our breakwater for little flounders, and they catch small fish only 4 inches long for bait. In three or four months' time these small fish would have been 9 inches long.

20,450. Do they sell them for bait ?—Yes.

20,451. (*Professor Huxley.*) Is there anything else on which you wish to offer a remark ?—I should like to say something about the oyster-dredging.

20,452. What do you wish to say about that ?—There have been two or three or four of the best oyster beds in the West of England in this bay. I found out two or three of them myself. But as soon as they were discovered, the boats came here from the east country. Numerous vessels were sent here from distant parts to dredge for oysters. There have been as many as 12 vessels here. There were 12 here I think in the last fleet. One vessel took away the whole of the oysters dredged up by the other vessels. Now these oysters when taken of so small a size have no nature in them to enable them to live in the vessel's hold. The small fish will not live, although the large ones may live for three weeks or a month. One vessel took away 60 tons of oysters which were not larger than a fourpenny piece, and I believe that they did not succeed in saving a bushel of them. I believe they gave 4*s.* a tub for them.

20,453. That would be a wanton destruction of the fish ?—Yes, the whole of it died in the hold of the vessel. Now, I think there ought to be a law passed stringent enough to prevent the taking away of oysters of such a size, no larger than a fourpenny piece.

20,453*a*. In point of fact they are good for no one when taken in that way; you cannot depend upon conveying them to distant beds where they can be laid down ?—No, they are so small that 10 hours will kill them.

20,454. (*Mr. Lefevre.*) Then it must have been a bad speculation for the men who went there ?—Yes, but it was a great oyster merchant who could afford to lose it. Sometimes a great part of the cargo will live. He only gives 4*s.* a tub for the oysters. Perhaps a tub will hold about 10,000, but in the course of four years a tub will not hold 400 of the same fish. They grow very rapidly, and if he can only get them laid down upon the beds alive, he is enabled to realize a good profit.

20,455. (*Professor Huxley.*) You think it is worth while for him to lose one or two cargoes for the sake of saving the third ?—Yes; but these beds would never have been thinned at all if they had only taken away the eatable oysters.

20,456. You would not object to their being taken away to be laid down in other places if they left the brood ?—Yes, I should.

20,457. Are you of opinion that when they take the small oysters they destroy the brood without doing themselves any corresponding good ?—The brood would not be destroyed if they were not kept so long out of the water. The reason of their being kept out so long is that they cannot dredge enough to make a cargo, so that they wait until they get one. There have been 60 vessels here from the east country dredging in this bay at the same time. At one time the bay was almost full of oysters, but go where you will now you see nothing but old dead oyster shells.

20,458. (*Mr. Lefevre.*) How long ago is that ?—50 or 60 years ago. I have been at it for 25 or 30 years.

20,459. Do you agree with the last witness that the last time there was any quantity of oysters got here was three years ago ?—Yes, they were as thick then as grass on the ground. The first time I saw them I hauled up eight bushels in a dredge belonging to the Zoological Gardens. It was choke full.

20,460. Were they all small oysters ?—Yes, they were all small oysters, all cleaned.

20,461. Then there must have been a great destruction of the brood ?—Yes, and many vessels have been down successively raking them away since.

20,462. Before that time had there been but very few oysters ?—Yes, but four years before that I dredged a great number for the late Lord Ilchester, the size of a five-shilling piece.

20,463. Were they all carried away in one season ?—No, in about two. We had the boats down from Colchester and other places, and they dredged on Sundays and all days. They did not even let Sunday alone.

20,464. Then there was no interval ?—No. There may be a place where you can dredge 200 or 300 large oysters now, but that is all. The vessels of which I am speaking dredged 40,000 or 50,000 a day.

20,465. Do you know anything of the spawning of the oyster ?—No.

20,466. (*Professor Huxley.*) Is there anything else you wish to tell us ?—No.

20,467. Are there any regulations here that affect the fishing injuriously ?—No.

The witness withdrew.

ABEL WHITTLE called and examined.

20,468. Have you been engaged in the fishery here ?—Yes, a little.

20,469. Have you heard the evidence of the previous witnesses ?—Yes.

20,470. Does that agree with your previous knowledge and experience ?—Yes.

20,471. Do you wish to make any remark upon it ?—There is only one subject which I wish to mention, and that is the fastenings which have already been spoken of. I think they ought to be removed from Portland to Abbotsbury. They are the greatest injury of which we have to complain. Some of them are upwards of a century old, and some of them have been about there more than 10 years.

20,472. (*Mr. Lefevre.*) Would the expense of removing them be very great ?—It would not be very great; but the poor fishermen here have not the means of doing it. I know several fishermen who

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were almost half ruined last year on account of the destruction of their nets by these fastenings, and the fish themselves were allowed to escape.

20,473. Cannot you escape the fastenings?—We do sometimes, but sometimes a shoal of fish will go over the fastenings, and the tide will drift us across them, and there we are bound to remain until the tide changes.

20,474. Do you belong to Wyke Regis?—Yes.

20,475. Can you tell us the number of fishermen living here?—There are about 10 boats.

20,476. How many men are there in each boat?—Each boat will command about 12 men.

20,477. Then there will be about 120 men in all?—Yes; some of them come from Weymouth.

20,478. Do you know most of the coast of West Bay?—Yes.

20,479. Are there many small fishing vessels there?—There are some at Portland.

20,480. How many fishermen are there at Portland?—It depends on the fishing. The quarrymen come down at intervals.

20,481. How many boats have they got?—There are 10, or 12, or 14.

20,482. Do they carry on the same fishing as the Wyke men?—Yes.

20,483. Then it is nearly as large a fishing place as Wyke Regis?—Yes, it is even more so.

20,484. What is the next fishing place to the westward?—There are 12 boats, I believe at Chickeral, which is the next fishing place going westward.

20,485. How far is that from here?—They are all places close adjoining. It is about two miles on the beach.

20,486. How many boats belong to Chickeral?—10 or 12.

20,487. What is the next fishing place beyond that?—Langton.

20,488. How many boats are there there?—About six.

20,489. Are they fishermen mainly at Langton?—They are a labouring class of people who go for the fishing season, which commences about May.

20,490. At other times do they work as labouring men?—Yes, they go to the fishing when the fish come.

20,491. At Wyke the men fish all the year round?—Yes, they are principally fishermen.

20,492. That is not the case at Chickeral and Langton?—They don't depend so much on the fishing as we do.

20,493. What is the next fishing place?—Abbotsbury.

20,494. How many boats are there there?—About 12 or 14.

20,495. Are they in the same position as the men at Chickeral and Langton?—Yes.

20,496. They do not depend so much on fishing?—No.

20,497. What fishing places are there beyond that?—There is Swyer.

20,498. How many boats are there there?—About half a dozen; there are 10 at Puncknoll and Swyer together.

20,499. What is there beyond that?—You come next to Burton.

20,500. How many boats belong to Burton?—About six.

20,501. Then you come to Bridport?—Yes.

20,502. How many are there there?—None.

20,503. Beyond that there is Stanton and Lyme Regis?—They are beyond our district. We know nothing about those places.

20,504. In all the places you have mentioned has the number of boats increased of late years?—Yes.

20,505. What has been the increase?—Quite one-half.

20,506. Has that increase taken place within the last 20 years?—No, not quite within 20 years.

20,507. Within 30 years?—Yes.

20,508. Do they complain of the fishing having fallen off?—They do in some seasons. In some seasons it is worse than in others.

22,509. Do they complain, taking one season with another?—I think there are more fish caught altogether than were caught 20 or 30 years ago, taking into consideration the number of men and boats employed in fishing.

20,510. Do the fishermen send their fish away principally by rail?—Yes, some goes to London and the rest is sold in the neighbourhood.

20,511. What are the principal fish they catch?—Mackerel.

20,512. Do they catch mullet?—Very seldom. There is one thing they complain of, but I do not think that has anything to do with your inquiry. I refer to the backwater fishing, which Lord Ilchester claims as a private right. He prohibits the fishermen from fishing in the backwater.

20,513. Do they not fish there?—No, he will not allow them to go there.

20,514. Is the backwater not fished?—No, and there are mullets and eels there.

20,515. Is it kept for wildfowl shooting?—There is a preserve for that there, but it is a great piece of hardship for the lower class of people here. There are seasons when they cannot get anything else when they could go there and catch eels. Twelve months or two years ago there were a number of people taken up and imprisoned for it. They had no means of protecting themselves, and they were obliged to submit.

20,516. We are told that he has some oyster beds?—Yes.

20,517. Does he let them out?—Not that I am aware of. He keeps them for his own private use.

20,518. Does he lay down the oysters on his beds?—Yes, for his own private use.

20,519. (*Professor Huxley.*) Have you any further remarks to offer?—No; but for the good of the fishing in general I would anxiously press that the backwater should be opened to the poor generally.

20,520. Do you know anything of the fishing villages to the east of Portland?—No, the fishing to the east of Portland is of a nominal character.

20,521. What is the next place of importance eastward?—There is no fishing place of importance to the eastward near here. It is all rocky ground.

The witness withdrew.

T. Sprackling.

THOMAS SPRACKLING recalled.

20,522. (*Mr. Lefevre.*) Can you tell us where there is any fishing eastward of Weymouth?—I think the only place that has any seine nets is Lulworth.

20,523. But is there any fishing of any other kind?—There may be persons who go hooking. I believe they go hooking at Potham.

20,524. How many boats are there at Lulworth?—Five or six.

20,525. There is nothing much after that until we come to Poole?—No.

20,525*a*. Is there much fishing at Poole?—That is only a little town.

20,526. (*Professor Huxley.*) Does much fishing go on there?—Yes, in the season; it is mostly covered with sands, as it is here. They catch herrings, whitings, and mackerel.

20,527. How many fishermen are there at Poole?—There are not more than four or five boats.

The witness withdrew.

The inquiry was then adjourned.

Harwich, Essex, Monday, 7th March 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

JAMES HOWARD called and examined.

20,529. (*Mr. Caird.*) Are you connected with the fishing here?—I am not exactly connected with the fishing here, although I have been connected with it in this part for the last 67 years.

20,530. Over what part does your knowledge extend? Are you acquainted with the fishing all along the coast of Essex, or does your experience apply more to the coast of Suffolk?—I have been for many years acquainted with the fishing all over the coast of Essex, all over the German Ocean, and in Norway and Sweden as well.

20,531. Then having had so long an experience, you can probably give us the information we desire with regard to the present state of the fishing interest here compared with what it was 15 or 20 years ago?—There is not now one-third of the fishing carried on here at Harwich that there used to be at that time.

20,532. Do you speak of all kinds of fishing or of any particular description?—There is not one-third of any description of fishing as compared with what it was formerly.

20,533. Taking 20 years ago what was the principal fishing carried on here?—At that time there was trawling, and I believe it would be about the beginning of the shrimping and what are called the trim-tram nets. It will not be more than 20 or 25 years ago since the first of them came here. Perhaps some of the regular trim-trammers may have been used here as early as 30 years ago. I cannot exactly state the date.

20,534. Was there any other description of fishing followed here?—Yes, there was the cod-fishing.

20,535. What is the principal fishery now?—There are a few trawl vessels belonging to Harwich, a few very small trawling boats, and there are a number of shrimpers, but I cannot tell you what the number of these shrimp boats is. They use what are called the trim-tram boats.

20,536. Will you be good enough to give us the particulars of that part of the fishing trade with which you yourself are best acquainted?—I understand every branch of the fishing trade, every description of it. I don't care what it is, I am acquainted with the whole of it.

20,537. Can you tell us what the supply of fish is in the place in which you are yourself located?—We have a different supply at different times of the year, and this is about the time of the year that we have the greatest supply. I believe, however, that we should be able to obtain a much larger supply if steps were taken to make an alteration in the size of the mesh of the net in use here, and to prevent the taking of small fish at a time when they are of no value to anybody. At present they kill a very large quantity of the brood here; they do that in all the rivers here. In this river, the Stour, for one, in the Ipswich river, the Orwell, and in all the rivers all along the coast. The destruction to which I refer goes on principally in the summer months, in May, June, July, August, September, down to the latter part of October. The small brood of almost every description of fish is taken and killed. Flounders, dabs, plaice, and all sorts of flat-fish come into the rivers here when very small, and thousands and tens of thousands of them are destroyed. I think that is a great evil, and it ought if possible to be prevented.

20,538. Has that destruction been of a recent date, or has it been going on for a long period?—It has been going on for many many years.

20,539. Has it not been going on as long as you can remember?—Perhaps hardly as long as I can remember, but it has been going on for a long time. At one time, within my recollection, the mesh of the nets was larger than it is now, and the small fish were able to escape.

20,540. Has the mode of fishing of which you complain been on the increase of late years?—Yes, because it has answered two purposes.

20,541. What purposes has it answered?—This small brood has been destroyed and brought ashore, and then made use of for catching crabs and catching whelks. The fishermen have destroyed hundreds of thousands of them for that purpose.

20,542. And has there been a diminution in the brood itself in consequence of the continuation of that mode of fishing?—Yes, there has been a very great diminution.

20,543. Are there not as many people employed now in that mode of fishing as there were formerly?—There are not as many employed now in trawling in the rivers.

20,544. Trawling in the rivers?—Yes.

20,545. Is that the mode of fishing you refer to as being destructive in the rivers?—Yes.

20,546. What kind of net do they trawl with?—They use a regular trawl net.

20,547. What is the size of the beam?—The size of the beam is according to the size of the boat. Perhaps some of them will be 22 or 23 feet long.

20,548. The large trawling boats use longer beams?—Yes; a trawling smack will have a beam 36 feet long or even longer, in proportion to the size of the vessel.

20,549. The kind of fishing you speak of, and of which you complain as being destructive, is not followed by the large smacks, but by smaller trawling vessels?—Yes; it is not followed by the smacks, but by boats of about 12, 14, or 20 tons.

20,550. Can you say positively whether the number of boats engaged in this description of fishing has increased or diminished during the last 10 or 20 years?—I should say they have diminished rather than increased.

20,551. Then the destruction of the brood is not so great now as it was formerly?—No, but it is very great even now, because it is only during certain months in the year that the brood is in the rivers and can be taken. I myself have witnessed the destruction which has taken place. Last summer I was out fishing for two or three nights with one of our boats, and I saw immense quantities of these small fish taken and destroyed. If they were allowed to come to maturity they might be caught when they would be worth having, and would be fit for the market, whereas they are taken now when they are absolutely useless.

20,552. (*Mr. Lefevre.*) What fish are principally taken by the small boats that trawl in the rivers?—They are principally little soles.

20,553. Do they consist entirely of small soles?—Not entirely. There are small soles, little flounders, dabs, plaice, thornbacks, and other fish. The trawl net takes everything.

20,554. Are these small fish when taken generally used for catching crabs?—They are generally. Some of them, if they are at all sizeable, are no doubt sold as food for the poorer classes to eat.

20,555-6. Then they are not all wasted?—A great many of them are used for what I have already told you, namely, catching crabs.

20,557. (*Mr. Caird.*) Are they used on this coast for catching crabs?—Yes, in the rivers.

20,558. Could crabs be caught without them?—Oh yes. Crabs may be caught in many different ways and by the use of different sorts of bait.

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20,559. But are these small fish to which you refer considered the best bait for catching crabs?—That I am unable to say. I cannot tell you whether it is positively the best bait or not.

20,560. Are the small fish so caught used solely for the purpose of bait and not for the purpose of food?—If they catch any sizeable fish among the brood they pick them out and sell them for food, but all the rest are used for purposes of bait.

20,561. And are used for no other purpose?—For no other purpose that I am aware of.

20,562. Are you aware whether any portion is used for manure?—I do not think that any part is used for manure. I think there is not enough in quantity for that.

20,563. Then from what I understand you to say there is no positive waste of the fish. They are used in some way?—I think there is a waste, and a very great waste too.

20,564. In what way?—You have all these fish destroyed before they come to maturity. If they were not caught, but were allowed to remain in the water next season, they would probably be fit for food. All the little soles which you now have brought ashore at this and other places in the summer months, when unfit for the market, would, if allowed to go into the sea, come back again next season nice sizeable fish fit for the table.

20,565. Have you any proof that that is so, or that it would be so?—I have had proof enough of the fact to convince me that I am not mistaken, and I should not be at all afraid of taking my oath on the matter.

20,566. Within your experience has there been a decline in the number of the fish of that description which come to maturity on this coast?—Yes, I believe there has been a decline.

20,567. There has been a falling off compared with what the number was in former years?—Yes, I think so.

20,568. Within what period of time have you noticed the decline?—Within the last 40 years.

20,569. There has been a falling-off during that period?—Yes, and I believe it has been the same in the North Sea, on the same principle, in consequence of the Barking trawling men.

20,570. Who have been the sufferers in consequence of that decline?—The public generally.

20,571. How have the public suffered?—They have had to pay a higher price for fish.

20,572. Has any particular class of fishermen also suffered?—Yes.

20,573. What class?—Many of the smack owners have suffered as well as the public.

20,574. Do the owners of smacks not get as good a fishing now as they did in the times to which you refer?—No, nothing like it.

20,575. (*Mr. Lefevre.*) What experience have you yourself had in the matter?—What experience have I had?

20,576. Yes; I want to know how you arrive at the opinion you have expressed?—I know that what I have stated is correct, because I have been engaged in the business myself.

20,577. Have you been in a trawler lately?—Yes.

20,578. How recently?—Within the last three or four months.

20,579. And did you then find that you did not catch as much as you were in the habit of catching some years ago?—Nothing like it.

20,580. Did you observe that the falling-off was very great?—We did not get half the quantity. In point of fact there is not half the quantity of fish in the river now that there used to be formerly.

20,581. But I am talking of outside. Are there not as many fish taken outside as there were in former years?—Perhaps there may be outside; but if you take the whole of the coast along here, even including Aldborough Bay, you will find that there has been a very considerable falling-off in the quantity of fish. I do not see how it could be otherwise when I know the quantity that is killed and destroyed when quite young by fishing in the summer season.

20,582. We have heard elsewhere that there has been no decrease in the quantity of fish caught by the trawlers in the North Sea?—Why, God bless you, 40 years ago there were very few trawlers at all.

20,583. There are a great many more trawlers now than there were then?—Yes, there are more than double the number of trawlers now than there were then.

20,584. Do you mean that there are now double the number of trawlers belonging to Harwich?—No; I am not speaking of Harwich alone, but of trawlers altogether. At this time there are a good deal more than double the number of trawl-boats engaged in trawling compared with what there were 40 years ago.

20,585. You believe there are double the number of vessels engaged now in trawling that there were 40 years ago?—Yes, there has been all that increase; and I believe that in saying there are only double the number I do not go anything like far enough.

20,586. (*Mr. Caird.*) Do you speak of the trawlers engaged in supplying the London market?—Yes; I believe that at this moment you will find there are pretty well on to 300 sail of boats out of Barking alone, if there are not quite that number.

20,587. Three hundred sail of trawl-boats?—Yes.

20,588. I understood you to say, in reply to one of the questions put to you, that the number of trawlers engaged in supplying the London market had diminished?—No, I did not say that. I do not mean to say that the number engaged in supplying the London market has diminished, but what I mean is that the trawlers about here, and along this coast, and in the rivers here, have diminished. The same remark does not apply to the trawlers generally.

20,589. You do not wish us to understand that the trawlers who supply the London market have diminished in number?—No; of course there has been no decrease in those vessels. On the contrary they have greatly increased, and there are now double the number compared with what there was 40 years ago.

20,590. I understood you to say so?—I think you must have misapprehended what I said.

20,591. It was quite contrary to what we know to be the fact?—Yes.

20,592. Am I correct in drawing the conclusion, from your evidence, that you wish to make a distinction between trawlers for small fish and trawlers engaged in fishing in the deep sea?—The trawlers who are constantly engaged in fishing in the deep sea do not get as many small fish in the deep sea as those trawlers do who fish in the rivers.

20,593. Do you know from your own knowledge and experience that the trawlers engaged in fishing in the deep sea find a greater difficulty now in getting a good catch of fish than they did 10 or 15 years ago?—I think they do find a greater difficulty now than they did some years back. I have been told that frequently.

20,594. But can you speak to the fact from your own personal knowledge and experience?—No, I cannot.

20,595. Can you tell us whether during that time the price of fish has increased or diminished?—The price of fish has much increased at times.

20,596. It comes and goes; it fluctuates? Is that what you mean?—Yes.

20,597. But that is not what I want to know. Taking it on the average, would you say that for a year's catch a fisherman gets more money now than he was in the habit of receiving formerly?—I think the fishermen generally have received more money for their fish since the price of provisions has been so dear.

20,598. You think that fish have become dearer in consequence?—Yes, I think that they bring a greater price than they formerly did.

20,599. What was the kind of fish that was principally caught and brought into Harwich in former times?—There were soles, and fish of that kind.

20,600. Were there turbots as well as soles?—Yes; but we used to get that kind of fish when the Barking vessels were in the habit of putting into Harwich, before the custom sprung up of fitting out cutters to

accompany the fishing vessels to sea. These cutters are very fast-sailing vessels; they take the fish as soon as a cargo is caught, and they convey it direct to the market without bringing it here at all.

20,601. What are the kinds of fish that come here now?—The kinds that come here are just the same, and we have also cod-fish and lobsters.

20,602. Are there many turbots still brought here?—No; we never had any great quantity of turbots brought here at all.

20,603. Are the cod-fish which you say are brought here brought alive in well-smacks?—Yes, they are brought here alive in well-smacks, and they are put in machines.

20,604. Are they put in alive?—Yes.

20,605. Are they kept in the wells, or are they put into boxes and kept in the sea?—They have some boxes to keep them in, the same as they have to keep the lobsters in.

20,606. Are they kept in that way so that they may be available for the supply of the London market?—Yes.

20,607. Has that mode of keeping fish to supply the London market with regularity been on the increase here?—Yes, I think that it has been on the increase. I think there are more fish here now.

20,608. Do you think that the quantity of fish here has increased of late years?—Yes, I think there have been more fish here for the last two or three years than for some time previously, and I believe it has been owing in some measure to the mode which has been adopted for keeping the fish.

20,609. Are you aware whether the fact of steamers constantly coasting along the shore has had any injurious effect upon the supply of in-shore fish?—I do not think that it has.

20,610. You do not think that it has exercised any injurious effect?—No.

20,611. Then you do not attribute any of the diminution in the quantity of fish to the effect produced by steamers coasting along the shore?—No; because most of the steamers which pass here are vessels of a large draught of water, and they do not come in towards the shore as far as the small fish get in the summer season.

20,612. Is there any mode or plan that you could suggest by which the destruction of the in-shore fish could be put a stop to?—Yes, I think something might be done to prevent that.

20,613. What would you recommend?—Well, in my own mind, I think it very practicable to alter the "shale" or mesh of all the trawl-nets.

20,614. Do you mean the trawl-nets used in the shallow water, or the trawl-nets generally?—I mean the nets used in fishing in shallow water.

20,615. An alteration in the mesh of those nets is, in your opinion, desirable?—Yes, I would alter the "shale."

20,616. What effect would that produce?—It would enable the greater proportion, at least three parts, of the fish they now kill to get through the net, and find their way to the sea alive.

20,617. That would diminish the catch of the small fish?—Yes, it would diminish the catch of those small brood which are not fit to take. If the size of the mesh were enlarged they would get through without injury. They would then remain in the sea to grow up into large fish.

20,618. But how would the crab people get on in that case; they would have no bait, would they?—They could always contrive to get bait; there would be no difficulty in getting bait.

20,619. What other bait could they use?—They could use salt haddocks.

20,620. Is there any important crab fishery here?—I think there must be, and there are a great number of whelks caught here to supply the cod fishermen with bait.

20,621. Is the crab fishery here an important interest?—I cannot speak very much with regard to that. I am not often among the people to ascertain what quantity they have, but they must get a great deal. They must have a great number of bushels of crabs in the course of the season.

20,622. Do you know anything of the oyster fishery in this neighbourhood?—No; we have had no oyster fishery in this neighbourhood until within a very recent period.

20,623. How long have you had oysters here?—Only during the last six or eight months.

20,624. Have there been no oyster fisheries here in the rivers?—There used to be a few in Harwich harbour, and at the back of the cliff in Handford water. We had no regular fishery until the ground in the river was taken up recently and some oysters laid down. What they are going to do with them I cannot say.

20,625. (*Mr. Lefevre.*) Are you yourself engaged in fishing now?—No, I am not engaged in fishing now. I am getting too old.

20,626. What has been your experience with regard to fishing?—I have been engaged in every branch of fishing that is practised from the time I was 10 years old up to the present time, and I am now 76.

20,627. Have you been the owner of a smack?—I have had 14 or 15 smacks here at one time.

20,628. How many have you got now?—None. I used to have three or four vessels in the south seas.

20,629. When did you give up that business?—I have not been in business since 1855.

20,630. Did you find that it did not pay?—It paid me very well at the time I was engaged in the business. I retired from it only because I found I was getting too old for it.

20,631. Since the time you gave up your connexion with fishing smacks have you had no experience yourself with regard to the fishing?—I have had very little experience indeed since then.

20,632. Do you go fishing now sometimes?—Yes.

20,633. But you have no longer any interest in it?—I have no particular interest in it now, but I know very well what benefit might be done to it by taking strong measures and requiring the law to be observed.

20,634. Do the large trawlers trawl much off Harwich?—Oh dear no.

20,635. What distance from Harwich do they trawl?—I should say that the trawlers we are now talking about will none of them trawl nearer than about 40 or 45 miles off Harwich.

20,636. Did they ever trawl nearer than that?—Yes; there used to be vessels every year, when I was a lad 15 or 16 years of age, that were constantly in the habit of trawling off here.

20,637. Do they now go further off?—Those vessels trawled 24 or 25 miles off, and now vessels trawl at a distance of 70, 80, or 90 miles off here.

20,638. Do they find it more profitable to trawl further off?—Yes; they go further towards the coast of Holland and the German ocean.

20,639. Do they send in their fish direct?—A great many of them do.

20,640. They have vessels specially engaged in conveying the fish direct to the market?—Yes; they now have 20 sail of cutters, which have been built for the purpose of bringing the fish to market. They take the fish out of the trawlers, pack them in baskets, and pack them up in ice. They go direct to Billingsgate; but if the weather happens to be very bad, perhaps a chance one may put into Harwich.

20,641. Is there not a great deal of fish sent in by the trawlers now to Harwich?—I do not think there is; but I am not much here now.

20,642. Where do you live?—At Mistley, about 10 miles from here.

20,643. (*Mr. Caird.*) I think you spoke of shrimping here?—Yes.

20,644. Do you know, of your own knowledge, whether shrimping is extensively followed here?—I cannot tell you as much about that as people living at Harwich, but I believe that a great alteration is also required in the mesh of the nets used in shrimping.

The witness withdrew.

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H. E. Russell.

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HENRY EDWARD RUSSELL called and examined.

20,645. (*Mr. Caird.*) I believe, Mr. Russell, that you have the management of the oyster bed recently formed in this neighbourhood?—I have.

20,646. How long is it since the breeding of oysters began to be tried here?—In August last.

20,647. Had there not previously been any oyster fishery or oyster bed in that quarter?—No, there had been none there before.

20,648. Is the bed you have formed near to the town?—The lower end of our ground is within about three miles of the town.

20,649. Is it in the river?—It is in the river.

20,650. Which river?—The river Stour.

20,651. What extent of oyster beds are you forming there?—Our limits are from Everton Ness to Stutton Ness.

20,652. What distance may that be?—It will be very nearly three miles; somewhere about that. You may say between three and four miles.

20,653. (*Mr. Lefevre.*) Do you hire the bed of the river on which you are forming your oyster fishery from the Crown?—Yes; we take it from the Crown.

20,654. (*Mr. Caird.*) Is it a Crown waste that you are working upon?—Yes, I believe so.

20,655. What steps have you taken to establish an oyster fishery there?—The first step we found it necessary to take was to clean the ground.

20,656. Were there any oysters there before you commenced your operations?—No.

20,657. Were there any shell-fish of any other description?—I believe that several small crabs were caught, such as the hammer crabs. I do not speak of the avil crabs; we got plenty of those.

20,658. When you had succeeded in clearing the ground what did you do?—We then laid down some oysters, or rather some halfware, for this season we could get no brood.

20,659. (*Mr. Lefevre.*) Was that because there was no brood last season?—Yes.

20,660. (*Mr. Caird.*) There has been no spat?—There has been a little, but it has been very little indeed.

20,661. When do you expect to get a return from your oyster beds?—That is a question I can scarcely answer. If we get a spat this season and the spat lives, we shall get a quick return.

20,662. When does the spat come?—Generally in the fall of the year—in the summer and the fall. There are two spats.

20,663. (*Mr. Lefevre.*) Have you laid down the oysters all below low water?—Yes. At the time of low water there are 18 feet of water on them in any part.

20,664. Eighteen feet of water?—Yes, from 15 to 18 feet.

20,665. I presume that you expect to have a spat there?—In all probability we shall be able to get one that will live. We are certain to get a spat next season. Every season there is a spat, but in some seasons the whole of the spat dies.

20,666. What reason do you assign for that?—The reason why it dies is to be attributed to the foulness of the ground. If it happens to fall upon foul ground it will die.

20,667. It has a much better chance if it falls upon clean ground?—If it falls upon clean ground it will in all probability live.

20,668. I suppose that the oysters are in too great a depth of water for the frost to affect them?—Yes, I think so, but that is a matter we have yet to ascertain.

20,669. (*Mr. Caird.*) That is a very important point, is it not?—Yes, very important.

20,670. Is there any fresh water mixed with the salt water which passes over the beds?—There is a considerable amount at times, but I do not apprehend that the freshes will at all interfere with the fishery.

20,671. You think there is not too much, so as to be injurious to the prospect of forming a good oyster bed?—I myself do not think there is, but that is a point we have still to ascertain.

20,672. Is the bed placed in similar circumstances to other oyster beds further up the Thames which have been found to succeed?—It has been formed on the same principle as those in the Thames which have been successful.

20,673. In the beds you are endeavouring to establish, are you, as much as possible, following the plan adopted in the oyster fisheries in the Thames?—Only to a certain extent.

20,674. You know the principle which they adopt?—Yes, we thoroughly understand the nature of those fisheries, and we know perfectly well how they go to work, but we do not follow their principle exactly.

20,675. In what respect do you differ from them?—Our plan is different from that adopted at Whitstable or Colchester. We do not pit ours as they do in Colchester river and on Whitstable flats, nor are they caught every year and pitted the same as at Colchester, because we have a greater depth of water and not so much fresh water.

20,676. (*Mr. Lefevre.*) Are there no natural oysters in the Stour or in the Orwell?—With regard to the Orwell I cannot give you any information.

20,677. Are there any in the Stour?—No, very few indeed. We caught about a couple of score while we were engaged in cleaning the ground. That was the most I saw all the time we were at work.

20,678. How long were you at work?—We were engaged with 14 or 15 sail of boats for six or eight weeks in cleaning the ground.

20,679. Has there been no dredging for oysters in the Stour?—Not so far up as our bed is placed. They seldom dredge above Shottley.

20,680. Then they do dredge for oysters in the river?—I cannot say whether they do so now or not. In the harbour they do, but not far up.

20,681. Have they dredged as high up as the beds you have laid down?—I do not think they have. They seldom or ever go above Shottley.

20,682. What size were the oysters you laid down this year?—I think the smallest of them would be about $1\frac{1}{2}$ inches over.

20,683. Where do you get them from?—We get them from Ireland now.

20,684. How many did you lay down last autumn?—I can scarcely tell you; I do not know myself, but I could soon ascertain.

20,685. Did you lay down any large number?—We laid down as many as we could get. It is very difficult to get them now; we cannot get oysters fit to lay down for any money. There are none to be had; they are all full-sized oysters.

20,686. What means do you take to prevent other people from dredging there?—We have given regular notice that there are fisheries being established in the river. I have a printed form with me now.

20,687. What expectation have you that you will prevent people from dredging there?—We have given them full notice in the public journals, and printed notices have been given to the fishermen in the river, so as to warn them that there are preserved beds.

20,688. Is it a London company by whom the beds have been formed?—No, it is not a company at all.

20,689. It has been done privately?—Yes.

20,690. Who is the gentleman who is the lessee?—Mr. Michael Wills.

20,691. (*Mr. Caird.*) He holds under a Crown lease, which gives him an exclusive right to have oysters on that bed and to fish for them?—Yes.

20,692. The Crown right gives him that privilege exclusively?—Yes.

20,693. Do you know what he pays for it?—I do not know what he pays for it.

20,694. (*Mr. Lefevre.*) Is there much other ground besides this oyster bed you speak of fit for oysters?—Yes, from the lower part of our ground down to Shottley.

20,695. Is that ground that has been dredged over?—Yes, it has been dredged as far as Shottley. I have no doubt that the Crown has a title to it down as far as Shottley. The boats seldom dredge above that.

20,696. Is it suitable for breeding all over there?—Yes, it would be after it has been cleaned; it is rather dirty at present.

20,697. Have the oysters decreased in quantity there of late years?—Yes, they have decreased wonderfully.

20,698. To what is that decrease due?—My own opinion, with regard to the reason why there has been so great a decrease, is that it is caused by the closing of the season for a part of the year.

20,699. How does that affect the oyster fisheries?—When the season is closed it allows the ground to become foul.

20,700. What do you mean by the season being closed?—During a certain portion of the year the fishing is prohibited. An Act of Parliament was passed hindering the fishermen from dredging all the year round, and the result has been that the ground has become foul and the oysters have been destroyed. In former years, before that Act of Parliament came in force, and when the fishermen were allowed to dredge all the year round, there was never any scarcity of oysters.

20,701. Then I gather from the statement you have just made that you think the regulation as to a close season is a bad one?—Yes, I certainly think so. Oysters were always plentiful before that regulation was established.

20,702. Do you mean that more good was done by dredging the ground than by leaving the oysters free from dredging?—Exactly, and I think we have had plenty of proof of that in the oyster fisheries in Jersey and other places. In those fisheries, perhaps a little longer back than I can remember, but within the recollection of many persons now living, there used to be plenty of oysters, and there are none now.

20,703. The oyster fisheries in the places to which you refer have very much fallen off of late years?—Yes, very much; so much has that been the case in Jersey that from that place, where the fisheries at one period were very extensive, the Jerseymen have been obliged to seek a living on other parts of the coast.

20,704. Has that change taken place since the establishment by Act of Parliament of close time?—Yes, I believe it has. The result of the absence of dredging during the close season has been that the ground has what we call "swarbed," and become covered over with "slub" and one thing or another.

20,705. That has all arisen in consequence of the ground not being worked?—Yes.

20,706. And in your opinion has that had a tendency to prevent the oysters from breeding?—Yes, I am convinced that it has, and that it is the real cause of the decrease which has taken place in the quantity of oysters. There was never any scarcity before that regulation came into force, and there has been a constant diminution in the supply ever since.

20,707. Is there anybody here who can give us any information with regard to what the supply was in former years before a close time was established?—Yes, I believe there are persons present who can give you all the information you require.

20,708. (*Mr. Caird.*) How long, under the Act of Parliament to which you refer, is the ground closed and the fishermen prohibited from fishing the oyster beds?—The season closes on the 1st of May.

20,709. And when does it commence again?—It closes on the 1st of May and opens again on the 1st of September.

20,710. Then during the intervening months there is no dredging?—There is no dredging during May, June, July, and August.

20,711. And you say the result of that is to injure the oyster beds?—Yes.

20,712. In what way do they become injured?—The ground fouls in consequence of being left open.

20,713. The ground gets covered?—Yes.

20,714. What does it get covered with?—With "slub," and wood, and mud, and all that sort of thing.

20,715. Do the oysters get covered with it?—Yes, and they become smothered and destroyed.

20,716. The oysters perish in consequence of that?—Yes, and not only that, but when the spat falls, instead of falling upon stones or upon shells, or upon anything to which it would adhere and live, it falls into the mud and "slub" which have become deposited there and dies.

20,717. Then, in your opinion, if the fishermen were permitted to dredge for oysters all the year round it would prevent the accumulation of "slub?"—Yes, certainly it would.

20,718. But if you have no close time, and allow dredging to go on all the year round, would you not in the course of time entirely remove the whole of the oysters?—I think there is very little danger of that.

20,719. What makes you think so?—Why, see for how many hundreds of years people have dredged before this Act of Parliament came in vogue, and yet there was never any scarcity.

20,720. Is the ground rough so that the dredge cannot remove every oyster?—Yes, it is rough to a certain extent; but there are other things besides the roughness of the ground which would prevent the beds from becoming entirely exhausted.

20,721. What is there besides that would operate as a protection to the beds?—If the men were constantly at work they would never dredge the ground clean. If you had a fleet of boats working for any length of time on the same piece of ground they would not succeed in catching every oyster. You would find that they must leave some, and those they left would be sufficient for breeding and replenishing the ground.

20,722. (*Mr. Lefevre.*) A very few oysters would supply spat enough to stock the beds?—Yes. If the ground were thoroughly cleaned from all mud and slub, as soon as the oysters spat the spat would fall upon the clean ground and in all probability would live.

20,723. (*Mr. Caird.*) But if you were engaged in dredging during the whole of a season would you not destroy the spat?—No, because the spat adheres to the stones; there is no fear of destroying it. If I were to show you spat when first it becomes spat, you would find that it is no larger than my nail. It has just the same appearance as if you were to take a wax candle and drop the melted wax upon a stone. I have never seen it on the surface.

20,724. Does it fall down and adhere to the stones?—Yes, it adheres to the stones and shells at the bottom.

20,725. (*Mr. Lefevre.*) It swims about for a short time when quite young, does it not?—You have probably seen oysters full of stuff like milk; that is the spawn or spat. It flows out of the mouth. Some people say that as soon as it leaves the shell it rises to the surface; I rather incline to think that it does not rise to a greater height than from six to 14 feet above the level of the ground.

20,726. Does it float there?—Yes, for a little while, and then it falls. As soon as it falls it adheres to anything it falls in with. If it falls on the rock and stone it adheres there until it becomes oysters, and remains until it is knocked off. If it were to fall clear of anything of that sort into the mud, where it has nothing to adhere to it, or into the slub I told you of, it would die.

20,727. (*Mr. Caird.*) On the bed you formed in the Stour you say that you cleaned the ground before you laid the oysters down?—Certainly.

20,728. Did you make the ground quite smooth?—The bottom of the river is nearly smooth.

20,729. Is it not a stony bottom?—It is like a gravelly beach composed of shingle.

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20,730. Is it such a smooth bottom that by constant dredging you would pick up every oyster laid there ?—It is as smooth as a garden path that has been gravelled or as a shingle beach.

20,731. Could you not by continual dredging lift up every oyster lying there ?—No, I do not think we could.

20,732. How could they escape on so smooth a bottom ?—If you were to dredge day after day you might suppose that you were constantly dredging in the same straight line, but in all probability you would always dredge a few feet out of the line. You might dredge over a piece of ground no larger than this room for a hundred times and yet you would miss an oyster or two here and there.

20,733. And if only a few were left would they be quite sufficient to give spat enough for keeping up a plentiful supply of brood ?—Yes, and up to within a few years past the men employed in dredging for oysters would not take away the very small stuff. Now unfortunately they do, but it is only because they are compelled to do so by the scarcity of anything else.

20,734. You mean that if they brought up very small oysters to the surface in the dredge they would put them back again ?—Yes, because they could not get a market for it; but now it is very different, because oysters are so scarce that they will take anything, and by so doing they have diminished the oyster fisheries to a very great extent.

20,735. You spoke of Jersey just now ?—Yes.

20,736. What experience have you had of oyster fishing on different parts of the coast ?—I have never been in Jersey during the oyster season myself; but I have often been with those who have been there, and I have heard them talk a good deal about it. I therefore know for a fact, from knowing Jerseymen and Jersey people, that, instead of dredging on their own ground now, they go now to Carnarvon, Cornwall, the lower part of Scotland, the Firth of Forth, and the Humber, dredging.

20,737. When the time comes round when they may legally fish again, do not they go back to their own ground and fish as they used to do ?—No. This last season they tried their own ground and found that they could not catch enough to pay them. They were therefore obliged to seek for oysters in other places.

20,738. Was it proved that the ground had become foul in consequence of the cessation of dredging, and that all the oysters had disappeared ?—Yes; that is a well-known fact among fishermen.

20,739. Is it the general opinion of the oyster fishermen that the establishment of a close time has proved injurious to themselves by decreasing the quantity of fish ?—Yes, I believe it is.

20,740. Can you tell us where the chief oyster beds that supply the London market are to be found ?—No doubt the chief beds are on the Kentish and Essex coasts.

20,741. Does the same rule apply there as to Jersey and the other grounds to which you refer ?—It would not answer on the Whitstable ground; if they did the same there as in the channel and on the public grounds, they would not have an oyster to send to the market. In the course of three years their ground would so fall off that every oyster would die.

20,742. Do they work their grounds all the year through ?—Yes.

20,743. Does not the law apply to them ?—No; their season is all the year through. They are constantly catching the oysters and moving them and shifting them from one part of the ground to another.

20,744. The law permits that although it will not permit them to be taken to the market and sold ?—Yes.

20,745. Could not the Jerseymen do the same thing ?—If they are caught in the Channel with dredges their dredges are taken away from them. The law will not allow them to go into the Channel with dredges after the season is closed.

20,746. Do you know whether there is a different law applicable to the oyster beds in the Thames from that which applies to the beds in the Channel ?—Yes, there is a different law.

20,747. (*Mr. Lefevre.*) The oysters on the beds in the Thames are private property, are they not ?—Yes.

20,748. And the beds outside are public property ?—Yes.

20,749. Have you laid down stones or anything of that sort on the bottom of your beds ?—No; we have laid down no stones.

20,750. Is the bottom of the river strong enough for the purposes of spat ?—Yes, the bottom is shingly.

20,751. Then what you have done has been to remove the mud and scum ?—Yes. There was not much mud, but we set to work to clear the ground of slub and weeds.

20,752. Did you not, in the process of clearing the ground, bring up a great many stones ?—There are only very few large ones to bring up.

20,753. Then the ground is quite shingly ?—Yes, just the same as it is on Landguard beach. In some places there may be a little hard clay.

20,754. Have you been continuing the dredging up to the present time ?—We are not engaged in dredging the bed now, but we are stocking it. We first clean it, and then stock it.

20,755. Have you observed whether the oysters have grown much since they have been laid down ?—They do not grow much at this season of the year; they may fatten a little, but there is not much alteration in the oysters in the winter season.

20,756. The growth takes place principally in the summer ?—Yes.

20,757. How long does it take before the oysters are fit to send to the market ?—Some of them will be fit for the market next fall, as soon as the season begins again in August for the London market.

20,758. What did you pay for the small oysters you laid down ?—I can scarcely tell you what we paid.

20,759. Can you tell me something to convey an idea of the price ?—We paid 15*s.* 2*d.* a wash for native brood and halfware, and as high as 7*s.* and 7*s.* 6*d.* per tub for channels.

20,760. Do the channels not turn out as good as the natives ?—No, they fetch very inferior prices.

20,761. But the spat of the channel oysters, how does it turn out ?—The spat of the channel oyster and of every other oyster on this ground is equal to a native; there is no difference at all.

20,762. But if you were to lay down the young of the channel oysters brought from a distance, would they at the end of two years produce as good oysters as the natives ?—No, certainly not. If we were to bring young channel oysters they would still remain channels, and they grow up to be channel oysters just the same as if they were in the Channel; but, nevertheless, the spat of that oyster, either in the Stour or in any other river, will become a native oyster, and will not appear at all like a channel oyster next season.

20,763. I suppose the channel oyster, if placed in the river, would improve more than if it was left in the sea ?—Yes; the salt rank taste the channel oysters have is entirely taken away after they have been laid down upon our river beds.

20,764. Do you know anything of oyster fishing in the Orwell ?—No.

20,765. Is there any oyster fishery in the river Deben ?—Is that the Woodbridge river ?

20,765*a*. Yes.—There is no fishery there.

20,766. Is there any in the Handford water ?—That is a public fishery.

20,767. Is there any large number of oysters there ?—There has been; and that is a proof of the truth of what I have been saying, namely, that in one season, when the season was open all the year round for catching oysters, they could never catch all the

oysters that were in that place; now there are so few that they cannot catch enough to make a living.

20,768. Do you speak from your own experience, or from what you have heard?—I speak from what I have heard. I have not been long enough on this coast to know much about it personally.

20,769. Is there anybody here who knows anything about the Handford fishery?—Yes, I think there is.

The witness withdrew.

William Groom called and examined.

22,770. (*Mr. Caird.*) Have you had much experience in connexion with the fishing interest at Harwich?—I am a smack owner here.

20,771. Can you inform us whether, within your experience and knowledge, the supply of fish brought into Harwich for the London market or otherwise has increased or diminished?—I believe the supply has increased.

20,772. Is the number of vessels employed in the various kinds of fishing here increasing or diminishing?—The number is increasing.

20,773. What kind of fishing is chiefly carried on here?—The cod fishery.

20,774. Is that by line-fishing?—Yes, line-fishing.

20,775. Is it carried on by what are called well-smacks?—Yes.

20,776. How many of those well-smacks are there which come into Harwich as a general rule?—I can hardly tell the exact number.

20,777. What is the average number; that will be near enough?—I should think that the average number will be about 25 a week.

20,778. About 25 a week?—Yes, about that number.

20,779. Can you compare that with what the number was five or 10 years ago?—There are decidedly more now.

20,780. And is the number increasing from year to year?—Yes; there has been a decided increase since the railway came here.

20,781. (*Mr. Lefevre.*) Do the boats of which you speak mostly belong to Harwich, or do they come from other places?—They belong to Greenwich principally.

20,782. (*Mr. Caird.*) Have you stores here in which to keep the fish alive after they are taken out of the wells of the vessels?—Yes.

20,783. Are they put in boxes and kept in the salt water?—Yes.

20,784. And by that means the London market is supplied gradually as required?—Well, sometimes that is so.

20,785. Is there always a supply of fish kept in store here in that way?—Yes, nearly always.

20,786. Has the fishing business here been an increasingly lucrative one?—I think it has.

20,787. The people who have been connected with it have generally found it to be a paying business?—Yes, I believe so.

20,788. Do the smacks that bring the fish here go to some considerable distance out at sea for the fish they catch?—Yes.

20,789. Where do they go to?—To the Dogger Bank principally.

20,790. Then they fish on the same fishing grounds as the Barking and Grimsby vessels?—Yes, precisely the same.

20,791. I presume they are the same class of vessels?—Yes, they are the same class of vessels.

20,792. Where do they get their bait?—From the rivers here round about the mouth of the Thames.

20,793. Are you aware whether any of the fishing grounds they frequent have shown any signs of diminishing in their yield of fish?—No, I think not.

20,794. Do you think the yield has increased?—It has rather increased, I think.

20,795. Then, from what you say, your experience agrees with that of those who have told us that the more vessels have been fishing upon the fishing grounds the more rapidly the supply of fish has appeared to increase?—Yes, I believe that is quite correct. It certainly appears that the fish increase the more they are fished.

20,796. There has been no diminution of a marked character that you are aware of on any of the principal fishing grounds off this coast?—None, whatever. I think, however, that they have decreased just off this harbour.

20,797. Do any of your vessels fish off the harbour here?—No, not at this time of the year. They go further out.

20,798. (*Mr. Lefevre.*) To what distance off the coast do they go?—Perhaps 20 miles from Orford Ness.

20,799. (*Mr. Caird.*) What kind of fish do they get?—They catch cod-fish.

20,800. Are they making better catches now than they were in the habit of making in former years?—Yes, they have been making better catches within the last two or three years.

20,801. Are the cod-fish they get now as good in size as they caught formerly?—Yes.

20,802. And are they as fine in quality?—Yes, decidedly.

20,803. Are there any trawled fish brought here from the deep sea?—Only very few. Sometimes there are a few brought in by chance.

20,804. Did you hear the evidence of a previous witness, who told us that the in-shore fishing has decreased in consequence of the practice of trawling in the rivers and the destruction of the brood?—No, I did not.

20,805. Does your experience lead you to the same conclusion?—No, I think not. I can hardly agree with that.

20,806. Do you find that the in-shore fishing is as good as it used to be?—Yes, as to cod-fish.

20,807. Is there any other kind of fish caught by the line here?—No.

20,808. Turbot, for instance?—No.

20,809. Turbot are not caught here by the line?—No. Off Cromer turbot and halibut are caught, but there are none round about this neighbourhood.

20,810. (*Mr. Lefevre.*) Is there any considerable fishing population here?—No, not with regard to the cod fishery.

20,811. Do the men who engage in the fisheries from here go from Harwich or from Barking?—They go from Harwich, Greenwich, Barking, and other places.

20,812. What is the number of fishermen living in Harwich?—I cannot give you the exact number.

20,813. About how many are there?—About 50, I think.

20,814. Has the number increased of late years, or has it remained stationary?—It has increased very little.

20,815. Are they fishermen who are mostly engaged in smacks that go out to a distance, or are they engaged in trawling in the river?—They go out to sea.

20,816. Do you know what is the number of men engaged in trawling in the river?—No, I do not.

20,817. Is trawling in the river quite a small trade?—Yes, it is a very small trade, I think.

20,818. There are only very few smacks engaged in it?—Yes, very few.

20,819. And those are small ones?—Yes.

20,820. How many smacks do you own yourself?—I have three.

20,821. Do they hail from Harwich?—Yes.

20,822. What is their tonnage?—They average between 50 and 60 tons register.

20,823. How many men are there in each of them?—Ten.

20,824. What wages do you pay the men?—1*l.* a week.

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20,825. Have they any share in the catch?—The men have no share in it.

20,826. Has the master?—Yes.

20,827. What does he get?—The master gets five per cent.

20,828. Is there any herring fishery off here?—No, we have no herring fishery.

20,829. I suppose that when the herrings are off here the boats follow them from Yarmouth and Lowestoft?—Yes.

20,830. Are there no herring boats belonging to Harwich?—No, none.

20,831. Is there much shrimp fishing practised here?—Yes, there is a great shrimp fishery here.

20,832. Where is it practised; mostly in the river or outside?—Outside.

20,833. Do you know how many boats are engaged in it?—I should think that in the course of the season there are at least 60 sail engaged in it.

20,834. I suppose there are two or three men in each boat?—There are two in each.

20,835. What do they catch them with; do they use a small trawl?—Yes, a small trawl.

20,836. Do they take other small fish at the same time?—Yes.

20,837. What sort of fish?—Small flat fish.

20,838. Has that description of fishing fallen off of late or not?—No, I think not.

20,839. Do you hear of any complaints from the fishermen of the destruction and injury committed by that kind of fishing?—No, I never hear of any complaints.

20,840. Do the men who are engaged in it belong mostly to Harwich?—No, I think not; only a few of them belong to Harwich.

20,841. Where do they come from?—Mostly from Lea.

20,842. Lea in Essex?—Yes.

20,843. They come up here from Lea?—Yes.

20,844. They are not men who belong to Harwich itself?—No; there are only a few men here who engage in that fishing.

20,845. How many boats belonging to Harwich are engaged in it?—There are only 10 boats here, I think.

20,846. What is the shrimp season here?—From May to August.

20,847. Do they follow the shrimps up here from Lea; do the seasons vary on different parts of the coast?—No, I think not. I believe that the shrimps caught here are a different description from those caught at Lea.

20,848. In what does the difference consist?—Those caught here are a red shrimp, while those caught at Lea are a brown shrimp.

20,849. Are the shrimps landed here every day?—Yes.

20,850. And sent forward to London?—Yes.

20,851. Is there a considerable quantity of shrimps sent up from here to London in the course of the season?—Yes, a very great quantity.

20,852. Has the quantity increased or decreased of late years?—It has increased.

20,853. Has it increased much?—Yes.

20,854. Is there any considerable lobster fishery here?—We import them from Norway.

20,855. But is there any considerable lobster fishery on the coast itself?—There are a few, but they are not caught to any great extent.

20,856. I suppose the ground off here is not rocky enough for them?—There are plenty of rocks just outside.

20,857. (*Mr. Caird.*) Is that along the Suffolk coast as well as the coast of Essex?—There are lobsters along Orford Ness and the Orwell.

20,858. Is there a valuable lobster fishery there?—No; it is only a small fishery.

20,859. (*Mr. Lefevre.*) Is there any fishery at Woodbridge?—There are a few lobsters there.

20,860. Are there many fishing boats there?—No.

20,861. How many are there?—There are not more than 20 persons engaged in fishing there.

20,862. South of Harwich, what fishing places are there?—There are none of any importance.

20,863. Is there any fishing station at Handford?—No.

20,864. Is there anything in the Blackwater or at Maldon?—I believe not.

20,865. (*Mr. Caird.*) Is there a large importation of fresh lobsters into Harwich?—Yes; we import a great many during the season.

20,866. Where from?—From Norway.

20,867-8. Can you give us any information as to what the quantity may be?—Yes. I have a return here which states what the number imported has been for some years.

20,869. Will you be good enough to hand it in?

Witness put in the following return:

The Number of Lobsters imported by us from the Coast of Norway from 1827 to 1863, both inclusive.

1827	259,992	1846	57,582
1828	269,837	1847	33,719
1829	177,568	1848	51,391
1830	233,090	1849	40,367
1831	129,512	1850	59,292
1832	71,810	1851	73,965
1833	87,716	1852	91,466
1834	71,596	1853	140,735
1835	95,204	1854	97,664
1836	87,777	1855	154,700
1837	79,205	1856	225,463
1838	79,712	1857	138,107
1839	56,144	1858	72,822
1840	62,354	1859	209,832
1841	62,957	1860	303,600
1842	62,906	1861	245,125
1843	65,828	1862	235,585
1844	58,563	1863	231,221
1845	80,826		

20,870. (*Mr. Lefevre.*) Are the fish boiled when they are brought here?—They are boiled on board the boats.

20,871. I see on looking over the returns you have handed in that it extends from 1827 down to the year 1863?—Yes.

23,872. Does it embrace the number of lobsters imported from the coast of Norway by you yourself?—Yes.

20,873. Does it represent the whole quantity imported into Harwich?—Yes.

20,874. Does nobody else import lobsters here?—No.

20,875. Then the return gives the whole quantity imported into Harwich from Norway?—Yes.

20,876. The number imported seems to have decreased from 259,000 in the year 1827 down to 56,000 in the year 1839, 33,000 in 1847, and now they have got to 231,000. Of late years the importation seems to have been quite as great as it was formerly?—Yes, and it continues to be so up to the present time.

20,877. The importation from Norway is quite as great as in former years?—Yes, quite as great.

20,878. It is not diminishing?—No.

20,879. During the last three or four years it has made a considerable increase over the ten years previously?—Yes.

20,880. You have put in the return as a correct return of the quantity?—Yes, and I wish also to put a further document in in reference to the cod fishery.

20,881. What is it?—It is a statement as to the cod-fisheries left by my father. He died the year before last, and I believe he gives in this paper a history of the fishing from Harwich.

The witness handed in the following document:

The North Sea Cod Fishery from Harwich, &c.

In the year 1712, at Harwich, a seaport in Essex, welled smacks were first constructed, suitable for fishing in the North Sea for cod-fish, &c; and between that year and the year 1715 three vessels of that description were built, but

very inferior to those which were afterwards constructed. In the year 1720 the number had increased to 12, and in 1735 to 30. Of that number Mr. Nathaniel Saunders (the progenitor of the three generations of the celebrated fish factors and salesmen at Billingsgate) had six, and with four of these, which were very superior to the other two, he visited the coast of Scotland in the course of his fishing expeditions, and was at that time the chief medium for conveying goods to and from the North of Scotland. In the year 1745 his four smacks were engaged by the Government to carry the loyalist troops across the Moray Firth from Mickle Ferry to Inverness, from which place they proceeded to the memorable battle of Culloden. In 1766 a Mr. Olibar, a fishing smack owner at Harwich, made the first attempt to fish for cod with long lines on the Dogger Bank, but although he was very unsuccessful, he still persevered, and was so fortunate that in 1774 the number of smacks had increased to 62, of which 40 went regularly to the Dogger Bank to fish with long lines. In 1788 there were 78 smacks, and in 1798 the number had increased to 96. About this period a few attempts were made at Gravesend, Greenwich, and Barking to construct smacks of a similar description, and the Harwich fishery gradually declined. At the present time there are only five welled smacks sailing from that port. There are ten from Aldborough, 15 from Grimsby, 37 from Greenwich, four from Deptford, ten from Gravesend, and about 180 from Barking. The following table shows the number of welled smacks, the amount of tonnage, and the number of men employed in codding from these places:—

—	No. of Smacks.	Tonnage.	No. of Men.
Harwich - -	5	300	50
Aldborough - -	10	500	90
Greenwich and Deptford	41	2,066	369
Gravesend - -	10	600	60
Grimsby - -	14	900	130
Barking - -	180	10,800	1,620
Total - -	260	15,166	2,319

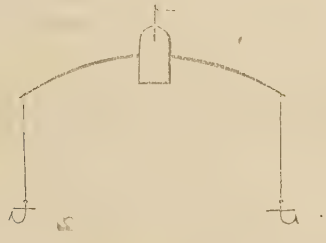
Of the Barking smacks 40 are employed in cod fishing, six in haddock fishing, and the remainder in trawl fishing. Besides these there are a large number of what are called dry-bottomed vessels, viz. smacks built without wells, employed in trawl-fishing in the North Sea, the tonnage and the number of men nearly equalling that of the welled smacks. The fish caught by these vessels consist of cod, ling, halibut, haddock, skate, soles, plaice, thornback, turbot, brill, and numerous other species.

The following statement, showing the number of fish brought to London, was published in the "Morning Chronicle" on the 12th Dec. 1850:—

An Account of the Number of Fish Sold in Billingsgate Market during 12 Months.

Salmon - -	29,000	boxes, 7 in a box - -	203,000 salmon.
Live cod - -	400,000	averaging 10 lbs. each - -	4,000,000 lbs. of cod.
Barrelled cod -	15,000	barrels, 50 in a barrel - -	750,000 codfish.
Salt cod - -	1,600,000	averaging 5 lbs. each - -	8,000,000 lbs. of cod.
Fresh haddocks -	2,250	tons, averaging 2 lbs. each -	2,470,000 fresh haddocks.
Smoked haddocks -	65,000	barrels, 300 in a barrel -	19,500,000 smoked haddocks.
Soles - -	12,000	tons, averaging ¼ lb. each -	97,520,000 soles.
Mackerel - -	10,500	tons, averaging 1 lb. each -	23,620,000 mackerel.
Fresh herrings -	250,000	barrels, 130 in a barrel -	33,375,000 fresh herrings.
Red herrings -	100,000	barrels, 500 in a barrel -	50,000,000 red herrings.
Bloaters - -	265,000	baskets, 150 in a basket -	147,000,000 bloaters.
Eels - -	729	tons, 6 to a lb. - - -	9,797,760 eels.
Whitings - -	3,000	tons, averaging 6 ozs. each -	17,900,000 whiting.
Plaice - -	15,000	tons, averaging 1 lb. each -	36,600,000 plaice.
Turbot - -	2,500	tons, 2 lbs. to 16 lbs. each -	800,000 turbot.
Brill and mullet -	1,500	tons, averaging 3 lbs. each -	1,220,000 brill and mullet.
Oysters - -	309,935	bushels, 400 to a peck - -	495,896,000 oysters.
Lobsters - -	- - - - - -	- -	1,200,000 lobsters.
Crabs - -	- - - - - -	- -	600,000 crabs.
Prawns - -	192,295	gallons - - -	498,423,628 prawns.
		Total number of fish - -	1,448,875,388

The time for cod-fishing is from May to the middle of October, and the line employed is a hand-line 2 lbs. to 35 fathoms, with a chopstick and a leaden sinker weight from 3½ lbs. to 4½ lbs., with about 30 inches of iron wire ¼ of an inch thick through the lead and snoods, and hooks attached, thus—



The line is fastened to the lead. The piece of wire across the upper part of the hook is to prevent the fish from swallowing the hook and being killed. Haddocks and whiting are caught in the same manner but with smaller gear.

The cod are caught during the above months at Iceland, Shetland, Butt of Lewis Islands, Fleman Isles, Barra and Rona, Cape Rock off Cape Wrath, Stack and Skerry, North Isles of Orkney, and Pentland Firth, off Ratrie Brigs, Marr Bank, Fern Islands, and the shoal grounds lying off the Humber from within sight of land to a distance of 30 or 40 miles.

The fishing grounds for haddock are near the N.N.E. Hole, deep water of the Well Bank, and deep water N.E. part of the Well Bank, called by fishermen Botany.

Whiting are caught off the edge of the Channel, off Lowestoft, Southwold, &c.

The trawling grounds for soles, turbot, brill and plaice are about Smiths Knoll, the great Silver Pits, the Brown Bank, &c.

The long-line fishing begins about November along near the land in thick water, as off the land in clear water the dog-fish eat the cod-fish very quickly when caught by the hook and confined. About December the smacks proceed to the Dogger Bank, and in moderate weather some of them will lay out lines for a distance of 12 miles, having a buoy with a flag at every mile, and at every nine feet a hook on a snood about 20 inches long fastened to the long line. When the lines are hauled in the cod-fish are lanced to let the air out of the sound or air vessel, which is so distended with air during their struggles whilst being hauled up, that they cannot go below the surface, but lay on the water belly upward, and would die unless lanced to free them from the pressure of the air.

The fish that are killed by the violent motion of the smacks in bad weather are taken out every day and salted. Those that live are taken to Gravesend and other places which have railway communication with London at the latest hour to save the market. The cod are taken out of the well and beaten about the head until they are quite dead, and they will crimp as well after they have been dead several hours as if they were alive.

The habits of fishermen are much altered for the better, but still there is great room for improvement.

The masters in the cod fishery get 12*s.* per week and five per cent. on the earnings of vessels. Some of them get a little more. The men get from 13*s.* to 15*s.* per week; the mates from 14*s.* to 18*s.* per week; the apprentices according to their servitude from 4*l.* to 8*l.* and 10*l.* per annum, and some even more besides perquisites.

There are no particular charities or schools exclusively for fishermen and their children. There are savings banks and national schools in all fishing towns.

HARWICH.

W. Groom.

7 March 1864.

The bait used for cod-fishing is whelks. Each vessel takes about 40 wash per voyage. A wash measure should hold 22 quarts and a pint of water. Haddocks and whitings are caught by means of mussel baits. The lines are coiled and hooks baited in trays and laid clear for running, from 480 to 640 fathoms in a tray.

On the Dogger the smacks fish in from 12 to 15 fathoms in December; in from 14 to 17 and 18 fathoms in January; and in 18 to 22 fathoms in February. In March they fish in shoal water, mostly in 10 to 12 fathoms. Latitude 54° 16′ to 55° 30′; longitude 3° to 3° 30′.

20,882. Do you find that you lose many of your lines in consequence of the trawlers coming in contact with you?—Not many from our own men, but we have lost a good deal by the French fishermen who come off the coast here.

20,883. Do you mean the French trawlers?—Yes.

20,884. What injury do they do to you?—They take away the lines and steal the buoys.

20,885. Does your loss in that way form any considerable item in your expenditure?—I should think that it must.

20,886. What are your lines; are they long lines?—Yes, they are long lines.

20,887. They are not hand lines?—In some part of the year we use hand lines.

20,888. What part of the year?—In the autumn.

20,889. What length are the long lines you use?—They shoot about 12 miles of lines I believe.

20,890. How many hooks are there to them?—I cannot tell you; I should think about 10,000.

20,891. Are they fastened to a buoy at one end?—There are seven or eight buoys attached to them.

20,892. Are they anchored?—Each buoy has an anchor.

20,893. Then I suppose that it will take a whole day to take them up and remove the fish from them?—Yes.

20,894. Are they set down again at night?—They are shot out in the morning and hauled in at night.

20,895. Do you leave them out in the water during the night?—No, they are only out during the day, and are taken in at night.

20,896. Then cannot you see what boats go over them and take them away?—Yes, we may probably see a boat go over them, but probably the smack will be 12 miles distant from the further end of the line, and by the time we can get up to the place they are all gone.

20,897. If you could get the number of the vessel injuring the lines you have a remedy, have you not?—Yes.

20,898. Have you any complaints to make against the English trawlers?—No, none whatever.

20,899. Do they not fish on the same ground?—Yes, but I do not think they injure our lines.

20,900. How is that?—They go over them.

20,901. They go over your lines without injuring them?—Yes; by chance they happen to catch a hook and then it breaks off.

20,902. The hooks are attached to the principal line you use by smaller lines?—Yes.

20,903. And those smaller lines will break sooner than the large one?—Yes.

20,904. One is much stronger than the other?—Yes, very much so.

20,905. You never lose the large line then in consequence of having it caught by English trawl vessels?—No.

20,906. Where do you mostly fish with the long line?—Off the Dogger Bank and Cromer.

20,907. What time of the year do you take to the hand line?—From July to September.

20,908. That line trails on the ground I suppose?—No, it is laid from the vessel down to the bottom of the sea.

20,909. But the bait touches the ground does it not?—Yes.

20,910. What is it that makes you give up the long line and resort to the hand line?—During the hand-line season the fish are all flying about after the herrings, or rather the herring spawn. The long lines are used when the fish are feeding on the ground.

20,911. But if you use the hand line the bait is on the ground, is it not?—Not always. We find by casting in the line where the fish are and how far distant they are down in the water. They are not exactly on the ground, but they may be four or five fathoms from the bottom.

20,912. You ascertain that by trying for fish?—Yes.

20,913. Having found the depth they are in you fish accordingly?—Yes.

20,914. The fish you wish to catch are after other fish at the time?—Yes.

20,915. (*Mr. Caird.*) When was the paper you have handed in written by your father?—In 1852.

20,916. Had he had a long experience connected with the fisheries here?—Yes.

20,917. I see he refers to the wages paid at that time to the masters and fishermen. The masters, he says, in the cod fishery got 12*s.* per week and five per cent. out of the earnings of the vessel?—Yes, I believe that was so.

20,918. Is that the same that they get now?—Yes.

20,919. The men got from 13*s.* to 15*s.* a week?—Yes; they get more now.

20,920. What do they get now?—They will get now from 18*s.* to 20*s.*, and some of them as much as 22*s.*

20,921. He says the mates got then from 14*s.* to 18*s.*?—They get more now.

20,922. (*Mr. Lefevre.*) I presume that the master as well as the men in reality gets more now than he did formerly?—Yes he does.

20,923. Practically his wages have increased?—Yes.

20,924. (*Mr. Caird.*) Have you read over this paper lately?—Yes.

20,925. Do you agree generally with the different observations contained in it?—Yes.

20,926. Your own knowledge and experience have been the same?—Yes.

20,927. Then you put it in as a correct account of the mode of fishing adopted off this coast?—Yes.

20,928. (*Mr. Lefevre.*) Were there great losses among the fishermen off Harwich this year?—Some of the little boats in the harbour were destroyed.

20,929. Not the trawl boats?—No, not fishing smacks.

20,930. How many were there lost?—Ten or 12.

20,931. With their crews?—No, they were sunk in the harbour.

20,932. (*Mr. Caird.*) This is a harbour into which fishing vessels can run in heavy weather?—Yes.

20,933. It is a good place for vessels to run for at any time?—Yes.

20,934. And it is a deep water harbour?—Yes.

20,935. At any time of the tide?—Yes.

20,936. Do vessels run much for this harbour?—Yes, all kinds of vessels both large and small.

20,937. In easterly gales?—Yes.

20,938. (*Mr. Lefevre.*) Is the harbour silting up?—It is growing out at the points, and might be considerably injured if nothing was done to prevent it.

20,939. Is anything being done to prevent it?—There will be shortly.

20,940. What is being done in the matter now?—An Act has just been passed for improving the harbour.

20,941. Has any public money been spent upon it?—8,000*l.* or 10,000*l.* will be spent upon it.

20,942. Does the town raise the money?—Yes, or at least the district.

20,943. (*Mr. Caird.*) Is it within your knowledge that there has been any wasteful destruction of fish or spawn by any mode of fishing that has been practised here?—I should think not. I know of none.

20,944. (*Mr. Lefevre.*) You have not heard complaints from any of the fishermen as to any wasteful destruction having taken place?—No.

20,945. (*Mr. Caird.*) Have you heard any complaint as to the diminution of fish in consequence of the destruction of the brood?—No, except with regard to the shrimps.

20,946. What complaints have been made with regard to shrimps?—I have heard a great deal of complaints with regard to catching them before the month of May and after August.

20,947. Before the proper season for shrimp fishing begins I suppose?—Yes.

20,948. What is the nature of the complaint as to that; do they say that it diminishes the supply of shrimps?—I cannot hear of any diminution.

20,949. But what is the complaint?—They believe there will be a diminution if something is not done to put a stop to the grievance of which they complain.

20,950. (*Mr. Lefevre.*) They have not experienced any great diminution at present, but they think there will be?—Yes, they think there will be.

20,951. (*Mr. Caird.*) Are there any legislative restrictions which at present operate injuriously upon the fishing here?—I think not.

20,952. Do you know at all in your experience whether the constant passing and repassing of steamers along this coast has had any injurious effect upon the fishing?—I think not.

20,953. Nothing of that kind has been noticed by the fishermen themselves or complained of?—No.

The witness withdrew.

THOMAS BRINKLEY called and examined.

T. Brinkley.

20,954. (*Mr. Lefevre.*) You are water bailiff here, I believe?—I am water bailiff to the corporation of Ipswich.

20,955. Can you tell us anything with regard to the oyster fisheries in the Orwell and in the Stour?—I can give you some information with regard to the fisheries in the Orwell and part of the Stour.

20,956. Over what length of time does your experience extend?—I can speak of three years in the Orwell and Stour.

20,957. Not longer than that?—I have been acquainted with the rivers here for the last 30 years, but I have only had an experience with regard to the oyster fishery during the last three years.

20,958. What has been the course of the oyster fishing during the last three years?—We have found that we have not had a great deal of spat.

20,959. Is the oyster fishery upon a public ground?—It belongs to the corporation of Ipswich.

20,960. Is there any great quantity of oysters in the Orwell now?—There is a middling quantity, not any great quantity. It brings in about 700*l.* or 800*l.* a year.

20,961. How many boats are there employed in dredging?—About ten I believe, and sometimes 12.

20,962. Are there any regulations with regard to the fishing?—We have a regulation that they are to bring the oysters to me and then they are sent off.

20,963. Do the oyster beds belong to the corporation of Ipswich?—Yes, the oyster fisheries belong to the corporation of Ipswich.

20,964. Have they a grant of the bed of the river?—Yes.

20,965. How long have they had it?—It is about four years since they had it.

20,966. Has there been any improvement in the fisheries since the corporation took an interest in the matter?—We have found very little improvement in them.

20,967. Is that due to the fact that there has not been any spat?—I think the great evil is trawling over the beds during the time the spat is there.

20,968. Trawling for other fish, not dredging for oysters?—Yes.

20,969. Do you think that that removes the spat altogether, or that it injures it?—I think the nets catch the spat when it rises in the water from the oysters, and again after a short time when it begins to fall again.

20,970. What length of time do you think elapses before the spat attaches itself to any substance?—It remains for a day or two in the water I think.

20,971. And is it during that time that in your opinion the trawlers injure it?—Yes.

20,972. In what way do they injure it?—The trawlers are trawling over the ground just at the time the oysters are spawning, and they sweep the spat away.

20,973. It is very small at that time is it not?—It is so small that it is scarcely seen.

20,974. Then it could not be caught in the net of the trawl boats?—Yes, it is. It is well known that it is caught by the net of the trawls.

20,975. Is it not so very small at that time that it would pass through the mesh of the net?—It might do so, but there would still be a part of it that would stick to the net.

20,976. What regulation would you suggest to prevent that?—I think the trawlers should not be allowed to trawl over the oyster beds in the months of June, July, and August.

20,977. Is that when the oysters are spawning?—Yes.

20,978. What do the trawlers to which you refer catch?—They catch flat fish and shrimps principally.

20,979. How many boats are engaged in that kind of fishing?—Sometimes there will be seven or eight of them trawling over the oyster beds at the same time. They do a great deal of injury in that way.

20,980. Do the boats you refer to belong to Ipswich?—No, to Harwich principally; but some of our own boats go fishing for other sorts of fish.

20,981. Has there lately been an increase in the number of boats which follow that kind of fishing?—No, I think there has been no increase.

20,982. Has there been any decrease?—I think there has been a decrease rather than an increase.

20,983–6. Do they not catch as many fish as they were in the habit of catching in former years?—No.

20,987. They trawl for flounders and dabs?—Yes, for flounders and dabs, and shrimps and soles.

20,988. Would you recommend that there should be any regulation as to the size of the fish that should be allowed to be taken?—Yes, I think there ought to be a regulation.

20,989–93. What regulation would you suggest?—I would recommend that they should be required to put all the fish caught in the trawls overboard that are under a marketable size.

20,994–5. How would you enforce such a regulation as that?—I would enforce it by an Act requiring them to do so.

20,996. Would you prevent such fish from being sold in the market?—Yes, or on board of the boats.

20,997. Do these boats when engaged in that kind of fishing catch many small fish?—Yes.

20,998. How many small fish will they catch in one haul?—Sometimes they catch a bushel all of which are small fish. Some of them are not as big as your finger. The fish caught in the river are principally small fish.

20,999. What are those small fish sold for?—They are sold for bait.

21,000. What do they catch with them?—They are used as bait for crabs.

21,001. Are they much sought for for that purpose?—Yes.

21,002. Do they sell well?—No; they get a mere nothing for them.

21,003. How much?—Perhaps 1*s.* or 6*d.* for half a bushel.

21,004. Have you been deputed by the corporation of Ipswich to come here and give us information in

HARWICH.

T. Brinkley.

7 March 1864.

reference to their interest in the fisheries?—Yes; I have come to Harwich to give you information on the subject.

21,005. Did you communicate with the corporation of Ipswich before you came here?—No; I did not speak to the corporation about it expressly.

21,006. Do you represent their views?—Yes, I represent their views.

21,007. So far as I understand your evidence their interest is mainly in the oyster fishery?—Yes.

21,008. Are you able to inform us what they get from the oyster fishery altogether in the course of the year?—In the course of the year?

21,009. Yes.—Do you want to know what they get for the oysters?

21,010. Yes.—What they have made by it so far is very little. It has not been worth anything to them as yet.

21,011. I suppose they hope it will become valuable to them in the course of time?—Yes, by taking care of it, but it is worth nothing now.

21,012. How do they expect to derive an income from it?—It is only for the benefit of the public that they are working it.

21,013. Then they do not wish to make an income from it for themselves?—No, they only want to get it into such a condition that it will pay the people for working it.

The witness withdrew.

F. R. Harrison.

FREDERICK RICHARD HARRISON called and examined.

21,014. (*Mr. Caird.*) I understand that you represent the corporation of Ipswich?—Yes; I have come here from the office of the town clerk to the corporation of Ipswich.

21,015. (*Mr. Lefevre.*) The corporation have expended a considerable sum of money in endeavouring to improve the oyster fisheries?—Yes.

21,016. How much have they expended in that manner?—About 6,000*l.*

21,017. How was it expended?—Mainly, in the first instance, in paying the expense of a litigation which arose between the corporation and the freemen in regard to the fisheries, and also in compensating the lessees under a lease.

21,018. What freemen do you refer to?—The freemen of Ipswich.

21,019. I presume that they contested the right of the corporation to the fisheries?—Yes.

21,020. And a large sum was incurred by the corporation in legal expenses in establishing their rights?—Yes, and also in settling the claims of the lessee, and in an outlay for brood required to replenish the beds.

21,021. Was nearly the whole of that sum of 6,000*l.* expended in legal expenses?—The larger portion of it was.

21,022. How much was spent in that manner?—All of it with the exception of 1,000*l.*

21,023. How do the corporation expect to recoup themselves?—At one time or another they have laid out about 1,100*l.* in brood and halfware and they hope by carefully keeping the rivers clean, by attending properly to the spatting, and by experiments with the oysters, to establish the fishery on a firm footing.

21,024. Do they charge so much for each boat dredging upon the beds, or do the boats employed in that manner belong to the corporation?—At the commencement of the season the corporation settle the price per wash to be paid for dredging the oysters.

21,025. They sell the oysters?—Yes; to supply the London market.

21,026. How do they sell them?—By so much per wash. We are now getting 16*s.* a wash for the oysters in the London market.

21,027. How many men do the corporation employ in dredging?—This season we have had about 12 boats.

21,028. How many men are there in each boat?—There are sometimes two men in a boat.

21,029. This system has been going on now for the last four years?—The Act obtained the royal assent on the 1st of August 1859.

21,030. Were there no oysters in the river before?—Yes, there have been oysters in the river for more than 100 years, and they have been dredged by the freemen.

21,031. The freemen of Ipswich?—Yes.

21,032. Was it found that the oysters were diminishing in number?—Some of the freemen gave evidence upon the bill when it was before a Committee of the House of Commons. They stated that there was a large quantity of oysters years ago, and in fact that as compared with former years there had been no season of late in which there had been so much spat.

21,033. Do you agree with the witness who gave his evidence a short time ago—Mr. Russell—that in consequence of a close time having been established the oyster fisheries have fallen off?—I do not agree with that opinion. It has not been the case with regard to our oyster beds.

21,034. What has been your experience?—During the close season the corporation have the boats they employ constantly at work cleaning the river with open dredges and removing the oysters from one place to another for the purpose of enabling them to breed and improve.

21,035. Perhaps if that were not done and the beds were not interfered with at all during the close time the oysters would be injured?—The object of employing the boats in the close time is to keep the bottom clear from weeds, and to prevent it from filling up.

21,036. Then if the fishing in the river were an entirely open fishing and at the same time there was a close time during which all dredging was prohibited damage might ensue to the beds; is that so?—I cannot quite understand the question.

21,037. If the fishery were entirely open and were not the property of the corporation, and if at the same time a close time were enforced, do you think that damage would ensue in consequence of the river not being dredged during the close time?—Yes; no doubt damage would be done if the beds became foul with pipe weed and other things.

21,038. The corporation, being aware of that, have the river dredged during the close time?—Yes.

21,039. (*Mr. Caird.*) How far do the rights of the corporation to the oyster fishing in the Orwell extend?—From Ipswich from a line drawn at Shottley Point to Fagwell Cliff on the opposite side of the river.

21,040. That does not come within the oyster fisheries referred to as being leased from the Crown?—No; they are in the Stour.

21,041. Do the corporation of Ipswich claim all the fisheries in the Orwell?—Yes.

21,042. Do they claim under any charter?—Yes; under a charter of King Henry the Eighth.

21,043. And they are endeavouring to improve the revenues of the corporation from those fisheries?—Yes.

21,044. In your opinion are they likely to be successful?—I do not think they have any reason to despair.

21,045. Have you any reason to believe that from the new mode of management adopted by the corporation in regard to these fisheries the supply of oysters is likely to increase?—Yes; a fortnight ago our oyster committee had an experimental trial of the river, and they found halfware and half-sizeable oysters.

21,046. When did they first adopt the system of managing the oyster beds on their own account?—They took the management of the fishery into their own hands from the 1st of August 1859.

21,047. That was the date of the Act of Parliament?—Yes; the royal assent was given to the Act on the 1st of August 1859.

21,048. Since then have they gone on with the intention of keeping the whole of the fisheries in the Orwell in their own hands?—Yes.

21,049. And fishing them by the employment of persons at so much wages?—Yes.

21,050. Do they thereby expect to increase very much the revenues of the corporation?—Yes.

21,051. And also the supply of oysters?—Yes.

21,052. Has the increase in the supply of oysters from the fishery been progressive since the corporation commenced that system?—Yes. Considering that there have not been any good falls of spat—in fact the falls of spat have been very small indeed—they have still taken as many oysters in proportion this season as in prior seasons.

21,053. Since the Act of Parliament to which you refer came in force and since the new system commenced, has there been, on the whole, an equal supply of oysters from the corporation oyster beds to that which was obtained previous to the passing of the Act?—One or two years before there was a much larger supply of the small oysters on account of the very large falls of spat which occurred, but since the date of the passing of the Act there have been very bad falls of spat.

21,054. That I believe has not been confined to this locality but has been universal?—Yes.

21,055. (*Mr. Lefevre.*) You do not attribute that to the foulness of the bottom of the river where the beds are?—No; I attribute it to the season.

21,056. The same cause affects all the fisheries in a similar manner?—Yes. There has been a general complaint of late years with regard to the scarcity of spat.

21,057. At Colchester the complaint has been the same?—Yes.

21,058. (*Mr. Caird.*) Is there any shrimp fishing in the Orwell?—Yes; the Kentish boats come to fish for shrimps.

21,059. Is there a considerable fishing for shrimps?—Yes; and we have prohibited them from fishing over the oyster beds.

21,060. Are there no shrimp grounds fished independent of the oyster grounds?—No, none.

21,061. Is there no shrimp-fishing in the Orwell then now?—Yes, from time to time, but we prohibit it during the close season.

21,062. But in the open season you allow it?—It does not injure the oyster beds then, on the contrary it does good because it helps to clean the ground.

21,063. Do the corporation levy anything for the privilege of fishing for shrimps?—Nothing whatever.

21,064. It is perfectly free for all persons to follow the fishing?—It is free for the fishermen of the port and of Harwich.

21,065. Do you know whether that description of fishing has been increasing or diminishing in the Orwell?—I cannot say.

21,066. Is it a large interest and an important source of revenue to the fishermen?—I have heard complaints from the fishermen that they have not caught as many as they did formerly both of shrimps and other kinds of fish.

21,067. (*Mr. Lefevre.*) I think I understood you to say that there was litigation between the freemen and the corporation of Ipswich?—Yes.

21,068. Did the case go up to the Court of Queen's Bench?—Yes; I believe it did.

21,069. Is it reported in the law books?—Yes; and the Act of Parliament eventually settled the question as between the corporation and the freemen.

21,070. How was it decided at law?—It was decided that the corporation had the right of controlling the fisheries in the Orwell.

21,071. Was the litigation subsequent to the Act of Parliament?—No; it was prior to the Act. The Act was obtained for the purpose of settling all the questions raised on that occasion.

21,072. Was it a compromise?—Yes.

21,073. Is there anyone here who is acquainted with the fishing?—Yes; there is a fisherman here who has been a fisherman upon the river for 28 years.

The witness withdrew.

THOMAS DENNY called and examined.

T. Denny.

21,074. (*Mr. Caird.*) I believe you have had considerable experience in connexion with the fisheries at Harwich?—Yes.

21,075. Has your experience extended to all the kinds of fishing practised here?—Yes.

21,076. And your knowledge and experience have also extended over a good many years I suppose?—Yes.

21,077. In your opinion, is the supply of fish brought to Harwich increasing or diminishing?—The quantity of fish brought to Harwich has been increasing very greatly during the last three or four years.

21,078. Do you refer to any particular kinds of fish, or to all kinds?—I refer principally to codfish.

21,079. To the codfish brought here in welled smacks?—Yes, brought in by various vessels.

21,080. Not Harwich vessels alone?—No. The Greenwich, Barking, and sometimes the Grimsby vessels come here with fish. There has been a very large supply of fish at Harwich during the last three years.

21,081. Chiefly codfish?—Yes.

21,082. Have you yourself been engaged in the cod smacks as a long-line fisherman?—I have never been a fisherman myself, but I have a smack engaged in cod-fishing.

21,083. Then you can speak from your own personal knowledge to the fact whether it is becoming a more profitable fishing than it used to be?—It has been more profitable to the town because there has been a larger number of vessels visiting the harbour, and of course as a natural consequence a larger sum of money has been spent in the town than would otherwise have been.

21,084. Are the vessels of the same tonnage and size as those which used to come here in former years?—Yes, they are of various sizes.

21,085. What is the average tonnage?—Some of them will be 50 tons, some 60, and some 70 tons.

21,086. Are you able to say whether vessels of the same size and tonnage now catch as large a quantity of fish in the same length of time as the vessels engaged in the fisheries 10 or 15 years ago?—I think they even catch a larger quantity. I know that a great deal more fish is caught now than was caught 20 years ago.

21,087. They make a better fishing now than they used to do?—Yes.

21,088. Do they find more fish upon the fishing grounds than they did in former years, or does the increase arise from other circumstances?—I believe they find more fish on the grounds.

21,089. Are the fish of as fine a quality?—Yes.

21,090. Then there has been no falling off, as far as your experience goes, either in the quantity or the quality?—No, and I have been a fishmonger in Harwich now for 26 years.

21,091. (*Mr. Lefevre.*) What has been your line of fishing mostly?—Principally cod-fishing and shrimping.

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21,092. Have you been engaged in trawling in the rivers?—I have not fished much in the rivers. I have no boats that trawl in the rivers. They go after other fish.

21,093. (*Mr. Caird.*) I understood you to say that you have had an experience of the shrimp-fishing here?—Yes.

21,094. Has that fishing increased or diminished of late years?—It has increased.

21,095. Has it increased much?—Yes, very much.

21,096. Is it increasing year by year?—Yes, year by year.

21,097. I presume that it has therefore been found more profitable by the fishermen themselves?—It has no doubt been found more profitable during the last 20 years.

21,098. How many boats were engaged in it 20 years ago?—Twenty years ago there were only two boats that went from Harwich catching shrimps.

21,099. How many are there now?—There are about 70 in the course of the season.

21,100. (*Mr. Lefevre.*) Does that number include those which come from Lea?—Yes, from Lea and other places. From Feversham in Kent and Strood and other parts.

21,101. (*Mr. Caird.*) Do those 70 boats now work upon the same ground that two did 20 years ago?—Yes.

21,102. Then there must be a vast deal more shrimps caught now than were caught 20 years ago?—Yes, certainly. There are more caught now in one week than were caught, 20 years ago, in the course of a year.

21,103. Yet there does not seem to be any diminution in the supply, notwithstanding that there has been such an enormous increase in the quantity caught?—At times they are somewhat scarce. There are more some times than at others.

21,104. But on the whole the fishermen make a very good business of it?—The men manage to make a living out of it generally.

21,105. They do not appear to have fished the shrimps out and exhausted them?—No.

21,106. The working of that excessive number of boats does not seem to have led to any diminution in the quantity of shrimps?—No, but they may have found different spots of ground to go to.

21,107. Do they catch a great quantity of small and immature fish?—They catch very few indeed in the shrimp nets.

21,108. Young soles and so on?—Very few.

21,109. No very large quantity?—No, no large quantity.

21,110. What do they do with them when they catch them?—The chief of them are thrown overboard. It is in the summer time when they catch them principally, and they have no use for them. If there are any among them that are at all sizeable and fit for sale they sell them; the rest they chuck overboard.

21,111. Are they alive or dead when they are thrown overboard?—Alive.

21,112. Then in your opinion the fishermen even when they catch these small fish do not destroy them?—No, I think not.

21,113. Do you not think that there is a very large quantity destroyed by the shrimp nets?—I never saw a great quantity caught. As a general rule they only catch what is saleable.

21,114. Those which are saleable are brought ashore and sold?—Yes.

21,115. What sort of market do they go to?—Different people buy them.

21,116. Do they go among the poorer classes for consumption?—Yes, principally.

21,117. Is there a large quantity of that description of fish sold to the poorer classes in the shrimp season?—Yes, there is a largish quantity sold then.

21,118. What does it principally consist of?—It consists chiefly of what we call river plaice. It is not the large plaice but a very small fish.

21,119. Are they sold at a low price?—Yes.

21,120. Do they go into consumption in Harwich and in the immediate neighbourhood?—Yes.

21,121. And that takes place principally in the summer months?—Yes, generally in the summer time.

21,122. Are any of them sent to the London market?—No.

21,123. None of them?—No.

21,124. Do they form a principal portion of the food of the people at that time?—Yes, they can buy as little as two or three pennyworth.

21,125. Then the poor profit by it?—Yes.

21,126. Do a large number of the poorer classes make use of this description of fish at that time?—Yes.

21,127. (*Mr. Lefevre.*) Then so far as the poor are concerned they would not like to see any regulation established which would put a stop to the catching of these fish?—No, I think not. If it were put a stop to many persons would be hindered from earning a few shillings and the poorer classes would not be able to get them as food. That would no doubt be felt as a great injury by the poor as well as by the persons engaged in catching the fish.

21,128. And perhaps you would not catch them when they got of a larger size?—The fish of which I am speaking are river plaice and they never grow large.

21,129. What is the principal ground upon which the shrimp fishing is carried on?—The principal ground is a clear ground; "Rossy" ground we call it.

21,130. Is it outside the river?—Outside?

21,131. Yes; you do not catch the shrimps inside the river?—No.

21,132. Where does the fishing ground run?—Right up from Cowan down to Harwich and as far down as Orford Head.

21,133. Where is Orford Head?—A few miles from Landguard fort below Felix Cliff. They go down as low as Woodbridge Haven.

21,134. From Orford Ness down to Woodbridge?—From Carn bar at the mouth of the river Carn upwards towards the Thames as far as the Colne.

21,135. What distance will that be altogether?—I suppose it will be about 22 miles.

21,136. How far out at sea do they catch them?—Sometimes as much as four, five, and seven miles.

21,137. In what depth of water?—In four, five, or six fathoms, and sometimes as little as three. The depth of water varies.

21,138. Is there much shrimping by hand?—None at all, scarcely.

21,139. It is carried on entirely by boats?—Yes, almost entirely by boats.

21,140. Have the fishermen any recognised season for going after the shrimps?—They begin generally about the latter part of the month of April.

21,141. And do they go on from April all through the summer?—Yes, they go on through the summer until the latter part of October. Sometimes some of the fishermen will continue shrimping until the winter, but the shrimps run very small then, as that is the time they spawn. The net is a very small one, and if a large body of them get into it they choke it up and when it is hauled in they are all dead. They are like the sprats; they run into the bottom of the net and there they get choked and die.

21,142. Is there any sprat-fishing here?—Yes.

21,143. Is it a considerable fishing?—There is not so much of it here. It is carried on to a greater extent more towards the Kentish coast and away in that direction.

21,144. Do you not catch shrimps in the Orwell and in the Stour?—A few, but not very many.

21,145. Is it not worth while to follow it as a business?—No.

21,146. Are there many caught in Handford water?—There are a few caught there. They are mostly large shrimps.

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21,147. Are there any caught up the Blackwater?—I cannot speak with regard to that.

21,148. Do you yourself follow the shrimping in the season?—No; but I have boats that go to it.

21,149. How many have you?—Three.

21,150. Do they pay you well?—Sometimes they pay middling.

21,151. How long have you had them?—I have had boats for the last 20 years.

21,152. I suppose that you began as a fisherman?—Yes.

21,153. And having saved money you bought these boats?—Men engaged in fishing have what they can earn; they work by the share.

21,154. But you yourself saved money and bought these boats?—Yes, to some extent. I got them by various things; a little out of one thing and a little out of another. I am a fishmonger as well, and I have also a cod smack.

21,155. How many men go in these shrimpers? Two or three?—Two and a boy generally.

21,156. What wages do you pay them?—Sometimes they will earn 25*s.* a week; sometimes 30*s.*; and at other times only 10*s.* or 12*s.*

21,157. Are they paid by share?—Yes, there is no regular pay.

21,158. What share does each get?—One share.

21,159. Each man gets a share?—Yes.

21,160. How much does the boat get?—Only one share, unless it is a large boat, and then it gets a share and a quarter.

21,161. How much does the boy get?—They pay the boy between them; perhaps 5*s.* a week.

21,162. Are the men mostly from Lea, or are they Harwich men?—Lea men belong to Lea boats, and Harwich men to the Harwich boats.

21,163. How many of the shrimp boats belong to Harwich?—About 20.

21,164. And the men go out to other kinds of fishing in the winter?—Yes.

21,165. (*Mr. Caird.*) Within your experience as a fish salesman has the price of fish increased on the average or diminished during the last 10 years?—The price has increased in Harwich on account of the railroad. The opening of railway communication has tended considerably to increase the price of fish.

21,166. Have you not had railroad communication from Harwich for more than 10 years?—The railroad opened in 1854.

21,167. And since the opening of the railroad the price has increased?—Yes.

21,168. Has it kept steadily increasing?—It has been about the same since the railroad opened.

21,169. (*Mr. Lefevre.*) I suppose that the railroad has made the shrimping here?—Yes.

21,170. There was none before the railroad came here?—There was scarcely anything at all, and now I send a great quantity to London, sometimes as many as 400 gallons a day.

21,171. Do your boats catch that quantity?—No.

21,172. You buy them then?—Yes.

21,173. Do they go up to London by the fast train?—They go by the fish train, which runs at 9 o'clock.

21,174. They go up to Billingsgate?—Yes.

21,175. (*Mr. Caird.*) Are there many turbots brought here?—There are a few brought from the North Sea and the coast of Holland, but they are very few.

21,176. (*Mr. Lefevre.*) Are the shrimps caught off here better shrimps than the shrimps caught in the Thames?—I cannot answer that question; I have not seen the shrimps caught in the Thames and therefore I cannot say. We get considerably more of the red shrimps than we used to do 20 years ago. At one time they would scarcely sell in London, and now they sell very well and realize a great deal of money.

21,177. (*Mr. Caird.*) Has the opening of the railroad been a great inducement to fishing vessels belonging to other places to come here and land their fish?—Yes.

21,178. It has considerably increased the number of vessels frequenting Harwich?—Yes.

21,179. Do they pay harbour dues when they come in here?—Yes, they have to pay harbour dues now.

21,180. Do all the boats that come here pay harbour dues?—Not all; only those of a certain tonnage.

21,181. What is the limit of tonnage that renders a vessel liable to pay the dues?—The limit of tonnage is I think 30 tons.

21,182. Everything above 30 tons pays the dues?—Yes.

21,183. Does anything below 30 tons pay?—Nothing below 30 tons pays; but the fishing vessels which come here are all above 30 tons.

21,184. Is the same rate of dues charged on fishing vessels as upon other vessels?—Yes; at one time fishing vessels did not pay any dues at all.

21,185. How long is it since the dues were first charged upon fishing vessels?—Since the passing of the Act of Parliament—the Harbour Act. There were no dues levied upon fishing vessels before.

21,186. Is the imposition of those dues felt by the owners of the fishing vessels as a grievance?—Yes, they regard it as a great grievance. They complain of it because this is the only place in which they are charged. The fishermen have never been called upon to pay harbour dues anywhere else.

21,187. They pay none anywhere else?—No.

The witness withdrew.

EDWARD CHAPMAN called and examined.

E. Chapman

21,188. (*Mr. Caird.*) You are acquainted with the subject referred to by the last witness, namely, the harbour dues levied upon fishing vessels?—Yes.

21,189. You are, at Harwich, an exception to all other harbours in that respect, I believe?—Yes.

21,190. (*Mr. Lefevre.*) Can you quote the section of the Act under which you claim the right to charge fishing vessels with harbour dues?—All vessels are subject to a general clause. There is no exemption whatever except in the case of vessels under 30 tons. Here is a copy of the Act.

21,191. (*Mr. Caird.*) This is the Act of Parliament under which you levy the dues?—Yes. The Act is carried out by a Conservancy Board, consisting of five members nominated by the Government and four by the localities, namely, two by Ipswich, one by Harwich, and one by Mistley and Manningtree.

21,192. Do you not think that the imposition of these dues upon the fishermen is likely to operate injuriously upon the interests of the harbour here?—I have no doubt of it; and the fishermen themselves are very sensitive upon the subject of paying dues. A very few shillings imposed upon them, especially if they think it unjust, will drive them away to other harbours where they have no dues to pay.

21,193. Then is it politic on the part of the corporation to charge those dues?—It is not in our power to act otherwise.

21,194. How is that?—The Conservancy Board, as I have already stated, is composed of five members appointed by the Government, namely, two by the Board of Trade, one by the Trinity Board, one by the Treasury, and one by the Admiralty; and then four appointed by the localities, one by the corporation of Harwich, one by the corporation of Ipswich, one by the dock owners of Ipswich, and one by the ratepayers of Mistley and Manningtree.

21,195. What is the amount of the dues levied by the board?—One penny per ton on all vessels ex-

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ceeding 30 tons burden, but with power to exempt vessels with the sanction of the Board of Trade.

21,196. How many ports does the Act of Parliament embrace?—Harwich and Ipswich.

21,197. Then it bears more hardly upon Harwich than Ipswich?—Yes.

21,198. Inasmuch as no fishing vessels go to Ipswich?—Yes.

21,199. Are you in a position to say that the corporation of Harwich desire that all fishing vessels should be exempted from the payment of these dues?—Decidedly. We should be very glad to see the fishermen relieved from all liability to pay the dues.

21,200. Cannot you prevail on the other members of the Conservancy Board to exempt them on the ground that fishing vessels in all other ports are exempt?—Our representative at the Conservancy Board has strongly urged upon the board the advisability of exempting the fishing vessels, and I believe that the board is inclined to entertain the proposition, but the Board of Trade will not sanction it at present.

21,201. (*Mr. Lefevre.*) Are you quite sure that under this Act fishing vessels above 30 tons burden must pay these dues?—I am certain that under the Act all vessels above 30 tons must pay them. There is no exemption.

21,202. I understand that fishing vessels claim a right by custom to exemption everywhere from all harbour dues?—But this is an Act of Parliament passed recently which overrides everything.

21,203. If the Act does not specially mention that fishing vessels are to be liable to the charge, would not the custom which has always prevailed hitherto hold good?—It would have held good prior to the passing of this Act, but in my opinion this Act overrides everything.

21,204. Does it mention fishing vessels in so many words?—It says "all vessels."

21,205. Perhaps it would be well to ascertain whether there is anything in that point?—I think there is not. I know that strong representations have been made upon the subject, and the whole question has been discussed at the Conservancy Board, and by the Conservancy Board with the Board of Trade. The Conservancy Board have been particularly desirous of exempting fishing vessels.

21,206. (*Mr. Caird.*) I suppose that the dues are only payable by the large well-smacks?—All the large well-smacks are above 30 tons.

21,207. Do the dues vary?—No; it is 1*d.* per ton.

21,208. Are they levied every time a vessel comes into the harbour?—Yes.

21,209. (*Mr. Lefevre.*) That may fall very heavily upon some fishing vessels?—Yes, it does fall heavily upon many of the vessels.

(*The witness Thomas Denny.*) My vessel has been in three times during the last three weeks, and has had to pay the dues on each occasion.

21,210. How many tons burden is your vessel?—Thirty-one tons.

21,211. (*Mr. Caird.*) Then it has paid 2*s.* 7*d.* a week?—Yes.

21,212. (*To Mr. Chapman.*) The fishermen look upon the payment of these dues as a great hardship?—No doubt they do. If they were only required to pay a shilling they would run anywhere if they could to avoid it.

(*Mr. Harrison.*) With regard to the oyster fisheries, perhaps you will allow me to say that the harbour is greatly used by vessels from the Colne and other parts, which employ themselves in dredging the spat of the oysters and carrying it elsewhere. If it were not disturbed it is thought that the fisheries would be greatly improved. That is thought to be a very material point, and I believe that any fisherman who has been employed in oyster dredging can give you any information you may desire upon the subject.

21,213. Has that taken place in the Orwell?—Yes, and in the whole of Harwich harbour as well. The spat comes down the rivers into the harbour.

T. Denny.

THOMAS DENNY recalled and examined.

21,214. (*Mr. Caird.*) Can you give us any information in reference to the destruction of spat in the harbour of Harwich?—Yes, I think I can.

21,215. What is the system of dredging adopted, and what is the point of which you complain?—We complain that a great number of boats come here from Colchester, Whittlesea, Wivenhoe, and other places, and that they dredge all the spat from Harwich all over the port. They take away all the spat that ought to be left for replenishing the beds here, and they carry it away to other places.

21,216. Does that take place in the summer time?—In the summer time and all the year through.

21,217-8. Do they get much spat?—About 4,000*l.* worth, taking one year with another.

21,219. Is there no means by which the authorities here would of themselves be enabled to put a stop to that?—I cannot say. Perhaps Mr. Chapman will tell you that. He is acquainted with it better than I am.

21,220. (*To Mr. Chapman.*) Have the authorities any power to put a stop to these proceedings?—The Conservancy Board have only power to stop them as far as they interfere with the navigation of the harbour. The corporation of Ipswich claim a jurisdiction over nearly the whole of Harwich harbour.

21,221. (*Mr. Lefevre to Mr. Harrison.*) Cannot the corporation of Ipswich put a stop to this?—Some years ago the corporation of Ipswich used strictly to prohibit other vessels from taking spat, brood, and culsh from the harbour; but that prohibition has now fallen into disuse, and the regulation has not been strictly enforced. It is now thought necessary for the protection of the fisheries that it should be re-established and rigidly enforced.

21,222. Mr. Denny informs us that spat to the value of 3,000*l.* or 4,000*l.* has been taken away?—Yes, I believe that is true; but if it was left in the harbour, probably it would not produce more than that.

21,223. Is there a greater stock in the harbour than it will bear?—There is a large amount of surface in the harbour from which the spat might be constantly dredged and removed to the rivers here by the fishermen employed by the corporation. In that case, both rivers, the Stour and the Orwell, would derive an advantage.

21,224. Am I to understand that what you do not like is the notion that other people are allowed to come here from a distance and carry the oysters off to their own rivers?—Yes.

21,225. As far as the public are concerned it would not much matter whether the young oysters are fattened in the Stour or in the Orwell, or in any other river?—There is probably more than is necessary to supply the harbour.

21,226. (*Mr. Caird to Thomas Denny.*) What would become of that spat if it was not taken away?—It would be taken up into the rivers Orwell and Stour and laid down.

21,227. Was it ever so taken up?—No; but we never had regular oyster beds there until now.

21,228. Cannot you take it up those rivers now?—I suppose we can.

21,229. If these persons had not come from Colchester and other places and taken it away it would have been lost?—Yes.

21,230. (*Mr. Lefevre.*) There is nothing to prevent you from dredging it now and selling it to these people?—No.

21,231. Then why not do so?—Some do, but we had nobody to buy it before.

21,232. In point of fact you did not think of it until other persons came here and carried it away?—Now we have oyster beds here, it will be of benefit if

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the persons who have the beds employ persons to dredge the oysters in the harbour and place them upon the beds.

21,233. (*Mr. Harrison.*) The corporation do occasionally take out culsh in the river and lay it on the beds.

21,234. (*Mr. Lefevre.*) You have more spat than you will require for your own river?—No, there is very little now.

21,235. In a good year there may be more than you want?—Yes, a very great deal more.

21,236. (*Mr. Caird.*) Do the Colchester people contend that they have any right to come here?—Yes, no doubt they do claim a right.

21 237–8 (*To Mr. Chapman.*) Have they a right?—That is a question I should not like to answer.

21,239. Have they been in the habit of coming here for any length of time?—Yes, for a long while now. They come principally from Colchester and Handford Water.

21,240. (*Mr. Lefevre.*) There may be some doubt whether your charter enables you to prevent them from coming?—There may.

J. Folley.

James Folley called and examined.

21,241. (*Mr. Caird.*) Can you add anything to what has been stated already on the part of the corporation of Ipswich with regard to the Orwell?—Yes, I can show you what the decrease of fish in the river has been.

21,242. (*Mr. Lefevre.*) The decrease of oysters?—No.

21,243. (*Mr. Caird.*) Of what kind of fish then?—Flat-fish and soles. We should have very good ground here for those kinds of fish if they were not caught when so very small.

21,244. Where are they caught?—From Pinwell down to the lower part of the river.

21,245. Has the catch decreased?—Yes.

21,246. Between what years do you draw a comparison in order to show the decrease?—There has been a decrease during the last 10 or 12 years.

21,247. Who is it that catches these small fish?—The fishermen in the river.

21,248. Do you yourself fish in that way?—Yes.

21,249. Cannot you catch now as many of those fish as you used to get?—No.

21,250. What do you attribute that diminution to?—To the trawl fishermen.

21,251. In what way have they brought it about?—When they catch these small fish instead of putting them overboard again they save them for bait.

21,252. For what sort of bait?—For crab bait.

21,253. Can you tell us anything about the oyster fisheries?—I have been in the habit of dredging for oysters before the Act was passed which prohibits us from doing so.

21,254. In your opinion is that new Act likely to increase the supply of oysters?—Yes.

21,255. Do you think it will increase the supply considerably?—Yes, if one thing is put a stop to.

21,256. What is that?—The practice adopted by the large Kentish boats of coming here to dredge in the river and carrying everything away.

21,257. Do they go over this ground?—Yes. I have seen as many as 12 boats shooting away right through the lower reach, and they have been continually at work throughout the whole day.

21,258. What have they been fishing for?—They were fishing for shrimps then.

21,259. Was that during the close time of the oyster fishery?—Yes, I have seen them there the whole season round.

21,260. (*Mr. Lefevre.*) We have been told that they do not shrimp much in the river?—I have occasionally been on board when they have hauled up their trawls, and in the latter part of the season I have seen small oysters a little bigger than my thumb smashed all to pieces in the net. They are taken up before they have any substance in them, and before the shell has properly become the shell of an oyster. I have seen thousands of those small things destroyed.

The witness withdrew.

T. Denny.

Thomas Denny recalled and examined.

21,261. (*Mr. Caird.*) Has the number of vessels fishing on the Galloper and on those banks which lie principally off Harwich increased within your recollection?—Yes, very much.

21,262. And the supply of fish on those banks has not diminished?—No.

21,262*a*. Has it increased?—It has increased materially.

21,263. Then the greater extent of fishing does not appear to have been followed by any diminution of the annual supply of fish?—Certainly not; it has increased materially.

21,264. Do you find now that your fishing vessels going from Harwich can get fish nearer home than they did formerly?—Yes. They are at work now off the Galloper.

21,265. Notwithstanding the great increase in the number of vessels which now come down the Thames for the supply of the London market, you find that you can get more fish nearer home than you used to do?—Yes; there are a large number of vessels at the present time on these banks.

21,266. Are there any engaged in trawling on the banks now?—Yes, both trawling and line fishing.

21,267. Can the two modes of fishing go on together without injury to each other?—Yes; but I am sorry to say that the Frenchmen are fishing there, and they steal our gear and buoys. I lost last week as much as 5*l*. or 6*l*. worth.

21,268. (*Mr. Lefevre.*) Cannot you ascertain the number of the vessels that commit those depredations?—It could be done if we were near enough, but very frequently our people are a good way off hauling in the lines when they cut the gear. The lines extend over a distance of some miles, and the Frenchmen go to one end of the gear and steal it while the fishermen are hauling in at the other. They are away before we can get at them.

21,269. If you caught them you would stop them?—We could not do that. They have as many as 12 hands on board their vessels.

21,270. (*Mr. Caird.*) What depth of water is there on the Galloper where you fish?—From 12 to 25 fathoms.

21,271. Is that about the same depth as the water on the Dogger Bank where you get the cod-fish?—There is as little as ten fathoms there, and from that to 12 and 20 fathoms.

21,272. It is about the same depth?—We fish at various depths.

The witness withdrew, and the inquiry was adjourned until Monday the 28th of March at Polperro.

Polperro, Cornwall, Monday, 28th March 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

POLPERRO.

JONATHAN COUCH called and examined.

J. Couch.

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21,273. (*Professor Huxley.*) I believe that you have resided here for a long time, Dr. Couch?—Yes, for a long time.

21,274. For how many years have you known Polperro?—I can go back for 50 years. I have made notes here for the last 50 years.

21,275. And you have been intimately acquainted with the condition of the people of Polperro for that length of time?—Yes, intimately.

21,276. I believe that you have made the subject of the fisheries and fishes a special inquiry of your own?—Yes, particularly.

21,277. Can you tell us what the population of Polperro is at this moment?—We generally estimate it at 1,000. Up and down there may be about that number.

21,278. And out of that population what is the proportion of persons engaged in fishing?—I hardly know what the actual number engaged in fishing is. We have here somewhat more than 30 boats, and perhaps three persons will be engaged in each of them, at one time or another. I have never counted them, but I should say that there are perhaps 100 actually engaged at sea in fishing. Of course those who are concerned in the fishing here will considerably exceed that number.

21,279. Is there any population here, of importance, besides the persons who are actually engaged in fishing or concerned in it?—No, I think not.

21,280-1. So that Polperro may be regarded as a fishing place altogether?—Yes.

21,282. And what is the average crew of each boat?—In the mackerel season the larger boats will carry four hands each. The seiners required more men when we had seines formerly. They would carry about 16 or 18 men. The small boats carry from two men and a boy to three men.

21,283. May we take it that on the average there are three fishermen to each boat?—Just so. That is about it.

21,284. Are the boats used here open boats, or are they decked?—Some of them have a partial deck.

21,285. A sort of little forecastle deck?—Yes, more or less. There is not more than a third or a fourth part of any of them decked, and the larger number of the boats have no deck at all.

21,286. What, upon the average, is the tonnage of these boats?—The average will be about nine or 10 tons to a boat.

21,287-8. What is the average cost of each boat when rigged and ready for fishing?—I think the average cost of the mere boat itself in the first instance will be about 100*l.*

21,289. Is that the hull of a boat?—The hull and rigging. A rigged boat will cost about 100*l.*, leaving the fishing gear out of the question.

21,290. What addition to the cost will the fishing gear make?—Perhaps that will add 100*l.* more.

21,291. Then I shall be right in saying that the average cost of one of your fishing boats fit for its work is about 200*l.*?—Yes, I think that is about the cost. You may take the average to be 200*l.* for the boat with its fittings and fishing gear.

21,292. When you first knew Polperro, Dr. Couch, was there the same number of fishing population?—I think there was just about the same number.

21,293. And about the same number of boats?—The number of boats has fluctuated, I believe, from 25 up to 35.

21,294. Then the average number has remained about the same?—Yes.

21,295. Have the boats continued to have about the same build and make?—Yes, about the same build and make, except that now we cannot reckon among our fishing boats the seine boats which formerly existed There were several here in years gone by, but there are none now.

21,296. You refer to the seine boats for the pilchard fishery?—Yes, the pilchard seine boats; they were much larger than the boats that are used here now.

21,297. When you first knew Polperro how many seine boats were there?—We had several seiners, which worked according to the regular rule—that is, three boats to each seine. I think there were at one time three seines here.

21,298. Pilchard seines?—Yes.

21,299. (*Mr. Lefevre.*) Were they seines that were dragged up on to the shore?—No.

21,300. The boats which carried the seine nets were simply rowing boats?—Yes, they were entirely rowing boats. I have been present at the pilchard seine fishing, and have seen the boats at work.

21,301. (*Professor Huxley.*) Has the supply of fish brought into Polperro remained the same during your experience, or has it perceptibly increased or diminished?—It has been very far from what it used to be.

21,302. What has been the difference?—There has been a very great diminution.

21,303. Has that diminution occurred of late years, or has it been going on gradually?—There has been a gradual diminution for almost the last 30 years.

21,304. In what kind of fish has the falling off principally taken place?—Generally in codfish, whiting, and that class of fish.

21,305. The long-line fish?—With us there is but very little long-lining carried on. The mode of fishing adopted here is almost always by hand-lines used from the boat.

21,306. Will you be good enough to explain the nature of the gear commonly used in the fishing-boats?—They generally use lines—long hand-lines. Each man will at least employ two, with a heavy piece of lead attached to each of them. The lead sinks the line in mid-channel.

21,307. What is the nature of the hooks?—Each line has a large single hook.

21,308. How many lines does each boat carry?—There are six or seven lines to each boat. Every man employed in one of these boats is in the habit of using two hand-lines at one time; but they will probably carry more altogether in the boat, inasmuch as they might lose some of those with which they were working.

21,309. They carry spare lines, you mean?—Yes, generally.

21,310. I presume that the whole of the fishing gear of each boat will amount to something more than that, and include an entire set of nets? Is that not the case?—Yes, but when the fishermen are engaged in using the hand-lines, they do not commonly use the nets. When nets such as those for mackerel or pilchards are used, they are frequently only used to occupy the vacant time. They will go out 10 or 12 leagues from the land with the hand-lines which I have described, for the purpose of catching conger, cod, ling, and haddocks.

21,311. What are the different fishing seasons here? We will take for example the fishing season at the beginning of the year?—There are two classes of fishing then.

21,312. What are they?—One is the mackerel-fishing by nets in the beginning of the year. It commenced on the 2d or 3d of January this year, I

believe. The boats went out then, and caught mackerel, and they continued at that fishing until they were interrupted by the weather.

21,313. You are speaking now of the drift-net fishing for mackerel?—Yes.

21,314. How long does the mackerel drift-net fishing continue?—It continues as long as the fishermen find themselves able to catch the fish.

21,315. But how long does it continue, on the average?—Up to the month of June or July. Then succeeds the mackerel or seine fishing, but that is more practised at Looe than here.

21,316. What are the boats which employ themselves in fishing for mackerel here?—The drift-net boats, but the fishermen catch a large quantity with lines. The principal fishing, however, is with the drift-nets.

21,317. Do the drift-nets go out principally in June and July?—Yes.

21,318. Is that fishing confined only to the larger boats?—There are four only here.

21,319. Then what do the smaller boats do during that time?—They are fishing with lines.

21,320. Are they the hand-lines you were speaking of just now?—Yes.

21,321. Then during the first six months in the year the fish brought into this place are principally mackerel, conger, and ling?—Yes, mackerel, conger, ling, whiting, haddock, and so forth. As soon as the weather gets mild we get a kind of bream.

21,322. That is in the latter part of the time?—Generally in the beginning of the month of August the attention of the fishermen becomes principally directed to the pilchard.

21,323. Are all the fishermen here employed in the pilchard fishery?—Yes, or at any rate the large majority.

21,324. Do they fish for pilchards with drift-nets?—Yes.

21,325. With drift-nets only?—Yes.

21,326. Then have you no pilchard seines here now?—No.

21,327. Are the nets you use of the same kind as those you use in catching mackerel, or are they different?—They have a different mesh.

21,328. How long does that kind of fishing last?—It lasts until it is interrupted by the weather. There are some remarkable things which alter the nature of the fishing—in regard to pilchards more particularly. They will frequently catch pilchards in December, and I have known them to be caught in January in large quantities. They are then devoted chiefly to the supply of the home market, and are not exported. They are not so good then, and they are chiefly employed as bait. They are considered to be excellent bait.

21,329. Then in the latter part of the season does the hand-line fishing begin again?—Some of the men who cannot afford nets go in the hand-line fishing all this time, so that one class of boats change their mode of fishing according to the season, from mackerel to line-fishing, and then to drift-net fishing for pilchards, while there are others which keep at hand-line fishing throughout the whole of the year.

21,330. Then I take it that mackerel, pilchard, cod, and ling are the principal fish you catch?—Yes, with haddock, whiting, and bream.

21,331. In what particular description of fish has the falling off been principally noticed?—There has not been so much falling off noticed with regard to the pilchard, and I will explain afterwards how that is. The falling off has been noticeable particularly in the whiting, cod, ling, haddock, and that class of fish which seeks its food near the bottom, and feeds from the ground mostly. In the conger also the same falling off has been observed.

21,332. Then it is the hand-line fishers who suffer?—Yes, they suffer greatly.

21,333. Has there been any remarkable falling off in the mackerel?—The mackerel is so very capricious a fish that only once in a few years there will be a successful fishing. On the whole, perhaps, there will be no falling off.

21,334. Has there been any falling off in the pilchards?—No, there has been no falling off, but the catch in different seasons will vary a great deal.

21,335. Is it the opinion of the fishermen in general that the falling off in the yield by the hand-line fishing is to be ascribed to any particular cause?—Yes, I think so.

21,336. Then what is the cause?—I am acquainted with an individual who, as a boy, served his apprenticeship on board a trawler in the latter part of the last century. He informed me that at that time there were only three trawlers at Plymouth.

21,337. There are a good many more than that now?—Yes, very much more. How many there are there now I do not know, but the number has greatly increased. There are nearly 100 there now, I think. We often see them here in large numbers, and we ascribe the falling off in the fisheries to the influence of their trawls upon the ground.

21,338. Do the trawlers trawl habitually off your coast?—Yes.

21,339. Is it their common trawling ground?—Yes.

21,340. How far do they work east and west?—The extent over which they trawl is unlimited. They trawl from Polperro Point right away to Bolt Head.

21,341. (*Mr. Lefevre.*) At what distance from the shore do they trawl?—Here we have rocks which prevent them from trawling within a couple of miles, but they trawl anywhere beyond that at any depth.

21,342. (*Professor Huxley.*) Is there a smooth bottom beyond two miles from the shore?—Yes, there is, I think, upon the greater part of the ground.

21,343. (*Mr. Lefevre.*) Do they habitually trawl as near as within two miles of the coast?—I am not aware of the exact distance, but there are fishermen here who can tell you. The reason why I ascribe the falling off in the catch of fish to the trawlers is this:—I will leave out of the question the destruction of the young fish. It is generally thought that young fish in large multitudes are upon the ground when the trawls are principally in action. They are accustomed to go in towards the land from long distances to places where there are a considerable number of flexible corallines to be found. In such places as that the fish I refer to seek to deposit their spawn. It is, therefore, not simply the young fish which are destroyed, but that which attracts the fish to the spawning ground is also destroyed. In studying natural history I have been accustomed to obtain specimens from the bottom of the sea here, and I have found immense quantities of these flexible corals. I believe the fish are guided to a great extent in the selection of their spawning ground by the food which is to be found upon it. They will not come in and spawn upon mere barren ground, and the removal by the operation of trawling of the food upon which they formerly relied, and the destruction of the feeding grounds, are in my opinion the causes why the fish have forsaken the ground.

21,344. (*Professor Huxley.*) Did you ever find any dry spawn among the specimens of which you speak?—Very little.

21,345-6. Then you think that the destruction of the spawning beds is owing to the operation of the trawlers, and that that is the cause of the diminution of the fish?—Yes; there is also another thing which I may mention. I have frequently been in the habit of opening the stomachs of the fish when they have been caught and brought in by the liners, and I have often found a vast variety of fine specimens of crustaceous animals, such as small crabs, in them.

21,347. What fish do you refer to?—Cod, whiting, haddock, and ling. From the ling perhaps not so much, but from the stomach of a cod I have often taken as many as 50 crabs of all sizes. Probably there would have been 50 cod caught at the same time, and if I had examined the stomachs of the whole of them, I should in all likelihood have found that there was not one that was deficient. When that

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food is destroyed the fish will not come in. These crabs assemble about the flexible corals. That is their harbour, and when the corals are destroyed the consequence is that the crabs cease to frequent the place. It is not the common crab of which I speak, but a large number of crabs of a smaller description.

21,348. You are aware that the trawlers have trawled over this ground for a great many years?—For the last 50 or 60 years they have been trawling there, but 60 years ago there were only three trawlers at Plymouth. They could hardly have done much harm, but it was very different when they reached up to 100 in number. Brixham and other trawlers also come down here in immense fleets, so that they can hardly be counted. Seeing the great extent of coast which they must sweep, I think they must have had an influence such as I have described.

21,349. Are you of opinion that there is any other cause which has led to the falling off in the fish?—I am not aware of any other cause in particular. Of course if a very large number of small fish—the newly-bred fish—be destroyed, that must diminish the general number. It would diminish not simply the number of small fish that would have grown up into large fish, but the number of breeding fish also.

21,350. Have you ever seen the contents of a trawl when it has been brought up?—Not at the time of its being brought up, but I have had the contents of a trawl net brought to me.

21,351. Have you ever seen spawn in the contents of a trawl?—No, I have never seen the trawl actually brought up.

21,352. When the contents of a trawl have been brought to you, have you noticed spawn in them?—No.

21,353. Can you give us any idea of the quantity of fish brought in here in favourable weather? What will be the average yield per boat?—I have known the conger, which forms a material part of the profit of this place—I have known the conger brought in here in as large a quantity as 20 cwt. at a time.

21,354. Do you mean 20 cwt. per boat?—Yes, per boat. Perhaps, taking every day, that would be a very large quantity, but I have known 5, 6, and 8 cwt. frequently brought in. There would often be a conger which alone would weigh from 30 to 40 lbs. They would be 8 or 9 feet long, and as large round as an ordinary sized man. I have frequently seen them from 30 to 40 lbs., and one of 60 lbs. was not at all uncommon. There has been a very great falling off, however, and one weighing 20 lbs. would be a very large one now.

21,355. What do you think would be a fair estimate of the quantity of cwts. of all kinds of fish now brought in per boat?—From 4 to 6 cwt. would be an average quantity per boat in a favourable season.

21,356. (*Mr. Lefevre.*) Is that with the liners?—Yes.

21,357. (*Professor Huxley.*) Of course it is quite apart from the pilchard and mackerel fishing?—Yes, simply line-fishing.

21,358. Then what becomes of that fish when it is brought in here?—There are certain fish—for my own part I think they are the best in the sea—which they do not carry to market at all. The fishermen eat them and preserve them for the winter. People in the neighbourhood are frequently supplied with them, and occasionally they may be carried to Liskeard.

21,359. (*Mr. Lefevre.*) What fish are they to which you refer?—Ray fish, and fish of that class. The people here eat dog-fish, and think it a very favourable fish for eating.

21,360. (*Professor Huxley.*) Is that the spotted dog-fish or the spine-dog?—It is the common spine-dog.

21,361. What is the ordinary market for fish from this place?—A large quantity since the railway was opened goes to London, and a large quantity is sent off two or three times a week to Liskeard, Tavistock, Callington, and other places.

21,362. How do you get it to the railway station?—It is sent up by carts. If there is a large catch of fish, such as mackerel, or of expensive fish from which they hope to get a good return, our fishermen will run into Plymouth without coming here at all.

21,363. Do they think that by doing so they are able to get a better market for it?—They can sell it quicker there.

21,364. I presume that the great proportion goes to London?—Almost all of it goes to London.

21,365. Is the price of fish here at all within your knowledge; I mean its price now as compared with what it was 50 years ago?—Many years ago there was a contract here for sending the fish to Bath. I have known 4*d.* a pound given for good fish then, and now if they can get 1*d.* per pound they think they have got up to the top price.

21,366. Then the price of fish here to the fishermen is less by a great deal than it was formerly?—That has been so here, except since the railway has been opened. The opening of the railway has had the effect of bringing up the price again. The question, however, is one of which I have very little personal knowledge. There are persons here who will be able to give you much better information on such points than I can.

21,367. From your knowledge of the fisheries here are you able to say whether the difference in the price has been such as to compensate the fishermen for the falling off in the take of fish?—In my opinion it has not at all been sufficient to compensate them.

21,368. Then the fishing business must have fallen off very much?—Yes, it has; at one time there was a trade here which is now quite forgotten.

21,369. What trade was that?—I have seen large quantities of conger preserved here dry without salt, and exported to Spain and Portugal. The Spaniards and Portuguese would give 5*s.* or 6*s.* a cwt. for them, and in that way there was a very considerable trade which we have since lost altogether. The conger douce it used to be called.

21,370. Has that falling off arisen in consequence of the scarcity of the conger?—Yes.

21,371. Is there still a demand for it?—I do not know whether there is or not. Perhaps there may be a better demand for conger in the country. Part of the population are very fond of buying conger.

21,372. Then with the falling off you describe I am afraid that the circumstances of the fishing population here have become much worse than they were in former times?—I think so. Within my remembrance it was a common practice for immense quantities—many hundred weights—of whiting to be brought into this place. If they were sold for 6*s.* or more a cwt. they went to the "jolters," as they called the people who carried the fish away and sold it. If it did not reach that price then there were fish carriers who took it regularly, and in that way there were many hundredweights of fish falling into the hands of the carriers every day, or at any rate two or three times a week. Now nobody thinks of it.

21,373. How is that?—On account of the scarcity.

21,374. It has become very scarce?—Yes, very. We cannot get a hundredweight in the course of a month. In former times it was one of the most common things for a family to lay in a little stock of dried whiting for roasting for breakfast. No one thinks of doing that now. In point of fact it would be impossible to do it.

21,375. You do not think that the scarcity of fish here or the market here depends on the draught away to London?—No, I do not think that has anything to do with it.

21,376. So far as I understand your evidence you are of opinion that the scarcity of hooked fish arises entirely from the trawling?—Yes, that is my opinion.

21,377. On the ground that the trawling operations have destroyed the breeding ground?—Yes.

21,378. You were speaking just now of the pilchard fishery, and there was some reservation which you made with regard to it. What was it?—I have records of the pilchard fisheries from the time of

Queen Elizabeth, which have fallen into my hands from traditionary accounts and from the statements of old men who have been engaged in the fisheries. In the early part of my recollection the season at which the pilchards were caught was different from what it is now. There has been a change in the time of carrying on the pilchard fishery from summer to winter. About 30 or 40 years ago the principal fishing for pilchards was in August and September. Since that time it appears to have dropped back again into October and November and perhaps December and January; and so it appears to have been in earlier times. There were intervals of between 30 and 40 years of that sort of transition. There are records of such a transition having taken place two or three times over. I was somewhat surprised a short time since at a fact which was brought to my notice with regard to the herring fishery. I have just been writing the history of that class of fish—the herring, pilchard, and kindred fishes—and I find that there are records of the same kind of transition in the herring fishery.

21,379. Is there any herring fishery here ?—The fishermen here catch them, but not to any considerable extent.

21,380. What time of the year do the herring make their appearance here ?—They may be caught all the year round. They are found in the pilchard nets and are those that are too small to have been stopped by the mackerel seines. They go through the mackerel nets. It is only the very fine large ones that can be caught in that way. We got them here about a foot long. The other day the whole of them that were caught were of that size. I do not suppose, however, that all the herrings on the coast are of that size. Some time ago I got some herrings from Lynn to compare with them, and ours were giants in comparison.

21,381. (*Mr. Lefevre.*) Do you know whether the fishermen here have nets specially for herrings ?—Yes, I believe they have in the large boats.

21,382. (*Professor Huxley.*) Do the herrings come here at any other period ?—They come again at the fall of the year—in about the months of September and October.

21,383. Are they then in more abundance ?—Yes. We never lose them altogether, but they are more abundant in the months of October and November. I waited a good while the other day to get specimens for dissection.

21,384. Have you any January and February herring here ?—Yes, there are some to be had then. Last season I think I was able to get them in those months.

21,385. With respect to the pilchard what is the condition of the fish when it visits this shore ? Is it a full fish ?—The pilchards caught in the months of July, August, and September are in the best condition.

21,386-7. Are they full fish ?—Yes.

21,388-9. In what month particularly are they full? —In the month of October.

21,390. At what other time of the year are they full ?—They are full of roe about March and April—April more particularly.

21,391. Then the pilchard like the herring has two spawning seasons ?—I have no doubt that it has.

21,392. Do they assemble in the early spring months in large numbers ?—I have known in the month of February 50 hogsheads caught at once in a shoal. I may add that they spawn further from the land in the spring than in the autumn.

21,393. Do you account in that way for there not being a regular pilchard-fishing in the spring ?—The fact is that they are so thin in the spring that nobody will eat them. The difference in the quality of the fish caught in one season is very great as compared with those caught in another. In August and September they are very fine, but that is not the case when they are caught in the spring.

21,394. But notwithstanding the fact that they are so thin they are full fish ?—They are full of roe, but our men go and catch them principally for bait. The success of the other fisheries depends in a great measure upon their being able to get good pilchard bait.

21,395. Do you think that the pilchards are here all the year round ?—No doubt there are some to be found here all the year round, but they do not assemble. It is only the straggling fish that are caught all the year round.

21,396. Do you believe that the pilchards migrate ? —I believe that they are so far migratory as to go to a greater depth of water—perhaps 40 or 50 leagues from the shore.

21,397. (*Mr. Lefevre.*) Are they always off the coast ?—Yes. I positively believe that the sardine is on our coast at times in some years.

21,398. (*Professor Huxley.*) Do you hold that there is any difference between the sardine and the pilchard ?—I hold it to be a different species. I have not, however, been able entirely to satisfy myself upon the point, but the preponderance of my opinion is in favour of the sardine being a different species.

21,399. You know that M. Valenciennes thinks to the contrary ?—Yes, and Cuvier also thought to the contrary, and he was a capital authority, but I have noted some marked points of difference. I have already detailed some of them. They do not come every year, and there have been some years in which a particular sort of fish has been here that nobody could make anything of at all. Now I believe that they have been the sardines. I have tried to get a real specimen of the sardine from the Mediterranean but I have not yet succeeded, so that I can only compare our own fish, without knowing whether they are what would be called sardines in the Mediterranean.

21,400. Have you noticed any difference in the size or appearance of the spring pilchard and the autumn pilchard ?—There is a difference.

21,401. What is it ?—The autumn pilchard has its fat—the oily part—mixed with the muscle. In the spring pilchard there is no fat mixed with the muscle. There is a very little bit of fat at all, and what there is is in the entrail.

21,402. In the mesentery ?—Yes.

21,403. Does the difference to which you refer in the case of the spring pilchard and the autumn pilchard depend, as in the case of the herring, on the amount of food it gets ?—Not altogether, I think. I have no reason to think that there is any difference in the food they get in the spring; but there seems to be something in the nature of the season, as the thinnest fish in the autumn have a great deal of fat mixed up with the muscle.

21,404. I presume that in the course of your experience you have dissected a great number of pilchards ?—Yes.

21,405. When the fish are full do you ever find any fat in the mesentery ?—Yes, in the mesentery and in the muscle too.

21,406. When they are full ?—Yes, our people when they preserve the pilchards take the entrails out. I have frequently examined them to look for ova, and I always found a clump of fat mixed up with it.

21,407. When the herring is full do you not find that the fat has gone from the mesentery ?—Yes, but they are a different fish. They are not half so good as a pilchard.

21,408. Are your spring and autumn pilchard of the same length as the herring ?—They are of the same length but not of the same bulk. A herring will always weigh down a pilchard of the same length. The other day I put a herring and a pilchard in the scale opposite each other, and although the pilchard looked the larger fish the herring was the heavier.

21,409. (*Mr. Lefevre.*) Is the mesh of the net used by the fishermen here for catching the pilchard the same as the mesh of the net used in catching the herring ?—No, the meshes used are different.

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21,410. Which is the largest?—I am quite sure that the whole box of herrings I received from Lynn the other day were smaller than any pilchards which I find commonly caught here. They could only be caught by the use of a very small mesh. According to an account published lately, especially with regard to the herring, it would seem that in almost all the districts in which the herring is caught they get a different size and appearance of fish. That might make some difference and prevent a uniform mesh being used. All the herring caught here are as long as this (*measuring*).

21,411. (*Professor Huxley.*) Have you carefully examined the herrings with regard to their spawning?—That is a point upon which I cannot speak so confidently.

21,412. At what time of the year are they full fish here?—This very year—but whether it is an exceptional year or not I do not know—they have all been very large with spawn throughout the winter. In December, January, and February they were quite large. I had a letter from Lynn stating that the same thing had occurred there, but it seems to have been regarded as an exceptional circumstance.

21,413. Do you get full fish here in August?—I can scarcely say. The herrings here then are not full. There is nothing in a herring in August.

21,414. (*Mr. Lefevre.*) Did you notice that the falling off in the fish to which you have referred, namely whiting, cod, ling, and so on, took place all at once or was gradual?—There has been a gradual falling off for the last 50 years. Of course there are variations in all kinds of fishing. One year will be much better than another, but taking the long run of 40 or 50 years the falling off has been gradual.

21,415. And during the same length of time I understood you to say that you had observed an increase in the number of trawlers?—That certainly has been the case, but whether the two things together are to be considered as cause and effect, or as a mere accident, I cannot say—still the fact is so.

21,416. Are you aware that the trawlers do not complain of any falling off in the quantity of fish they catch?—I am not aware.

21,417. I think we may fairly assume that their numbers would not have increased if there had been any falling off in the fish they catch?—The person I spoke of was a person of strict veracity, and his statements were not made to me with any idea of finding fault. He was one of the Coastguard at the time.

21,418. Do you think it is not possible that the trawlers now catch fish which used formerly to be caught by your own fishermen?—I do not think that that is the probable cause. I am much rather inclined to impute it to the destruction of the breeding grounds.

21,419. Do the trawlers off this coast catch the same kind of fish as the line fishermen?—I think not, and I will give an explanation. Sometimes no doubt they catch the same sort of fish as those which our men catch. I understand, for instance, that they catch immense quantities of hake. So far they catch in common, but the remarkable point is that they take the hake in by thousands at a time when our men cannot catch one. The hake loses its appetite when going to spawn. It is a most voracious fish nearly all the year through, but it loses its appetite in January and February, and then is the time that the trawlers catch more than at any time of the year. They carry them into Plymouth.

21,420. Do the hand-line fishermen fish at the bottom of the sea? Is the bait on the bottom?—It is near the bottom, perhaps within a fathom. They draw up the hand-line a little more, but the fish are near the bottom.

21,421. So that the trawlers get the same fish occasionally?—They do not catch the same fish as those who use the hand-lines. For instance, the trawlers take large quantities of soles, but I never knew more than one or two soles caught by a hook and line.

21,422. Are turbot caught by the line-fishermen?—Turbot we have more frequently, but not in any considerable quantity. In fact the sole feeds by night and in bays. If our men go out to a long distance where the trawlers fish they will not catch soles. They use immense large conger hooks.

21,423. Too large for the sole?—Yes; that may be one reason our men fish by night.

21,424. The trawlers in this part mostly fish by day?—Unfortunately they do not. They frequently run across the nets without caring what becomes of them.

21,425. The Plymouth trawlers mostly go into harbour by night, do they not?—No, and when they commit damage by night our men are unable to convict them because they cannot see their numbers.

21,426. Is it not the rule for them to go in at night?—If they have a cargo of fish they will run in with it, but I hear complaints continually that the trawlers get among the men by night. With regard to the pilchard-fishing there is one subject upon which I should be glad to make a remark. I have received a letter from some fishermen at Mevagissey calling my attention to certain grievances of which they complain, and in the answer I returned to them I requested them to appear there before the Commissioners. It seems that there is a quarrel there between the seiners and the drift-net people which originated several years ago. They accuse each other of destroying the fishing. The law is, as you are probably aware, that by an Act of Charles II. the drift-net fishermen are not allowed to come within a league of the land, which is considered very oppressive, particularly as no seine can be shot on a good deal of our rocky coast here. The consequence is that the pilchards may come here and yet the drivers are not allowed to go in after them, and the public are the losers, because the drivers can catch fish when the seiners cannot. I am told that the Government, in consequence of some representations that were made to them, issued some order to the Revenue cruisers directing them to take possession of all drift-boats fishing within the distance mentioned in the old Act of Parliament I have referred to. The consequence was that a correspondence was entered into and meetings were held. I was chosen by the fishermen to be their president, although I had no interest whatever in the fishing. I had a correspondence with Lord Eliot, the present Earl St. Germans, who was then member of Parliament for this division of the county, on the subject, and in consequence of the representations which were then made, the order was withdrawn, and the drift men were permitted to fish within a mile of the land except where the seiners were engaged. I have a copy of the whole of that correspondence at home, and shall be happy to place it in the hands of the Commissioners if it is likely to be of service.

21 427. It does not affect this place I understand?—Yes, it does, very materially. It applies to the question of the pilchard fisheries generally.

21,428. I thought you said there was no seining on the coast here?—There are seines at Looe. This letter was sent to me on Saturday requesting me to say something about the matter. The disputes were all ended with us in consequence of the new regulation permitting the fishing within a mile of the shore. I thought that the whole grievance had ceased to exist all along the coast, and that it was dead and gone, but it seems that I was mistaken. This letter has been sent to me, and I beg to hand it to the Commissioners.

21,429. (*Professor Huxley.*) Do you put it in as evidence?—Yes.

21,430. (*Mr. Lefevre.*) Is the gentleman who writes to you likely to give us evidence at Mevagissey?—Yes. I think so. I requested him to make his appearance there.

21,431. (*Professor Huxley.*) I understand, from what you have stated, that any regulation that would have a tendency to put down driving for pilchards

here would be injurious to the place?—Yes, it would be the ruin of the place.

21,432. It would be utterly disastrous to the fishing population here?—Yes.

21,433. For the simple reason that it is impossible for you to seine here?—Yes, quite so. Besides we frequently hear a great deal said of the exportation of pilchards. Now the average extent of exportation from this country is 30,000 hogsheads a year. Sometimes it is much more, but no account is taken of the quantity consumed by the people in the country. It is the common food of which the labouring people, farming people, and townspeople lay in a stock, so that they may have something to eat when the boats cannot go out to sea. All this is derived from the drift fishery, and if it were not for the supply provided by the drift boats many of the lower classes would starve. The mining population and nearly all the lower classes have their stock of pilchards, and not only those but respectable people do the same, for their servants and families. There is not a child here who would not be satisfied with having a roasted pilchard for breakfast.

21,434. Do you think that the seining would not supply the people here?—I do not think it would.

21,435. Upon what ground do you arrive at that conclusion?—Because they have found it unprofitable to go seining at all. If the seines had paid well and proved profitable the owners would not have got rid of them, and instead of having decreased they would have increased in number.

21,436. Why did they have seines at all when they had no use for them?—Because the fishery at that time was principally carried on in the winter, and now it has changed from a summer to a winter fishing.

21,437. The fish, then, have changed their season for visiting this coast?—Yes. The fish which formerly were so abundant that from 500 to 600 or 800 hogsheads were caught at one single shoot of the seine in the months of July, August, and probably September, and sometimes the first half of October, now visit us very much later. In fact those fish which we used to take in these months do not now come here at that time.

21,438. Why should they be able to use the nets at one time of the year and not at another?—I do not know why, but I know that from some cause or other the fish have undergone the transition that I have described.

21,439. But why is it not possible to catch them in the seines at one time of the year as well as at another?—Perhaps you are not aware of the mode in which they act in the seine fishing. When the seine is shot, if the enclosed quantity of fish amounts to 40 or 50 hogsheads, they put the tuck seine under it and take the fish out. Two boats, which will be sufficient to take the fish when they amount only to 30 hogsheads each, find it impossible to take up from 100 to 500 hogsheads. It is necessary, therefore, to let the seine be moored with the fish still enclosed in it, and if a gale of wind came on in the night in all probability it would destroy the nets and ruin the fishermen. You must bear in mind that a net of this description costs the fishermen 800*l*. I have heard of instances in which the fishermen have been engaged a whole week in taking out the fish after they had been enclosed in the nets. If anything happened to injure the nets or to destroy them, it would have been the ruin of all the parties concerned.

21,440. (*Mr. Lefevre.*) I suppose that in the fine weather in the summer you can allow the nets to remain out with safety?—Yes, there is very little danger then. I have heard an instance in which after the seine was shot and the fish enclosed the fishermen found that they had no salt; they therefore sent a ship down to the Bay of Biscay to bring up a cargo of salt. They brought up the salt and managed to save the cargo of fish afterwards.

21,441. (*Professor Huxley.*) Then it is not on account of the nature of the bottom, but because the time when the fish visit this coast has changed to a much later part of the year, that the pursuit of seine fishing is in your opinion attended with hazard?—Exactly so.

21,442-3. (*Mr. Lefevre.*) At what distance from the shore do the fishermen set their drift nets?—At all distances. You will see one long line of drift nets from Mevagissey right across for six or seven miles.

21,444. (*Professor Huxley.*) How far out can seine nets be used?—Only a very little way. There used to be 40 seine boats at Mevagissey and four drift boats, but now they have only 14 seine boats and 40 drift boats.

21,445. Can the seine boats work out at sea?—No; they might be used within a certain distance of the shore.

21,446. (*Mr. Lefevre.*) Do they often shoot the drift nets within two miles of the shore?—Yes; they shoot them wherever there is any chance of taking fish.

21,447. Does it often happen that the pilchards are found within such a short distance of the shore?—Yes.

21,448. Then in your opinion would any regulation prohibiting the use of drift-nets within a short distance of the shore be disastrous to the fishery here?—Yes; but there are certain parts eastward of Looe where there is clean ground. They never draw the seine nets ashore. From the Land's end to Plymouth they never draw the seine nets ashore.

21,449. To the northward do they draw the seine nets ashore?—It is only very rarely they do. The land is so very steep here that they could not warp the seine in.

21,450. (*Professor Huxley.*) Are you aware that in various parts of Cornwall complaints have been made, especially on the other side, by the seine fishermen of the mode of fishing adopted by the drift-net fishermen?—Yes.

21,451. It is asserted by the seine men that the drift-net fishermen destroy the fishing?—Yes, I believe it is.

21,452. Can you tell us anything about it?—I do not believe that they do as much injury as they are said to do. Of course if they were to shoot their nets where the seine men are fishing it would be wrong and ought to be prevented. There are only certain places on the coast where the seine can be shot, and in those places there are regulations now observed. There are certain spaces along the coast which are called turns; the regulation is that the first seine which arrives at that spot shall have exclusive possession of it for a certain length of time. No other seine is allowed to intrude there for the space of 24 hours unless the fishermen in possession of the turn happen to get a catch of fish, and then their turn is ended.

21,453. Does the next in order take possession of the turn in that case?—Yes.

21,454. Then are we to understand that the coast is divided into these turns?—There are only certain places where the seine can be shot, and these parts are called turns. The seiners themselves are not permitted to go among those who are there; if one goes out to wait his turn he will drop his anchor outside, and although he may see the fish there he is not to proceed to shoot among them until his time arrives for taking possession of the turn. I think that the drift men ought not to be permitted to go near the turns, and I see no reason why all the real seining ground where seines would be eligible should not be divided into turns.

21,455. What distance do you think the drift fishermen ought to be kept from where the seines are used?—I think that if there were a regulation enforced that no drift fishermen should come within two miles of the ground divided into turns that would be quite sufficient.

21,456. Are you aware that it is stated by the seine fishermen that the mere fact of drifting at all breaks the shoals of fish and disperses them?—That is the

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very point upon which I had a correspondence with Lord Eliot. The question is who shall really catch the fish, whether one is to be allowed to break the shoal or the other to catch the whole of it.

21,456*a*. But as a matter of fact do you agree with the opinion expressed by the seine fishermen that drifting breaks the shoal of fish?—I do not believe that it does. I have seen the shoal of fish within half a mile of the land visibly rippling upon the surface of the water; I have seen the drift-net fishermen cut across that shoal, and I have seen the pilchards on the lee side just as perfect. They must have gone under or over, but without being stopped at all by the shooting of the nets.

21,457. Then that is positive evidence that under certain circumstances the shoal is not broken?—Yes.

21,458. (*Mr. Lefevre.*) Have you any suggestion to make with regard to the trawlers? Do you think that there are any regulations affecting the trawlers that ought to be imposed?—I think that the trawling has now become far too wide an interest to be interfered with unnecessarily. They catch an abundance of fish which no one else would catch; they therefore form a very valuable interest, and one which ought to be supported. The trawl boats likewise form an excellent school for the training of sailors. Under these circumstances anything that I could say as to imposing restrictions upon their fishing must be taken with the utmost reserve. At the same time I think that if they were prevented from trawling by night it would be satisfactory. Of course the distance from land within which they may fish should be observed as it now exists. They ought not to be allowed to come close in-shore.

21,459. (*Professor Huxley.*) What distance would you keep them off the shore?—I am not prepared to say.

21,460. Are there not rocks within two miles of the shore?—They cannot come in here, and they cannot come in to the north-east of Looe. In Lantivet Bay, between this and Fowey, the trawlers can go in very close, indeed they can run in and out of that bay easily, and I think they should be prevented from trawling by night.

21,461. Why do you think they should be prevented from trawling by night?—I think so for a double reason. In the first place, because if they commit any infringement of the law they could not be convicted. Nobody could see the numbers of the boats, and therefore whatever they did it would be impossible for them to be detected.

21,462. Such a regulation as the one you propose, namely, preventing them from trawling by night, would do very well in a place like Plymouth, but how would it affect the trawlers generally?—If they were trawling by day, and did anything contrary to the law, it would be easy to see who they were, and they would be convicted, but now they can do as they please without running any risk of detection.

21,463. Is there anything you wish to add to the evidence you have already given?—Nothing.

21,464. (*Mr. Lefevre.*) On the whole do you think that the wages of the fishermen have fallen off?—They have no wages.

21,465. Has what they make by share fallen off?—Of course it must, if a large proportion of their profits has fallen off. The plan they adopt here is for the men to go shares in all cases.

21,466. How do they divide the shares?—The boat has a share, and the nets also.

21,467. It is divided into shares?—Yes, but I think they are not all equal shares. The fishermen, however, will tell you much more about it than I can. The old seining plan was to pay by wages, but no fishing will ever prosper where the men depend upon wages only.

21,468. Taking the last 50 years, do the men make on the whole less now than they did formerly?—Yes, considerably less.

21,469. Notwithstanding the advantages they now possess in having the railroads?—Yes, the profit is so much smaller than it used to be. In the winter time they suffer most. Perhaps this year has been an exceptional one. For six months now they have been hindered from going to sea, but taking them as a whole the profits of these men are considerably less than they were in former years. As a proof of this, I am aware that a large proportion of them, as soon as they get sickly or aged, are obliged to go to the union.

21,470. Does the surplus population go off to other places?—We have a large number of men from this part in the navy and in the mercantile service. During the late war with Russia there were 70 persons there belonging to these parts, and the greater part were serving in the fleet.

21,471. I think I understood you to say that the population has remained about stationary during the last 50 years?—Yes.

21,472. Then what becomes of the surplus population?—It has gone eastward and westward. We do not lose many by drowning. It is rather remarkable the few losses we have in that way.

21,473. Do you think that the surplus population have gone to Plymouth and other fishing places?—They are scattered all over one hardly knows where. There are a great many in the mercantile service, and a great many in the navy.

The witness withdrew.

GEORGE BRINE, R.N., called and examined.

G. Brine.

21,474. (*Professor Huxley.*) You are, I believe, the Inspecting Commander of the Coastguard here?—Yes.

21,475. Are you anxious to make some statement?—All I wish to say is that I consider the drift-net boats are absolutely necessary for keeping up the supply of pilchards to the population of Cornwall. If it were not for the fish caught by the drift-boats the people here would absolutely starve on many occasions. They could not exist for a month in the winter time without the drift-boats. The seine boats belong principally to the wealthy proprietors, such as Messrs. Fox of Falmouth, and a few others. The fish they catch in these large seines they salt down, and export abroad. The fish caught by the drift-boats is used for the support of the population. To my knowledge there are people now in Mevagissey who in consequence of a partial failure in the pilchards have almost exhausted their supplies. They are, in point of fact, half starved, and are living from hand to mouth on what they can get. If the drift-boats were stopped altogether these people would be placed in a very unfortunate position. As I have already stated, the seine boats are in the hands of a few parties at Mevagissey and other places, but the drift-boats are very differently situated. They bring in a very large supply of fish, and everything they bring in is sold for consumption here; but what the seiners bring in is salted down in the cellars, and afterwards exported abroad to Spain and Portugal.

21,476. Then do I understand you to say that the drift-boats are the principal support of the fishermen, and that what fish they obtain is supplied as an article of food for the people?—Yes, it is the principal support of the miners. I see them frequently going through St. Austell. They bring their fish from the northern parts of the country, each having his cask of pilchards laid by for a supply of food in the winter.

21,477. I presume that they would not be able to get that if the drift-net fishing were put a stop to?—They would not be able to get it at all. Last year the Mevagissey people did not get enough in their boats to supply the population. I was down there looking on at the time, and saw the only haul they had. Perhaps the drift-boats interfere a little with the seine-boats. If they start from here, for instance, and run across the bay, there is a probability that

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the fish would become broken and the net would separate.

21,478. Do they interfere with the seine-boats more than one branch of trade generally interferes with another?—I do not see that the drift-boats interfere much with the pilchards. I may say that at Mevagissey, where they formerly used to have a great number of seine-boats, and a small number of drift-boats, they now have 40 drift-boats, and not more than five or six seine-boats.

21,479. You know the Convention which exists between this country and France?—Yes.

21,480. Do your instructions as Inspecting Commander on this coast oblige you to look sharply after the enforcement of the regulations laid down in that Convention? Do your instructions oblige you to see that those regulations are carried out?—No, not here. They have a cutter here. There is no regular Revenue boat here, but they have a kind of Revenue vessel attached to the Coastguard service. I have a little tender, but no regular crew.

21,481. Do you consider that you are bound to examine any of the nets?—There is an officer on the Looe station whose duty it is principally to look after the river fishing.

21,482. I am not speaking of the river fishing now, but only of the sea fishing?—I have no instructions with regard to that.

21,483. Is it not a fact that the Convention is practically a dead letter so far as you are concerned?—Yes, with the exception that we have been spoken to once or twice, and asked why we do not put a stop to the drift-boats, and make them go further off the coast.

21,484. Who are the persons who have complained of the drift-boats?—The complaints have been made by persons connected with the seine-boats.

21,485. The Convention would give you no power to do that?—No, but these people have an idea that the drift-boats ought to be stopped. I declined, however, to interfere with them.

21,486. (*Mr. Lefevre.*) How far does your station extend?—From Blackrock two and a half miles the other side of Looe down to the Falmouth side of the Deadman Point.

21,487. Is there any other fishing village besides Looe between Polperro and Plymouth?—There is a place called Wrinkle, but I should not think there is much fishing carried on there.

21,488. Is that in Whitesand Bay?—Yes.

21,489. Then there is nothing between Cawsand and Looe?—No, I think not. On the other side there are two steamboats belonging to a man named Nichols at Fowey, but they did not catch fish last year.

21,490. What place is there between Fowey and Mevagissey?—There is Polkerris. There are one or two seine-boats there, I believe, and a little trawling-boat; it is only a small punt.

21,491. Where is Polkerris?—It is near Fowey.

21,492. You say there is nothing at Fowey itself?—No.

21,493. What is there westward of that?—There are one or two seine-boats at Charlestown, and then Mevagissey is the next place. You need not go to Gorran Haven. At Mevagissey I think there are a good many fishermen.

21,494. Between that place and Falmouth is there any fishing of importance?—I believe they have a few seine-boats at Porthloe.

21,495. (*Professor Huxley.*) Have you ever had any complaints of the trawlers having fallen foul of the drift-net men?—No, I have never heard any complaints whatever made about the trawlers.

The witness withdrew.

JONATHAN COUCH recalled and examined.

J. Couch.

21,496. (*Professor Huxley.*) You wish to make some addition to your evidence?—Yes, I wish to add a word or two. One reason of this particular feeling of enmity between the seine fishermen and the drift fishermen is this. When it was found that the seiners began to fall off in the catching of the fish, and that the profits consequently became less, a large number of the most regular fishermen left the seine-fishing, and went to the drift-nets. The seine men have not been able to get their services back again. The consequence has been in some cases that the seine-boats have been left without their proper crews. A large portion of the men who go with the seine-boats are tradesmen—shoemakers, masons, and others, who only follow the business of fishermen during two months or so, while the seine-fishing is on; therefore they are not proper seamen or fishermen at all. The seine owners, however, endeavour to obtain the services of a certain number of regular fishermen to manage their boats. When they found that these men could not be obtained, an additional feeling of ill-will was created.

The witness withdrew.

CHARLES WILSON RILEY called and examined.

C. W. Riley.

21,497. (*Professor Huxley.*) You are a captain in the navy, I believe?—Yes.

21,498. Have you been long residing at Looe?—For the last 20 years.

21,499. Are you intimately acquainted with the population there?—Yes.

21,500. I believe you are anxious to make some remarks in reference to the fishing interest there?—Yes, I only wish to make a remark or two in reference to what has fallen from Captain Brine. He said if the drift-boats are stopped it would be the ruin of the fishermen. Now I beg to add a word to that, and I wish to say that if they are materially interfered with they would be ruined. It is not the stopping of them alone, but any material interference with them would be the ruin of them, and also the ruin of their families.

21,501. In what way should they not be interfered with?—There should be no interference with them regarding where they should fish. I am in a position to know that they do not commit the amount of damage to the seine-boats which has been alleged now. In 1850 we had three seine-boats at Looe; there used to be five, but there are only three now. On one particular occasion they shot their nets, and enclosed about 1,000 hogsheads of pilchards; 300 hogsheads were landed that night, but before the night was over the seiner was moored, and two watch boats were placed in position to look after it. In the middle of the night the Plymouth trawlers came to the place. They were hailed by the Looe boats, and requested not to go over the net as there were 700 hogsheads of fish in it. They however made use of very blackguard language, and got quite across the net. They tore it, and the whole of the fish went away. Now, if it had been a number of drift-boats that had done this they would have obtained the names of the fishermen. I wrote to the Admiralty about it, to the Secretary of the Admiralty, and requested that a revenue cutter might be sent down immediately, and the crew was off and on for two months. The trawl-boats kept out then, but all the mischief had been done.

21,502. The persons who committed this damage were amenable to the common law, were they not?—Yes, but what the fishermen said was this: If we go to law we shall only sustain a greater loss. There is some law I know about the drift-boats not being allowed to come within two miles of the bay; but if

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the law were strictly adhered to our men would lose the greater part of their season.

21,503. Can you tell me where the law you speak of is to be found?—There is a law about the boats not coming within a certain number of miles. I believe it is that they shall not come within two miles of the headlands, and if that were carried out it would be very injurious to the interests of the fishermen.

(*Dr. Couch.*) I believe the law which Capt. Riley refers to was passed in the reign of Charles II.

21,504. (*Professor Huxley to Capt. Riley.*) Is it not an obsolete Act?—No, I think not. But if that Act had been carried out to the letter our fishermen would have made no season whatever last year. They had been out for a month, and then they laid their boats up for a fortnight when their fish struck in. The drift men took from 20,000 to 30,000 fish the very night the seiner was laid up, all of which would have been lost but for the drift-boats.

21,505. One of the special points for us to inquire into is whether there are any legislative restrictions in existence which, if carried out, would be mischievous to the fishing interest. I understand from you that if this enactment were carried out it would be injurious to that interest?—Yes, it would destroy all our fishing altogether if our drift-boats were obliged to keep outside certain limits. The whole of the fishing interest here would be ruined.

21,506. Then is it your desire that you should not be meddled with?—Yes; when the seine-boats are out the drift-men are careful not to go and interfere with them; but the seine-boats only shoot their nets by day.

21,507. Are you aware of the trawlers having done any mischief to the drift-men?—Yes, frequently. We used to have a good salmon fishery at Looe.

21,508. Do you mean a sea salmon fishery?—Yes, and river also.

21,509. The river fishing we have nothing to do with.—The mines here have utterly destroyed that.

21,510. (*Mr. Lefevre.*) I believe you live at Looe?—Yes.

21,511. How many fishermen are there there?—About 180 I think.

21,512. As many as 180?—Yes.

21,513. How many boats have you?—Twenty-one large boats and seven open boats.

21,514. Have you paid much attention to the fishery for several years past?—I cannot say that I have, but I have taken an interest in it for the sake of the fishermen.

21,515. You cannot tell us what the increase or decrease in the fishing has been of late years?—I think I might give you some information on that. Really and truly the fish appeared to me to have very much fallen off. Ten years ago I could always have a whiting on my table for breakfast, now we can seldom see one. In point of fact the fish appear to have fallen off very much.

21,516. How is it then that the number of fishing boats has increased in many of those places?—The fishing has been kept up, I believe, because the price the fish will fetch in the London market has become so much larger. The railroad now takes them all away. We used to be able to get lobsters for eightpence each, now we are obliged to give half-a-crown for one. They all go to London.

21,517. Is the decrease you have observed mainly noticeable in such fish as mackerel, cod, whiting, and ling?—Our hook-boats do not think they bring in one-half the fish they used to bring in formerly, but the fishermen will be able to give you better information on those points than I can.

21,518. Are there any Looe fishermen here?—Yes.

The witness withdrew.

R. Little.

RICHARD LITTLE called and examined.

21,519. (*Professor Huxley.*) Are you a fisherman at Looe?—Yes.

21,520. How long have you been fishing there?—25 years.

21,521. Is the population of Looe almost entirely a fishing people?—I think about one-third of the population of Looe are engaged in fishing.

21,522. What is the employment of the rest?—There is a great deal of shipping; they ship the copper ore and coal. There are two Looes, East Looe and West Looe, and we have altogether a population of 2,000.

21,523. I am speaking now of both Looes. How many fishermen are there there altogether, do you think?—About 120 who are connected with the fishing at one period of the year, and about 200 at the other period of the year.

21,524. How many boats are there there?—There are 21 pilchard drift-boats.

21,525. Are they of the same make as that of the boats here?—Yes, about the same.

21,526. About the same tonnage?—They will average about 15 tons. There are some of them 18 tons.

21,527. What would be the cost of a boat of that sort?—About 240*l.*

21,528. Do you mean fitted with gear and all?—Yes.

21,529. Has the number of boats increased to any extent since you have been fishing there?—Yes.

21,530. How many were there there 25 years ago?—There were then about 12 pilchard boats, and they were smaller than those they have now.

21,531. How many were there of other kinds?—I should think there were about nine or ten hake boats.

21,532. In what has the increase been? Has it been chiefly in the pilchard boats?—Yes, in the pilchard boats.

21,533. (*Mr. Lefevre.*) Are the pilchard boats not used during the hake season?—They are only used during two months of the year, namely, April and May.

21,534. (*Professor Huxley.*) You are a practical pilchard fisherman?—Yes.

21,535. What is the length of your fleet of nets?—Half a mile.

21,536. Are they mounted like herring nets?—Yes, just the same.

21,537. With buoys, head-lines, and so on?—Yes.

21,538. What is the size of the mesh of the net?—It will run from 38 to 40 to the yard for pilchards.

21,539. Is there any regulation as to the size of the mesh? Can you have it as large as you like or as small?—No, we could not catch pilchards if we did that.

21,540. But are you by law allowed to use any sized mesh you please?—Yes, I think so.

21,541. You have nobody to interfere with you?—Not that I ever heard of; but I have heard that there is somebody trying to interfere with us, and that is partly why we have come here.

21,542. Do you mean to interfere with your pilchard nets?—Yes.

21,543. On what grounds?—They say that we catch too small pilchards.

21,544. Has that agitation been going on for some time?—I have only heard of it for the last 12 months.

21,545. Do you fish for herrings?—Yes.

21,546. What sized mesh do you use for them?—35 and 36 to the yard.

21,547. Have you heard of any regulation limiting the size of the mesh of the herring net?—No.

21,548. You have never heard of a law to that effect?—No.

21,549. Nobody interferes with your nets?—No.

21,550. Do you shoot your nets for herrings in the same way as you do in the pilchard fishing?—Yes, quite the same.

21,551. Do you go out during the day, or do you fish during the night?—We follow the night fishing; we generally shoot when the sun is going down.

21,552. For what reason do you do that; is the take better?—Yes, we should not catch the fish by day.

21,553. Then you pursue the same course as with herrings?—Yes.

21,554. And you fish much in the same way?—Yes, just the same.

21,555. What is the length of a fleet of pilchard nets?—It is half a mile.

21,556. How many nets are there in a fleet?—21 nets.

21,557. How many fathoms do they hang down vertically?—Seven fathoms if we let them hang, but they are about five fathoms, being gathered in a little.

21,558. Do you let them drift all night?—That is according to the manner in which the fish go in after dusk; we try them, and if there are fish in them we take them on board, if there are not we let them remain down longer.

21,559. Do you have your boats lighted at night?—Yes.

21,560. What kind of lights do you carry?—We carry a large square lantern, 15 inches one way and 11 inches the other; and we also carry a flare-up.

21,561. Have you one light above another?—We have only one fixed light; if a vessel comes too near then we show the flare-up.

21,562. Then you do not carry two lights one above the other?—No.

21,563. Have you ever heard of this regulation: "In order that boats fishing with drift-nets may be "easily recognized at night, the masters of these boats "shall hoist on one of their masts two lights, one "over the other, three feet apart. These lights shall "be kept up during all the time their nets shall be "in the sea between sunset and sunrise." Did you ever hear of that?—No.

21,564. Did nobody ever try to enforce it?—No.

21,565. Were you not aware that that was the state of the law?—No.

21,566. And that you might be brought before the magistrates for not doing so?—No.

21,567. Do you think it practicable to enforce that regulation?—No.

21,568. Do you carry any particular kind of vanes on your mast?—No.

21,569. You never trouble your heads about that?—No.

21,570. Did you ever hear of this regulation: "For "the purpose of distinguishing by day drift-net fishing boats from trawl-boats, both shall carry at the "masthead vanes which shall be at least eight inches "in height and two feet in length; the colours of "these vanes shall be for British trawl-boats red, "for French trawl boats blue, for British drift-net "boats white and red, and for French drift-net boats "white and blue. It is understood that the vanes of "the drift-boats shall be divided vertically into two "equal parts, of which the white shall be the nearest "to the mast." Did you ever hear of that?—No; something was said about it three or four years ago, but it never came to anything.

21,571. Everyone then does as he pleases?—Yes, pretty much so.

21,572. Do you fish for herrings?—Yes.

21,573. Do you keep up any particular kind of lights when you are herring fishing?—No.

21,574. Did you ever hear of this regulation: "The "meshes of all nets used for herring fishing shall not "be less than one inch square from knot to knot along "the line." Have you ever heard of that?—No.

21,575. Nobody has tried to enforce it?—No.

21,576. Do you think any good would result from enforcing it?—That is about the size we use.

21,577. You adopt that size because you can catch the largest quantity of herrings in nets with such meshes?—Yes.

21,578. Are your herring-boats decked?—They have what we call a cudos.

21,579. Do any of the decked herring-boats come amongst you?—Some of the Mounts Bay boats do.

21,580. Are they decked?—I believe they have about 50 of them decked.

21,581. Do they drift faster than the undecked boats?—I think it makes a little difference. We generally fancy that the Mounts Bay men drift faster than we do. They generally shoot a little athwart the wind.

21,582. (*Mr. Lefevre.*) Are they larger boats?—Yes.

21,583. What is the difference in the size?—Their boats will be about 30 to 35 tons.

21,584. (*Professor Huxley.*) If the Mounts Bay men come up when you are going to shoot your nets do they shoot theirs among yours?—Yes.

21,585. Where they like?—Yes.

21,586. And when they are fishing do you go amongst them?—We never go to Mounts Bay fishing.

21,587. But do you do that in your neighbourhood?—Yes.

21,588. You shoot among them as you like?—Yes.

21,589. Then have you never heard of this regulation: "Whenever decked herring-boats and undecked herring-boats shall commence shooting their "nets at the same time, the undecked boats shall "shoot their nets to windward of the decked boats, "except they should prefer going to leeward to a "distance of at least half a mile to shoot their nets. "The decked boats on their parts shall shoot their "nets to leeward of the undecked boats, unless they "prefer going to windward to a distance of at least "half a mile to shoot their nets." Have you never heard of that?—Yes, I have heard of that law, but I do not know that it has ever been put in force.

21,590. In point of fact nobody pays any attention to it?—No, they shoot when and where they think proper.

21,591. Do you think it would do any good to enforce that regulation?—No.

21,592. Are you of opinion that no advantage would be derived from observing that regulation?—Yes.

21,593. You do not practically interfere with each other?—We get foul sometimes, and then we do the best we can.

21,594. The undecked boats get foul sometimes?—Yes.

21,595. You do not get foul more frequently because of there being decked boats among you?—No, I do not think that that makes any difference.

21,596. You spoke of the interference of the trawlers?—Yes.

21,597. Have you ever had your nets destroyed by the trawlers?—Yes.

21,598. That has occurred in your own case?—Yes.

21,599. How long ago?—Two years.

21,600. Will you state what happened?—We went off Plymouth with 300 sail of boats at the hakeing time in the month of October. When we came to haul in we found that the trawlers had trawled over our nets, and had cut them right in two.

21,601. Were you fishing for hake with nets?—We were catching pilchards for bait for the hake.

21,602. And they trawled after you?—Yes.

21,603. Had you your lights up?—Yes.

21,604. Did they know you were there?—They could see our lights.

21,605. Did they know you had your nets out?—Certainly, they could not help knowing it.

21,606. Do you think the damage was done simply because they would not take the trouble to haul up?—Yes.

21,607. Has that happened when you were fishing for herring and mackerel?—No, we have no mackerel drift-nets at Looe. It is mostly confined to the seining boats.

21,608. Did you ever hear of this regulation: "Trawl-fishing is forbidden in all places where there

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" are boats engaged in herring or mackerel drift-net " fishing ?"—No.

21,609. Were you not aware that that was the law? —No, I never heard of it.

21,610. Would that regulation meet your views with respect to the injury done to your nets ?—Yes, I have known sometimes, and the trawlers knew it well, that boats were drifting, and if they were not going to trawl under other circumstances they would set down their trawls, and I have known them drift foul of our nets during the night. I have sometimes seen a vessel almost on the nets. We have hailed her to haul in, but she took no notice. When we came to examine our nets we found that the trawler had hauled off a piece 9 or 10 fathoms long.

21,611. (*Mr. Lefevre.*) Did you lose it altogether? —Yes, at another time we had another portion of our nets all torn to pieces.

21,612. Could you not take the number of the trawler who did that ?—No, not at night, and you might as soon ask them for anything as their number if you could not see it yourself.

21,613. (*Professor Huxley.*) You are aware that you could have punished them if you could have got their number ?—Yes.

21,614. Did you ever hear of this regulation : " Trawl-boats shall always keep off a distance of " at least three miles from all boats fishing for her- " rings or mackerel with drift-nets ?"—No, I was not aware of that.

21,615. You are not aware that you could appeal to that as the law ?—No.

21,616. If that law were enforced could the trawlers do you any damage ?—It would certainly keep them out of our way at night. They would not come in contact with our nets at night.

21,617. Apart from the injury done by the trawlers getting foul of your nets, do you think that they do you harm by destroying the brood of fish ?—I should think they do.

21,618. Have you any good reason for thinking so ? —They catch a good many hake.

21,619. (*Mr. Lefevre.*) I suppose you mean that they catch fish that you would otherwise catch ?—The quality is not as good when they catch them as when we do.

21,620. (*Professor Huxley.*) You say you have not heard of the regulations which I have read to you ?— No.

21,621. Here is another one : "Whenever herring or " mackerel boats shall commence drift-net fishing in " any place whatever, the trawl-boats which may be " already fishing in such places shall depart there- " from, and shall keep at a distance of at least three " miles from the said drift, herring, or mackerel " boats." I suppose you never heard of that ?—No.

21,622. That compels the trawler to get up his nets and be off ?—Yes.

21,623. If this regulation were enforced would that effect all that you wish with regard to the interference of the trawlers with you ?—It would be of very great benefit to all the drift-net men.

21,624. I think you said that you had no particular mackerel-fishing at Looe ?—No, except shore seining.

21,625. But that is quite a different occupation from pilchard seining ?—Yes.

21,626. You haul the nets on to the shore ?—No, we haul them into the boats the same as we do in the pilchard seining.

21,627. Have you two-oared boats ?—Yes.

21,628. Is your beach rocky ?—Yes, it is a very rocky shore indeed.

21,629. Is there anything with regard to your fishing at Looe upon which you wish to make a remark ?—No, I think not.

21,630. Is there anything that wants remedying ? —I think it would be of great benefit if the drift- boats were allowed to go anywhere to fish. I have known, since I have been drifting at Looe, boats to catch 14,000, 15,000, 16,000, and 20,000 fish, when the boats were but half a mile from the shore, when the seiners would not have been able to catch them. Now if the drift-boats are to be kept two miles off the shore, we should have no fish at all. The seiners could not catch them, and we should not be allowed to catch them.

21,631. (*Mr. Lefevre.*) How many pilchard seiners are there now at Looe ?—Two.

21,632. How many used there to be there ?—There used to be five.

21,633. (*Professor Huxley.*) You spoke of some regulation preventing the drift-men from fishing within two miles of the shore. Have any of them been prosecuted for that ?—Not for a great many years. One of the Looe men was prosecuted for shooting his net within the limits.

21,634. Has there been any prosecution within the last 10 or 15 years ?—No.

21,635. But I presume there have been a great number of cases in which the drift-net men have shot their nets within two miles ?—Yes.

21,636. But none have been prosecuted ? —No, none have been prosecuted, but many have been threatened.

21,637. (*Mr. Lefevre.*) They did not pay any attention to the threats, I suppose ?—No.

21,638. (*Professor Huxley.*) Then you do not know whether they could be enforced now or not ?— No.

21,639. Have you any crab or lobster-fishing at Looe ?—Yes.

21,640. What is the mode of fishing you adopt ? Do you use the ordinary crab-pots ?—Yes.

21,641. Have the fish increased or diminished of late years ?—They have diminished.

21,642. To what do you ascribe the falling off ?—I do not know what the cause of it is.

21,643. Has the take diminished ?—Yes, we cannot get half as much as we used to.

21,644. Do the trawlers at all interfere with the crab-fishing ?—No, the crab-pots are shot in the rocks, and they cannot trawl there.

21,645. Has the lobster-fishing fallen off ?—They have been very scarce this year.

21,646. Have the trawlers anything to do with that ?—I do not know. All I know is that we have not been able to catch many lobsters this year. They have been very scarce indeed.

21,647. You heard what was stated by other wit- nesses respecting the sale of fish to the poor by drift- net men ?—Yes.

21,648. Do you agree that that is the case ?—Yes, I have sold 26,000 on the beach in one day to the country people.

21,649. Did you sell them to the hawkers ?—Yes, and they carried them into the country.

21,650. Do any London dealers come down to buy your fish ?—No, there are certain men who buy fish at Looe to send to the markets, but they do not take the pilchards. The pilchards are sold about the country.

21,651. (*Mr. Lefevre.*) Is there any export of her- rings from Looe ?—No, there is very little round this part of the country.

21,652. Is there any by sea ?—No.

21,653. (*Professor Huxley.*) Is there any regula- tion here as to the size of the crabs caught ?—No.

21,654. Then you can catch any size you like ?— Yes.

21,655. Have you been in the habit of catching any small crabs to any great extent ?—I do not know that I have.

21,656. I suppose you know what a berry lobster is? —Yes.

21,657. Have they been caught here to any great extent ?—Yes.

21,658. Do the fishermen catch them whenever they can ?—Yes.

21,659. (*Mr. Lefevre.*) Do they fetch a better price in the market than the others ?—Yes, they generally put them on the top of the package when they send them to London.

21,660. (*Professor Huxley.*) Do you think that the catching of these berry hens has anything to do with the falling off of the lobsters ?—I have no doubt that if the berry lobsters were thrown away the increase in the quantity would be much greater ; but at times, if they throw away all the berry lobsters, they would have very few for the market.

21,661. Has the crab and lobster fishing increased of late years, that is to say, have the number of people engaged in the fishing for them increased ?—Yes, of late years.

21,662. Then do you think that over-fishing has anything to do with it ?—Perhaps it may have.

21,663. Are your pots of the same construction as they are elsewhere ?—Yes.

21,664. Do you use trunks ?—No.

21,665. You merely use pots then ?—Yes.

21,666. (*Mr. Lefevre.*) Are you yourself the owner of a boat ?—Yes.

21,667. How do you pay your men ?—They are all paid by the share.

21,668. How many shares are there ?—There are nine shares in the pilchard fishery.

21,669-70. How do the shares go ?—Four men get one share each. The boat takes one share, and the nets take four shares.

21,671. Are you yourself the owner of the nets ?—Yes.

21,672. Do they generally belong to the owner of the boat ?—Yes, in our place, but in Mounts Bay they go differently, I believe.

21,673. Are the pilchard boats fitted with the herring nets ?—Yes.

21,674. Do you ever use the pilchard nets for herrings ?—No.

21,675. Do you find that you do not catch the herrings with them ?—Yes.

21,676. Is the mesh too small ?—Yes.

21,677. Then are not the meshes of 36 inches to the yard the proper size for herrings ?—Yes.

21,678. And it would not answer to have a smaller mesh ?—No, the net shrinks by curing.

21,679. What do they shrink to ?—They shrink up to 40. I have known some of them to shrink up to 41.

21,680. Do you think that the simple difference between 36 and 38 meshes to the yard is sufficient to make all the difference ?—Yes, from 38 to 39 and 40 is generally the rule for pilchard fishing.

21,681. Would the nets of 35 and 36 meshes to the yard be too large for the pilchards ?—Yes, we should never catch any pilchards with nets of that description.

21,682. Have you observed any great increase in the number of herrings during the last few years ?—No, we think that the herring is a fish which visits at a certain place for five or six years, and then takes its departure, and goes to another place. At Plymouth, where we now go herring fishing, they have only come in during the last few years, and at Torquay they have all gone.

21,683. Are you aware that there has been a great increase in the herring fishery at Plymouth during the last few years ?—Yes, there has been a very great increase there.

21,684. How long have you been fishing at Looe ?—For the last 12 years.

21,685. Did the herring fishing commence then for the first time ?—Twelve years ago, when first I went to Looe, we used to go to Torquay. I believe that boats from Polperro had been out there before that. Latterly we have only been to Plymouth.

21,686. What is your season for the herrings ?—November and December.

21,687. Was it formerly in only those months of the year ?—Since I have been engaged in the trade the herring fishing has generally been in those months, and sometimes at the end of October.

21,688. Is the pilchard fishing your harvest time ?—Yes.

21,689. That is, you make more money of the pilchards than of anything else ?—Yes, that is our principal fishing.

21,690. Do you find, taking the year round, that you make as much money now as you did 15 years ago ?—Do you mean in the pilchard fishery ?

21,691. I mean in all the fisheries together ?—Some years we do well, and some years we do badly. Fishing is all a speculation. I do not think there has been much difference, taking it altogether.

21,692. Is the price of pilchards less, or about the same ?—It is less.

21,693. Then the price of pilchards has gone down?—Yes.

21,694. How do you account for that ? Are there more pilchards caught off the coast ?—We have a better mode of catching them.

21,695. Are there more caught ?—Yes.

21,696. By the drift-boats ?—Yes, at Looe now we have all cotton nets, and they catch three fish where one was only caught before. We have also larger boats, and we carry longer nets.

21,697. Do you make more money by the pilchards than you did formerly ?—There is sometimes a difference, taking one year with another.

21,698. Taking the average of years, do you make as much ?—I do not think I have ever known the pilchard drift-boats to increase faster than they have done during the last three or four years. At our place drift-boats seem to be coming up every month.

21,699. And the seiners are going down ?—Yes.

21,700. Do you think the seine-net fishing is not found as profitable as it used to be ?—Yes.

21,701. Do you account for that in the same manner as Dr. Couch has done ?—Yes, something in the same way.

21,702. Namely, that the season has altered for seine fishing ?—Somehow or other it appears that they do not catch as many fish in them. As regards the season, we have caught shoals of fish which have come along in the middle of the summer, but they have caught very little of them, not having really first-rate fishermen to direct the work.

21,703. Do you fish for hake ?—No.

21,704. You go to the pilchard and herring fishing ?—Yes, and to the mackerel fishing also.

21,705. Do these three descriptions of fishing take up the whole of your time ?—Yes, at this part of the year we take two months to repair our craft, and some of our boats go spring pilcharding for about two months.

21,706. You take the pilchards then for bait ?—Yes, and for the market when we send them to London.

21,707. We have been told they are very poor fish at that time of the year ? — Yes, they are poor fish then, but still they fetch a price at Plymouth.

21,708. Is any of the bait you speak of for the market ?—Yes, for the market. The Frenchmen come over and buy some of these pilchards for bait.

21,709. Do many Frenchmen come over here to fish with the hook and line ?—They come into the Channel, but not much where we are. They come to Plymouth to buy their spring pilchards for the long-line fishing.

21,710. How many hake-boats are there at Looe ?—Not more than six.

21,711. Has the number fallen off of late years ?—There is very little difference. There are only a few who attend to the hake fishing about this time of the year. It is left to a few old men who are too old for other fishing, so they go a-hakeing. Perhaps in the spring of the year, after we have done with the pilchard fishing, in April or May, some 12 or 15 of our large boats may get out.

21,712. Have you observed whether the hook-and-line fishing is not as profitable as it used to be ?—As regards the large boats they never used to go out hakeing until the last few years.

21,713. Formerly the hake fishing was carried on close in-shore in open boats ?—Yes, we do not carry on hake-fishing at Looe as they do at Polperro.

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21,714. Of late years have the hake-boats not got as much as they did formerly?—They cannot catch anything like it.

21,715. To what do you attribute that?—We think it is because the fish are not there. I cannot exactly state what is the cause.

21,716. Have you observed any great increase of trawlers off your shore?—Yes.

21,717. Do they catch the fish you formerly caught?—I have no idea. They destroy a great deal of spawn.

21,718. Have you yourself seen spawn taken up by the trawlers?—I was never on board a trawler. I have seen them heave it overboard with the shovels for a long time.

21,719. What have they thrown overboard?—The stuff they have taken out of the sea.

21,720. Have you observed whether that was spawn or not?—No.

The witness withdrew.

E. Pengelly.

EDWARD PENGELLY called and examined.

21,721. (*Professor Huxley.*) Are you a fisherman at Looe?—Yes.

21,722. Did you hear the evidence of the last witness?—Yes.

21,723. Do you agree with it generally?—Yes, I agree generally with what he proposed.

21,724. And you concur in the statements which he has made to us?—Yes. I think the statements he has made are very good statements.

21,725. Is there anything that you wish to add?—I do not see that there is anything I could say different from what he has stated already. I agree altogether in the remarks which he has made.

21,726. Do you ever experience any difficulty in getting bait at Looe?—I do not require any. I have not been in the habit of going out hooking now for some years past. Some of our men go hooking in the season, and they have to provide themselves with bait, but that is a line of fishing which I do not follow.

21,727. Have you ever heard any complaints on the part of the fishermen who do follow it as to a difficulty in obtaining bait?—No, I never heard any complaint.

21,728. Is there any dredging for oysters carried on about your place?—No, there is no oyster-dredging nearer than Falmouth.

21,729. Is there anything that occurs to you which you would like to add to the evidence of the last witness?—I do not think there is anything more that I need say. Perhaps I may be allowed to say that I have often been alongside the trawlers when they have been fishing, and I have noticed the way in which they fish.

21,730. What have you seen them do?—I have seen them take up the trawl, and after sorting out the good fish they have shaken the net out and thrown the small fish overboard.

21,731. Did you observe what there was in the trawl?—Yes; there were a good many small fish and a considerable quantity of spawn. It would be no service either to them or us to carry in such fish to the market. I have also been engaged in drifting for the last 30 or 40 years, and I have known cases occur frequently in which the trawlers have cut our nets away in the night time. I have lost a good deal of nets at different times in consequence of the trawlers fishing by night and trawling over them.

21,732. Do you carry lights on your drift-boats?—Yes.

21,733. Are the lights you carry like those described by the previous witness?—Yes, just the same.

21,734. You do not carry one light above the other as you are directed by the regulation laid down in the Act of Parliament?—No, we could not do that very conveniently.

21,735. Why could you not do it?—We are generally rolling about so much that we could hardly manage two lights.

21,736. Then you think that the regulation which requires you to hoist on one of your masts two lights, one three feet over the other, would be if enforced an inconvenient regulation?—Yes, I do most decidedly; for when we are engaged in the drift-boat fishing we could hardly keep two such lights at the masthead.

21,737. You say that the trawlers do injury to your nets in the night time?—Yes.

21,738. Do you think it quite impossible to identify the trawlers who do the damage?—All I know is that they do us a great deal of damage.

21,739. Cannot you get hold of them?—No, and yet they do us a great deal of injury.

21,740. Is it not to their own interest to keep out of your way?—There is ground further out where they could go and trawl, but they like to come in nearer to us, as they frequently get bait.

21,741. (*Mr. Lefevre.*) Do they sell you the bait?—No, they steal it from our nets.

21,742. They steal it?—Yes, and they know that we have no small boat with us, and that therefore we cannot get up to ascertain their name or number.

21,743. What have you lost in that way?—I have lost many pieces of my nets in consequence of their trawling at night.

21,744. Were they of any great value?—Yes, at times I have lost portions of net worth several pounds.

21,745. (*Professor Huxley.*) You have never been able to get the number of the boat which committed the injury?—No, we cannot get at them, and they know that very well. If there is any chance of our getting up close to them they will drop a piece of tarpauling over their number.

21,746. What distance from the shore are they trawling at the time of which you speak?—Perhaps they may be six or seven miles from the land; sometimes more and sometimes less. Sometimes a shoal of fish will come in to within half a mile of the shore, and at other times they will be six or seven miles out at sea.

21,747. What is the character of the shore off Looe; is it rocky or sandy?—It is rocky except in Whitesand Bay.

21,748. You have sandy ground in Whitesand Bay?—Yes, it is a clean sandy bay for a few miles.

21,749. Is there any seining carried on at Wrinkle?—No; there are no seines at Wrinkle. In point of fact seining has almost come to nothing along our shore.

21,750. (*Mr. Lefevre.*) Do you agree with the last witness that any regulation that would interfere with the pilchard drift-net fishing would be injurious?—Yes, I believe that any interference with the drift-nets would do a great deal of harm. The Cornish coast would be worth nothing to the fishermen if the drift-net fishing was interfered with. The fishermen have now got the nearest scale they can use for catching good fish, and they catch none that are not fit for the market.

21,751. How long have you been engaged in fishing?—I have now been drift-net fishing for the last 39 years.

21,752. Are you the owner of a boat?—Yes.

21,753. Have you more than one?—Yes.

21,754. How many?—I have three.

21,755. Do you find, on the whole, that you make less for your fishing now than you did in former years?—Sometimes the fish fetches the price it did 18 or 20 years ago, and then when we get very large catches the price becomes lowered again.

21,756. You do not find, however, that the value of your fishing has diminished very greatly of late years?—No, there is not much difference that I see.

The witness withdrew.

WILLIAM LAUGHRIN called and examined.

21,757. (*Professor Huxley.*) Are you a native of this place?—No, I am not a native, but I have been here some time.

21,758. How long have you known it?—For about 25 years.

21,759. You have heard what has been stated by Dr. Couch and the other witnesses?—Yes.

21,760. Do you agree generally with the opinions which they have expressed?—There are several things upon which I wish to make a remark. Perhaps I had better take the trawling first.

21,761. Then let us begin with the trawling. What have you to say in reference to that?—The fish off here have got scarce for many years past, and I put it down to the trawling.

21,762. Do you think that the operation of trawling destroys the spawn in the way in which it has been described?—I believe that the trawlers destroy the food of the fish. I consider the bottom of the sea as a sort of forest, full of crustacea of different sorts which supply food for the fish. There are two sorts of crustacea, one the stalk-eyed and the other the sessile-eyed, and they are to be found among the coralline sponges. The fish have been in the habit of coming in to the shore to feed upon these beds, which were almost like a forest of well-cultivated ground. The trawlers, however, have almost entirely destroyed these grounds, and as the fish can no longer find food when they come in they have ceased to frequent the shore. Perhaps I may be allowed to draw your attention for a moment to another matter. We have all along the coast what are known as marks. How is it called a mark? Why should it be called a mark? Because it is a series of rocks where the coralline sponges have been well cultivated, and as a consequence these crustacea abound among them.

21,763. What do you mean by "a mark"? Do you mean a fishing mark?—Yes, a fishing mark with plain ground probably about 30 fathoms from it. The grounds all round have now been cleaned, and there are no fish to be found upon them, but the trawlers cannot come near the marks.

21,764. You attribute the destruction of the grounds near the marks to the trawlers?—Yes, the trawlers have come in, and they have swept them quite clean. Our boats can now come to an anchor on those places, and they are frequently able to catch five or six cwt. a boat, but they would not be able to do that if the ground was not of such a nature as to prevent the trawlers from going close in.

21,765. Do you mean that that is a piece of ground which the trawlers cannot sweep?—Yes.

21,766. Where are there such places?—Just off to the westward of our land. To the south-west of this place there are different rocks where our boats go and where they can always find fish.

21,767. There are particular places where your fishermen can go and always catch fish?—Yes.

21,768. Where all around they cannot catch fish?—Yes; on these marks they always find fish, while on the plain ground within a short distance of it they may catch a straggling fish or so, as they are always ranging round for food, but nothing more; they may catch a fish or two, but nothing to pay them. They live on the crustacea, which supply food for the fish and are likewise the scavengers of the sea.

21,769. Before the trawlers commenced their operations off this coast, were you able to get fish in the intervals between these marks?—I believe so.

21,770. Do you know that as a fact within your own knowledge?—Yes; I have examined the coral lines brought in by our boat's men. Here is a representation of a nest of them; I have sent off some to scientific men.

21,771. A nest of what?—Of the sessile-eyed crustacea.

21,772. Is that Mr. Spence Bates' book?—Yes.

21,773. You are of opinion that the trawlers in sweeping up the corallines have swept away the food of the fish?—Yes, it destroys the food of the fish.

21,774. The fish have not been able to find food there since the trawlers came?—No; I have examined the stomachs of the fish, from the mackerel down to the herring; I have examined those of the cod, haddock, ling, and conger; I cannot find crustacea in the conger. I have here a list of the crustacea which have been found in the stomachs of different fish.

21,775. The cod takes what it can?—Yes, it will eat other fish, but it prefers crustacea to any other kind of food.

21,776. The cod-fish will eat a great number of herrings, will they not?—Yes.

21,777. They are found abundantly in the stomachs of the cod?—Yes.

21,778. You think that the trawlers by destroying the ground where the crustacea flock destroy the food and prevent the fish from going there?—Yes, they scrape the bottom of the sea day after day. Sometimes there will be as many as 40 or 50 sail of trawlers sweeping the ground at once, and they scrape it as clean as that table; they allow no time for it to become replenished.

21,779. (*Mr. Lefevre.*) Do you not think that the first persons to observe the decrease in the fish would be the trawlers themselves?—They would not say anything about it.

21,780. (*Professor Huxley.*) Why do they go over the same ground week after week if there are no fish to catch?—They get the straggling fish.

21,781. But we have had it in evidence that a whole fleet of trawlers has been trawling over the same ground for weeks, and they have caught the same quantity of fish at the end of that time as they did at the beginning?—No doubt the fish are constantly ranging all over the ground for food.

21,782. (*Mr. Lefevre.*) But if they did not find food they would cease to frequent the place?—No; they keep ranging about. I can give you an instance that occurred within my own knowledge. I had an idea that it would be better to use gut instead of twine, but I lost my hook altogether, and yet a man who lives here caught a fish with my hook in it; when he got the fish there was my gut, he knew it was mine; that will show you how the fish range about. They are constantly ranging about after food.

21,783. (*Professor Huxley.*) If, as you suppose, the operations of the trawlers have so completely destroyed the food of the fish that they do not now come here, it would surely be impossible for the trawlers to go on for six or eight weeks catching fish on one and the same ground. Whatever may be the motives of the fish they must go there or the trawlers would not be able to catch them?—Certainly they do; but if you kept the trawlers from coming within the bays you would have some reserve where fish would always be plentiful.

21,784. (*Mr. Lefevre.*) How do you account for the increase in the number of the trawlers if the fish have ceased to visit the coast?—I believe that trawling has been found to be a very profitable occupation.

21,785. That must have arisen from the quantity of fish they are able to catch?—They catch that description of fish which always brings the best price, such as turbot, brill, and soles.

21,786. (*Professor Huxley.*) Do any of your fishermen here catch turbot with the hook and line?—Sometimes they will bring in seven or eight turbots.

21,787. I believe that you have been a good deal accustomed to hooking?—Yes.

21,788. Do you ever catch soles with the hook?—Never.

21,789. Then it would be altogether impossible to supply the market with soles by hooking?—Yes, it could not be done by the hook and line.

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21,790. Do not the soles form a large proportion of the fish the trawlers catch ?—Yes, and plaice.

21,791. Have you ever been on board a trawler ?—Yes.

21,792. Have you seen the quantity of fish they bring up ?—I was never on board a trawler when the trawl was taken up.

21,793. You know that they do catch large quantities of fish ?—Yes.

21,794. Do you think it would be possible to send the same quantity of fish into the market if trawling were put a stop to ?—Perhaps not.

21,795. And they catch you say the best description of fish ?—Yes.

21,796. Do they not supply the market with the greatest quantity of good eatable fish ?—No ; I think the hookers beat them in good eatable fish.

21,797. Do they exceed them in quantity ?—In the quantity of good eatable fish I am sure they would. They catch much better fish—much better than are caught by the trawl.

21,798. But I am speaking of the quantity required to supply the London market ; you are aware that that is exceedingly great ?—Yes ; some people follow the trawling, and some people take to fishing with the hook and line. The quantity of fish caught for the supply of the London market would depend in a great measure, if there was no trawling, upon the number of hookers that would go to sea ; there are not enough hookers now to compete with the trawlers. Perhaps there may be 60 out of Plymouth, and I believe that some of them have failed in that business ; they are hurting themselves to some extent.

21,799. Then it is clearly your opinion that trawling very much injures the hook-and-line fishing ?—Yes, I believe it does.

21,800. Do you think that the injury to the hook-and-line fishing is so great that trawling ought to be put a stop to ?—No.

21,801. Then what would you do with it ?—I think the trawlers ought to be kept a certain distance from the land ; they ought not to be allowed to come into the bays.

21,801*a*. Why should they not be allowed to come into the bays ? Do you think that they destroy the young fish there ?—Yes ; very small fish come into the bays. I have myself seen turbot caught in the harbour no larger than a half-crown piece or a shilling.

21,802. How close do the trawlers come into the bays here ?—They get into the bays in the night time, and get out again in the morning.

21,803. Do they get so much fish in the bays that it is a matter of interest to them to go there ?—Yes. For instance, they go into Whitesand Bay, on the other side of Looe, and I believe that they catch a great quantity of small fish there.

21,804. Do you think that they would do any harm if they were kept well outside ?—No, I do not think they would do much damage in that case.

21,805. What distance would you keep them outside ?—They ought to be kept from every headland.

21,806. How far would you keep them off the headlands ?—I would require them to keep out two or three miles beyond every headland. I think that that would give fair play to all.

21,807. You heard the passages I read just now from the articles of the Convention ?—Yes.

21,808. You are in the Coastguard, I believe ?—Yes.

21,809. Did you ever know an instance in which any of these regulations were enforced ?—I never knew of their being enforced with regard to the trawlers.

21,810. Have they ever been enforced in any other respect ?—Yes, I think they have.

21,811. Will you state in what way they were enforced ?—When we had a cruiser here some time ago I remember that one of the drift boats was seized and brought into Polperro. I believe that the nets were seized and put into the watch-house.

21,812. What were they seized for ?—I believe it was for being too close in-shore.

21,813. Were the persons who had committed the offence brought before the magistrates ?—Yes, I believe they were.

21,814. Were they fined ?—I forget whether they were fined or not, but I know that their nets were taken in the first instance.

21,815. How long ago is that ?—I think it must be about 20 years ago now.

21,816. Is it your impression that there was a conviction ?—No, I do not think there was a conviction, and I believe they got their nets again. It will be more than 20 years ago now, and I do not distinctly remember the whole of the circumstances.

21,817. You do not recollect whether or not a conviction took place ?—No, I do not, but I rather think that there was not a conviction.

21,818. Is there any other point on which you wish to say anything ?—No, I think not.

21,819. Do you agree generally with the rest of the evidence which has been given ?—Yes.

21,820. Do you think that any interference with the drift-net fishing by any sort of regulation would be likely to be injurious ?—I think if they were prevented from going where they go now to fish it would be very injurious to them.

21,821. Then you think it would be better not to meddle with them ?—Yes. Our coast here is a very bold coast, and altogether unsuited in most places for pilchard seining. They could not shoot their seines round our rocks.

21,822. They cannot go where the drift-net boats can ?—Just so. If there are any fish in-shore the drift-boats can go close up to the rocks, and shoot the nets when the seiners would find it impossible to shoot their seines.

21,823. When you had seine-nets where were they shot ?—We used them down the bays about here, about four or five miles off. Ours is too bold a coast generally for seining. A seine could not be shot, although the drift men can shoot their nets easily. If there were 10 shoals of fish in here a seine could not shoot, and the fish would all escape. No seine could take them.

21,824. But the drift-nets could ?—Yes.

21,825. Do you agree with what has already been stated as to the value to the poor of Cornwall of the pilchard fishery ?—Yes, the pilchard is a most valuable fish to the poorer classes here. I believe that the rich also are very fond of them. We often send them away to different parts. I have even known them sent to Australia.

21,826. (*Mr. Lefevre.*) Is there any export of pilchards from this place ?—No ; we do not cure any quantity for exportation.

21,827. Do the boats take any great proportion of the pilchards they catch to Plymouth ?—Yes, when they have a large shoal here they send them to Plymouth. They get a better market for them there. The boats are sometimes taken into Fowey, a few miles from here, by Mr. Fox's cutter.

The witness withdrew.

R. Hicks.

ROBERT HICKS called and examined.

21,828. (*Professor Huxley.*) Are you a fisherman here ?—Yes.

21,829. Have you been for many years a fisherman here ?—Yes.

21,830. Have you practised fishing with drift-nets and with the hook-and-line as well ?—Yes, and seining as well.

21,831. When you practised seining whereabouts did you shoot your seine ?—Up at Shalborough and Bigbury Bay. I have used the pilchard seine there.

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21,832. In speaking of seining you mean pilchard as well as mackerel seining?—The pilchard seine I mean is what they use in-shore in the bays. The boats do not go out to shoot them.

21,833. Why have you left off pilchard seining, and taken to drifting for pilchards?—My parents and my grandfather before them had a part share in a seine, and many a time when they have used it they have caught small fish which they were obliged to cart away for manure. The mesh of the seine is very small indeed, and it will catch anything. It will even catch a shrimp. We drew it ashore, and the fish in it was so small that people would not buy it.

21,834. You found it unprofitable then to continue seining?—Yes; the fish were so very small that we could not get enough for it to pay the wages of the men employed in catching it. It was only used for about six or ten weeks, and then the crew were all paid off, with the exception of my father and myself. My father acted as master of the seine, and we were perhaps occupied for 40 days longer in the months of October and November. That is what we call the after part of the first part of the seining. I have been out catching great quantities of fish at times, and bringing it to the shore, but for all that it was of very little value as it was so small. We found that seining would not do, and the consequence was that the seine went down.

21,835. You found that it did not pay?—Yes.

21,836. You could not catch enough fish?—Not enough good fish to make it pay.

21,837. Even when you used it late in the season?—No.

21,838. Then in your case it was not merely that the time for the coming of the fish had changed, but when they did come you could not catch a sufficient quantity to make it a profitable business?—Yes.

21,839. Have you anything to add to the evidence of the witnesses who have already been heard?—No, I think not, unless it is with regard to trawling.

21,840. What have you to say in regard to trawling?—I think that trawling by night injures us a great deal sometimes.

21,841. Have you yourself ever been injured in consequence of the trawlers trawling by night?—Upon one occasion I lost a great deal of net. It was cut away, and it was picked up by some other vessels.

21,842. Where did that occur?—It was off here. The boat was a Mounts Bay boat.

21,843. Did you ascertain who it was that had done the damage?—No, I could not get a wind strong enough to enable me to go after him and find out his number. I believe that he hove his foresail over the number so that we should not detect him. We could not see the letters on the stern nor his number. We were obliged to cut away the nets. There was a rope attached to the bottom of the net to save it, but we had to cut six nets away.

21,844. The boat was a Mounts Bay boat?—Yes, but it put that night into Plymouth. I was very much afraid of the consequences when it occurred. I thought I should be ruined, and indeed I should have been very much injured if I had lost my nets. The next day, however, I fortunately got them again. They had been picked up.

21,845. Have you sustained any injury on any other occasion?—Yes, but not to the same extent. Several times the trawlers have trawled across my nets and cut them away.

21,846. Do you think there is no remedy short of putting down trawling by night?—I do not know.

21,847. Is it absolutely impossible to provide any means by which you might be enabled to identify the persons who commit the damage?—All I know is that they interfere very much with our pilchard-fishing and also with our mackerel-fishing.

21,848. Do they injure you in any other way than damaging your nets?—Yes.

21,849. In what way do they interfere with you?—We cannot shoot our nets in less time than two and a half hours, and sometimes it will take us five or six. Sometimes directly we have got our nets out a number of trawlers will shoot their trawls and come down right among a fleet of boats.

21,850. You know that that is illegal?—Yes, but they do it constantly, and when we find they are among us, every one of us has to haul in his nets as fast as he can in order to get clear of the trawlers. We think that a very great hardship. We are compelled, if nothing worse happens to us, to lose our fishing.

21,851. Do you think that no kind of regulation would be sufficient to protect you short of putting down trawling by night altogether?—I think that trawling in the night time should be put a stop to. I do not think that trawling altogether should be prevented, but something should be done to prevent them from interfering with us when we have our drift nets out. They pay no attention to us at all, and in the night time they do not care where they trawl. We have sometimes actually seen them go over the nets, and if we were near enough to hail them they would swear that they had never seen us, and that they had not touched the nets at all. Yet when we have hauled the nets in we have found them all torn, and the fish that were in them gone.

21,852. You have heard that the Convention says that trawl-boats shall always keep at a distance of at least three miles from all boats fishing for herring or mackerel with drift-nets?—Three miles from any boat! I am afraid that they call it a long three miles or a short three miles as they like to have it. Sometimes some of them will be three miles off, and there will be others that will hardly be three fathoms off.

21,853. Is there anything else connected with your interests as a fisherman upon which you wish to make a remark?—I have nothing to say further than what other people have said. As to the lights we carry when we are out drifting, we have a large lantern such as Mr. Riley mentioned. It is fixed upon a stand. We keep it up when we are shooting. If we have calm weather we may keep it below, but generally it is up while we get our nets up.

21,854. How high is it up?—I think about six feet, but as soon as we see any sail or steamboat, or anything of that sort coming, we light up a large flare-up with a big bunch to it. That gives a very good light. I have hauled it up, and have been able to see a vessel with all her crew for a considerable distance, perhaps a quarter of a mile. The flame will light up all round for that extent. It gives more light than four lights in lanterns.

21,855. Do you think it is impossible to comply with the Convention?—I don't know.

21,856. The Convention says that the masters of drift-net boats shall hoist on one of their masts two lights, one over the other, three feet apart?—Yes.

21,857. You do not comply with that?—No.

21,858. Do you think it is impossible to have two lights hoisted one above the other?—I do not see how we could have any but the one we generally use, unless it is the flare-up.

Captain BRINE recalled.

Capt. Brine.

21,859. Are you of opinion, Captain Brine, that the two lights required by the Act of Parliament to be hoisted could be kept up one over the other?—Yes, they might be kept up easily.

21,860. I confess that I do not see any difficulty myself. It does not strike you that there would be any difficulty?—Certainly not; but in the night time, if they have them, they are scarcely ever known to use them. I believe they refrain from doing so solely for the sake of economy. They would be put to a greater expense; but it is my opinion that if they showed the lights which they are bound to show, if

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they comply with the Act of Parliament, there would not be one-half of the accidents which occur now.

21,861. (*Mr. Lefevre.*) Do you think that in consequence of their not complying with the Act there is nothing to warn the trawlers where these drift-boats are?—No doubt there are instances in which the trawlers might get out the way if they wished to do so, but I have known other cases in which it would be very difficult to see the drift-boats. In fact the trawlers do not see the lights until they are almost down upon them, and I believe the neglect is chiefly committed on the part of the drift men for the sake of economy. Of what real use can a little lamp and a dirty bit of candle be? and they too for half of their time are at the bottom of the boat.

21,862. Then I presume you are not surprised that they do occasionally lose their nets?—Not at all. The only wonder to me is that they are not frequently run down.

R. Hicks.

ROBERT HICKS (examination continued).

21,863. (*Professor Huxley.*) Do you keep your mast up when you are fishing?—No.

21,864. That makes the boat ride easy?—Yes.

21,865. Do you hoist the light you use upon a stand-up?—Yes, we have a large stand made on purpose, and all the east country men do the same. The lantern goes into it, and is fixed up on a large rod of iron.

21,866. How high will it be up above the level of the boat?—About eight feet.

21,867. Why could you not have a second light three feet below the first on the same stand-up?—I don't know why we could not have one, but it would be necessary that we should have a different kind of thing made on which to place the lights. I don't think that a second light in that position would show as much light to be seen as far off as the flare-up we now use.

(*Captain Brine.*) Perhaps you will allow me to remark that the flare-up is never used by fishermen except when a vessel is almost right upon them.

21,868. (*Professor Huxley to witness.*) The law is quite explicit on the point that there should be two lights. What I wish to get at is whether there is any practical difficulty in the way of carrying these two lights. I can't see why, if you are required to have a stand-up at all, you should not have one that would carry a second light three feet above the first?—We could not do that now.

21,869. I understand you to say that you have a light eight feet up?—Yes.

21,870. Then why is it not possible to put one three feet below that, as the law requires?—I don't know; there is no room on the stand-up to put a second light.

21,871. There is no room to hang a lantern three feet under the first?—No, the stand-up we have now would not enable us to do that. The light would not be secure.

21,872. Do you mean to say that the lantern is not more than three feet above the level of the gunwale?—Yes, it may be four or five feet above that.

21,873. I suppose it would not do to keep your mast standing up, it would make your boat work uneasily?—Yes, we should not be enabled to get in our nets, we should have to carry more hands, and that would not pay.

21,874. When you have struck your sail, does the boat work a good deal?—Yes.

21,875. Then you don't think you could follow out this regulation completely?—No, I don't think we could.

21,876. Because you see that this article of the Convention says that you are to hoist two lights on the mast, one three feet over the other?—Yes.

21,877. You think you could not do that?—No.

21,878. You can't do that because you don't keep the mast up?—No.

21,879. Would there be any difficulty in having an upright on which you could carry two lanterns, one three feet higher than the other?—I don't know where we should fix it. Ours is a very small boat, you must remember. It is not like a decked vessel.

21,880. (*Mr. Lefevre.*) Are you part owner of a pilchard seine-net?—My grandfather was at Bigbury Bay.

21,881. Did you yourself work for wages?—Yes.

21,882. What wages did you get?—From 8*s.* to 10*s.* a week; the master seiner would get a guinea.

21,883. How many men would there be employed in managing one seine?—Eighteen. Occasionally we may have an extra hand or two; probably we should employ two or three additional hands if the fish were plentiful.

21,884. Can you tell how many nets are used at this place now?—There are no pilchard seine-nets here now.

21,885. How many were there here formerly?—I believe that at one time there were three seine-nets.

21,886. (*Professor Huxley.*) How are your boats rigged?—They are lugger rigged.

21,887. That is you have two masts?—Yes.

21,888. A mizen?—Yes.

21,889. Do you unship your mizen at night?—No, we keep the mizen up.

21,890. Then if you can keep up that why not hoist your lights on the mizen?—It would be impossible for the lights to be seen if we did. The sail is continually flopping about the deck, and the boat is generally head to wind.

21,891. But if the boat was head to wind would it not be possible to see a second light round three quarters of the compass?—I don't see how you could fasten it up; it would be almost certain to be knocked down by the sail. I broke three glasses in my lantern the week before last. We are continually breaking lanterns, and of course if we had it fixed up higher there would be more waggling about.

(*Capt. Brine.*) They could hang up the lantern easily enough if they liked. There is no excuse for them not having a second light. All that they would have to do would be to run out from the mizen mast an iron stem with a little block. They could fix the lantern on that, and then it would hang up without any trouble.

(*Witness.*) I have seen the boat roll so that I have been obliged to hold on by the gunwale.

21,892. (*Professor Huxley.*) Have you anything else to add to what you have already stated?—No.

21,893. (*Mr. Lefevre.*) What is the furthest distance that you go out in your boats for pilchards?—Sometimes we go out for 15 or 20 miles. We have gone as far as 40 miles.

21,894. As the season goes on do you go further off the shore?—Yes.

21,895. Do you catch a large portion of your fish 20 miles off the coast?—Sometimes I have been catching 10,000 or 15,000 in a night four or five leagues off the shore.

The witness withdrew.

T. Holten.

THOMAS HOLTEN called and examined.

21,896. (*Professor Huxley.*) You have heard the evidence given by the previous witnesses?—Yes.

21,897. Is there anything you wish to add to their statements, or anything you desire to correct?—No; I can only confirm the accounts which have previously been given, especially with reference to the lights. I do think it would be a most inconvenient matter to require us to carry two lights in our small boats where we have so much motion.

21,898. You know that one light is to be above the other; that is what the law requires, and that would take no more room than having one light?—It is not

on account of the want of room that I object so much as on the want of security for the light itself.

21,899. But surely the second light would require less securing than the other one?—We cannot carry the stand up sufficiently high to enable us to have another light placed under it.

21,900. (*Mr. Lefevre.*) Has expense anything to do with the objection?—Of course a little expense would be incurred, but that would be a trifling consideration. My own opinion is that vessels out at sea that could not see one light would not be able to see two. Our lights I may tell you are very beautiful lights; they are large glass lanterns.

21,901. I presume that the intention of the legislature in saying that you shall have two lights was to enable persons approaching you in other vessels to know what the nature of the fishing you were carrying on was?—Perhaps so.

21,902. (*Professor Huxley.*) A trawler would have no hesitation in coming within hail of an ordinary vessel lying at anchor; but the object of the regulation laid down by Act of Parliament is, as Mr. Lefevre says, to enable other vessels to detect the drift-net boat, and thus ascertain the fact that drift-net fishing is being carried on?—Yes.

21,903. Is it for the interest of other vessels to get where you are sometimes?—No vessels ever bring up at anchor where we are.

(*Capt. Brine.*) Will you allow me to say that as by Act of Parliament these men are required to have two lights, if a trawler runs into a vessel he says he is not responsible so long as they have only one light up. His answer to any claim for damage committed by him is, "How was I to know that it was a drift "boat when it did not carry its proper lights?"

21,904. (*Mr. Lefevre to Capt. Brine.*) You think they have no right to complain of the trawlers if they don't take the precautions which the Act itself suggests?—Of course not.

(*Capt. Riley.*) What the fishermen mean to say is that they are placed in a very unpleasant position by the regulation contained in that Act. I believe it is their wish to convey to you that if the Board of Trade established any particular description of one light, the whole of the drift boats would feel themselves bound to carry it out.

21,905. (*Professor Huxley to Capt. Riley.*) The law does make a distinction already, but yet the fishermen don't obey it?—I must confess for my own part I don't see how they can obey that Act so long as they are fishing in this description of boat.

Examination resumed.

21,906. (*Mr. Lefevre.*) Can you suggest any light that would distinguish the drift-net boats from other boats?—I don't know that I can. The light we carry at present is a bright light.

21,907. (*Professor Huxley.*) Is there any other point upon which you wish to make any comment?—I only wish to confirm the evidence that has been already given, that the trawlers materially interfere with our mackerel fishery, which is a night fishery, and also with the pilchard fishery.

21,908. They interfere with both in the same way?—Yes.

21,909. By getting foul of your nets and catching them?—Yes.

21,910. (*Mr. Lefevre.*) Have you ever lost nets in that way?—Yes, I have lost part of my nets on several occasions.

21,911. Have you ever lost any of any great value?—Perhaps on the whole I may have lost 4*l.* or 5*l.* worth.

21,912. Within how many years have you sustained that loss?—It is now little more than 12 months since I had a really good net ruined.

21,913. How did that occur?—I was out fishing in a dark night when a trawler came down upon us. We had up our lights and he had none. He got foul of our nets, and he must have been there some time before we found him out. As soon as we did see him we began to haul our nets, and to get clear of him the best way we could, but we could not do so without doing considerable damage to our gear.

21,914. Was that a mackerel net?—No, it was a pilchard net. On one occasion a trawler came across us several years ago, and completely ruined five or six of our nets.

21,915. What is the length of your mackerel nets?—They will reach about a mile and ahalf in length.

21,916. Are they longer than the pilchard nets?—Yes, they are about three times the length of the pilchard nets, perhaps even more than that. They are a shallower and lighter description of net than the pilchard net, and hence they are enabled to reach further.

The witness withdrew.

JOHN PUCKEY called and examined.

J. Puckey.

21,917. (*Professor Huxley.*) You are engaged in lobster-fishing, I believe?—Yes.

21,918. And in the crab-fishing as well?—Yes.

21,919. You are engaged more in that description of fishing than in anything else?—Yes.

21,920. How long have you been engaged in it?—For ten years and more.

21,921. Have you noticed any diminution in the supply of crabs and lobsters?—I think that the trawlers injure our fishing a good deal.

21,922. What I want to know in the first place is whether there has been any diminution in the amount of fish you can catch?—I think the trawlers destroy the spawn.

21,923. We want to know in the first place whether you can catch less fish now than you did in former years?—Yes, we catch a good deal less fish.

21,924. For how many years has that been going on?—We have been catching less for the last 15 or 16 years.

21,925. Have you been catching less and less year by year?—Yes.

21,926. Has the number of crab catchers increased very largely?—Not here, but I believe in other places it has.

21,927. How is it with regard to the lobster catchers; are more persons engaged in that way than when you began?—I don't know that there is here.

21,928. Do you think that the fishing is carried on more throughout the year than it was in former years?—Yes; some go almost throughout the whole year in other parts, but not here.

21,929. Do they catch crabs of all sizes?—Yes, but none of them are big. There are none big now, or at any rate only a very few.

21,930. Do they catch lobsters in the same way, namely all they can get, great or small?—Yes.

21,931. Then do you not think that their fishing may have had something to do with that diminution in the supply?—I do not know that.

21,932. Then what do you think is the cause of the falling off?—I think it is owing in a great measure to the trawling off our place. The trawlers destroy the breeding places to which the crabs and lobsters resort. They breed generally on the sandy ground, but trawlers come in trawling over that and destroy the spawn.

21,933. I think that you find lobsters mainly on the rocky ground?—Yes, I think we do.

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21,934. Then what makes you believe that they go on the sandy ground to spawn?—I know they do.

21,935. Do trawlers catch lobsters in their trawls?—Yes.

21,936. Have you seen them catch lobsters?—Yes, they catch crawfish and all kinds of shell fish.

21,937. Have you seen lobsters caught in the trawls?—I have never actually seen the trawl heaved up.

21,938. How are lobsters sent to the market; are they sent from here to the railway?—Yes.

21,939. All of them?—Mostly all of them.

21,940. (*Professor Huxley.*) It is impossible that they should catch lobster or crab spawn unless they catch the she fish?—They do catch the she fish; we only get one or two in a season; they catch she crabs with spawn in them; they catch hundreds I believe.

21,941. Do you not catch lobsters when they are berry-hens to a great extent?—Yes.

21,942. Then are you not doing the same thing as the trawlers?—Yes, we destroy them no doubt the same as they do.

21,943. (*Mr. Lefevre.*) Has the whole quantity of lobsters sent to market from this place fallen off of late years?—Yes.

21,944. (*Professor Huxley.*) Are you engaged in any other kinds of fishing?—Yes.

21,945. Do you agree generally with what the other witnesses have stated?—Yes.

The witness withdrew.

C. Jolliffe.

CHARLES JOLLIFFE called and examined.

21,946. (*Professor Huxley.*) You are a fisherman here, I believe?—Yes.

21,947. Have you long been engaged in the fishing business?—I have not been fishing very much; I generally buy the fish.

21,948. Have you noticed any difference in the prices within the last 20 years?—Yes, there has been a great deal of difference.

21,949. Do you pay more or less for the fish now?—I don't pay half as much.

21,950. (*Mr. Lefevre.*) Are you speaking now with regard to pilchards?—Not of them in particular, but of all sorts of fish.

21,951. (*Professor Huxley.*) Do you mean that you don't pay as much per pound or per bushel?—What I mean is that I don't buy half as much in proportion as I used to do.

21,952. But what is the price; I wish to know if that is more or less now than in former years?—With regard to the price I think it is somewhat higher.

21,953. Owing to scarcity?—Yes.

21,954. You confirm what has been stated already, that the fish here have been growing scarcer?—Yes.

21,955. To what do you attribute that?—I think it is owing to the trawlers. At Plymouth I have sometimes seen as many as 200 turbots on one stall, which had been caught in Whitesand Bay, and for the largest of them the woman who had charge of the stall only asked 6*d*. I leave you to judge from that what the size of them was.

21,956. (*Mr. Lefevre.*) I believe that the hook-and-line men never catch many turbot?—They will sometimes catch one or two. With regard to the herrings, I don't think since Michaelmas up to the present time there has been three cwt. caught, and I have seen not long after Christmas more than that quantity caught by one boat in the course of a morning's fishing. The reason of that is that our ground has been dragged away by the trawlers. There is nothing to be found on it to keep the fish. Now I believe that in all the bays, wherever there is a sandy bottom, all sorts of fish come to it to spawn. My opinion is that the fish cast their spawn in the sand.

21,957. (*Professor Huxley.*) Do you think that keeping the trawlers out of the bays would be sufficient to prevent that mischief?—Yes.

21,958. Then you don't wish to put a stop to trawling altogether?—No; but I should like to see a stop put to this catching of small fish. I can assure you they frequently catch tens of thousands of little doreys no bigger than my thumb. I have known them to catch 9 or 10 upon a hook-and-line, capital fish for the table; but it is very rare to see that done now.

21,959. Are you aware that the trawlers catch a larger quantity of fish now than they did in former years?—Yes; if any person would go to Plymouth market he will see thousands of fish caught in a week not fit for food at all. In point of fact I don't know what use can be made of them; they have no size in them.

21,960. Are you aware that the trawlers have caught a large number of good doreys lately?—Yes; but I think they would get more if it were not for the course of fishing they are pursuing. I believe they acknowledge themselves that they are doing themselves injury by trawling in the bays.

21,961. Are you aware that they themselves don't complain of any falling off in the number of fish?—I believe they had a very good season this year, but in other years they have made bad seasons.

21,962. Has that not been rather on account of the weather than on account of any falling off in the fish?—There is plenty of ground for them to trawl upon without going into the bays and injuring the fishing of other people.

21,963. (*Mr. Lefevre.*) Then if a regulation were established that trawlers should keep out of the bays, would that satisfy you?—Yes, they ought to be kept out a certain distance; and as to trawling in the bays, I think they do great injury in that way. They go where our boats are riding, and using hooks and lines, and they tear them all away.

21,964. But if you ascertained their numbers, you are aware that they are liable to be prosecuted for doing that?—Yes, but they do it notwithstanding. There is also great difficulty in finding out who it is that does it. Three years ago they did considerable damage to a boat belonging to me off Deadman Point. That is like robbing a man's house; but they don't care what they do when they are trawling by night.

21,965. You are aware that if the number of the boat had been taken they could have been summoned?—Yes; but I don't suppose any of our boatmen can either read or write.

21,966. Have you been engaged in purchasing fish in this place?—Yes, for the last 40 years; that has been my principal means of living here for the last 40 years.

21,967. Do the fishermen here now take their fish into Plymouth more than they did formerly?—They do in some seasons, but we have a very good demand for fish here. We have some men who come from a distance of 30 or 35 miles for our fish.

21,968. Purchasers?—Yes, they buy of us all the year round.

21,969. But nevertheless the fishermen take their fish more to Plymouth than they did formerly?—Yes, for about two months in the year.

21,970. Have you observed the same falling off in the quantity of the pilchards as the other witnesses?—No; last year there were pilchards enough on our coast for all the world. That has been the case for the last three or four years.

21,971. Then is it chiefly with regard to hooked fish that you complain of a falling off?—When the pilchards strike in they strike in in great abundance.

21,972. Do you confirm what the previous witnesses have said as to the consumption of pilchards?—Yes. Last year Mr. Fox's seines caught pilchards in Mevagissey, but he would not let his men sell one to the poor in our country. All of them were salted and exported. You will see, therefore, that if the drivers don't catch fish to supply a quantity the poor people hereabout would starve.

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21,973. But you send off a great quantity of fish yourselves by the railroad?—Yes.

21,974. How long has the railroad been here?—Three years last October.

21,975. You send them to Liskeard?—Yes.

21,976. That is the station to which you send your fish?—Yes; there is one thing more about trawling. Some years ago a man here named Barrett, who has now been dead for several years, used to have a little net. What I am going to state will show that the trawling does injury. Perhaps he would catch as many as 80 surmullets in the course of the day. Now you will shoot 600 fathoms of net, and you will not catch 30 in a day and night. I shot 600 fathoms last year, and I believe I never exceeded 26. I have seen thousands of these surmullets at Plymouth not longer than my finger, and not worth a farthing. All these were caught by trawlers. They would have been worth 1*s.* apiece if they had been caught properly in the right season.

The witness withdrew.

JONATHAN COUCH recalled and examined.

J. Couch.

21,977. (*Professor Huxley.*) You wish to add something to your previous evidence?—Yes, I think I can account partly for the falling off in the crabs. I don't impute that falling off to the trawlers. I am not alluding to the small crabs which the fish eat, but to the common edible crab. I have noticed that in former years what is called the bun crab, which means the female crab, was sometimes caught by our old fishermen. They used to twist off the two best claws, and throw the crab back again into the sea alive. The consequence was that they were preserved, but now they sell the whole they catch. In regard to the lobsters, there are one or two things I should like to mention. For a number of years I have been engaged in making observations, and I have wished to obtain a young small lobster. I have offered any price for one, and yet I could never get one. I never saw one less than my little finger. I have offered a large price, and tried to make it the interest of the men who are engaged in catching them continually to obtain one. I have taken them when they have been breeding and have had young, when they have been emerging from the egg, but I never got one less than my finger, so that there is no destruction in any kind of way in that respect. I never found them less than that in the stomachs of any kind of fish. What is the cause of that I am not sufficiently instructed, and am therefore unable to say. I have a copy of the Act of Parliament before it passed.

21,978. What Act is that you refer to?—The Act that was subsequently passed to carry out the provisions of the Convention. I have a copy of it just before it passed. Sir Antony Perrier sent me a copy, so that I might make suggestions upon it.

21,979. How long is that ago?—When the Convention was entered into with France. It was laid down in the Act that lobsters should not be caught after the 1st of July. Now there is no earthly reason that I know why they should not be caught. There is not a single month in the year in which they don't breed.

21,980. There is nothing about it in the Act of Parliament as it passed?—Then that clause must have been omitted. The next remark I wish to make is this. Perhaps the Commissioners will not be aware of the fact that our men have mapped out the bottom of the sea as regularly as you have the land. They have certain places which they call their marks, and if they are outside of the land they know these marks by the bearing of the land. I have a copy of the whole of them, and it is those marks that are principally concerned in the operations of the trawlers. When they go off as they do sometimes out of sight of land for congers, they will catch the congers on the plain ground. These congers, by all I can ascertain, are accustomed to burrow into the bottom, and of course if the bottom is trawled away the congers must decrease. Close to our land there are a number of congers of a black colour caught among the rocks, but the larger ones always go away from the rocks to the plain ground; perhaps 10 leagues from the land.

21,981. (*Mr. Lefevre.*) Have you any reason to believe that the trawlers catch lobsters outside?—They can catch small ones; they breed undoubtedly within a quarter of a mile of the land. The small ones would have the same appetites as the large ones, and go into the same crab-pots, and yet as I have said I never saw one smaller than my finger.

21,982. (*Professor Huxley.*) Lobsters eat carrion, do they not?—Yes.

21,983. Is there anything else that occurs to you, Dr. Couch?—No, there is nothing more.

The witness withdrew, and the inquiry was adjourned until Tuesday the 29th March, at Mevagissey.

Mevagissey, Cornwall, Tuesday, 29th March 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

JOHN SAMPSON JAGO called and examined.

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21,984. (*Professor Huxley.*) I believe, Mr. Jago, that you have known Mevagissey for many years?—Yes, I was born in Mevagissey.

21,985. How many years have you been acquainted with the fisheries here?—Ever since the year 1816; in point of fact ever since I returned from sea.

21,986. Are you able to inform us what the population of Mevagissey is?—It is about 1,900 and odd at the present time. I cannot say what the exact number is, but I know that it has gone back from 2,200 down to 1,900.

21,987. Then am I to understand that the population is diminishing, and has been diminishing ever since you have known the place?—I think during the first few years that I knew it it increased. The fisheries were very productive from 1816 up to 1818, and the population increased then.

21,988. Out of that population are the great majority of persons engaged in fishing?—Yes.

21,989. Is there any other branch of industry here of any importance?—No, none of any importance.

21,990. How many boats are there employed in the fishing?—I cannot say exactly; I believe 40 or 50 drift boats, and 11 or 12 seines went out this year. I was not down this year at the fisheries, but I believe that 11 or 12 went out. Some of the men here will be able to correct that if it is incorrect.

21,991. Has the number of boats increased or diminished?—The seines have materially diminished. In the year 1818 we had 44 seines. I do not believe there are more now than 14 or 15 belonging to this town.

21,992. Has any other mode of fishing increased as seining has fallen off?—The drift-boats have increased,—those boats which are engaged in driving.

21,993. Then taking the seine boats and the drift-boats together, has the total number decreased or increased?—If we put three boats to a seine there

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would have been 132 boats in 1818. I do not know exactly how many seines there are in the town now, but I believe there are about 14.

(*A fisherman.*) 11 is the number.

(*Witness.*) In taking three boats to each seine that would give 33 boats, but in seining there are about 50 drift-boats I believe; I cannot say exactly the number, but there are between 40 and 50.

21,994. Probably the number of persons engaged in fishing is about the same, they have only changed their mode of fishing?—I think not; because when we had 44 seines at sea we sent nearly 800 men and boys in the water in the evening. Then there would be 16 men and two boys to each seine; therefore you would have 44 times 18, which would make 792. Now we have only 11 seines here, which give employment to about 198 persons. Perhaps there are more seines in the town. My own opinion is that there are, but only 11 went to sea last year.

21,995. Can you account for the falling off in the seine-fishing?—Yes, I account for it by the absence of fish. They fall off every now and then. Sometimes they will fail for several years successively. They have frequently failed for six or eight years together. I have made a memorandum which will give you an account of the fishing for many years. It refers to the state of the fishing very many years ago. I wished to inform myself what the average catch of a seine was for a series of years, and I have prepared this statement purposely. If you will examine it you will understand what I mean when I say that for six or eight years successively there were no fish, and that they then returned again in large quantities. I have taken three independent seines and calculated the quantity of fish they have taken. Now in early days each seine averaged 375 hogsheads. The take varies very considerably; in one season a seine took at one catch as much as 1,400 hogsheads. During the next 10 years the average only came to 221 hogsheads; in the next 10 years there was a great falling off; it fell from 221 hogsheads down to between 80 and 90, that was between 1780 and 1790, and this year was generally considered a failure. In Mevagissey there was in consequence very great distress in the year 1790, and there was a severe fever which arose from poverty, distress, and one thing and another. During the 10 years beginning in 1780 and ending in 1789 the average was only 82 hogsheads; there were no driving boats then, at least if there were there were only one or two; I believe there was not more than one at all. Then we go from 1790 to 1799; and the average during those ten years, taking one year with another, was considerably above what it had been in the previous 10 years. In 1790, 680 hogsheads were taken in the fisheries.

21,996. Then there appears to have been a sudden recovery?—Yes, they came in in immense masses in 1790 and in 1791. That went on for some years. Then we go from 1799 to 1809; the total number of fish caught by the seines during the 10 years ending 1809 was 2,585 hogsheads, giving an average of 258 hogsheads per year. In 1810 and 1811 the seines caught nothing at all, but that was the time of the war. There were immense quantities of fish in at that time. I believe they could have caught what fish they liked but there was no sale for them; they could not send them abroad. The French had got hold of the Italian ports and altogether stopped the trade. Yet notwithstanding that nothing at all was done in those two years, the average for the 10 years commencing in 1810 and ending 1819 was 290 hogsheads each seine per year. In 1812 the catch per seine amounted to 1,400 hogsheads, while in 1818 it was only nine hogsheads. We had then 44 seines fishing, the fisheries had been very productive and the price was very high. People here speculated very largely in the fisheries and they built a new pier at Mevagissey. Then directly afterwards, from 1818, the fisheries began to fail, and even with their 44 seines they did not succeed in catching anything in 1818 or 1819, nor yet in 1820. In 1821 and 1822 there was only one seine which averaged 12 hogsheads.

21,997. Were there no fish here then?—No; and there were no drift-boats to speak of.

21,998. How many years was that after the first falling off; the first falling off was, I think, in 1790?—Yes, from 1788 to 1790 was the first falling off.

21,999. Then the second falling off would take place 30 years later?—Yes. In 1809 they were very scarce; there was hardly a fish caught in Mevagissey, but that might have arisen from a bad look-out having been kept.

22,000. When did the second falling off take place?—From 1818 to 1830.

22,001. That would be 30 years after the first failure?—Yes. In 1830 there was a large quantity of fish caught of very good quality, and the seines then averaged 495 hogsheads; but after that they began to lessen again as the drift-boats became more plentiful.

22,002. (*Mr. Lefevre.*) Were there still the same number of seines as in 1830, namely 44?—Very few went out. From the year 1818 they were owned principally by large speculators who could stand the rub. The fish that were caught then were sold for a mere song, and seines that cost 50*l.* and 60*l.* to make and keep up did not make 8*l.* or 9*l.* From 1840 to 1849 there were valuable catches. The average was 160 hogsheads each seine per year. There were, however, some failing years; for instance, in 1842 and 1845 there were none caught. The total catch was only 1,609 hogsheads. In 1830 what was called a travelling shoal came. We imagine that there is a difference between the travelling fish and the bay fish—that is the opinion of all the fishermen here.

22,003. (*Professor Huxley.*) How far does that record from which you have been reading extend?—It extends altogether up to 1862. From 1850 up to 1859 the total catch was 1,124 hogsheads, which makes the average 112. The years 1854 and 1855 were failing years, but there had been good years before; 1850, 1851, and 1852 were very good years, but 1854 and 1855 were bad; 1856 was a good year, but from that time up to the present there has been a constant failure with regard to the majority of the seines. In 1861 there were very few, and also in 1862; the next year they returned again in large shoals.

22,004. Were there large numbers this year?—I cannot give you this year's returns yet.

22,005. How much was there last year?—I do not know.

22,006. Do you recollect to have heard any cause assigned for the falling off in the year 1790 or thereabouts?—We cannot account for it. I believe myself that the fish all come from the south.

22,007. There is no positive evidence on that subject?—No, I think not.

22,008-9. (*Mr. Lefevre.*) Can you add to the list the number of seine nets each year?—I am not able to do so at present, but I can obtain the information and send it to you.

22,010. (*Professor Huxley.*) Do I understand that you cannot account for the increase of last year's fish?—The last year there was a large quantity of fish came on the coast; I believe they all came down from Brest. The captain of a merchant ship told me that in coming from Brest during the whole of the night the sea appeared as if it were on fire, and the fish appeared to be coming this way. I have been at Corunna and have seen them there; they are generally there at the end of April or the beginning of May. They are at Quiberon in July, and at Brest after that. I believe, however, that they fail there the same as they do here.

22,011. Has there been any remarkable change in the appearance of the pilchards on the coast?—They vary very much.

22,012. It has been stated to us that during the last 20 years or so the pilchards have been getting later in their appearance?—Within the last 20 years

I have known the fish here in July. The seines were shot here one year at the end of July.

22,013. We have been told that the falling off in the seine-fishing has been partly due to the circumstance that for the purpose of securing the successful use of the seine it is necessary to have calm weather; that during the early months of the summer when there was calm weather there were no fish, and that when the fish made their appearance in the latter part of the summer the weather was so bad that it was impossible to use the seines with advantage. If the fish had made their appearance as they used to do at a different period, we have been informed that there would have been large takes. It is said that when the fish have been here the fishermen have been unable to use their seines without the risk of losing them altogether, and that consequently there has been a falling off in the fish. I wish to know from you whether that is the case or not?—I do not think that it is. I have known large quantities of fish caught in a gale of wind when they came in in large bodies; generally when there is a heavy gale of wind it prevents the boats from getting out, but it does not arise in any way from the fish coming later in the season.

22,014. You do not think, for example, that the pilchards making their appearance off Mevagissey very late would interfere with the fishing?—No, because we should get fine weather here then, unless we had a strong easterly wind; that is the only thing that would prevent us in Mevagissey Bay from catching fish. Sometimes we have a strong wind from the north, but not often. I do not know that the weather has very much to do with the fishing here.

22,015. When the weather is good enough for using the drift-net boats can you also use the seines?—I should say that we could.

(*A fisherman.*) No.

(*Witness.*) A fisherman here says no, but I think we could.

22,016. What other kind of fishing is there besides the pilchard fishery at Mevagissey?—There are two small trawlers, I believe.

(*A fisherman.*) There is only one now.

(*Witness.*) They were very small; in point of fact they were only boats.

22,017. They were not vessels of any tonnage?—No, they were not of any size; they were merely open boats.

22,018. Is there any hook-and-line fishing here?—Yes.

22,019. How many boats are there that follow that?—I do not know how many boats there are now, but it is generally the privilege of the master of the seine who controls the seine-fishing in the season to have a boat all the year round, and he uses it in hook-and-line fishing.

22,019*a*. Then the same boats are used for hook-and-line fishing as in seine-fishing?—Yes; but in the seining time they drop the hook-and-line fishing and the master attends to the seine.

22,020. Do the drift-boats go hooking sometimes as well?—Yes, and very often they catch some fish with a hook while they are drifting.

22,021. Then what is the season for hooking here?—All the year round, but in the spring and winter they do not get quite so much.

22,022. You mean about this time?—Yes.

22,023. Do they use hand-lines or long-lines?—Hand-lines generally. Some few of them use long-lines.

22,024. Have you ever been possessed of a seine-boat yourself?—Yes.

22,025. What does a seining boat cost?—I bought last year a new one. Do you wish to know what the cost of the boat is alone, or the cost of the boat and the net.

22,026. Let us have the boat first?—About 15*l.*, that was what I paid for one last year.

22,027. Was that with the fittings of the boat?—No, I mean only the boat.

22,028. Without oars?—Yes.

22,029. What would be the cost of a boat with its fittings—the cost of the boat, the sails, oars, and the like, take it on the average?—Of one boat?

22,029*a*. Yes.—I think I could tell you better what the whole would cost.

22,030. Supposing you wanted to fit out a seine-boat with nets and everything that belonged to it, what would it cost?—It would cost pretty nearly 800*l.*, I should say from 700*l.* to 800*l.*

22,031. Then the principal cost would be for the nets?—Yes, nets and ropes are the great things. I have all the particulars at home, and can give you the exact cost of these things.

22,032. You are required to have three boats to each seine?—Yes, and some have four; they have a small boat attending upon them. The fishing-boats are rather too heavy for the purpose for which they use the small boat.

22,033. How long are your seines?—I believe they are about 220 fathoms. Some of them may be 205 or 210, but a few of them are larger than others.

22,034. What is the depth?—The depth will be about 14 fathoms.

22,035. What is the size of the mesh they use?—The Dungarvan mesh, but what the size of it is I really forget. I believe it is about 19 to the foot.

22,036. Nineteen to the foot?—Yes, we call it the Dungarvan mesh.

22,037. It is a very small mesh?—It is considered to answer the purpose.

22,038. What is the size of the mesh from knot to knot?—Here (*producing a piece of net*) is a portion of the net we use.

22,039. That is a half-inch mesh. Is the whole net made of meshes of that size?—Yes.

22,040. Is the net made with a pocket?—When they take in the seine they make a little belly in this way:—they shoot a large seine and enclose the shoal, and they then have a smaller seine which they put round. They use it for taking the fish up out of the larger seine. They make that with a kind of little belly; but its object, I imagine, is rather to hold in the fish when they are taking up the seine.

22,041. What is the length of your seine?—It should be 220 fathoms; some of them are 203 and others 210. They vary in length up to 220 fathoms.

22,042. Will you describe the mode of fishing. How many boats do you send, to begin with?—Three. In the first place there is the lurcher, which goes ahead of the other boats. If the man in charge discovers a shoal he makes a signal to the in-shore boats—to the two boats carrying the seine, to lay stern to stern. As soon as they receive the signal they separate, and if they are near enough the master seiner gets the seine out as rapidly as possible and they surround the shoal.

22,043. Then does one of your boats have the seine on board?—It is carried by two of them. One has the large seine, and that is called the seine boat.

22,044. How many men has that boat?—It has a crew of seven men.

22,045. How many men has the other boat?—Seven.

22,046. How many are there in the lurcher?—Two men and two boys.

22,047. I understand you to say that the lurcher looks out for the shoal?—Yes.

22,048. And signals the other boats to come to him?—Yes.

22,049. Then does the other boat that has not got the seine on board take the warp?—Yes.

22,050. And they pay it out round?—He takes the warp and runs it in-shore, and warps the seine in. The seine goes round the shoal, and the second boat runs away with the warp and pulls it in where the master seiner thinks is a fitting place for drawing the seine. That sometimes depends upon the depth of water, and whether they are able to draw it in, as sometimes they are forced to hold on.

22,051. They never attempt to haul the seine on shore?—No.

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22,052. They simply enclose the fish?—Yes, and if there is a quantity of fish that renders it worth while to moor the seine, they will moor it, and then they use the other seine for taking up the fish.

22,053. How do they manage to get the fish out? Do they haul the seine gradually in?—They get in where the master thinks there is shallow water, so that the net will be down to the ground and prevent the fish from escaping.

22,054. Then they take the fish out with the smaller net?—Yes.

22,055. What is the size of the smaller net?—It varies from 80 to about 100 fathoms.

22,056. Is that the net with the pocket?—There is a little belly which makes a sort of pocket. It is left a little slack merely to form a bag.

22,057. Do they haul in the slack from the bottom?—Yes; when they get a bottom the fish are in a kind of bag.

22,058. How long will the fish be enclosed in the principal seine without coming to harm or damage?—I have heard of their being there for a fortnight.

22,059. A large shoal has remained in the water as long as that?—I have heard so. I think in Mevagissey they took 1,500 hogsheads, and I believe they were a fortnight in taking them up.

22,060. Do the fish become damaged when they remain in the water so long?—We may get a small portion of them damaged—at least I have heard so—but not much.

22,061. Why have the people here of late years taken to the drift-net fishing?—I suppose they have found it more profitable to themselves.

22,062. Do they follow the mackerel fishery as well?—Yes, some of them.

22,063. Is it possible to work the seine far out at sea?—The depth of the seine is only 14 fathoms, and then they have to take into consideration the tide.

22,064. (*Mr. Lefevre.*) Can they fish with the seine in deeper water than 14 fathoms?—No.

22,065. (*Professor Huxley.*) That is the depth of the net?—Yes. If they were to shoot in a greater depth than that they would not touch the bottom of the ground.

22,066. Then if the pilchards don't come in-shore the seines cannot be used?—Of course not.

22,067. The pilchards come in-shore less of late years than they did formerly?—I don't think they have come in less, but the seine fishermen have been hindered by the drift-net fishermen coming in so closely. In former days they would not allow the hook-and-line boats to go and fish among them.

22,068. It would be to the advantage of the fishermen to catch them with the seine if they came in as they did formerly?—They do catch them with the seine still, but the fish are disturbed so much by the drift-nets coming so near the shore and in among the seines, that the seine fishing is not so good as it was years ago.

22,069. A drift-net costs very much less than a seine-net?—Yes.

22,070. I suppose you don't know the value of a drift-net?—No, but it is of considerably less value than a seine-net. It does not require so many hands to work it.

22,071. So that it is a less expensive mode of catching fish?—Yes. At the same time I believe it is a good mode if it don't interfere with the in-shore fishing. I think it would be a great benefit to the country that both should be protected.

22,072. You think that the drift-net fishing disturbs the shoal-fishing?—Yes, particularly the bay fish. There is very little doubt of that. I am speaking now not of what we call a travelling shoal, but of the bay fish. There are pilchards off this place now, I believe, but they are not fit to cure.

22,073. It is your opinion with regard to the bay fishing that the drift-nets very much interfere with the seine men?—They do at present, but they would not do so if they kept a sufficient distance away from them.

22,074. What do you think would be a fair distance?—Three miles; but they will now come within less than half a mile.

22,075. The Act of Charles II. lays down three miles as the distance within which they shall not come?—Yes.

22,076. Have any prosecutions taken place under that Act?—I believe they used to prosecute, but the lawyers can ride through that Act. I have known fishermen taken before the magistrates, and I have also known a conviction to take place.

22,077. You have known a conviction to take place?—Yes, at Truro.

22,078. How long ago is it since the last conviction took place?—I cannot say.

22,079. Is it 20 years ago?—I should think it is.

22,080. Are you acquainted with any case in which the Act has been put into operation during the last 20 years?—I don't know of any case within the last 20 years, but I think the last case was at Truro or Bodmin.

22,081. We are informed that there has been a good deal of bitterness between the drift-net men and the seine men?—Yes; the seine men consider that when the drift-net men come right in among them they disturb the shoal. I have no doubt myself that they have done a great deal of injury.

22,082. If the Act were really operative could not convictions be obtained?—I believe the expense is really the thing that has prevented that.

22,083. The expense of obtaining convictions?—Yes.

22,084. What is the cause of the great expense?—The lawyers, I imagine.

22,085. But the value of a shoal of fish taken by the seine is enormous, so that the expense of a prosecution, if the law really held good, could not have been anything to compare with it?—Yes, the takes are enormous.

22,086. Yet you think prosecutions have not been undertaken on account of the expense?—No doubt the expense has been one thing.

22,087. What is the value of the largest shoal you ever knew of?—I had charge of a set of seines once, and that set brought 3,300 hogsheads of pilchards in one catch.

22,088. What was the value?—At that time they would not be of so much value, but at present they are selling at from 40*s.* to 55*s.* per hogshead. The price varies very much according to the quantity caught. I have known them at 33*s.* a hogshead, and I have known them sell as high as five guineas a hogshead.

22,089. We have been told of 10,000*l.* worth of fish being caught in one seine. Have you ever known of a catch of that sort?—I think not; but it would depend very much upon the price.

22,090. You don't know of a catch of that sort?—No. The utmost I know of is the 3,000 hogsheads which I have mentioned. That catch occurred in Gerran bay. They considered that we had nearly 4,000 hogsheads, but the pilchard net gave way.

22,091. Do you think that 5,000*l.* would be a fair estimate?—That would depend upon how many hundred hogsheads were caught. In the year 1830 one seine here must have had 1,400 hogsheads. That is about the heaviest run we ever see here.

22,092. I ask you this because it appears to me that if the value of the contents of a seine is anything like what it is commonly stated to be, the cost of a prosecution would be very small in proportion?—I have shown you the average catch of a seine since 1760.

22,093. Do you think the cost of prosecution is too great to make it worth while to prosecute?—Yes, I have no doubt of it, when the fishery now is barely paying the interest of the money embarked upon it.

22,094. Do you of your own knowledge know much of the drift-net fishing? What becomes of the fish

they catch?—They sell some of it fresh, and a large portion is exported.

22,095. Do the population of Cornwall depend to a large extent for their food upon the pilchard?—The Cornish men will eat pilchards anywhere if they can get them; they value them beyond anything.

22,096. Do the mining and agricultural population habitually make pilchards a large part of their food?—I do not know whether they make it a large portion of their food, but they lay in some for winter stock. It is considered a great thing for the poor to have these pilchards.

22,097. When the fish are taken by the seine-nets in large quantities, is it the custom of those who take them to cure them all at once for exportation?—They cure as much as they can, and they sell some fresh.

22,098. I believe that the hauls of the seines only take place at comparatively rare intervals?—We commence generally in August.

22,099. But you may not get a haul once in a fortnight?—Sometimes they come in on several occasions, but we rarely have more than one or two catches. The seines will be shot two or three times if the fish set in for the bay.

22,100. Is it not the case that in the season you will get but two or three big hauls?—Yes, or small hauls, as the case may be.

22,101. So that seining would not furnish a regular supply to the population?—No, only in the season. We have had them up here in November. We had them caught here in November some years ago; we got a good deal in the bay adjoining here.

22,102. The supply from seining is occasional. Sometimes you get a large haul, and in the intervals you get none?—Yes; often we get them in November.

22,103. How many drift-boats go out from this place?—From 45 to 47, I believe.

22,104. How long does the season for drift-net fishing last?—They begin rather earlier.

22,105. In what month?—About the middle of July.

22,106. And they go on drifting till when?—They go on fishing as long as the fish are here.

22,107. But on the average how long will the fishing last?—Until Christmas; in November there is generally a great catch.

22,108. Is it the habit of the drift-net fleet to go out every night?—Yes, they go out every night, either hooking, drifting, or something.

22,109. During the season they go for pilchards?—Yes, except Sundays.

21,110. And they shoot their nets?—Yes.

22,111. Sometimes they get big catches, and sometimes very small ones?—Yes, they vary.

22,112. But they always bring in something?—I think very few fail to bring in something. I cannot speak, however, except by hearsay, but I think very few fail. I believe that some catch more than others.

22,113. You often go down to the quay here to see them come in?—I have not done so lately.

22,114. But you know that they always bring fish from repute?—I generally get a report brought me of what is going on.

22,115. Then under these circumstances I presume that during the season there is a pretty regular supply of pilchards brought into port?—Yes, more than they can sell fresh sometimes.

22,116. But their great market is the fresh market?—That has not been so of late years when they have caught any quantity.

22,117. What do they depend on for their steady remuneration?—They can almost make as much now by salting the fish as they did before by selling them fresh.

22,118. Do they sell them to the hawkers?—Yes, they supply the hawkers in the season when the seines are not out.

22,119. And the hawkers sell them all over the country?—Yes.

22,120. Does the permanent supply to the poor of Cornwall depend on the drift-net fishermen, and not on the seine-nets?—I rather think they get more from the seine-nets, because they get them ultimately at a cheaper rate.

22,121. (*Mr. Lefevre.*) I think you said that you yourself were owner of a seine-net?—Yes.

22,122. How long have you owned the seine?—I have had it since 1835, but my family have owned seines for the last 100 years.

22,123. Are the seine-nets mostly owned by capitalists, or by fishermen?—They have now got into the hands of a few of the principal men, but they used to be owned by sailors and fishermen.

22,124. The fishing-boats belonged to fishermen?—Yes.

22,125. Do you recollect the time before the bounty was taken off?—Yes.

22,126. Did that have any effect on the number of seine-nets?—I think it would have an effect on the profits of the seine-nets. They used to catch 250 hogsheads on the average in a season, and they would get 250 eight shillings. Eight and sixpence was what they got, but they kept back 6*d.* That went in paying the wages of the men.

22,127. Was there an important falling off in the number of seines after the bounty was taken off?—I don't think there was so much falling off in the number of seines as there was in the fishery. The failure of the fisheries and the coming off of the bounty occurred pretty much at the same time.

21,128. Was there an increase in the number of drift-boats after the bounty was taken off?—An increase did begin, but it did not go on very rapidly.

22,129. I see from the return you have prepared that there were in 1820 only two drift-boats, but that in 1830 there were 10?—Yes.

22,130. Was that owing to the taking off of the bounty?—I think not. Perhaps the failure of the fishery, and the fact that the drift-net boats could catch fish which could not be caught by the seine-nets, induced them to set up drift-boats.

22,131. You say the drift-boats are not altogether dependent on the pilchard fishery?—If the pilchard fishery fails they can take to the mackerel fishery, and if that fails they can go to the hook-fishing. They follow all three.

22,132. But for the time being the taking off of the bounty was a blow to the fishery here?—Yes, it was the ruin of many persons who were engaged in the fishery.

22,133. It fell principally upon the capitalists?—Yes.

22,134. Do you export your pilchards direct from here, or do you send them to Falmouth?—We export them from Mevagissey.

22,135. Do you export nearly the whole of the produce of the seine-net fishery?—Yes, and of the drift-net fishery too.

22,136. Is almost the whole of what the seine-net produces exported?—Yes, except what is sold to go into the country fresh.

22,137. What has been the average price of the pilchards during the last few years?—I think the return that I have prepared shows that it varies very much. For instance, in 1850 the average price was 44*s.*; in 1851 it was 39*s.*; in 1852 it was 32*s.*; in 1853, 38*s.*; in 1856, 47*s.*; and in 1857, 45*s.*

22,138. Then the price has risen lately?—Yes, but it is difficult to obtain the exact average. The prices of different classes of pilchards vary very much. Perhaps they may have for small fish 20*s.* a hogshead, and for large fish 40*s.* or 50*s.* In 1856 they sold for 47*s.* a hogshead.

22,139. On the whole has the average price fallen or risen?—I should say that the average price is better than it used to be.

22,140. How do you pay your men in the seine-net fishing?—When we had the bounty of 8*s.* the men got that 8*s.* a week.

22,141. Did they get any more when they engaged in the fishing?—Yes, they got a share when the

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bounty was taken off. An arrangement was come to that the fishermen should bear their proportion of the loss, so that they then got a third of the fish sold fresh, and a fifth if they were cured.

22,142. Was it a third of the price or bulk ?—A third of the price.

22,143. Was it the custom to settle with them at the end of the season ?—Yes.

22,144. What more did they make in the course of a season ?—That depended much upon the catch and the price.

22,145. Can you form any idea of what the average would be ?—I cannot say. I have heard that some of the seiners, when they have got a large catch, have paid 20*l.* a man, but of late years the men have hardly had anything.

22,146. Do you find that the men are more willing to go out in the seine-net fishing, or the drift-net fishing ?—Perhaps you will allow me to say that fish were taken by the seines in 1862 from August 27th until October the 30th ; in 1861, from October the 1st to the 7th ; in 1860, from September the 3d ; in 1859, from August 3d ; in 1858 there were no seine-nets shot ; in 1857, from August 27th ; in 1856, from August 13th ; in 1855 there was scarcely any fish got ; in 1854, from August 14th ; and in 1853, from the 31st July. They came in then from July up to August 24th. In 1851 they were taken from July 30th to October 29th ; in 1850, from August the 11th to the 31st ; and in 1847 and 1846, from August until the end of October. Between these dates the fish were taken to our cellars.

22,147. Are the men more ready to go out in the seine-boats, or in the drift-boats ?—There are many sailors who go in our seine-boats.

22,148. Do you find any difficulty in getting hands? —We have often not enough of men ; they are not as plentiful as they used to be. We have more countrymen than formerly when the fish was more plentiful.

22,149. Do you ever find any difficulty in getting a sufficient number of men to work the seine ?—I don't know that we ever had.

22,150. I think you said there was only one trawl-boat from Mevagissey ?—Yes, I believe there is only one.

22,151. Do the Plymouth boats come off here ?—I don't think they come further than Looe, about 10 miles off.

22,152. What is the nature of the bottom, is it rocky ?—There are splats of rock here and there.

22,153. Is the ground smooth or rocky generally ? —There are splats of rock where we go to fish upon. I believe that near those splats of rock there are good breeding grounds for the spawning of the fish. Years ago we had immense catches. I believe the Plymouth trawlers came there, and after that they said the men ought to be hanged who went there. They discovered that it was spawning ground for the fish and they took away immense quantities of spawn.

22,154. Do the drift men fish constantly within a league and a half of the coast ?—They seldom go much beyond that.

22,155. The drift-boats ?—Yes ; sometimes they may go 20 or 30 miles out.

22,156. But are they constantly fishing within a league and a half ?—Yes, they go wherever the fish are.

22,157. Are the fish constantly found within a league and a half of the coast ?—I should think not, but they follow them wherever they go.

22,158. I want to know if they are constantly found within a league and a half of the coast ?—No.

22,159. Are they often found beyond that distance ?—They are constantly found beyond that distance ; they are rarely found within it.

22,160. What did you say was the shortest distance within which you could fish with the seine-net from the coast ?—We can only fish with the seine-net in 14 fathoms of water. Perhaps half a mile.

22,161. You cannot probably use the seine-net beyond that distance ?—No, not further than from a quarter to half or the third of a mile. You may go out to the points of the head and you may seine about half a mile from the coast.

22,162. (*Professor Huxley.*) During the years that the seine-net fishing failed altogether was there any yield from the drift-fishing ; did they go on as usual ?—Yes, they went on as usual.

22,163. So that there were pilchards here although the seine men could not catch them ?—Yes ; there was one year, I believe, that the drift-net fishery failed ; that was the year 1830. There was no trade then for the sale of fish ; they had to carry them to Plymouth.

22,164. That was one of your travelling shoals ?— Yes.

22,165. When, in other years, the seines failed altogether in consequence of the shoals not coming to the shore, have the drift men got a fair supply ? —Their take has varied much.

22,166. Under those circumstances if the drift-net men had not existed you would have had no pilchards of any kind ?—We should only have had very few ; some years there has been no seine shot at all.

22,167. (*Mr. Lefevre.*) Would it be possible to get a return of the quantity of pilchards exported from this port during the last 20 years ?—Perhaps not from this port alone but from the county.

22,168. That would do as well, although I should like to have a return also from this port ?—This (*handing in a document*) is the quantity exported from the county.

22,169. Is there any quantity of fish sent by train from this place ?—They are getting into a trade in that way with hooked fish.

22,170. But no pilchards are sent away in that way? —No.

22,171. Pilchards are not sent to London generally ? —No.

22,172. Do they not send them out of the county ? —Yes, in some places, but not many.

The witness withdrew.

J. Ley.

JOSEPH LEY called and examined.

22,173. (*Professor Huxley.*) You are a pilot here, I believe ?—Yes.

22,174. How many years have you been hailing from the port of Mevagissey ?—About 35 or 40 years.

22,175. Have you been connected with the fishing all that time ?—Yes.

22,176. Have you yourself been a practical fisherman ?—Yes.

22,177. Or have you been more a pilot during that time ?—I have been piloting some part of the time, and sometimes I have been fishing.

22,178. What mode of fishing have you been in the habit of practising, seine-fishing or drift-fishing ?—I have been seining for some years and drifting also.

22,179. Then you are acquainted with both ?— Yes.

22,180. Did you ever have a share in a seine net yourself ?—I have been the master of one—of a stop seine.

22,181. Then you are thoroughly familiar with the working of the seine net ?—Yes.

22,182. But you have never been actually interested pecuniarily in one ?—Not as far as having a share in a seine net. I have been interested in the seine-fishing but I have never had shares.

22,183. You have heard the mode of fishing described by Mr. Jago. Do you agree with him in the evidence he has given ?—I agree with him in his evidence and also in the statement which he has read to you, especially with regard to the state of the fishing—about eight years before the year 1790. I have had that handed down to me from my father,

grandfather, and great grandfather, all of whom were fishermen. What Mr. Jago stated is quite correct. Eight years before the year 1790 there were no fish, and the green grass grew in our cellars. There was not a drift-boat in the place then with the exception of one in Charlestown.

22,184. At that time there were no drift-men?—Not one.

22,185. Was there any reason to believe that the fish were off the coast during those years when none were caught?—I have heard that the fish were off the coast.

22,186. But they did not come in?—No.

22,187. With regard to the mode of fishing and the kind of nets used, which have been described to us by Mr. Jago, do you agree with him as to the mode of shooting the seine and so forth?—Yes; when the seine is shot it goes right out on the warp and then they warp the seine in.

22,188. Do you seine more during the night or in the day?—We catch more in the day in general. I have nothing to say against what Mr. Jago has said, except that in most cases the men engaged in seining are taken from the country, except the master and perhaps a few other men.

22,189. The master and a few other men only are sailors?—Yes.

22,190. Are landsmen employed?—Yes.

22,191. No particular seamanship is required?—No, not if they have a few good men and the master is a sailor.

22,192. When did the drift-men within your recollection begin to increase here?—About the year 1817.

22,193. How many were there when you first recollect the drift-net fishing here?—There were only one or two at first. There were only three for several years and then they went down to one again. Then they got up to five or six, and so they have gradually grown up.

22,194. They have steadily increased ever since?—Yes.

22,195. They have steadily increased during the last 40 or 50 years?—Yes.

22,196. Within your recollection how long is it since there were 20 drift-boats here?—They must have reached that number about 1830 or 1835.

22,197. Then between that time and now the increase in the number has been more than double?—Yes; in 1843 there were about 40 boats.

22,198. And now how many are there?—I think there are 50 or thereabouts.

22,199. I presume that the men who use the drift-boats must be sailors?—Yes, they are all sailors in general, brought up to the fishing from being lads; they go on till they get a craft of their own; there are a great many of them who have fishing boats now, some of them are the sole owners.

22,200. Then it is within your recollection that a great many who began as boys have earned sufficient by following up the fishing business to enable them to save money and purchase boats on their own account?—Yes.

22,201. Does not that show that the catch of fish in their case has been pretty steady?—Yes; I think they can get more fish in the offing and near the land in the summer time.

22,202. Have you ever known the drift-fishing fail altogether?—It did a year or two ago, and I believe also in 1830.

22,203. What was the reason of the failure?—The fish did not come on the coast. The fish you are aware are like birds of passage, they come after their prey; some years there are none, or scarcely any at all, but at the drift-fishing we generally catch some. There has hardly been a year in which they have not paid for themselves well, with the exception of one year.

22,204. Then all the failure you can recollect is that one year; there was then a total failure?—Yes, there was a great falling off one year, but even then it was not a total failure.

22,205. Did you yourself go drift-fishing for any number of years running?—Yes, for 10 or 12 years.

22,206. Did you keep any account of the yield of your fishing during that time?—No, I never kept any account.

22,207. Did you ever hear from anybody here what his take of fish was for a series of years;—No, I think not.

22,208. It is not the habit of fishermen to keep accounts?—No, it is not. I recollect once getting 27*l.* for going out three times fishing.

22,209. But still it is within your recollection that the number of fishermen fishing with drift-boats has steadily increased?—Yes, and it is still increasing.

22,210. And within your knowledge a great number of them have become owners of fishing vessels from having been boys in the boats?—Yes.

22,211. What sort of net do they use in the drift-fishing?—Pilchard nets. This (*producing a piece of net*) is part of one of them.

22,212. How many meshes are there to the yard from knot to knot?—There are 40 bars to the yard.

22,213. (*Mr. Lefevre.*) Is that the number of meshes when they are ordered from the net maker?—Yes.

22,214. They shrink a little in curing?—Yes.

22,215. (*Professor Huxley.*) This one is about three-quarters of an inch from knot to knot?—Yes.

22,216. How long is your fleet of nets for pilchard-drifting for each boat?—About 250 fathoms, but it depends on the size of the boat.

22,217. They vary?—Yes.

22,218. What is the average?—About 250 fathoms; some have got a longer fleet.

22,219. How much will a boat with its fittings and nets and everything complete cost? Supposing you wanted to set up a pilchard boat, with nets and all complete, what would it cost you?—About 220*l.* or 230*l.*

22,220. Then it would cost you about a quarter as much as a seining vessel?—Yes.

22,221. And out of the profits of the earnings of the drift-net fishing you have known many instances in which drift-net fishermen have saved enough to set up boats of their own?—Yes.

22,222. They have saved a sufficient sum of money to enable them to do that?—Yes.

22,223. (*Mr. Lefevre.*) Do they not occasionally get a little help from the capitalists?—They may get a little credit, but they generally earn the price themselves.

22,224. (*Professor Huxley.*) Do they pay off such mortgages?—Yes.

22,225. Do you fish at any particular time? Do you set your nets at any particular time?—We shoot our nets in the offing just when the sun is beginning to drop down.

22,226. You shoot your nets just before sun-down?—Yes.

22,227. Why do you do that; is there any regulation about it?—The fish would not go to the nets if we were to shoot them earlier.

22,228. Do you use twine for the nets, or cotton?—Cotton is more commonly used now.

22,229. Do you think that cotton is better than twine?—Yes, it is more pliant and better for the taking of fish generally.

22,230. Do you find that cotton is increased in price lately?—Yes, but we are obliged to have it.

22,231. (*Mr. Lefevre.*) Do cotton nets last as long as the other nets?—Yes, but that depends on how you cure them.

22,232. (*Professor Huxley.*) Your mode of fishing is as similar as possible to the herring-fishing?—Yes it is quite similar.

22,233. Do you have your net made fast to a warp at the top?—Yes, and we shoot the net over.

22,234. You have the warp or head-line and buoys?—There is a small line about 15 ft. with cork on the

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surface, and we sink the net 15 ft. under the surface.

22,235. What do you call the line that goes at the head of the nets?—The head rope.

22,236. How many fathoms deep is your net?—About four or five fathoms, some have them as much as six fathoms; they vary.

22,237. You go out whenever you see signs of fish?—Yes; but sometimes we shoot when we see nothing, and we find an abundance of fish.

22,238. Do you drift all through the night?—Yes.

22,239. What time do you make for port in the morning?—As early as we can; we get the nets up as soon as ever the day breaks; we know that the fish will not go into the nets after that.

22,240. Who buys your fish in Mevagissey?—People from the country come here in carts and take it away.

22,241. Hawkers and pedlars?—Yes.

22,242. Does any merchant buy your fish for salting?—Sometimes, but in general they are sold to go into the country.

22,243. Do you salt them if you get a heavy catch?—Yes.

22,244. And the fish is sold all over Cornwall?—Yes, it is sold for 10 or 15 miles round, up to Bodmin.

22,245. (*Mr. Lefevre.*) Is it sold fresh?—Yes, fresh.

22,246. (*Professor Huxley.*) During the 10 or 15 years that you have been fishing have you found that the fleet of drift-boats fishing here has brought a pretty regular supply into Mevagissey?—Yes.

22,247. And does the price remain about the same?—Yes.

22,248. Has there been a constant demand for your fish so as to enable you always to get rid of them?—Yes, we have been able to get rid of them all.

22,249. Then during that time your pilchards have been a large article of consumption here, and an important article for the food of the poor?—Yes, just as Mr. Jago said, there are thousands in the country who depend on the pilchards, and the masters of vessels will buy them by thousands to carry to different parts.

22,250. Then you do not look to an export market for the fish that you catch with the drift-nets?—Yes; sometimes, for instance, if we get as much as 300 or 400 hogsheads we export some.

22,251. That is when the supply of them very much exceeds the demand?—Yes.

22,252. Are there any houses for salting the fish here?—Yes, all our fishermen have houses here of their own for that purpose.

22,253. Have the drift-fishermen houses of their own?—Yes, and they salt in the cellars.

22,254. I suppose they go in companies?—No, each man has one of his own. The owner of each boat has a cellar and salt for curing his own fish.

22,255. Does not that operation require rather a large space for carrying it on?—No, a small cellar about 20 ft. long is sufficient.

22,256. The fishermen here must be very well off; every man has his boat and cellar for salting his own fish?—Well, their situation is better than perhaps it ever was before in their lives; at one time I know that these men could hardly obtain a living in Mevagissey.

22,257. (*Mr. Lefevre.*) Was that before the drift-boats became common?—Yes.

22,258. Were they hard up and obliged to go elsewhere?—Yes, but that is not the case now, owing to their sobriety and industry.

22,259. (*Professor Huxley.*) Are not the people engaged here at fishing now more sober than they were at one time?—Yes.

22,260. Fishing people are generally rather thirsty, are they not?—They used to be, but they are altered now for the better.

22,261. Is there any herring-fishing here?—Yes.

22,262. Have you ever been herring-fishing?—Yes.

22,263. Do the same men go herring-fishing as go pilchard-fishing?—Yes.

22,264. What time does the herring make its appearance here?—About October.

22,265. How long does it last?—Till January or February. They come here till the early part of February sometimes.

22,266. What condition are the fish in when they come? Are they full fish?—Yes, they are very full when they first come.

22,267. Full of milt and roe?—Yes.

22,268. When do you begin to find that they are spent fish, that they have become shotten?—Some time after Christmas we find them so; they are not good for much after Christmas.

22,269. Do you find full fish in January or February?—No, they are generally full fish at the commencement of the season.

22,270. Then you do not find any spawning fish here in the month of February?—No, scarcely any.

22,271. How many fleets of herring-nets are there here?—40 or 50. Almost all the drift-boats have herring-nets.

22,272. Then they have two sets of nets?—Yes.

22,273. Do the herring-nets cost them a great deal of money?—Yes, in proportion to the others.

22,274. Then is there a considerable capital invested here in herring-fishing?—Yes, fully 12,000*l.*; and then we have the mackerel-fishing as well.

22,275. How do you fish for mackerel here?—We drift for them in the same way.

22,276. And set your nets as in drift-fishing?—Yes, only the nets swim on the surface.

22,277. Do you practise shore-seining for mackerel?—Yes.

22,278. You do that with the shore seine; that is not like the pilchard seine?—No, the meshes are larger.

22,279. You haul them on shore, do you not?—No.

22,280. Do you use the net for circle-net fishing?—Yes.

22,281. Like pilchard fishing?—Yes, we go round the shoal; the mackerel equal in their flight the pilchards.

22,282. (*Mr. Lefevre.*) Is the coast not fit for drawing the nets?—There is no beach, and we do not like that plan; it mangles the fish and makes them in a terrible state.

22,283. (*Professor Huxley.*) How large is the mesh of your mackerel seine?—About $1\frac{1}{4}$ inches on the bar.

22,284. Do you mean from knot to knot?—Yes; there is just a little of that in the bunt where we take them out. If we did not have that they would mesh in the net, and we should not be able to get them on board.

22,285. Is it common for the drift-net fishermen here to have three sets of nets, namely, pilchard-nets, herring-nets, and mackerel-nets?—Yes, that is very common now.

22,286. It is common for men to have three complete sets of nets?—Yes.

22,287. What would be the cost of these nets?—300*l.* or 400*l.*, supposing that everything was new.

22,288. And one boat does for all the nets?—Yes.

22,289. Of course they are not decked boats?—They are partly decked.

22,290. They are half-decked with a kind of forecastle-deck?—Yes, and we have one or two mackerel boats decked.

22,291. Do you line for mackerel at all?—Sometimes, but that has gone out for several years. In my youthful days we used to catch some thousands of mackerel with the hook and line, but we have not done much in that way lately.

22,292. Is it not worth your while now?—We do not find it to be very much so.

22,293. Are there less mackerel than there were formerly?—I don't think so. They come along in heavy shoals at times, both mackerel and pilchards. I recollect in the year 1849 there was an abundance of mackerel. We could catch them almost on the

beach by putting our hands out and taking them up. There were hundreds of thousands here for years. In 1862 they were very plentiful.

22,294. In what condition are the pilchards when they come in, are they full fish?—No, they spawn before that, about May and June, off the Lizard. If we shoot the mackerel nets, then we find them in the mackerel nets. The mackerel nets will take them because they are full of roe.

22,295. Then do the pilchards as a rule spawn in May and June?—Yes.

22,296. Are the fish that come in here in shoals shotten fish?—Yes.

22,297. They are fat fish?—Yes.

22,298. Have they no visible roe or melt inside?—Occasionally we may see some, but it is rarely the case; they are cured well after that.

22,299. But they have not much roe or melt in them?—When they have any roe in them they will not save well. They are in that condition in the early part of May, down to the beginning of June, and then they are not so good.

22,300. You do not find them in shoals then?—Do you mean in the early part of May and the beginning of June?

22,301. Yes.—No, they are then in the Channel.

22,302. (*Mr. Lefevre.*) Are they always somewhere off the coast?—Yes, I think so.

22,303. (*Professor Huxley.*) Then they are very different from the herrings?—Yes.

22,304. When you get herrings here in great shoals they are mostly becoming full fish?—Yes.

22,305. Do you think that the trawlers do you any harm here?—We fancy that they injure the spawn outside.

22,306. Do they get foul of you?—Sometimes in the offing they will get foul of the mackerel-nets.

22,307. Do they get foul of the pilchard-nets?—No, not near our place; but if any of our men go off Plymouth and down that way they are very dangerous then. I have heard of boats being run down by them.

22,308. Have you known anybody who has been engaged in fishing off Mevagissey hurt by them?—No, not hereabouts.

22,309. What sort of lights do you carry on your pilchard boats?—We are supposed by law to carry the single light when the nets are out at anchor.

22,310. What lights do you carry when you are herring-fishing?—Then we carry a single light, a bright light.

22,311. Did you ever know anybody interfere with you about that?—No.

22,312. Do the Coastguard or the Revenue people interfere with you?—No.

22,313. What is the size of the mesh for your herring-net?—About one inch and a quarter.

22,314. How many to the yard?—32.

22,315. Do you make it of any size you like?—No, it would not do to have it either too large or too small.

22,316. You are guided by that and not by any law upon the subject?—Yes.

22,317. If you wished to make it 40 to the yard you would do so if you liked?—Yes.

22,318. Did you ever have any Government officer here to examine your nets?—Some years ago there were some persons who came down and overhauled the nets with regard to the salmon.

22,319. But not your drift-herring nets?—No.

22,320. Then nobody meddles with you at all?—No.

22,321. Did you ever hear of any regulation of this kind: "The meshes of all nets used for herring-"fishing shall not be less than one inch square from "knot to knot along the line?" Did you happen to know that you would be liable to be brought up before the magistrates for using meshes less than that?—Yes, I have heard of that.

22,322. Now, with regard to the injury done by the trawlers, did you ever hear of this regulation: "Trawl-boats shall always keep at a distance of at "least three miles from all boats fishing for herrings "or mackerel with drift-nets?" Did you ever hear of that?—No.

22,323. Did you ever hear of its being enforced by anybody?—No, I never did.

22,324. Did you ever hear of any complaint being made by the drift-fishermen of damage done to them, and of the trawlers being punished under this convention?—No, I never heard of their being punished. I have heard of the trawlers injuring the nets, but I have never heard of their being punished for it.

22,325. Let me ask you a question with regard to the lights. Article 53 says, "In order that boats "fishing with drift-nets may be easily recognized at "night, the masters of these boats shall hoist on one "of their masts two lights, one over the other, three "feet apart." Did anybody ever take the trouble to do that?—I have taken the trouble to do it a few times, but not very often.

22,326. Did anybody ever meddle with you for not doing it?—No, I was never interfered with by anybody.

22,327. Did you ever hear of anybody trying to enforce the provisions of this Act, or taking any trouble about it here?—No.

22,328–9. How are your herring-boats rigged here?—They are lug-rigged. With a mizen and foresail.

22,330. Do you strike your main-mast when you commence fishing?—Yes.

22,331. How high is the mizen?—Thirty feet.

22,332. Do you keep the mizen set?—Yes.

22,333. That is done in order to keep the boat steady, is it not?—Yes.

22,334. Where do you hoist the light?—They have an iron fixed into the gunwale, six feet above the gunwale.

22,335. Is there anything to prevent you from having a second light three feet under the first?—I do not see how we are to do it.

22,336. The regulation is that you shall hang the second light three feet lower down?—Yes.

22,337. Is there anything to prevent that?—It would be difficult to do it unless we had an iron especially for it.

22,338. The light is nothing but a lantern, is it?—No; but it would be rather a difficult thing to do.

22,339. How is a trawler to distinguish between a hand-line fishing boat and a drift-net fishing boat by night, when they both hoist the same light up?—I know nothing about that.

22,340. Now you are a pilot. Supposing that you had the management of a trawler at night, and that you saw a single light upon a vessel at some distance, how are you to know whether that is a hand-line boat or a drift-net boat?—I should not be able to know.

22,341. Then it would be no great fault of yours if you ran over the drift-net man's nets?—I should keep to leeward of them, under the lee side.

22,342. But suppose it was more convenient for you to go the windward; if you did not know that they were drift-net men, why should you not do so? If the drift-net men do not have the distinctive lights they are ordered to carry by this Act of Parliament, the trawling-men are not to be blamed for running over their nets?—There is no reason why the drift-net men should not carry the lights according to the Act of Parliament.

22,343. Would there be any particular difficulty in having the second light under the first?—No, I think not; there would not be much difficulty.

22,344. Then why should you not obey the Act as there is no difficulty about it?—No, there is no difficulty. Of course we could put up two lights; but we do carry a flare-up.

22,345. But that is not in accordance with the regulation laid down by Act of Parliament?—No.

22,346. And you think there would be no particular hardship in enforcing this regulation?—No, I think not.

22,347. Are you at all troubled with Frenchmen coming here fishing among you?—No.

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22,348. Do you have any heavy decked boats here from St. Ives?—The Brighton and Hastings boats come down sometimes.

22,349. They are decked boats?—Yes, and they have large fleets of mackerel-nets.

22,350. And herring-nets as well?—It is a rare thing to find them here with herring-nets.

22,351. (*Mr. Lefevre*). Do the Yarmouth boats come here as well?—Yes, they come here occasionally to the mackerel-fishing.

22,352. Do they come drifting among you?—Yes.

22,353–4. And you go among them?—Yes.

22,355. Did you ever hear of this law? "Whenever "decked herring boats and undecked herring boats "shall commence shooting their nets at the same "time, the undecked boats shall shoot their nets to "windward of the decked boats, except they should "prefer going to leeward to a distance of at least "half a mile to shoot their nets. The decked boats "on their part shall shoot their nets to leeward of "the undecked boats, unless they prefer going to "windward to a distance of at least half a mile to "shoot their nets." Did you ever hear of that?—I do not recollect hearing of it before.

22,356. Have you heard of this further regulation? "When decked boats shall arrive on grounds where "fishing is already begun by other boats, amongst "which shall be undecked boats, the decked boats so "arriving shall shoot their nets to leeward of the "undecked boats, except they should prefer going to "windward to a distance of at least half a mile to "shoot their nets. When undecked boats shall ar-"rive on grounds where fishing is already begun by "other boats, amongst which shall be decked boats, "the undecked boats so arriving shall shoot their "nets to windward of the decked boats, except they "prefer going to leeward to a distance of at least "half a mile to shoot their nets." Did you ever hear of that regulation?—No.

22,357. Then it appears that nobody pays any attention to them?—No.

22,358. Do you think that any particular harm arises from the decked boats fishing among the undecked boats?—I never knew any harm result from it.

22,359. Then you see no reason for this regulation?—No.

22,360. The boats never do each other any harm?—No.

22,361. When does the pilchard-fishing begin here?—About July.

22,362. Do you find then that the fish are a great distance from the coast?—Yes.

22,363. As the season advances do they come nearer?—Yes, they draw nearer the land.

22,364. Do you often set your nets within a league and a half of the coast?—Yes, the fish will draw to the land as the summer comes on. They come in as the prey comes towards the land. It is my opinion that the fish come towards the land as the season advances.

22,365. Do you catch half your fish within a league and a half of the coast?—Yes, I think so, and more than that too.

22,366. More than half?—Yes.

22,367. Within a league and a half of the coast?—Yes.

22,368. Did you ever hear of anybody being prosecuted for setting his nets within a league and a half of the coast?—Yes, many years ago some old men were put in prison for it.

22,369. There has been no interference of late years?—No, we have gone on very peaceably of late; but 14 or 15, or perhaps 18 or 20 years ago, I believe there was some interference.

22,370. What effect would it have on the fishing if this law were carried out, and the drift-men were not permitted to fish within a league and a half of the coast?—In that case the drift-men would not be able to get their bread.

22,371. Would it destroy the fishing here?—They would not get anything. It would be injurious to all parties. The seine-men would be unable to catch the fish, and the drift-men would be prevented from doing so, and the fishermen would not be able to get their bread in any other way.

22,372. If that law were carried into effect the drift-men would not be able to earn a living by their fishing?—No.

22,373. Do the herrings come to within a league and a half of the coast?—Yes, they come close into the shore; they come within a quarter of a mile and nearer than that.

22,374. Are you able to tell me what proportion of your catch of herrings is caught within a league and a half of the shore?—Some boats will catch 5,000 or 10,000, and some boats only 4,000 and 6,000, while others will only get 2,000 and 3,000. It varies very much.

22,375. What distance do you find them when they are first off this coast?—They generally come to within a short distance of us.

22,376. You do not go out any distance after them?—No, they come close in; sometimes they are within half a mile of the shore, sometimes within a quarter of a mile, and sometimes even nearer than that.

22,377. Then you catch nearly all your herrings within a league and a half of the shore?—Yes.

22,378. How is it with regard to the mackerel?—The mackerel are sometimes close in, and sometimes they are out in the bay.

22,379. Are they generally caught rather further off the shore than the herrings?—The mackerel drift-boats generally go further off, but sometimes the fish are in the shallow water. We catch an abundance of fish in the mackerel season; sometimes 10,000, 15,000, and as much as 20,000.

22,380. Are you yourself the owner of a drift-boat?—Yes.

22,381. I think you said that you had not been out for some time yourself?—No, I have not.

22,382. How many men have you on board your drift-boat?—From three to four; they vary.

22,383. And a boy besides?—Yes.

22,384. How do you divide the take; do you pay the men by shares?—Yes, they have a share of what they take.

22,385. How do you divide the shares?—The boat and craft get half, and the other half is divided among the men.

22,386. One half goes between the boat and nets?—Yes.

22,387. The nets get an equal share with the boat?—Yes; the men get half, and the remaining half goes to the boat, nets, and craft.

22,388. Do you find that you make as much now by your boat as when you bought it?—Yes.

22,389. You do not find that you have lost anything by it, or that you do not make as much by it?—No, I do very well every year.

The witness withdrew.

J. Elvins.

JOSEPH ELVINS called and examined.

22,390. (*Professor Huxley.*) You are a fisherman of this place?—Yes.

22,391. How long have you been fishing here?—For 40 years.

22,392. What mode of fishing have you practised?—I was seining for 20 years, and then I took to hook-fishing.

22,393. Do you agree with what we have heard as to the mode of practising seining?—Yes, I do not think I should be able to get a living out of it. It would not pay me at all. I was obliged to be hauling for other people the first part of my time, and then I left that and went with nets. During the time I was filling that position I caught thousands and tens of

thousands of small fish, which were sold for manure, in order that they might be put upon the land.

22,394. Do you mean small fish caught by the seine?—Yes.

22,395. What kind of seine? The tuck-seine?—No, the stop-seine.

22,396. Is that the seine with which the pilchards are caught?—Yes.

22,397. And you say that you have caught large numbers of small fish in that seine?—Yes, I have been selling tens of thousands of chads, small pilchards, and other things caught in the nets. I have been drawing them on to the pier for manure, and then they have been carted away to be put upon the land; but I found I could not get a living by that sort of work, and I was obliged to leave it.

22,398. How was that?—I could not get any pay. Sometimes I would get 2*l.* or 3*l.* for my share, but not enough to support my family.

22,399. Do not the great catches make up for the poor ones?—No.

22,400. And that was the reason why you left off seining?—Yes.

22,401. You also state that it is within your experience that a large quantity of small fish is taken in the stop-seines?—Yes.

22,402. What kind of fish?—Small pilchards, small chads, whitings, and other things.

22,403. I believe that the mesh of the pilchard-net is so small that it would confine every kind of small fish?—Yes.

22,404. What is the smallest fish you have seen taken up in the pilchard-nets?—I have seen little bits of small mackerel, very small indeed, about the length of my finger, and thousands of small chads. In point of fact every kind of fish you could mention.

22,405. Were there any small turbots among them?—Yes, small turbots, and every kind of flat-fish. We used to take immense numbers of small fish, tens of thousands.

22,406. Then, besides taking pilchards in the seines, you destroyed an immeuse quantity of small fish of other descriptions?—Yes, we destroyed thousands of fish of other kinds.

22,407. Was the proportion very large compared with the whole take, or was it after all only insignificant?—I do not understand what you mean.

22,408. When you had a take of fish of that description in the seine, I mean a quantity of small fish mixed up with the pilchards, did that form a large proportion to the whole take?—Yes, it did; there was a sight of them.

22,409. Were the proper-sized pilchards picked out from the rest and the remainder left as refuse?—I have sometimes seen 5,000 or 6,000 small fish put into one hogshead, while the fair-sized fish would only run 2,800 in a hogshead.

22,410. In fishing with the drift-net does the net itself pick your fish for you?—Yes, we only take proper-sized fishes then.

22,411. The small fish go through the net?—Yes.

22,412. Then, under these circumstances, do you consider that the mode of catching pilchards by the seine-nets is a destructive and wasteful mode of fishing?—Yes, the poor man cannot get at a good shoal to do any good for himself. I have seen a poor man have a small seine, and wish to fish with it, when those who own the large seines have turned him off the position, and have then shot round the shoal themselves.

22,413. Is there not some agreement about the places where the seines shall be used?—I believe there was a law made by our forefathers long ago, that a man should have a seine a certain length before he should be entitled to have a turn.

22,414. What is a turn?—The meaning of a turn is this: a man with a seine must go out and ride his turn for 24 hours. Without that he could not get a turn, and was not allowed to shoot at all.

22,415. Who was to prevent him from shooting?—The seine-owners, both masters and men. They are more powerful than he is, and would prevent him.

22,416. Would they prevent him in the teeth of the law?—Yes, they would.

22,417. After you gave up seining what did you do?—I went driving after that, and since then, thank God, I have been enabled to bring up my family, and to pay my way. I am now going to have a larger boat built. I paid 127*l.* some years ago for the one I have got, and now I am going to have a larger one for my sons.

22,418. Is the regulation in reference to having special stations for the seine-nets a matter of agreement among the men?—Yes.

22,419. Can anyone take any station he likes?—No, the small seines cannot hold a turn at all.

22,420. Suppose you went out and took up a station, and held it for 24 hours, could the long-seine men force you to take up yours?—Yes, our seines are not considered long enough to hold turns.

22,421. Must you have the seine a certain length before you can hold a turn?—No man can hold a turn unless he has a seine 230 fathoms long and 14 fathoms deep.

22,422–3. Upon what law is this regulation based?—I cannot tell. I think it is a very hard law, and so do many of the fishermen; but what it is derived from I cannot say. I believe it is a private law.

22,424. So that practically the poor man, or the man of small capital, is excluded from the seine-fishing?—Yes, they could not get on at all.

22,425. They could only be employed by others?—Yes, and they could not bring up a family with that.

22,426. When did you begin the drift-net fishing?—I began in 1824; that is the first year I went drifting. I was with Messrs. Fox's concern for several years.

22,427. Did you begin as a member of the crew?—I began as the owner of an old boat. It was given to me, that is the keel, for supporting my mother. I supported her through life after my father died, and I got on in that manner.

22,428. Did you find that drifting answered so well that you were able to get on by it?—Yes.

22,429. Since you have been able to practise drift-fishing on your own account it has been of great benefit to you?—Yes.

22,430. (*Mr. Lefevre.*) Have you kept any account of the money you have taken for a series of years?—No, my missus takes the money. She never puts it in a book, and perhaps when we have sometimes made a good catch she may have been a little hasty with it.

22,431. (*Professor Huxley.*) Have you been engaged in the herring-fishing as well as in the pilchard-fishing?—Yes, I have a small boat of my own.

22,432. You have been able to set up your own boat?—Yes.

22,433. And your own nets?—Yes.

22,434. Does that all come out of pilchards?—Yes. In the beginning of my time I had to pay a guinea a year for a net.

22,435. Have you been engaged in hooking as well?—Yes, I have been all my life engaged in fishing in one way or another. I never did a day's work on the land in my life.

22,436. What sort of fish do you catch?—Every sort of fish.

22,437. Congers?—Yes, and hake, and every other kind of fish calculated to take the hook. I catch them all.

22,438. Do you catch whitings?—Yes.

22,439. How long have you been hooking?—Perhaps I may have been at it on and off for 40 years.

22,440. (*Mr. Lefevre.*) Have you been hooking between the other seasons?—Yes.

22,441. (*Professor Huxley.*) Do you find that the supply of hooked fish has kept up? Do the hook-and-line fishermen get as many fish as they did formerly?—I do not think they do. The trawlers disturb

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our hook-and-line fishing off the land. I do not think there are as many fish as there were 20 years ago. They began to fall off about that time.

22,442. What fish have fallen off most?—I think the mackerel, whiting, and hake.

22,443. Do you catch mackerel by hooking?—Yes.

22,444. And there has been a falling off in that?—Yes, and in hake too. There has been a great falling off in hake.

22,445. How has it been with regard to codfish?—The catch of cod varies very much.

22,446. Taking them on the average, are there not as many caught now as were caught formerly?—There were as many caught the year before last and last season as were ever known, but this year we have scarcely had any.

22,447. How has it been with regard to whiting?—They have been very scarce indeed. This year, if you were to offer me 50*l.* for one, I could not tell where to go and catch it.

22,448. Are the whitings apt to vary in the same way as cod?—I never knew a winter like this has been before. They seem to have gone right away from the coast.

22,449. What is the reason of that?—I cannot form any idea.

22,450. What is the nature of the bottom off here, is it rocky?—I am pretty well acquainted with the bottom off here. I do not think there is a man in the county who has had more experience than I have. From Port Looe the land runs up abreast of Fowey Harbour, and there is clean ground from there to Rame Head.

22,451. Is there trawling ground outside?—Yes.

22,452. How near do the trawlers come to the shore?—They come within four miles of the land, and I have seen them as far as 12 miles out.

22,453. From the Deadman?—Yes.

22,454. Where is the whiting ground?—It is where they trawl.

22,455. (*Mr. Lefevre.*) The trawlers do not come lower down than Looe, do they?—Yes, south of the Deadman. They passed me several times last year when I was fishing there.

22,456. (*Professor Huxley.*) Did they come within 10 miles of the Deadman?—Yes, and within five miles of it, and within four miles of the Gribben.

22,457. What sort of a haul of whiting did you have last year?—They did not come off the coast at all last year. I never knew anything like it in all my life. I have been off Falmouth Harbour and about Polperro looking for them, and have not succeeded in finding one.

22,458. What is the reason of that?—I cannot tell. I cannot give you any account of it. We catch an immense lot of those things we call bibs; we have been making a greater price for them than ever we did before, perhaps double as much.

22,459. Is that the whiting-pouting?—Yes, they live on small splats.

22,460. Have the bibs increased as much as the others have fallen off?—Yes, and they will go on increasing till we thin them out. They are things that you cannot catch everywhere. I have made a great price of them this winter. I believe that I have taken more than all the men about our coast.

22,461. How is that?—Because I have fished for them particularly, and I am better acquainted with them than other fishermen.

22,462. Are you able to say whether there is any regulation or law here that does you any harm?—I would not much mind what the laws were as long as every man was let to fish where he liked, and permitted to enjoy his own opinion. He ought to be allowed to fish where he pleases, whether he has a big seine or a little one. I think the laws should be fair, and that we should all act fairly one towards another.

24,463. You have no objection to seining?—No; every man ought to be allowed to get his living honestly where God has called him.

22,464. You want to be allowed to drift as much as you like?—Yes; I cannot get a living if I am to be kept a league and a half from the land, because my living is all within that. It is very seldom that I go five or six miles out in the summer time.

22,465. If that law were put in force, and you were obliged to haul up when you were drifting, if you found yourself within three miles of the land, do you think that it would inflict great damage upon you?—Yes.

22,466. Would the enforcing of that law practically put an end to drift-net fishing?—Yes, it would put an end to the whole of it throughout the county of Cornwall.

22,467. Do you agree with the previous witnesses that the pilchards which are caught by the drift-net fishermen are sold to hawkers and other persons who carry them about the country?—Yes.

22,468. Are you acquainted with the mode of living adopted by the agricultural people here?—Yes.

22,469. Do they depend to a considerable extent upon the pilchards for their food?—Yes, many of them will take 1,000 of them if they can raise them for their families. Many of them are glad to get 1,000 and upwards if they can.

22,470. I suppose that pilchards are much cheaper than butcher's meat?—Yes, you can get five salted pilchards for a penny now in Mevagissey. I sell them for that now. I have got some at home in salt which I sell to the neighbours around. I sell them at five a penny, or 2*s.* a hundred.

22,471. Do you recollect the bounty being taken off?—I cannot tell you much about that. I have heard reports of it, but I was a very young man at the time, and was engaged at seining with my father.

22,472. Are you able to say whether the people live more upon the pilchards now than they did then?—We had little cellars then, and we had a difficulty in getting salt. We used to tie the salt bags round the women's legs and smuggle it in.

22,473. (*Professor Huxley.*) Do the hook-fishermen have to go farther out to fish now than they did formerly?—No, I have been farther out before now. I have been in a very leaky boat even off the Lizard at night.

22,474. But on the average do the fishermen go farther out now?—No; in the hook-and-line fishery they do not go further out now than they did 40 years ago.

22,475. (*Mr. Lefevre.*) How many boats go from here hook-and-line fishing?—During certain parts of the year every one of the boats is engaged in the hook fishing. There would be as many as 70 about then.

22,476. As many as 70?—Yes, large and small.

22,477. What distance do they go?—Some only half a mile, and some will go 10, 15, or 20 miles. Some will be fishing in shallow water and some in deep water, many leagues from the others.

22,478. Do you work a mackerel-net?—Yes.

22,479. Have you found any falling off in the take of mackerel?—I have been catching great quantities of them at times, but I have never been doing much in that way since I had nets in my own possession.

22,480. Do you think that the fishing has fallen off generally?—Yes, it is slack with us now.

22,481. Do a great many more boats come after the mackerel from Yarmouth, Brighton, and Hastings than did formerly?—Sometimes. The mackerel do not come into the Channel as they did formerly.

22,482. But is it not a fact that there are a great many more boats fishing for mackerel now?—I think there are more here now than there used to be.

22,483. In former days do you recollect boats coming here to fish for mackerel from Yarmouth, Brighton, and Hastings?—Yes, they have come off here ever since I can recollect.

22,484. Do they land their fish here or at Plymouth?—Sometimes here, but generally at Plymouth.

If the wind is against them they put in here. The Mount's Bay men were in the habit of landing their fish here before the railway went further down. They used to bring them in here fresh. They could not conveniently get them into Plymouth.

22,485. Do they mostly bring them here now?—Yes, and they are carried away from here. They are worth from 17*s.* to 18*s.* per cwt.

22,486. Do you send them away by the train?—Yes; the last witness, Ley, sends away haddock and whiting.

22,487. Are they sold on the beach?—Yes; they bring them on to the quay and the best bidder gets the lot.

22,488. And the buyer sends them off to the train?—Yes.

The witness withdrew.

WILLIAM ROBERTS called and examined.

W. Roberts.

22,489. (*Professor Huxley.*) Are you a fisherman here?—Yes.

22,490. How long have you been occupied in that way?—I have not been employed on the water. I have been principally engaged on land. I take charge of the fish when they are landed.

22,491. What kind of fish?—Pilchards.

22,492. What mode of pilchard-fishing are you acquainted with?—Seine-fishing.

22,493. Have you been exclusively concerned in the seine-fishing?—Yes, and in no other.

22,494. You are not practically acquainted with the actual mode of fishing?—No, except from other quarters. I have received information from other people, but I know nothing of it myself.

22,495. Is it your business to take charge of the fish as soon as they are landed?—Yes.

22,496. For whom?—For Messrs. Fox of Falmouth, and on my own account.

22,497. Is there a drying-house here?—Yes.

22,498. What is the common mode observed as soon as the shoal of fish have been taken in the seine?—As soon as they are brought in they are taken away to the cellars and placed in salt.

22,499. Are they gutted before they are salted?—No.

22,500. Are they put in casks?—Yes, 30 days after.

22,501. Then what is the first step?—They are laid down; first a layer of fish, and then a layer of salt.

22,502. In the cellars?—Yes, till a pile of them is raised six, seven, or eight feet high.

22,503. What is the bottom of the cellar made of?—They are all wood, some of them are paved with tar and sand.

22,504. Is there any provision made for drainage?—Yes.

22,505. Will you explain what is the construction of one of these salting houses. In the first place how is the floor made?—It is made of wood.

22,506. How is the floor arranged in order to allow the drainage of the fish?—There is a little declivity.

22,507. Is there a gutter on one side?—Yes, which leads down into a pit.

22,508. Then how do you proceed in the first instance, do you put down a layer of salt?—Yes.

22,509. How thick?—Very slight indeed, we merely sprinkle it over the sand on the floor.

22,510. Is it bay salt that you use?—We get it from France and Liverpool principally.

22,511. Is it a coarse salt?—Yes.

22,512. Is it of a reddish colour?—It is grey principally. The Liverpool salt is rather white.

22,513. By whom is that operation performed?—By women.

22,514. How many do you employ?—We employ 20 steadily, and from 120 to 140 when heavily pressed.

22,515. You have extra hands when you have larger catches and are pressed?—Yes.

22,516. Do you employ a certain number of those women at weekly wages?—Yes, we make a bargain with 28 at 2*s.* 6*d.* a week to attend our service when required.

22,517. You do not give them regular wages?—No.

22,518. That is a kind of earnest money?—Yes.

22,519. What do you pay them when employed?—We give them 2*s.* per hogshead for what they cure.

22,520. Then if the take of fish fails they get nothing but their half-crown?—No, their services are not required in that case, but they get their half-a-crown.

22,521. They get that under any circumstances?—Yes, whether there are any fish or no fish.

22,522. Then their remuneration depends upon the take of fish?—Quite so.

22,523. Then it cannot be called a steady employment?—No, it is not.

22,524. Now describe how you dispose of the shoal of fish when it comes to you to be cured. I understood you to say that in the first place there is a layer of salt spread by these women over the floor?—Yes.

22,525. And then comes a layer of fish?—Yes.

22,526. Is there any particular mode of disposing of the fish? Are they laid head to tail?—No, I think not; the outside part they arrange, but they are not particular about the inside part.

22,527. How wide is the floor on which they are laid, is it as wide as this room?—Yes.

22,528. Is it wider?—Yes.

22,529. Do they walk over the floor and put them down in rows?—No, they keep a kind of passage down, and then they build another bulk against it till they cover the floor.

22,530. The second layer goes over the first?—Yes.

22,531. With the layer of salt between?—Yes.

22,532. And then comes a third layer of fish?—Yes, a third and a fourth.

22,533. How many layers will there be altogether?—I can hardly tell. They build them up to the height of four or five feet, or even higher than that.

22,534. Then there will be a great number of fish in these cellars?—Yes, a great number.

22,535. Then the pressure exercised upon the lower layers of fish must be considerable?—Yes.

22,536. What happens after they have been there for some time? Do the fish begin to yield, and give out juice?—Yes.

22,537. And that flows down your gutters?—Yes, into the pit.

22,538. What is it that flows down?—Oil and brine.

22,539. Do you collect the oil?—Yes

22,540. It comes to the top?—Yes.

22,541. And the brine goes to the bottom?—Yes.

22,542. What do you do with the oil?—We sell it at Bristol and London.

22,543. Do you know what is done with it in those places?—I believe it is used in connection with machinery, and by floor-cloth manufacturers.

22,544. Are you aware whether the oil comes from the livers of the fish?—No; I believe it comes from their bodies generally.

22,545. How long do the fish remain in that condition?—For 30 days.

22,546. Are they shifted at all during that time?—No.

22,547. At the end of that time are they cured?—Yes.

22,548. Does anything depend on the heat of the weather?—That does not appear to affect them.

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22,549. Does the operation of laying the salt upon them require a little skill?—Yes, and the most experienced hands are employed.

22,550. If the work were carelessly done would not your fish run a great danger of rotting?—Yes.

22,551. Have you ever lost a considerable number of fish from carelessness?—No.

22,552. Would the people you employ be paid all the same if the fish turned out well or ill?—Yes, they would have just the same money.

22,553. Then each person does not get paid by the quantity of fish she cures, but the price paid for the total quantity is divided between them?—Yes.

22,554. It is taken for granted that they work equally?—Yes.

22,555. What happens after the fish have been laying in that state for 30 days; are they then transferred to casks?—They are then taken out and washed; the salt is removed from them; half of it comes back again.

22,556. Can it be employed again?—We do use it again sometimes, but we prefer disposing of it for manure.

22,557. What is done then?—After the fish are washed they are placed in casks, and put in the press.

22,558. In what kind of press?—In a press on the leverage principle.

22,559. What is the effect of that?—They gradually settle down in the cask. After three days they fill the cask again. After three more days they again refill it, and then the operation is completed.

22,560. Is it then headed up?—Yes.

22,561. Is there any Government inspection?—No.

22,562. There is nothing in the shape of the brand which is used with the herrings?—No, there is nothing of that kind; there was formerly.

22,563. When you had the bounty?—Yes.

22,564. But there is not at present?—No.

22,565. Do you not find that you are interfered with on the continent in consequence of the absence of the Government brand?—I cannot answer that question. It was before I had any knowledge of the matter that the brand existed. Of late years there has been no brand.

22,566. (*Mr. Lefevre.*) Has each pilchard merchant his separate trade mark?—Yes.

22,567. (*Professor Huxley.*) After the casks are headed up are the fishes exported?—Yes.

22,568. There is no considerable sale for them about the country in that state?—No, but occasionally we have sold them from the seines fresh.

22,569. Do not the drift-net fishermen supply a large proportion of the fish consumed in the country?—Yes, I believe they do.

22,570. In what relation does your house stand to the seines? Is there any agreement between the curing house and the seine workers, or do you have your own seines?—We have our own seines.

22,571. How many have you here?—We have 11 afloat now.

22,572. Do you engage the crews of the seines at the beginning of the season?—We bargain with them as we do with the women, and give them 1*s.* to secure their services.

22,573. And they are bound to come when you require their services?—Yes.

22,574. How many have you to one seine?—18.

22,575. Sixteen men and two boys?—Yes.

22,576. Out of that number how many will be sailors?—Some of them will be fishermen.

22,577. Fishermen by calling?—Men who know the sea.

22,578. How many?—I can scarcely say. We find a larger proportion in connection with one seine than with another.

22,579. I believe it is only necessary to have one or two men acquainted with the sea to manage the boats; the others may be shore-going men?—Yes, but the latter will have been engaged in this way for years.

22,580. Still a great number of them may be landsmen?—If we have a good set of men in the seine boat we are not so particular what they are in the follower.

22,581. That is the boat they call the volyer?—Yes.

22,582. A portion of the men will be sailors and fishermen, and the rest may be picked up anyhow?—Yes; carpenters, blacksmiths, and shoemakers, anybody that can be induced to go to sea.

22,583. Have you in your possession any records with regard to the take of fish of past years?—Yes.

22,584. Can you tell us what the average of hauls has been with your 11 seines during the season?—I hardly think I can give you that.

22,585. How many hauls will each seine have made?—That is a difficult matter to get at.

22,586. What number of hauls would constitute a good season?—As far as we are concerned we had a good season last year. There were four seines out with which Messrs. Fox are connected. Three are all their own, and Mr. Jago has an eighth share in the other one. Last year each seine produced 230 hogsheads at 55*s.* a hogshead.

22,587. How many times during the season will you get a good haul?—Perhaps only once sometimes, and sometimes twice; occasionally three times, but very rarely more.

22,588. Very rarely more than three times?—Yes.

22,589–90. Then out of your 11 nets do you think that you do well if you get 30 hauls in a season?—Yes; there is no more labour in enclosing a shoal worth 1,500*l.* than there is in enclosing one worth 30*s.*

22,591. How many nets has your firm got altogether?—11. I manage four out of the 11.

22,592. If each seine got three good hauls in the season you would think that you did well?—Yes, that would do very well for us.

22,593. I believe that a regular look-out for the fish is kept?—Yes, by the master seiners from the water, and by others from the hills.

22,594. What do the men do in the intervals when they are not employed with the seine? I presume that by taking the 1*s.* they are bound to give their services whenever they are called upon?—Yes, either day or night.

22,595. Then what do they do in the interval?—In the morning some of them may go harvesting, some shoemaking, some blacksmithing, some one thing and some another, and some of them are looking after the seines. They require washing, and otherwise attending to.

22,596. Is it the duty of the men who are hired in that way to attend to the seines as well as to work them when they are required?—Yes.

22,597. Suppose that you had no haul in the season then these men would get nothing at all?—No.

22,598. Notwithstanding they have engaged to tend the nets?—They get 8*s.* per week for their services, and their employment is only for about half the day. They go out after their dinners, and they get back about 8 or 10 o'clock, unless they find a shoal and shoot the nets, and in that case their services may be required in landing the fish if it happens to be a large catch for a week or ten days.

22,599. Then the men differ from the women in having regular wages?—Yes, and they have the fourth part of the fish besides.

22,600. Taking men, women, and children all together, how many people get employment in an average season in connection with your house and the four nets you manage?—I myself keep about 90 or 100 employed, men and women.

22,601. What the men actually get and what the women get must be a matter of great speculation?—Yes.

22,602. Some years they get a great deal?—Yes.

22,603. And some years next to nothing?—Yes.

22,604. In point of fact hardly enough to keep them alive?—It varies much. One of our seines

last year in the course of three or four days got from 15*l.* to 16*l.* a man.

22,605. That is what the poor men got, the men employed in working the seine ?—Yes.

22,606. Do you agree with what other witnesses have stated that employment in connexion with the seines is not so steady and regular as employment in connexion with the drift-nets ?—I think it is as far as wages go.

22,607. But the wages are small, only 8*s.* a-week ?—You must remember that the men are only employed half the day for that.

22,608. But the engagement is one which necessarily prevents a man who undertakes it from having other employment ?—They can get employment about the town. We do not like them to go into the country, because the fish might appear in their absence and then we should be short of hands.

22,609. It tends to keep the people engaged in this business rather idle than otherwise while the fish are off the coast ?—Yes.

22,610. The great mass of your fish are exported ?—Yes, the principal part.

22,611. Unless you get an unusually large catch ?—In that case they are all exported or nearly so.

22,612. You do not do much business with the hawkers about the country ?—Very little now.

22,613. Have you ever done much ?—Yes, formerly, and also with the drift-fishermen at Plymouth. We sold fish to them 15 or 16 years ago for one or two seasons, but I do not know what the quantity was. One seine sold 300*l.* worth in one year.

22,614. What is the greatest value of a shoal inclosed within a seine you have ever seen ; what money has it produced ?—I cannot exactly say. We had one last year that brought in 1,100*l.* and we had one a few months ago that brought in between 1,200*l.* and 1,300*l.*

22,615. Was that in one shoal ?—Yes.

22,616. Do you think the seining is injured by the drift-net fishing ?—There are various opinions respecting that.

22,617. What is your own opinion ?—I am not sufficiently a practical man to be enabled to give an opinion in the matter. I know very little about it, but I understand that it is considered injurious.

22,618. (*Mr. Lefevre.*) Do you remember when the number of drift-boats here was much smaller than it is now ?—Yes.

22,619. (*Professor Huxley.*) You have not made any observations on the matter yourself ?—No.

22,620. You cannot tell me from practical experience whether drifting breaks the shoal ?—It has been reported to me that it does.

22,621. Is it their theory of the case, or have they observed it ?—I think it is only their theory.

22,622. Do you know of anybody who has observed that drifting has actually broken the shoal ?—I do not know that I do ; I know very little about the matter.

22,623. You stated just now that the refuse salt after the fish have been washed was sold for manure ?—Yes.

22,624. Does it make good manure ?—Yes, we sell great quantities of it; we sell 200 tons or 300 tons in the course of the season.

22,625. One of the witnesses stated just now that when a large haul took place there was a great deal of refuse, consisting of small fish of no value ?—That is quite incorrect. During the last season I had 1,620 hogsheads in Messrs. Fox's cellars, and there were only 16 hogsheads of small fish among them.

22,626. But were all the fish brought to the cellars ?—I am speaking of the fish placed under my charge during the past season, and I had only 16 hogsheads of small fish out of 1,621.

22,627. Had a selection previously taken place ?—Yes, and 16 hogsheads of small fish came from the whole quantity.

22,628. Then you do not agree that there are a great number of small fish which are not pilchards and which are taken in the seines ?—Sometimes I have seen such a thing, but it is very rare when we have a large haul of fish. Our fish are very clean generally.

22,629. (*Mr. Lefevre.*) Are they much of the same size ?—Yes.

22,630. (*Professor Huxley.*) Have you ever seen any large quantity of useless fish disposed of for manure ?—Never in my day. It may have occurred in former times, owing to an immense quantity of fish being taken and there being a scarcity of salt, but nothing of the sort has ever come under my own knowledge.

22,631. Nothing of that kind has ever occurred within your own knowledge of Messrs. Fox's operations ?—No.

(*Mr. Jago.*) Perhaps I may be permitted to say that I have seen them sold in that way when they were not worth salting, they were so small. The Italian market requires very good fish. I remember a seine taking 270 hogsheads which were considered not worth salting after they were brought ashore, and they were carted away as manure.

22,632. (*Mr. Lefevre.*) Then it does happen sometimes that you get a shoal of useless fish ?—Yes.

22,633. (*Professor Huxley to the witness Roberts.*) Have you any difficulty now in obtaining salt ?—No, we can get any quantity we like.

22,634. In your opinion is there any regulation enforced which interferes with the prosperity of seine-fishing ?—No, I do not know that there is, but it is a difficult matter to enter into.

22,635. We are here for the express purpose of ascertaining that fact. One of our main duties is to inquire whether there is anything that interferes with the prosperity of any kind of fishing ; we are quite unpartial in the matter and only wish to obtain all the information we can. Is there anything you can suggest to us in addition to what you have already said ?—No, I think not. There is one thing I cannot account for.

22,636. What is that ?—Some seasons we have an abundance of fish and then we have not. We had them in 1849 in great abundance, then again in 1856, and again in 1863. It would appear from that that they come in great abundance once in every seven years.

22,637. In the years you have mentioned, namely 1849, 1856, and 1863, was there the same amount of drift-net fishing going on ?—Yes. I suppose the number has increased since 1849 ; but when we have had large catches in the seines they have also had large catches in the drift-nets ; when there has been a failure in the one there has also been a failure in the other. Both seem to derive advantage when the fish approach the shore.

22,638. Then the tendency of that answer is to show that drift-net fishing does not interfere with the seine-nets ?—I think the seine-nets would have a better chance if the drift-boats kept a little further off.

22,639. Would you keep them out a league and a half ?—No ; I would not wish to drive them to the extreme limit laid down by the law, but if they gave us a little fair play it would be rather beneficial to all parties. At Gorran, for instance, they must keep a little further off. There is a bay shore there where the seines can work better than at Mevagissey. The drift-net men would not be injured by that.

22,640. The drift-net men might if they pleased intercept the shoal ?—Yes.

22,641. It would be wrong for them to do so ?—Yes.

22,642. Does it ever occur ?—I cannot say; I have heard the master seiners say that when they have shot to enclose a shoal of fish, another shoal has come in and struck the side of the seine and the fish have immediately taken off into deep water. While they have been working the shoal another shoal has occasionally come up and struck the side of the seine. When such a case occurs the fish invariably take off.

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22,643. Are you acquainted with the regulations which affect the seines? We have heard of persons taking possession of particular localities, and of there being some rule upon the matter.—Yes, there is a rule.

22,644. What is the nature of that rule?—They hold the turn for 24 hours.

22,645. What do they call that operation?—Stemming. They adopt that at St. Ives, and in the mackerel-fishing as well.

22,646. What is the rule as to that?—If a seiner takes possession of a given spot he shall hold it for a given time?—He is allowed to hold it unmolested for 24 hours.

22,647. He cannot be meddled with at all for 24 hours?—No.

22,648. Does the size of the seine regulate that privilege?—The seines are all of one length.

22,649. What is the length?—240 or 250 fathoms. No arrangement is entered into between one seine and another.

22,650. Is it regulated by a local Act of Parliament?—No.

22,651. Is there no Act of Parliament upon the subject?—Not here; I think there is one at other places.

22,652. If any person chooses to disregard that regulation, is there any means of enforcing it?—Yes, they have a right to interfere with each other.

22,653. Under what Act?—There is no Act.

22,654. Then where does the right come from?—It is a rule or regulation entered into between them, one with another.

22,655. Suppose that some outsider does not choose to come within the rule, have those who have laid down the law any right to enforce it?—I cannot say whether they have or not.

22,656. Have you ever seen any person taken before the magistrates for refusing to comply with this regulation?—I cannot say that I ever have.

29,657. (*Mr. Lefevre.*) How many of these turns are there?—About a dozen on our shore.

22,658. And there are only 11 seine-nets?—Yes, but there were only the same dozen turns when we had 40 seines. They were obliged then to take first, second, and third turns.

22,659. There is room now for all the seines?—Yes; each might have a separate turn if they liked.

22,660. (*Professor Huxley.*) Are these turns quiet, sheltered places where the seines can be worked?—Yes.

22,661. Does it depend on a man's activity whether he gets the first turn or not?—Perhaps two individuals may row for the same turn sometimes, and the first who gets there has it.

22,662. Is there anything like a roster or rotation set up?—No; some go to one place and some to another.

22,663. What is the distance between the stations?—I suppose they extend over two miles altogether.

22,664. If a man has held the turn for 24 hours, can he at the end of that time go on for another 24 hours?—Yes, if there is nobody to interrupt him.

22,665. But suppose another boat comes up and they say they want to fish there?—Then the first must go out, but he can renew the turn in 24 hours.

22,666. What is the rule in a difficulty of this kind: if two people come up after a man has held a turn for 24 hours, what is the rule in this case?—The last there goes back again.

22,667. (*Mr. Lefevre.*) How is it that a boat takes possession?—A man comes up with his boats and throws a barrel overboard with a rope attached to it.

22,668. Does he leave his nets in the boat until the shoal appears?—Yes.

22,669. (*Professor Huxley.*) And he may hold that turn for 24 hours?—Yes.

22,670. And if anybody else comes he must then go?—Yes, for instance, a man may row up and say, "Joe" or "Tom," as the case may be, "your turn is "up," and if that is the case the man immediately withdraws and the other takes his place.

22,671. (*Mr. Lefevre.*) I suppose there is not much choice in the stations, except with regard to their distance from the port?—Some seem to be favourable to one place and some to another.

22,672. (*Professor Huxley.*) We have heard it said that unless a man has a net of a certain size he is not allowed to claim the privilege of claiming a turn?—Yes, that is so. Those nets you refer to have been prevented from fishing since that byelaw was made, namely, within the last four or five years.

22,673. All this is a matter of local agreement for which there is no other warrant?—Yes.

22,674. (*Mr. Lefevre.*) Did I understand you to say that you had some seine-nets at Gorran?—No, we have only an eighth part in one seine there.

22,675. How many seines are there there?—There are three there now.

22,676. How far is that from here?—A couple of miles.

22,677. What place is there eastward from here where there are any seines?—Charlestown.

22,678. Are there any drift-boats at Gorran?—I think there are nine.

22,679. Between Gorran and Falmouth is there any fishing station?—There is one at Porthloe.

22,680. Are there any seine-nets there?—Three, I think.

22,681. Do you cure any fish for the drift-boats?—No; at Porthscathe there are a couple of seines. Then we get down to Falmouth harbour, and there are some at St. Mawes.

22,682. What is the greatest distance you have known the seine-nets put out from the shore?—They cannot go out a great distance their depth being only 14 fathoms. They are confined to a limited distance from the shore.

22,683. What is the greatest distance; is it half a mile?—From a quarter to half a mile, I suppose.

22,684. (*Professor Huxley.*) Can you give us any correct statistics of the catches here?—Yes, I will forward them to the secretary.

The witness withdrew.

J. Furze.

JOHN FURZE called and examined.

22,685-6. (*Professor Huxley.*) Are you able to explain to us what a ground-seine is?—Yes. It is a seine about 100 fathoms long and eight fathoms deep.

22,687. How is it made; is it made with a pocket?—No.

22,688. What size is the mesh?—From one and a quarter to one inch bar.

22,689. That is from knot to knot?—Yes.

22,690. Is it loaded along the foot?—Yes.

22,691. With what?—With lead.

22,692. Are there buoys along the head-line?—There are floats along the cork-lines.

22,693. How do you work the seine?—We shoot it similar to other seines.

22,694. Do you drag it on the shore?—No, we tuck it.

22,695. How many boats does it take to work it?—Two boats.

22,696. How many men are there in each boat?—Five.

22,697. Does it differ from the other seines?—We take up the tuck, and then we take the fish out of the tuck.

22,698. Is the middle of the net deep and long?—The middle of it is of the same depth.

22,699. When you haul it in you get hold of the bunt by the lower part?—Yes.

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22,700. What do you catch with the ground-seine?—Turbot, plaice, sole, brill, and other fish.

22,701. What depth of water do you work it in?—From four to eight fathoms.

22,702. Then you use it along the shore?—Yes.

22,703. Do you require any particular sort of bottom on which to fish?—It must be a soft bottom.

22,704. It will not do to use it on a rocky bottom?—If we use it near the rocks in the night time it will take the red mullet.

22,705. Do you catch turbot here in great numbers with it?—Last year we caught more than we ever did before, but they were not very large.

22,706. Do you catch soles as well?—We catch more in the summer, in June and July.

22,707. Are there any particular parts of the coast where you can use the ground-seines more than others?—Yes, off the Deadman Point and Gorran Bay.

22,708. In sandy places?—Yes.

22,709. (*Mr. Lefevre.*) Can you use it all the year round?—No, only from June and July to November.

22,710. (*Professor Huxley.*) Why can you not use it at other times?—Because the fish are not then near the shore.

22,711. Do you ever get any large turbots in that way?—We get them weighing from 10 lbs. up to 24 lbs.

22,712. Do you get plenty of soles?—Yes.

22,713. Do you catch plenty of small fish in the ground-seine?—Yes, in some seasons of the year.

22,714. What is the size of the smallest that you get?—We have soles from six to eight or 10 inches long.

22,715. Not smaller than that?—No.

22,716. Do you not get small turbot sometimes?—We get a few small ones if they come close in-shore. Last season we got the largest plaice we ever caught, from one to two feet in length.

22,717. (*Mr. Lefevre.*) What do you do with these small fish?—Sometimes we throw them away, and sometimes we bring them ashore.

22,718. Do you find any market for them?—Yes, we sell the large ones.

22,719. (*Professor Huxley.*) Where is your market for them?—Here.

22,720. Do you work that seine all the season?—Yes; and in November we use it for the herring-fishing.

22,721. When the herrings come in you look out for the shoals and surround them?—We go out and we shoot for them, but we do not do much in that way.

22,722. Is it a kind of circle-net fishing for herrings?—Yes.

22,723. Do you get large hauls?—Sometimes.

22,724. Are the herrings much damaged or bruised when they are taken in that way?—No, I cannot say that they are.

22,725. Why do you not practise the regular mode here; is it because you find the other mode better?—Yes.

22,726. Is there less chance about it?—Yes.

22,727. Are there many of these ground-seines here at Mevagissey?—I think there are four or five.

22,728. Do they keep their crews pretty well engaged?—In the season when the fish are off the coast they have crews to work them.

22,729. Are they regular fishermen?—No, boys and landsmen, whoever we can get to go.

22,730. (*Mr. Lefevre.*) How long has that system of fishing been carried on here?—From before my time.

22,731. Then it is not a new thing?—No.

22,732. (*Professor Huxley.*) Do you go hooking during the rest of the season?—No, I construct seines for others. I came from Charlestown this morning. I have been engaged there constructing pilchard-seines.

22,733. Do others who work their ground-seines go hooking or pilchard-fishing for the rest of the year?—They all go pilchard-fishing.

22,734. Then this is a different kind of fishing?—Yes.

22,735. Do you find any falling off in the quantity of fish you take by it?—Last year there were more fish on the ground than I ever saw before.

22,736. Does anybody trouble you or meddle with you?—No.

22,737. (*Mr. Lefevre.*) The trawlers have not affected that kind of fishing?—No, it is in-shore fishing and they cannot come.

22,738. Does the better class of fish you catch go off by train?—Yes.

22,739. Do you sell them on the beach?—Mr. Ley buys them.

22,740. What becomes of the inferior kind of fish?—It is sold round the country, such as chads, gurnards, and the like of that.

22,741. When you haul the nets in do you bring up the fish dead or alive?—They are all alive.

22,742. Do you throw any of them overboard?—Yes, if they are very small.

22,743. Are those you throw overboard alive?—Yes, they are all alive; they are not like those taken by the trawler men.

22,744. Have you trawled from here?—Yes.

22,745. There is a small trawler off here?—Yes.

22,746. Is that your boat?—No.

22,747. (*Professor Huxley.*) Have you seen dead fish brought up by the trawl?—Yes, I have seen fish got up dead in the trawl.

22,748. Have you been much engaged in trawling?—About 10 or 12 years.

22,749. (*Mr. Lefevre.*) From here or from Plymouth?—From here. I went first in the year 1826.

22,750. (*Professor Huxley.*) Why do not your fishermen here trawl more from this port?—They do not find that it answers.

22,751. What is the reason of that?—The fish they get in that way does not pay them so well as what they get by driving.

22,752. What sort of port have you here; can you get in and out at any state of the tide?—No.

22,753. You cannot use heavy vessels then?—No heavy vessels could get into this place.

22,754. (*Mr. Lefevre.*) Is the ground here suitable for trawling?—There is good trawling ground four or five miles off. You get then on the ground where the Plymouth men go.

22,755. Do you think trawling would pay you if you had a better port?—No.

22,756. Is there any further suggestion that you wish to make to us?—No.

The witness withdrew.

JOHN BEER called and examined.

J. Beer.

22,757. (*Professor Huxley.*) Do you belong to Gorran?—Yes.

22,758. How long have you been a fisherman there?—30 years.

22,759. What kind of fishing have you practised?—Crabbing, ground-seining, driving, and pilchard-seining.

22,760. Is Gorran a great crabbing place?—Yes, very great.

22,761. What is the reason of that? Is it a favourable spot about there for crabs?—Yes, very much so.

22,762. Is it rocky ground?—It is not all rocks; there is some sandy bottom.

22,763. How many fishermen are there in Gorran?—I suppose there are about 40 established fishermen.

22,764. Forty regular fishermen?—Yes.

22,765. How many boats have they among them?—20 small boats.

22,766. Crabbing boats?—Yes.

22,767. Are they all little wherries?—Yes.

22,768. How many other boats are there?—There are nine driving boats.

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22,769. Are they the same sort of driving boats as those here?—Yes.

22,770. What are the crabbing boats worth; they do not cost much, I suppose?—From 10*l.* to 14*l.*

22,771. Are they sailing boats?—Sailing and rowing boats.

22,772. How do you catch your crabs there, with pots?—Yes.

22,773. Do you bait your pots?—Yes.

22,774. What with?—Any kind of fish we can get.

22,775. Do the crabs like the bait high or fresh?—Fresh.

22,776. They prefer it fresh?—Yes; we cannot catch them at all if we have stale bait.

22,777–8. Do you catch lobsters with the bait stale or fresh?—It does not make any difference.

22,779. Do you set your pots on the rocks?—Yes, and on the sand as well. We set them on the rocks for the lobsters, and on the sand for the crabs.

22,780. Do you get a great supply?—Some seasons we get a very good supply, and in others the fish are very slight.

22,781. Taking it on the average, has there been any change of late years?—It has rather fallen off.

22,782. How many crab pots have you got here?—They average about 60.

22,783. (*Mr. Lefevre.*) 60 to each boat, or altogether?—60 on the average, some may have more or less.

22,784. (*Professor Huxley.*) Are they all made fast to one warp?—They are all separate but attached to one line.

22,785. Do you put them down and leave them?—Yes, we haul them in every 24 hours.

22,786. What is your average catch of crabs in that way? How many will a boat give? What is a good haul?—What we call a good haul now-a-days is half a score.

22,787. Is that half-a-score for 60 pots?—Yes.

22,788. Do you get one large crab for every six pots?—Yes, and when the she-fish come they are more plentiful. These are the large he-fish. I am speaking of the he-crabs. When we have the she-crabs here we catch some days perhaps 100.

22,789. Do the he-fish command a better price than the she fish?—Oh yes.

22,790. Where are they sold principally?—We sell them greatly to the smacks that trade with us.

22,791. Where do they carry their crabs?—To London and Southampton, I believe.

22,792. How many smacks trade at Gorran?—I can hardly say; there are eight or nine that go there, but three smacks would be sufficient to trade regularly.

22,793. Does that fishing go on all the year round?—No.

22,794. How many months in the year?—It commences in January and falls off when the pilchard season sets in in July.

22,795. You do not think that there has been any great decrease of late years?—There has been a decrease in the crabs.

22,796. Has the decrease been very great?—Yes.

22,797. What do you think is the reason of that?—I cannot assign any reason whatever for it.

22,798. Do you think that you have been fishing them too much?—I think that is the cause more than any other thing.

22,799. What do you do with the small crabs you catch?—We have a measure for them; if they come under that measure we throw them away.

22,800. You throw them away if they are under a certain size?—Yes.

22,801. What is the smallest size at which you take them?—Six inches for a he-fish.

22,802. And what for a she-fish?—There is no rule for the she-fish.

22,803. (*Mr. Lefevre.*) Has the number of crab-boats increased?—They are just about the same some years; they decrease, and then they increase again. I think this year there has been an increase.

22,804. (*ProfessorHuxley.*) How long has that rule concerning the size of the he and she fish been laid down?—Ever since I have been crab-fishing.

22,805. Is it a kind of agreement among the fishermen?—Yes.

22,806. I suppose it would not do much good unless you were to put down the he as well as the she fish?—If we find a fish with berries we cast them away always.

22,807. What do you do with the berry lobster?—We sell all we get.

22,808. Do you not get rather a higher price for them?—No, only the same price: we sell them at so much per dozen.

22,809. Have the lobsters fallen off too?—Yes, very much so indeed; we were about to make an agreement among ourselves to abstain from fishing in the fall of the year. We consider that the lobsters come to the coast at that time to spawn, and we tried to make an agreement to put a stop to the fishing then; we think it is injurious. In the summer season the fish begin to draw in to the land, the lobsters get almost as near as there is any water for them and there they cast their spawn. We find more berries then than at any other time of the year.

22,810. What do you mean by saying that the lobsters cast their spawn; they carry it with them, do they not?—Yes, they carry it with them till it gets ripe, and then it falls off.

22,811. You think that the eggs are detached in shallow water?—Yes, we consider that that is so when the weather is warm and the water still.

22,812. What is the smallest-sized lobster you have ever caught?—About the length of your pen.

22,813. Not smaller than that?—We do not make our pots sufficiently close to catch them smaller than that. We could make them close enough to enable us to catch them half that size, but we find that such fish would be of no benefit to us. We therefore make our lobster pots of certain dimensions, so that the smaller fish may pass through.

22,814. By chance did you ever see a lobster half the size of the smallest you generally take?—No.

22,815. If there are any such your pots would not bring them up?—No.

22,816. (*Mr. Lefevre.*) They would get out again?—Yes.

22,817. Do you sell lobsters of that length?—Yes.

22,818. Do they sell very well?—They are generally counted two for one.

22,819. (*Professor Huxley.*) Are your lobster pots made in the same fashion as your crab pots?—Yes.

22,820. How many of them do you have to each boat?—50 to each boat.

22,821. Do you use the same pots?—Yes, we use the same for crabs and for lobsters.

22,822. Do you think that the scarcity of lobsters has arisen from over-fishing?—I am not prepared to express an opinion on that point.

22,823. But you tell us that you thought of making some regulation among you?—Yes; it was mentioned among ourselves the other day when we heard that you were coming down.

22,824. Could you not agree in the matter?—No, it is not often that you find all of one mind.

22,825. What other kind of fishing is there at Gorrin?—There is a pilchard fishery.

22,826. Do you agree with what has been stated by previous witnesses in reference to the pilchard-fishing?—Yes.

22,827. Is there any seining at Gorran?—Yes, I have a small seine myself.

22,828. (*Mr. Lefevre.*) Is it a ground-seine or a small pilchard-seine?—I have a ground-seine also.

22,829. (*Professor Huxley.*) Have you a small pilchard-seine?—Yes.

22,830. Have you any rule about stations there?—The rule is that the stems are only for the large seines. They will not allow me to go there on any terms whatever.

22,831. Who will not allow you to go there?—The lot of them, beginning with the masters and going down to the young ones.

22,832. Have you ever gone to a station to take up your place and then been ordered off?—Yes, and they threatened to run me down too.

22,833. By what law or authority was that done?—I do not think they have any law or authority. It was done by nothing more than an overruling power as we call it. Now I am a fisherman the same as my friends here who have spoken before. I have been a fisherman engaged at that employment from the time I was 12 years of age, and I never earned 1*s.* from anybody on land in my life. I have been in what you may call the very lowest grade of fishing, and that is what we call crabbing. Now I am a driver and a stop-seiner.

22,834. But why do you set up a stop-seine if you are not allowed to use it?—They will not let me use it, because they say it is a small one, and they say it is under size.

22,835. If the people order you away when you try to use it, surely it can be of no use to you?—No, it is of no great use.

22,836. Did you not know that they would not allow you to use it when you bought it?—No.

22,837. How many years have you had it?—Only one. Last year was the first time I tried to use it.

22,838. Under these circumstances did you not attempt to get some protection?—I got no protection at all. I wanted to make some arrangement with the masters and workers. I told the men in charge of the large seines that I was ready to meet them on any reasonable terms. I offered to go to the masters, or to the magistrates, or I was willing to appeal to the law. I did not wish to have any disturbance; all I wanted was to have the matter settled in a proper manner. We are only poor fishermen, and it is a matter of great importance to us. There are four of us acting in company, and we endeavoured to set up this small seine, yet after we got it they would not allow us to use it. I tried to meet them on any reasonable terms, but they would not allow us to come in at all. We have turns here on the west side of the Deadman, and we have turns also on the east side. I said to them, Now suppose you stem on the east side of the Deadman, and suppose I am inclined to stem on the west side, we can very easily arrange that, or if you choose to stem up here I can go somewhere else. I will go there to the east side of the Deadman, or to the west, or where you please, but it is very hard not to allow me to fish at all. All I want to know is, if I go away from you, will you allow me to work my little seine where there is water. The complaint they had against me was that my seine was only nine fathoms deep, whereas theirs was 11 and 12 fathoms deep. I said I will go outside yours if you will not allow me the privilege of working inside. They told me that if I went to the west side, or went to the east, I should not be allowed to shoot my seine, but I should be ordered out of the turn. What was I to do under these circumstances? They said I was to go away from them. I said further west at Porthloe I shall be ordered away there, and what am I to do betwixt the two fires. All they said was you must do your best.

22,839. (*Mr. Lefevre.*) What turns are there at Gorran?—There are three turns near the place, and eight or nine further down.

22,840. And there are only three seines there?—Only three.

22,841. Then there is room for plenty more seines?—Yes, there is plenty of room.

22,842. (*Professor Huxley.*) What is the ground of the objection to your seine; I suppose there must be some sort of reasonable objection made?—I do not know, I am sure. I do not know anything about it. I have no idea what objection there can be.

22,843. Was it that the long seines expected to be cut out?—I do not see how they could be. I told them plainly before I went out that I would meet them on any reasonable terms. I went to an influential man to make an arrangement, but he told me I must go further as he was an interested party.

22,844. (*Mr. Lefevre.*) I understood you to say that you offered the large-seine men the choice of stations?—Yes, we must hold the stem for 24 hours. Then after 24 hours it goes to the next man. I did not ask for a whole stem, but I simply requested to be allowed to work my seine if I was there before them. But they said no, they would not allow me to do so at all.

22,845. (*Professor Huxley.*) They with a deeper seine would have the advantage, and could work outside of you?—Yes.

22,846. (*Mr. Lefevre.*) Could you not wait and see what stem they took, and then take another?—Yes, but if they felt inclined they would come and turn me out.

22,847. If they saw the fish come in would they leave their own stem and come to yours?—Yes, if the fish happened to be in mine they would do so. I went to the west side of the Deadman early one morning. I went there first turn, and I went on shore to look out for the fish, and see if there was a shoal there. I was on a hill on the look-out, in the same way that we look out for mackerel, when one of the seine-boats came down. There was another stem in the inside turn from me, but they came down and hove out their grapnel just outside of me, notwithstanding that there was another turn vacant at the west side. They would not go further down because they wished to interrupt me.

22,848. (*Professor Huxley.*) How is it that you allowed all this to take place without appealing to the nearest authority? There must be some right or wrong in the matter?—I was given to understand that there was no law for it. We tried it on with the mackerel seines and we did no good; we found that the weakest must go to leeward.

22,849. So I understand you complain of this custom, and you cannot say it is sanctioned by law?—No, we are given to understand that there is no law for it whatever.

22,850. Then in that case there is nothing we can very well do to help you; you must have recourse to the ordinary forms of law?—We are entirely helpless. We are down, and there we must stop. What can we do?

22,851. I thought that the ordinary process of law would protect you?—I have tried to make things as agreeable as possible. I tried this morning before I came away. I told them I was ready to meet them on any reasonable terms, but I do think that it is very hard on me as a poor fisherman that I should not be allowed to go out and work my little seine.

22,852. Would it not be better for some of the fishermen who feel oppressed by this course of proceeding to ascertain definitely what the condition of the law is, so as to know whether there is any law that really affects or binds them?—We are only poor fishermen, and we do not understand much about the law. Therefore, when the thing was done, we allowed it to fall off.

22,853. (*Mr. Lefevre.*) But suppose that you insisted upon putting your seine-net down?—I was told that if I persisted in doing that they would run into me.

22,854. They threatened to run you down?—Yes.

22,855. But if they did that surely you could appeal to the law?—Of course we could appeal to the law then for damages.

22,856. In that case the question would be settled whether they had any right or not?—No doubt, if they went as far as that, we could appeal to the law for damages.

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22,857. What would be the effect of putting your net, which is only nine fathoms deep, in deeper water?—In that case we should lose all the fish. We should not attempt that.

22,858. How many men do you employ for your seine-net?—We have about nine hands, including the boys. We have two boys for each boat.

22,859. Did you not take any fish with your seine last year?—We got about four hogsheads.

22,860. That did not pay you?—No, it was very slight indeed.

22,861. What was the cost of your net?—50*l.*

22,862. How long does a seine-net last?—That depends upon the use you have for it. Generally speaking a net will last from 10 to 15 years; 15 years I should think.

22,863. Is the whole coast along here set out in stems?—Yes, wherever there is a sandy bottom and the seine can work.

22,864. Where there are rocks there are no stations?—No, it would be useless to have stations where there are rocks.

22,865. Is there a considerable quantity of rocky ground between here and Falmouth?—Yes, in places.

22,866. Is it only here and there that you find it clear?—Yes.

22,867. Is it your impression that the lobsters are destroyed by trawling?—For my own part I do not know anything about the matter, although I have been engaged in the fishing business all my life, and although I have used ground-seines and mackerel-seines, and also crab-pots. I am not prepared to say anything upon this matter.

22,868. Do the trawlers ever trawl over the crab-pots?—Yes.

22,869. Have you suffered damage from that?—Yes, I have suffered a great deal of damage.

22,870. That has been the ground of complaint among the fishermen here?—Yes, it has been; we consider that the crabbers are the prey of everyone.

22,871. I take it that that is one of the calculations of your trade?—Yes, we make that calculation.

22,872. The trawlers do not come within a short distance of Gorran, do they?—Yes.

22,873–4. (*Professor Huxley.*) Do you think they should be kept out of the bays where the crab-pots are set?—I have no desire to prevent them from getting a living, but we have suffered from them.

22,875. (*Mr. Lefevre.*) Have you got a drift-boat of your own?—Yes.

22,876. What did it cost you?—The boat cost about 70*l.*

22,877. And what did the nets cost?—About 60*l.*

22,878. Then you saved sufficient by that to purchase a seine-net?—I am like our friend at the back who gave his evidence a little while ago; I rose up from as low a position as I could have been in; I have managed to get along somehow; first I got a good ground-seine, and then a mackerel-seine, and then a drift-boat.

22,879. You have done pretty well, then, one way and another?—Yes, I have managed to bring up a large family in a decent way without being a burden upon anybody.

The witness withdrew.

J. Hunkin.

JOSIAH HUNKIN called and examined.

22,880. (*Professor Huxley.*) Are you a fisherman here?—I have been a fisherman from my boyhood; for a few years I attended to something else, but I always went fishing in the season.

22,881. What modes of fishing have you practised?—All sorts except trawling and crabbing.

22,882. You have heard the evidence given by the previous witnesses?—Yes.

22,883. Have you anything to add to their evidence, or anything to qualify?—I might say a great deal, but I think that perhaps enough has already been said upon the general subject. There is, however, one thing upon which I wish to say a word, and that is, the obstruction which is given to the small seines by the large pilchard-seines. As others have said already, I also have risen from one net to many nets of all sorts. Last season I put into the water what is deemed a little seine, and which has recently been called a jackass-seine.

22,884. What is the nature of the seine?—It is a small pilchard-seine, but that is only the appellation they give it.

22,285. A large one being called a horse-seine, I suppose?—Yes, perhaps so.

22,886. What is the size of your small seine?—It is 100 fathoms long and 12 fathoms deep.

22,887. Is it made with the same sized mesh as the large seine?—Yes, the mesh is just the same.

22,888. What is the cost of a net of that kind?—Last year I had a fathom of mackerel-net to the bottom of the seine, but now I have it all the same mesh.

22,889. I am not asking about the mesh, but I want to know what the cost of a seine such as that is?—I can hardly tell you exactly, but I suppose she would cost when new not much less than 100*l.*

22,890. Then we may take it that it requires a certain amount of disposable capital to set up a net of that kind?—Yes.

22,891. When did you set it up?—I never had one in the water till last season.

22,892. What happened when you tried to put it in action?—In the first place allow me to observe that I did not go with that seine only, I had a partner with a seine of the same dimensions; the two together made a seine of 200 fathoms in length.

22,893. What occurred the first time you shot the seine?—After we had shot we endeavoured to take up one of the seines, when a large pilchard-seine came to the turn.

22,894. Had you your turn in regular order?—There was no large seine there when we got there, we therefore shot our seine. When the large seine came up, almost the first thing they did was to ask if the seine had anything in her; I said no. One man on board the other boat said "We will heave the grapnel into her," but they did not do it.

22,895. Did they mean to throw it in your net?—Yes. I complained to them of their wanting to monopolize all the fishing.

22,896. Did they drive you from the ground?—No, our seine was in the water at the time; they did not do anything to it, they only made a threat.

22,897. Then on that occasion you were not compelled to leave the ground?—Our net was in the water and we could not leave it; they only threatened to heave their grapnel in the next time we went out with the net. We went to a place where there was no seine at work, we had the two seines with us, and we took the stem, but a large seine-boat came and drove us away.

22,898. How did they contrive to drive you away?—I do not know, but the fact is that they did it.

22,899. How many men had you in your two boats?—10 men.

22,900. How many men had they?—17. We went away in order to keep the peace, and in order that there might not be a fight on the water. The fact is, however, that they prevent us from fishing by physical and brute force.

22,901–2. Do you conceive that you have no remedy in that case?—We know of no remedy unless we oppose them, and then they run us down. Then if we feel ourselves aggrieved we might appeal to the law. But that is a very dear thing for men without much capital to try; lawyers I have heard cost a great deal.

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22,903. What you wish to suggest to us is that it is the force of the capital of the large seiners that drives you out?—No doubt; the men appear to be supported by the owners, but how far they are supported by them I do not know. This sort of thing has been carried on in many cases, and not in mine alone. I could mention the names of several men who have had little seines in times past, and who have been driven out by this kind of treatment. We think it is very hard upon us.

22,904. Is there any law, Act, or custom of the trade that is binding?—There is nothing more than the rule which says that the legal stop-seine shall be fourscore cloths, that would be about 160 fathoms, and ours when we put our two together makes a seine of about 200 fathoms; ours, however, is not as deep as the long seines; theirs is 14 fathoms deep, while ours is only 12.

22,905. Then your two seines put together are within a few fathoms of some of the largest seines?—There are very few larger. Some of them are from 200 to 208 fathoms, but not many; I am a maker of seines, and therefore I know.

22,906. (*Mr. Lefevre.*) What is the depth of your seine?—12 fathoms.

22,907. (*Professor Huxley.*) I believe there is a regulation here that the seine that takes its turn shall be of a certain size?—Yes, it must be fourscore cloths, which will make 160 fathoms.

22,908. How did that regulation come about?—It was made years ago among the seiners themselves.

22,909. By whom was it made?—By the seine owners.

22,910. Was it a voluntary obligation?—Yes; there is no parliamentary law or statute law of any kind upon the subject. In St. Ives they have an Act of Parliament.

22,911. A local Act?—Yes.

22,912. Here you have none?—Here there is no such thing, and we complain of the course taken by the large-seine owners as a piece of injustice; we think we ought to be protected against them.

22,913. But suppose your statement is correct, your protection lies at common law. If you do not seek the protection afforded you by the common law of the realm, nobody can give it to you. For instance, if a number of persons combine to drive me out of this town, I have a remedy at common law, but I have no other?—Our seine owners we think have taken the advantage of influencing every ministry which has held office of late years; all the inspecting officers sent down here have been instructed to carry out their views.

22,914. If there be no Act of Parliament or statute law relating to the question, you must seek your protection from the ordinary magistrates; if you are assaulted, or the like, your protection is the same as mine. You cannot expect any special legislation when you are not wronged lawfully. If the law is violated you have your remedy by going to the proper authorities?—If I thought I could get any remedy I would apply; we ought to have some one on the bench who would act in an impartial manner.

22,915. (*Mr. Lefevre.*) I suppose you would like some one to be stationed on the fishing ground to keep peace between you?—If something is not done I think it may lead to disastrous consequences; men do not like to have what they consider their rights trampled out of them.

22,916. (*Professor Huxley.*) Suppose the large-seine owners are going on in this way against the law, would it not be worth your while, jointly, to have it settled once for all?—The danger of the matter is in its leading to a rupture on the water. When the fish are in they do not tarry very long, they must be caught there and then, or not at all. We had a little catch last year; if we had missed that opportunity in consequence of a disturbance on the water, our season would have been gone, and we should have done nothing for the rest of the season.

22,917. Our position as Commissioners here is this: if you can tell us that there is any law which acts oppressively upon your interests, it is our duty to inquire into it. If, for instance, you told us there was a certain law here enforcing a particular length of seine, and were then to add that you were unable to make them so long, we should make a report to that effect to the Government; but all you tell us is this, that certain persons here act unlawfully, and that is a matter in which we cannot help you. Do you ask for Government protection in this matter?—Unless the seine owners will come to some legitimate arrangement I think we must apply somewhere or other. We would rather, if possible, that the question should be settled in a peaceable manner. All we want is to know what we are to do. I think the seine owners have placed themselves in a false position in the matter.

22,918. Do you wish to appeal to the Coastguard to protect you in your rights?—Yes.

22,919. You want something of that kind?—Yes, something to protect us from being interfered with when we are engaged catching fish in the season; I have been employed in driving as well as in seining. I must say that I like driving best, but I wish to be able to go out and catch some of the fish when they appear off the coast.

22,920. You wish to be protected in what you consider to be the exercise of a legal right?—Yes.

22,921. Are there any other small seines here besides yours?—Yes.

22,922. How many are there?—We have four, I believe.

22,923. Do their owners all make the same complaint?—Yes, I believe they do.

The witness withdrew.

J. Scantlebury.

JOHN SCANTLEBURY called and examined.

22,924. (*Mr. Lefevre.*) Do you make the same complaint as Hunkin?—Yes, I am labouring under the same difficulty.

(*The witness John Furze.*) We have a small seine 150 fathoms long, and we make the same complaint.

22,925. (*Professor Huxley to Scantlebury.*) Then it appears that there are four or five of these small seines here, and your complaint is that you are not allowed to use them?—Yes, I was first off last year, and I do not know what I lost. I was so much hindered in fishing that the crew I engaged have threatened to leave me unless I can make some other arrangement; now I have increased my seine this year at an expense of fourscore pounds. There will be no end to the loss I shall sustain if some understanding is not come to with the seine owners.

22,926. (*Mr. Lefevre.*) Have you increased your seine so as to come within the regulations made by the seine owners?—Yes, I have it in contemplation to do so. It would not be more than 160 fathoms then if it came up to the standard of 80 cloths. Then I should be allowed to hold a stem, but they tell me I shall not be allowed to do so otherwise. To do that, however, entails so much expense that there is not one out of ten who is desirous of incurring it.

22,927. (*Professor Huxley.*) Is the tendency of this regulation to keep the small capitalist out of the field?—Yes, and that is what we complain of.

22,928. (*Mr. Lefevre.*) Is it necessary that there should be any regulation of this sort?—I think there must be some regulation with regard to turns.

22,929. I suppose the breadth of the stations or stems has been regulated with regard to the size of the nets?—I think the marks have been there from time immemorial. The stems were laid down in olden times. They are certainly older than my grandfather's time.

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22,930. (*Professor Huxley.*) Would the increase in the number of seine nets tend to injure the chance of each person to catch fish by diminishing the number of turns they could take?—Sometimes it would, and sometimes it would not matter how many were there.

22,931. The greater number of persons there are to take turns, the fewer must be the number of turns any given net can hold?—Yes; but I have known in my day the time when the fourth turn has taken the greatest shoal of fish.

22,932. But, as a general rule, the greater the multiplication of the number of nets, the less chance there is of catching fish for each boat?—Yes.

22,933. If there are 20 boats now, and you double that number, making it 40, would you not lessen the average chance of profit by one half?—Not so much as that, because if there were 40 seines it would not damage them to the extent of one half. It would make some difference, no doubt, but not to that extent.

22,934. But in the long run of chances it must come to that?—When there is a large shoal of fish there is plenty for all. I have seen every one of the nets shot and still there were plenty of fish left.

22,935. That can only apply when the number of nets is fewer than the number of stations. If the number of stations is fewer than the number of nets then some must be excluded?—I have seen them take fourth, fifth, and sixth turn in the same station. I have been riding a sixth turn myself.

22,936. (*Mr. Lefevre.*) We have been told that there are 12 stations and 11 nets?—Yes, that is so.

22,937. If you were admitted to equal terms with the large-seine owners, there would then be 15 seines and still only 12 turns?—Yes.

22,938. That would not give the owners of the large nets quite as good a chance as they have now?—Not exactly.

22,939. (*Professor Huxley.*) It takes a considerable time to empty the net of pilchards?—Yes.

22,940. How long does it take?—A tolerable catch may be taken up at once; for instance, if we have 100 hogsheads or so; but if we get 200 hogsheads or more it will take two or three days to take up.

22,941. All the time they are in the net the seine must keep the station?—No, the turn is lost as soon as the net is shot overboard: as soon as the end of the seine is gone the turn is gone too.

22,942. Another can come and shoot?—Yes.

22,943. (*Mr. Lefevre.*) I understand from your evidence that you wish to be put upon the same footing as the large-seine owners?—Yes, that is what every man in our position would desire.

22,944. Do the seine-net men come down every day and take up their station, or only when they have a notion that there are fish there?—They let what they term their dan or buoy remain there when they go away; by two o'clock in the afternoon it is ended and a boat comes up.

22,945. Do they take up their station every day in the season?—Every day when they are out, their first turn, second, or third.

22,946. They do not wait till they fancy the fish are near?—No, they take their station every day.

22,947. (*Professor Huxley.*) Who arranges the rotation to begin with?—Sometimes a chase is rowed by two or three boats, and you will see the whole town excited with it.

22,948. They have a race for it?—Yes; the way it is done is this: if I go out to take my first turn, if there is no person to oppose me I go out quietly, but if there are two going out together they pull off their jackets and go in for a chase.

22,949. At the beginning of the season is there no arrangement by which the turns are taken with order and regularity?—No; if two go out together there is always a chase.

22,950. (*Mr. Lefevre.*) You do not wish to have the regulation done away with altogether?—No, I do not think that would be the best way of settling the difficulty.

22,951. Do you think that confusion would result?—Yes.

22,952. What you want is that the small-seine net owners should be placed on the same terms as the large-seine net owners?—Yes, I do not want to do away with the regulations in the bay; for instance, we should have no objection to the race.

22,953. Is there anything further that you wish to remark upon?—No. I have had some thoughts in my own mind with regard to the diminution in the quantity of fish. I am quite confident that there is a diminution.

22,954. Of all fish?—Of a great many. I do not think that we have had for a great number of years as many pilchards as we have had formerly, and I do not think we get as many hake and several other kinds of fish.

22,955. Do you think there are as many whitings?—I do not think there are. As to the pilchards, I have watched them with a great deal of interest, and I have thought from what I have seen and experienced that in the month of May the pilchards leave our coast. There seems to be some law of nature similar to that which regulates the coming and going of the flowers, and the ebbing and flowing of the sea, and so on. In the month of May generally—sometimes it is a little earlier than others—the pilchards retire from our coast into deep water, and they are found there in June.

22,956. Are they full fish then?—Yes. Upon one occasion I took some in the beginning of May, and thought I had an opportunity of selling them. I took 30 maunds or 10 hogsheads, brought them into Mevagissey, and cured them. I thought I had a market for them, but owing to the spawn being in them they were a dead loss altogether. My opinion is that they retire from the shore and go out into deep water to spawn.

22,957. You believe that they spawn in deep water?—Yes. If you take one of them when it is very large and full of spawn, as those we catch occasionally in our mackerel nets, and just press your finger just over its belly, the spawn will drop like lead into the water and go to the bottom. They deposit their spawn there; it is there disturbed by the operations of the trawlers and the passing of their beam over it. A friend of mine has made a calculation as to what ground they go over in the Channel, and I find that the greater proportion of it is trawled over. I believe that they kill a great deal of the spawn and weaken the rest. For that reason our pilchard fisheries have not been so profitable of late years as they were formerly; that is the result of my experience. I believe that when they haul up their trawls in deep water they are obliged to take up spawn with them. The spawn hangs to the net in small globules, and they have to shake the net in order to get rid of it.

22,958. Have you seen that done?—I have never seen it done myself, but I have seen others who have.

22,959. Are they here?—Yes.

22,960. (*Professor Huxley.*) Do you think the trawlers are injuring the pilchard-fishing?—Yes, I think they are injuring all the fish that go into deep water to spawn. Anything troubling the young in that way must injure its life, or at least its strength.

22,961. Have you had large hauls for the last year or two?—Do you mean of pilchards?

22,962. Yes.—Not so large as they used to be. I will give you an instance. When first I went pilchard-driving I had 40 dozen of twine; now I do not think we take as many with 50 or 60 dozen as we did then with 40. The coming of the fish shows itself in circles. I think there is nobody who can give a strict account of its coming, but I do not think there are as many fish in the pilchard way as there were formerly.

22,963. You have been pilchard-driving as well as seining?—Yes.

22,964. In your opinion does that interfere with the seining?—I do not think the pilchard-driving in

any shape or form interferes more with the seining than the seining does with the pilchard-driving. In all kinds of fishing if you happen to come in contact injury is done to both parties.

22,964*a*. What one catches of course the other cannot have?—Just so. Sometimes the pilchard-seines will take a great quantity of fish. Mr. Roberts has said that they are not sold for manure, but that has been done. I have bought them as low as 3*s*. a maund, with fully 2,000 in the maund. In such a case as that all price is knocked down.

22,965. Have you yourself seen the pilchards sold for manure?—Yes; in the case of which I have just been speaking, Mr. John Pearce came down on the pier and condemned them when they were brought in as not fit for the merchants. I believe there are others here who can recollect the circumstance. The fish laid on our wharves till the stench became intolerable. It was during the harvest time, and the farmers could not come here to take it away.

22,966. But you do not think drift-net fishing does any injury to the seine-fishing?—I have sometimes seen drivers shoot their nets where I would not have shot them, and where they ought not to be shot.

22,967. Do you mean that they shot their nets too close to the seine-nets?—Yes. I think the drivers, like honest, upright men, when the seiners have been out riding the stem for 24 hours, should allow them to have the place for shooting their nets without interfering; but in a company where you have seiners and drivers you will always find somebody who will break over the bounds.

22,968. Is it desirable to enforce the regulation for keeping the drivers a league and a half distant?—That would be the ruin of the fishermen.

22,969. Would it be desirable to have some regulation for keeping the drivers always at a certain distance from the seiners?—It would be very difficult to do that. The seines only come out occasionally; they are not constantly employed. Sometimes they do not stop out longer than a month, and at other times for two months, or for 12 or 13 weeks. No man would like to be kept from the fishing ground when there are fish there if there was no one else to catch them.

22,970. I was not talking of that; I mean when the seine is actually in the water. In such a case could no regulation be made by which the drift-men could be kept a certain distance from the seiners, suppose a mile, or any other distance you please?—There was a time when we tried to arrange that matter. I took a part in it, and I used all the moral power I possessed to bring these disputes to an end. I will tell you the circumstances as well as I can relate them. Alfred Fox, of Falmouth, had an interview with a gentleman upon the subject, but whether he was connected with the Government or not I cannot say. By his request he came to Mevagissey. The drivers were called together and the seine owners also. I know what our party was prepared to give, and I think it was quite sufficient room. Mr. John Pearce proposed a certain distance, but the seine owners would not listen to the proposition, and from that time there has been no attempt to arrive at anything like a right understanding upon the subject.

22,971. Were the seine owners of opinion that the distance proposed was not sufficient?—They would not listen to the proposition of the gentleman I have mentioned.

22,972. What was his proposition?—There were to be certain marks on the land which they were to keep outside.

22,973. Under all circumstances were they to keep outside those marks?—They were to come to some regulation about it, but the only thing absolutely mooted was the distance.

22,974. What was the distance?—Mr. Pearce proposed the Gwingees and the Deadman Point.

22,975. They were not to come inside a line drawn between those two points?—Our proposition would have gone a deal further than that. I am simply stating now that an attempt was made to come to an understanding.

22,976. (*Mr. Lefevre.*) Is there not a great deal of ground between this place and Falmouth where seine-nets cannot be used at all?—Yes, a great deal.

22,977. Upon such grounds is there any reason why the drift-net fishermen should not go as near the shore as possible?—No.

22,978. I suppose that the fish often strike the shore in places where the seine-nets cannot be used?—Certainly; there are only particular places where the seine-nets can be used.

22,979. (*Professor Huxley.*) Would it not satisfy the seine owners if there was a regulation to keep the drift-men a certain distance outside the seine-nets when in use? Suppose a seine-net has taken its turn, if there was a regulation to keep the drift-men a mile or two miles outside would that not answer your purpose?—In my humble opinion, if the drift-net men were required to keep where the seine men could not shoot their seines that would answer every purpose.

22,980. You think the drift-net men should confine their fishing to places where the seines cannot be shot?—Yes; if the drift-net men kept outside the ground where the seiners seine that would be quite enough.

22,981. But how far outside should they be kept, that is the point?—In some cases the distance would be greater than in others, but they would know from their soundings pretty well how far the seines could be used.

22,982. Would there not be great danger of drifting in with the wind or tide?—I have sometimes hauled in my nets as fast as I could when I thought I was drifting in too near. Sometimes the tides will carry us in quite a different direction from that which we thought or expected.

22,983. Is there anything else that you wish to mention to us?—No, I think not.

22,984. Can you tell us whether the hook-fishermen have now to go off further than they did in former years?—I have not been a great deal at the hook-fishing, but I understand from our fishermen that they go now as far as they did formerly. I do not know that they are obliged to go further.

The witness withdrew.

MATTHIAS DUNN called and examined.

M. Dunn.

22,985. (*Professor Huxley.*) You gave us evidence at Plymouth, I believe?—Yes, in reference to the spawn in the trawls.

22,986. Is there any other point on which you wish to speak?—I only wish to say that when we have been out with our mackerel-nets we have sometimes noticed a considerable number of pilchards.

22,987. At what time of the year?—In May and June, and the trawlers have been trawling on the ground where the fish have been seen.

22,988. Do you think that the trawlers have taken up the spawn from the bottom?—I have every reason for thinking so.

22,989. Have you ever been on board of a trawler?—Yes, but not in deep water.

22,990. Have you seen spawn brought up in the trawl-net?—Not in the shallow waters, but I have noticed spawn fast to the net.

22,991. Do you know of any person who has himself seen spawn brought up in the trawl-net?—No, I think not. Forty years ago a number of Brixham trawlers went up to our place, and some of our old men have told me that when these Brixham trawlers were at Mevagissey they stated that they had seen large quantities of spawn taken up. They admitted

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that the way in which they were fishing was sure to do harm to our fisheries here. I have conferred with some of the men who heard these statements made.

22,992. Will your port here shelter Brixham trawlers?—Yes.

22,993. How many can get in?—As many as 40 at a time.

22,994. Then in that case, if you pleased, you could manage to trawl from this port?—It would be difficult in the winter time when we have strong gales of wind blowing.

22,995. (*Mr. Lefevre.*) Is it a tidal harbour here?—Yes, and we give shelter to hundreds of tons of shipping all the year round.

22,996. (*Professor Huxley.*) Is there any other remark you wish to make about these matters?—I should like to add to the statements made by Mr. Hunkin, that if we as drifters were required to keep a certain distance from the land it would be entirely ruinous to us. As a rule we never catch small fish in our nets, or fish with spawn in them.

22,997. You never get small fish or spawn in your drift-nets?—No.

22,998. Do you use the seine-net?—No.

22,999. You are not engaged in pilchard-seining?—No.

The witness withdrew.

J. Dunn.

JOHN DUNN called and examined.

23,000. (*Professor Huxley.*) Are you a fisherman here?—Yes.

23,001. How many years have you been engaged in fishing here?—40 years.

23,002. Upon what point do you wish to make any remarks?—I was brought up to the seine-fishing, as was my father before me, but I found that it was impossible for me to get a living out of it. I should have starved if I had continued at it, and therefore I went to the drift-net pilchard-fishing.

23,003. Had you a share in the seine you worked?—Yes; I had a sixteenth part, and we had 7*s.* 6*d.* a week for going with it.

23,004. You had a sixteenth part?—Yes, and I was out with it for several years, and we caught no fish. Besides that it cost 8*s.* 6*d.* to allow for my sixteenth part of the cost of keeping the net in proper order. No man could obtain a living from an occupation of that sort. When I got the opportunity I bought a few pilchard-nets. I then began to get on in the world, and now I am in tolerably good circumstances. I have now both mackerel and herring-nets as well as pilchard-nets.

23,005. You found that the income you derived from the seine-net fishing was not sufficient to keep you?—No; it was altogether ruinous to me, and would have brought me to the union if I had not given it up.

23,006. Do you agree with the other witnesses that any regulation which required you to keep a certain distance away from the shore would be injurious to the interests of the drift-net fishermen?—Yes, I do. Upon one occasion I was fishing for four weeks successively in our bay with a fleet of drift-boats. There were fish enough for all of us without fishing on Saturday nights or Sundays. There the fish remained all the time for four weeks.

23,007. Could those fish have been caught by the seine-nets?—Yes, some of them; but we can take them when the seine-nets cannot; and if we were kept outside for any distance, at such times for instance as when the weather is stormy, we should be ruined and brought to the union. We depend upon the fishing for our living, while the great majority of those who go with the seine-nets are landsmen, such as farm labourers, mechanics, blacksmiths, tailors, and shoemakers. We are fishermen solely, and have nothing else to depend upon. I have no wish to interfere with the seines. I have frequently hauled in my nets because I did not wish to come into contact with them, and I have gone by the seines when I have seen a shoal of fish, and have not shot my nets, because I was afraid of getting into contact with them. When we have strong weather we are glad to get in under shelter of the land, and it would be hard to prevent us from taking the fish there when we cannot go out further. If we are prevented from coming within a certain distance of the land it would be ruinous to us. We have no desire to interfere with the seiners, and if we go where they cannot use their seines we think we go a sufficient distance. If we are obliged to go further out it would ruin us all. At Mevagissey all the men depend upon the drift-fishing.

23,008. (*Mr. Lefevre.*) Between this place and the Deadman Point is the coast fit for seine-nets?—Not in many places.

23,009. Is the ground fit for seine-nets mostly eastward of this?—In St. Austell's Bay there is ground where the seines can be used.

23,010. (*Professor Huxley.*) Have you ever used the small seine?—No.

23,011. Is there any other point on which you wish to make a remark? Is there any hardship which presses upon you?—I do not know that there is. There is not as much hooking fish, generally speaking, or indeed of any other fish, as there used to be. Of no kind are there as large quantities as there were years ago.

23,012. Do you go further out now when engaged in fishing with the hook and line than you did formerly?—No, I think not; but it requires a third more nets now to take the same quantity of fish.

23,013. Is that because the number of drift-net fishermen has increased so much?—No, I do not think so, and whether it is owing to the trawlers killing the spawn I am not able to say.

23,014. Have the trawlers ever got foul of your nets or interfered with your fishing?—No.

The witness withdrew.

W. Pearce.

WILLIAM PEARCE called and examined.

23,015. (*Professor Huxley.*) What is it you wish to say to us?—I was engaged with the seines for a number of years, and now I am established in the pilchard-driving, to which I look for a living. I have come as it were from what you would call complete poverty, and now I have had such a rise that I care not for anyone, thank God for it.

23,016. Then you agree with the previous witnesses who have spoken on the same subject?—Yes.

23,017. Have you anything new to tell us?—No; but I believe that if the matter went by a majority we should gain the day.

23,018. Is there any new point that you wish to bring before us?—No, I have nothing to say except with regard to the greater value of the pilchard-driving to us fishermen. I have found it to be a prosperous thing ever since I took it in hand, and while following the seining system I had sunk down almost to nothing. I had 15 children, and often I could not raise bread for them on the Sunday to eat. I have been obliged to go to the clerk of Mr. Fox for assistance. For more than 20 years I was in that position, unable to support my family. I then found that I was obliged to give up seining.

23,019. Would any of the regulations which have been suggested about keeping at a certain distance from the seines interfere with your power to catch fish?—No; I have no wish to interfere with them, and I believe that they have no wish to interfere with us.

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23,020. Would you like to see some fair regulation established which would enable both descriptions of fishing to be carried on?—Yes.

23,021. (*Mr. Lefevre.*) Do you recollect the seine-fishing before the bounty was taken off?—I can just "mind" it, but I cannot recollect much about it. I have heard my father talk about it. There was a sum given by the Government to keep the fisheries up.

23,022. Do you recollect what effect the doing away with the bounty had?—No.

The witness withdrew.

John Sampson Jago recalled and examined.

J. S. Jago.

23,023. (*Mr. Lefevre.*) I wish to ask you a question or two in reference to the regulations with regard to stemming. Are you acquainted with the mode in which the stems or turns are taken?—Yes, but I think it has already been explained to you. There is no absolute legal regulation upon the subject, but a custom has prevailed from time immemorial.

23,024. Would it be possible to adopt some regulation which would have the effect of admitting the small seines on the same terms as the large ones?—I think some regulation might be made.

23,025. Then do you think that the grievance of which the fishermen here complain is a true one?—I do not think that the grievance is very great, but when a seine is of a certain size it might be admitted. If I understand rightly, in former days the seines were not as large as they are now. I think there might be some regulation to admit them under certain limits. I do not see why a small seine should not have the same right as a large one.

23,026. Do you think they ought to be allowed at all?—Yes.

23,027. What limit would you impose?—I am not prepared to say. I have hardly given any consideration to the question.

23,028. Do you think that the owners of the large seines would be ready to discuss the question?—I should think they would. There is a certain limit within which they might be admitted; that is my own opinion.

23,029. You would admit them to the same turns as the larger seines?—Yes, they should take their turns fairly with the others.

23,030. (*Professor Huxley.*) Why do you think there should be a limit?—There would be a great interference with the fishing if there was not.

23,031. Do you think there is any vested right?—Yes, from time immemorial, but I do not believe that 100 years ago the seines were as large as they are now. I suspect that some of the small seines here now will come up to what the seines were generally at that time. I cannot say for certain, but I have a strong notion that that is so.

23,032. (*Mr. Lefevre.*) You think it would not injure the large-seine owners if the small seines were admitted on equal terms?—I think they should be allowed, and they might meet among themselves and arrange how it is to be accomplished.

23,033. (*Professor Huxley.*) Do you think that the opposition to the small seines has arisen not so much on account of the fishing and the benefit of the fishermen themselves as on account of the large capital invested in seining?—Altogether I think a certain freedom of the sea ought to be allowed. I do not go altogether by the amount of capital invested, but if a seine came up to anything near the size of the larger seines, then I think the capital invested in them should be taken into consideration as well as that invested in the larger seines.

23,034. (*Mr. Lefevre.*) Would there be a good deal of confusion if there was no regulation?—Yes, very much. From time immemorial there have been regulations adopted all round the coast.

23,035. (*Professor Huxley.*) Has the Duchy any rights over the fisheries?—No. Perhaps you will allow me to say a word in reference to the statements which have been made by some of the fishermen that when they were employed in seining they were unable to get a living. They say they have frequently gone out and have got nothing. That may be true to a certain extent, but they had the lurcher, which they used as a fishing boat all the year round. The master seiner had the privilege of using the boat, and when the pilchards were on the coast they did very well.

23,036. (*Mr. Lefevre.*) The pilchards were a kind of harvest to them?—Yes; but they had the boats to go fishing with—the lurchers. They were not permitted to go as drivers, but they could go out, and catch herrings with their nets the same as other boats.

23,037. (*Professor Huxley.*) Were they employed to do that by the seine owners?—No, the profit all went to the men themselves. The master of the seine is allowed the use of the boat to go fishing in. He has 8*s.* a week the same as the other men, and something extra if they have a large catch, and the boat is kept for his use all the year round. The father of the last witness had the lurcher.

23,038. (*Mr. Lefevre.*) Are not many of the men employed in seining landsmen, and not fishermen at all?—Yes, but they do all their day's work before they go out; that is a great advantage they have.

23,039. (*Professor Huxley.*) How many out of the 16 persons in a crew have permanent employment or permanent wages all the year round?—Only the master who has the boat.

23,040. Then are the other boats not used?—No, they lay them by.

23,041. So that there is practically permanent wages to the master seiner?—Yes.

23,042. But not to any other person?—Not to any other person.

The witness withdrew, and the inquiry was adjourned until the 30th March at Falmouth.

Falmouth, Cornwall, Wednesday, 30th March 1864.

FALMOUTH.

J. Mayne.

30 Mar. 1864.

Present:

Professor Huxley, F.R.S. (Chairman). | G. Shaw Lefevre, Esq., M.P.

Jonathan Mayne called and examined.

23,043. (*Professor Huxley.*) Are you engaged in fishing here, Mr. Mayne?—Yes, in the oyster fishery.

23,044. You are a native of Flushing, I believe?—Yes, I have lived there 50 years.

23,045. Have you been engaged in the oyster-fishing all that time?—Yes.

23,046. Are you acquainted with the modes of fishing that are practised in the neighbourhood of Falmouth?—Yes.

23,047. What are the modes of fishing practised here?—They use the ground-seine principally in the harbour.

23,048. What other kinds of fishing are there?—At the mackerel time they have all floating seines, which are seines of a larger description.

23,049. They are mackerel seines?—Yes.

23,050. Is there any pilchard-fishing here?—No, not in the harbour.

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23,051. Is there any pilchard-fishing practised by boats going from this port?—Yes, belonging to other places, but not to Falmouth.

23,052. Not to Falmouth?—No.

23,053. Is there any herring-fishing practised here?—No, very little indeed. There may be a little by the ground-seines in the winter.

23,054–5. Are there any long-line fishermen here?—I think not.

23,056. Is there any considerable number of hand-line fishermen?—Yes, I believe there are a good many in the harbour.

23,057. What are the principal fish they catch here?—Cod and hake.

23,058. They catch them by the hook?—Yes, outside.

23,059. What kind of fishing are the fishermen who belong to this port principally engaged in?—In the winter time they are principally engaged in the oyster-fishing.

23,060. And in the other parts of the year they are generally engaged in the line-fishing?—Yes.

23,061. Can you give us any notion of the number of persons who are engaged in fishing here?—Do you include the oyster-fishing as well?

23,062. Yes, all the fisheries?—I do not know how many there are, but there are some hundreds.

23,063. Do you know how many boats of all kinds are engaged in the fishing?—In the harbour?

23,064. Yes; hailing from this port?—There are from 200 to 300 boats, I believe. Perhaps there may be 300 altogether, but you would be right in saying from 200 to 300.

23,065. They are partly hookers?—Yes, in the summer time, and in the winter time they are engaged in the oyster fishery.

23,066. Are the same boats employed in the herring and in the oyster fishery?—There are not so many engaged in the herring fishery, not by a great many; perhaps only a very few of them go to the hook-and-line fishing.

23,067. But is the same boat used?—Yes; it is the same boat.

23,068. What is the kind of fishing boat used here, how large is it?—They have a sailing boat varying perhaps from 25 to 30 tons down to a punt or to a very small boat.

23,069. What will be the average size of the 200 to 300 vessels employed here?—They are generally small boats.

23,070. What is their tonnage?—They are merely two-handed boats.

23,071. Mere wherries, in point of fact?—Yes; small boats, from 10 feet to 18 feet long.

23,072. Is the fishing from this port carried on mainly in the harbour?—The oyster-fishing is in the harbour.

23,073. I suppose that the boats which go outside and follow the hand-line fishing are larger boats?—There are a few larger.

23,074. But not many?—No, they go out in small boats in the summer.

23,075. What is the value of one of these boats with its fittings, I mean the chief boats used here?—About the medium boat?

23,076. Yes.—I should say from 25*l.* to 30*l.*

23,077. Is that the hull of the boat or the boat and its fittings?—The hull of the boat.

23,078. And what would be the value of the fittings?—The gear would be worth about 3*l.* or 4*l.*

23,079. Within your recollection has the number of the boats much increased?—Yes, very much.

23,080. How many were there when you first knew this port a few years ago?—There were a few boats then on the other side of the water at Saint Mawes, but there was hardly a boat here.

23,081. Not at Falmouth?—No.

23,082. Were there many at Flushing?—I believe I was the first man there at Flushing.

23,083. Then when you first knew the port there were very few boats?—Yes.

23,084. Were there a score?—No, not so many inside here, but there were a few at St. Mawes on the other side.

23,085. How many were there at St. Mawes?—There may have been a score or two at St. Mawes.

23,086. Then will it be fair to say that the number of boats has increased of late years seven or eight times?—Yes, and more than that.

23,087. Where are the oyster beds?—Almost all over the harbour.

23,088. Are there any regular beds, or are the oysters scattered over the harbour?—They are scattered all over the harbour.

23,089. What is the average depth of water in the harbour, do you happen to know?—I do not know exactly.

23,090. The most part of it seems to be under 3 or 4 fathoms, judging from the charts?—There is a great part of it deeper than that.

23,091. That is in the deep channel?—Yes.

23,092–3. But the great area of the channel seems not to be more than that?—The oysters are deeper than that.

23,094. Do you include under the name of harbour all this Carrick Road?—Yes, all inside the rocks.

23,095. There you have a deep mid channel of 12 or 14 fathoms?—Yes.

23,096. Do the oysters abound all over the harbour? Yes, almost all over.

23,097. Outside low-water mark?—Yes, all through the bed of the channel.

23,098. Have you noticed any diminution in the quantity of oysters taken by the fishermen here?—Yes, there has been a very great diminution.

23,099. Has the number sensibly diminished of late years?—Yes.

23,100. The average yield per boat has decreased?—Yes, very much so.

23,101. I suppose the oysters here are taken in the ordinary fashion by a dredge?—Yes.

23,102. What is the size of the dredge?—The dredge is nearly three feet long.

23,103. With two scrapers in the ordinary fashion I suppose?—No there is only one.

23,104. Only one?—Only one.

23,105. What will be the weight of the dredge?—The belly of the dredge will weigh 5 or 6 lbs.; that is the part of the dredge that comes on the ground. The dredge altogether will probably weigh from 25 to 30 lbs.

23,106. How is the dredge worked, is it worked commonly under sail?—All the larger boats are under sail.

23,107. Are the smaller boats worked by men rowing in them?—Yes, they are worked with a winch.

23,108. Do they lay a warp out?—Yes, they lay a warp out ahead; they go the length of the warp, heave the dredge overboard, and then heave them in by the winch.

23,109. They are able to do that, this being a sheltered harbour?—Yes.

23,110. It could not be done in the open sea?—No.

23,111. It is done when the water is rather shallow?—It is done in the channel also.

23,112. In the channel as well?—Yes.

23,113. In your early recollection what was the average take, what at that time would you consider a fair day's work?—Two men would get from 8 to 10 or 12 bushels a day.

23,114. What will be a fair take now?—Two men now cannot get more than half a tub or a little more say from half a tub to three quarters.

23,115. To what cause do you ascribe that falling off?—To too large a drain upon them.

23,116. Then in point of fact you are of opinion that they have been over-fished?—Yes, and I also think it is owing in some measure to the brood not being properly protected.

23,117. Since you have known the harbour have there been any fence months during which you were not allowed to take oysters?—Not during the whole of the time.

23,118. Was it so when you first knew the fishing?—No, there were no close months then.

23,119. At that time you fished when you pleased?—Yes.

23,120. And at that time did you take oysters of any size you liked?—Yes.

23,121. There was no restriction upon that?—No, none at all.

23,122–3. When was any restriction brought to bear on the fishing?—I cannot recollect when it was exactly, it would probably be about 10 years ago.

23,124. Why was that restriction placed upon the fishing; was there any special falling off?—The order came from the Custom House that oysters were not to be taken in the close months.

23,125. What months were laid down as close months?—The months of May, June, July, and August.

23,126. During the rest of the year you might take them as much as you pleased?—Yes.

23,127. Was there any restriction made with regard to the size of the oysters you were to take?—I think not at that time.

23,128. Have you now any regulation as to the size of the oyster?—There was one established last year and the year before.

23,129. What was the regulation?—There was a gauge provided.

23,130. What was that gauge?—It was simply a ring.

24,131. Have you the gauge here or a copy of it?—I have not.

23,132. How large was the ring?—The ring was very large for this harbour. It was too large for this harbour in point of fact. It was introduced I understand from the Jersey fisheries but the oysters they get there will grow up in the course of one year as much as ours will in three years.

23,133. But there was a gauge introduced?—Yes.

23,134. By what authority was it introduced; was it sent down by the Customs?—Yes.

23,135. Do you think the introduction of that gauge has done any good?—No, I think it has done very little good. They continue to take them notwithstanding the gauge.

23,136. Is that because there is not an efficient watch kept?—Perhaps that may be so.

23,137. Is there any inspection of the oysters when they are brought ashore?—There was at that time.

23,138. If the men were found with oysters in their possession too small were they condemned?—Yes.

23,139. Does that not take place now?—No.

23,140. Then what is to ensure the rule being carried out?—Nothing; it is not adhered to at all now.

23,141. Was that because it turned out that there was not sufficient authority to enforce it?—I understood from the Customs House that the Board of Trade did not wish to authorize any interference.

23,142. Do you mean that they were not inclined to prosecute under the Act?—Yes, I believe they did not wish to prosecute.

23,143. Is there any fishing of the oysters in your harbour by people from other parts of England?—Yes.

23,144. Is there any steam-dredging carried on here?—No.

23,145. But boats come here from other parts of England?—Yes, from the eastward principally.

23,146. From Colchester?—Yes, from Essex.

23,147. Do they carry away the oysters to any great extent?—They dredge them and the merchants come down here and purchase them.

23,148. Are they not carried away to be laid down elsewhere?—Yes, they are carried away to be laid down elsewhere afterwards.

23,149. Have you ever had any considerable demand for young oysters to be carried away and laid down in other oyster parks in England?—At one time there was a demand. We were not allowed to go in and take any large quantity; that was a few years ago.

23,150. Do the French come here and get your oysters?—They have done so during the last two or three years.

23,151. Do they offer high prices?—They have been disposed to offer the highest prices.

23,152. Is there any considerable trade derived from the French merchants now in consequence of that?—No, there has not been much this year, but I think there has been over in Ireland.

23,153. Can you tell us whether you have ever noticed the time at which the oysters spawn here?—I do not know exactly; I should think some time in May or June.

23,154. When do you find the spat?—Well, we do not find the spat till some time after.

23,155. In what month do you find the spat?—We find it when we go out to work again in the early part of the season.

23,156. Is that in September?—Yes.

23,157. How big is it then?—It is very small indeed.

23,158. Do you find it in the early part of the year before the fence months?—I think not.

23,159. Have you ever seen it at all?—Perhaps I have sometimes.

23,160. But you have not noticed it particularly in any way?—No.

23,161. Do you find any difference in the shallow part of the harbour, where the oysters are, and in the deeper parts?—As to the brood?

23,162. Yes, as to the time of spawning?—I think not.

23,163. Are there any regular oyster parks here?—Do you mean places where they are laid down?

23,164. Yes.—We have ground where we put the oysters after they are caught.

23,165. Whereabouts is it?—It is from the Green Park there towards Penryn.

23,166. In the Shallows?—Yes, on the flats.

23,167. You lay them down within the tide-mark?—We lay them down inside low-water mark.

23,168. (*Mr. Lefevre.*) Are those grounds private property?—We have had it for a long time. I have had some for the last 50 years.

23,169. Have you a portion set apart for yourself?—Yes, I have got a certain part and other people have got a part.

23,170. Do you pay any rent for it?—No.

23,171. (*Professor Huxley.*) Do you fatten your oysters there?—They improve there very much.

23,172. But you do not fatten them artificially at all?—No.

23,173. You do not feed them there?—No.

23,174. Do you choose by preference places where fresh streams are running?—Not particularly.

23,175. You do not find that you derive any particular benefit from that?—No; on the contrary, we find if there is a great deal of fresh water that the oysters do not thrive as well.

23,176. How long do you let them live before you take them away for sale?—We catch them in the fall. Those we caught in the last fall we shall dispose of the year after, that is to say, not the year following but the year after that.

23,177. So that they would be laid down for about 18 months?—Yes, about that.

23,178. Do you think that they are all the better for remaining on your beds during that time?—Yes, we think they are.

23,179. Do they fetch a higher price in consequence?—They grow and fatten, and in the market they bring a higher price.

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23,180. Is the oyster you have here a large oyster?—No, it is not large.

23,181. There are some parts of the world where they feed oysters regularly?—Yes.

23,182. You have heard of that practice?—Yes.

23,183. But you do not adopt it here?—No.

23,184. Do you make any complaint here of the trawlers?—No, I think not.

23,185. Are you aware whether the fishermen here have any matter for complaint at all?—I do not think they have, nor do I think there is anything that can be remedied.

23,186. (*Mr. Lefevre.*) The oysters you dredge up from the bottom of the harbour are not fit for immediate eating?—No.

23,187. Are they green in colour?—Not now; they used to be.

23,188. That is not the case now?—No.

23,189. But they are not fit for eating when they are taken up?—No, unless they are laid down either in this or some other place.

23,190. They are not full grown when you take them up, are they?—Not in general.

23,191. I presume that you would prefer to take them up before they are full grown?—They are better when taken up in that way.

23,192. Of those you sell, what is the price you get for them when they are first dredged up?—We buy them ourselves in the first place.

23,193. What do you give for them?—Do you mean of the dredger men?

23,194. Yes.—We have been giving this year 13*s.*

23,195. What was the price before that, some years ago?—1*s.* 6*d.* to 2*s.*

23,196. Then the trade of dredging is very much better than it was?—I do not know that it is, because there are hardly any oysters to be got.

23,197–8. I understood you to say that the takes had only fallen off one-half and you get a price much more than double?—I did not say that they had only fallen off one-half.

23,199. Then do you think the men employed in dredging do not earn so much money as they used to do?—No, I think not.

23,200. I think you said that a great many of the oysters are sold to people from a distance?—Yes.

23,201. To Frenchmen?—Yes, and to the Kentish merchants.

23,202. Do they in preference take the small oysters, or do they prefer to buy the large ones?—They do not wish to have very small oysters.

23,203. What is the size of the oyster for which they will give the largest price?—They are giving a long price now; they are giving 13*s.* for the fresh caught oysters.

23,204. What is the size they prefer?—You cannot get oysters exactly of one size, they are of all sizes.

23,205. All sizes mixed up together?—Yes.

23,206. Are they sorted into different sizes?—No, they go promiscuously.

23,207. Is there any considerable quantity of full-sized oysters dredged up from the bottom of the harbour?—I think full-sized oysters have now become very scarce.

23,208, Are they mainly of that size (*holding up an oyster*)?—Yes.

23,209. That is the size you lay them down in your parks?—Yes.

23,210. And in the course of 18 months they grow to the full size and are ready for sale?—Yes.

23,211. Then during that time do they lose any trace of greenness they may have had?—Yes, they do.

23,212. I think you said that these parks are not private property?—We have the possession of them; we do not call them parks, oyster beds we call them.

23,213. But what right have you to the possession of these beds?—They were of no value when we took possession of them, and we have held possession ever since.

23,214. How many of them are there?—They are situated in a large flat which is divided between four and five people. It is a large piece of flat ground that goes dry at low water.

23,215. How long have you been in possession of those beds?—Just upon 50 years.

23,216. Have the other people who have also beds had them as long as you?—No, not quite as long.

23,217. Has the ground there been allotted to them by the corporation or by any authority?—No.

23,218. What means have you of preventing other people from laying down oysters there?—We keep our goods on the ground, we have always got some there, and other people respect our right. We buy the oysters, in the first instance, from the dredgermen when they come in with them, and that I suppose is better for them than having a ground in which they could put the oysters, because they want the money for the oysters directly they catch them.

23,219. How much ground is there fit for that purpose?—There are a good many acres at spring tide low-water.

23,220. What is the nature of the ground?—It is between hard and soft; perhaps in walking over it you would sink down just over the sole of your boot.

23,221. How many acres altogether does it cover?—I cannot say how many acres.

23,222. Your business is to buy the oysters of the dredger-men and to lay them down in these beds and sell them subsequently?—Yes.

23,223. When do you sell them?—What we have taken before Christmas we shall sell about this time next year.

23,224. Where do you sell them?—We supply the London market with some of them, and also other markets, and if we have any over there are gentlemen here who are glad to have them.

23,225. Is this ground all between high and low-water mark? Are they laid down below low-water mark?—No, there are none laid below low-water mark.

23,226. Has the enforcement of a fence time improved the fishery here or not?—I should think it has.

23,227. You believe that it has?—Yes, I think that a close time is necessary.

23,228. Do you well recollect the fishing before the fence time?—Yes; but there was such a quantity of oysters then that you could hardly judge what benefit it had then.

23,229. I think you stated that the fence time was introduced about ten years ago?—I cannot tell exactly. I think it is about as long as that since it was first introduced; perhaps it may be eight or ten years.

23,230. Has the number of dredges increased since then?—Yes, it has increased materially.

23,231. Were there any complaints before that of the falling off of the oysters?—No, I think not.

23,232. Then the fence time was not introduced in consequence of any complaint of the oysters having diminished?—No.

23,233. Do you know what the nature of the bottom of the harbour here is?—Do you mean muddy or sandy?

23,234. Yes.—It is a little of both; in some places it is quite hard and in others it is rather soft.

23,235. Where do you find the best oysters?—The best oysters are on the starboard side as you come into the harbour.

23,236. Is that upon the soft or upon the hard ground?—It is upon rather hardish ground.

23,237. Does not mud accumulate at all during the fence time?—Mud does not accumulate, but weeds do.

23,238. Do you think that that does any harm to the oysters?—Yes, it does rather.

23,239. (*Professor Huxley.*) Does it occur to you as a practical fisherman, that any sort of restriction or regulation would be of use if established here in preventing a further diminution in the supply of oysters?—I see no other way of preventing it than to provide for the protection of the brood.

23,240–1. How do you propose to effect that protection?—That is a very difficult thing to say.

23,242. In the first place tell us what your plan would be if you had an unlimited supply of men and money; what plan would you carry into effect for the protection of the fishery in that case?—I think some regulation ought to be placed upon the oysters themselves before they are shipped off If there were restrictions put upon the oysters before they were shipped out of the harbour that in my opinion would provide protection for the brood.

23,243. What restriction would you establish?—There should be a person appointed to inspect the cargoes in the first place.

23,244. But what restriction would you adopt, would you fix a certain size for the oysters shipped away and prevent all under that size from being taken away?—Yes, I think so, unless you were to allow the oyster people of the port to take what oysters they pleased and grow them on their own ground. They would grow rather faster on the beds we have here than in their own native ground.

23,245. Then you would not think it expedient to prohibit the dredging up of small oysters from the natural oyster beds?—Not in that case, provided you were to lay that embargo on the exportation of the oysters.

23,246. But you would allow the dredgers to take up oysters of almost any size?—If the people in the port who have grounds were allowed to take small oysters they could grow them very fast on those grounds. The water is much warmer there in the summer time, and the oysters would come to maturity faster.

23,247. Then your objection is to the waste which is involved in taking oysters away before they are properly grown?—My objection is to taking up a vast quantity of oysters and shells and carrying the shells away with the oysters at a time when they are covered with an enormous quantity of the brood, and by that means all this brood is lost.

23,248. But if the brood were merely transferred to the oyster beds you think it would be doing good rather than harm?—Yes, I think so, and in addition to that it would give employment to many people in this port.

23,249. But how about the oysters, would they be all the better for it?—Yes, I think so; they would come to maturity much sooner.

23,250. Then what I understand you to say is this: you would prohibit the exportation of small oysters and brood, but you would not object to their removal from the natural oyster grounds to be laid down on your grounds in order that they might grow?—That is the course I would adopt. I think that would be the best plan for the protection of the oysters, and in that case one man, provided by the government, would be sufficient to do all the work.

23,251. What would you have a man appointed for?—I would have an inspector appointed to inspect the cargoes.

23,252. And see that none were carried away too small?—Yes; the inspector, whoever he was, should be informed when a cargo was about to be shipped, and should go and inspect it.

23,253. Would you provide him with an oyster gauge?—Yes.

23,254. What size would you have the gauge?—He would soon be able to tell what the proper size should be by his own eye independent of the gauge.

23,255. What would be the smallest size of oyster that you would allow to be exported?—The gauge which has been in use here hitherto has been much too large; it has been too large by a third quite.

23,256. This gauge is about two inches and a half in diameter?—Yes.

23,257. And you think that that is too large?—Yes, I think so.

23,258. How much smaller would you make it?—I think if it were a third smaller it would do.

23,259. A third smaller than this?—Yes.

23,260. You would prohibit the exportation of any oysters that would go through a gauge a third smaller than this?—Yes, I would.

23,261. Do you think that that would effectually prevent the wasteful fishing of which you complain?—I think it would in a great measure.

23,262. Is there anything else that you have to suggest to us?—I do not think there is.

23,263. (*Mr. Lefevre.*) What is the smallest oyster you yourself carry away to lay down on your beds; is it half the size of this (*holding up a small oyster*)?—No, that is quite small enough to carry away. Our only desire is to keep them till they get to a proper size, and that we can do by keeping them for the time I have specified.

23,264. Then you do not want to purchase any oysters smaller than that?—No, that is quite small enough.

23,265. Do you find it unprofitable to purchase them smaller?—If we were to purchase them smaller we should have to allow them to remain another year, and they would occupy the ground unprofitably.

23,266. You mean that they would take the place of larger oysters?—Yes.

23,267. But still they grow very quickly on the beds?—Yes, they grow very quickly, but there is a great deal of waste; there is a great deal of death at times.

23,268. Is not that much the same at the bottom of the harbour?—Perhaps they may not be destroyed to such an extent in our beds as in the harbour. We take all the care of them we can.

23,269. I think one of your objections was that the larger oysters, when carried away at a certain season, took with them a large number of small ones attached to them?—Yes, they are brought up fast to the large oysters. The dredger-men, and particularly the country dredger-men, will not handle the oysters properly.

23,270. Would you have an inspector to see that no small oysters were carried away fast to the large ones?—I do not attach so much importance to that as to the other point.

23,271. What other point?—I think the inspector should see that no oysters were carried away under a certain size.

23,272. I understood one of your objections to be that many of the large oysters were carried away with a great number of small ones attached to them?—Yes, that is so; the spat is frequently found on the large oysters, and it ought to be taken off in a very careful manner before the oysters are taken away.

23,273. How would you have that done, would you have the inspector object to all the oysters that have spat attached to them?—If the spat were on the shells he ought to object.

23,274. You would have the inspector object to all the oysters that were in that condition?—Yes.

23,275. But have not the greater number of these oysters spat in that condition adhering to them?—A good many of them have, but not all.

23,276. But the greater number have?—No doubt it is on a good many.

23,277. Would it be possible to scrape them off?—Yes, I think so, unless they were very small indeed, and very young and tender.

23,278. But would not that increase the price you pay for the dredging of oysters?—A man is taught to do things very quick in dredging. He must handle the oysters very quickly or he would not get much out of them.

23,279. Then he would hardly have time to scrape off the young spat?—They are very easily rinsed off.

23,280. Do you not lay down a good number of oysters on your beds with spat attached to them?—No.

23,281. Who scrapes off the spat?—The men who dredge them.

23,282. They scrape off the spat?—Yes.

23,283. Before they are laid down on the beds?—Yes, before the oysters are brought ashore.

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23,284. They scrape it off directly the oysters are taken up?—Yes.

23,285. Then why do they not do the same in the case of the oysters they dredge for sale and sell to the people who carry them away to a distance?—I think our dredger-men would do so, but the country dredgermen are not so careful or so particular as our own dredger-men.

23,286. Do you think it is the dredger-men from a distance who do not dredge them in a proper and careful manner?—They have certainly brought in a new mode of dredging here.

23,287. Are there any dredger-men who are in the habit of scraping off the spat from the oysters?—I believe there are many of our own men who are very careful.

23,288. And they are in the habit of scraping off the spat from the oysters?—They are in the habit of cleaning off the extraneous matter. All of them ought to do so, but whether they do or not is another question.

23,289. (*Professor Huxley.*) Did you ever notice the oysters on the oyster beds in a spawning condition?—Yes.

23,290. Do they come to a spawning condition on your oyster beds within tide-marks?—Yes.

23,291. That is a point that has been a good deal disputed?—I think if you open them you will find a great many of them with spat in them.

23,292. Then the oysters on your spawning beds will be as much out of condition in May, June, and July as the oysters on the beds in the harbour?—No doubt they become so as the weather gets warm.

23,293. Is it an advantage to have oysters on your beds of a smaller size than this (*exhibiting a small oyster*)?—No, not smaller than that.

23,294. Then there would be no objection at all to the dredger-men employed in taking oysters from the natural beds to your beds being under the same conditions and restrictions as those employed in dredging oysters to be carried away; I mean if they get up oysters of too small a size they should be prosecuted also?—Yes.

23,295. You are of opinion that that would not interfere with your interests?—I do not think it would.

23,296. Then if a man employed in dredging oysters for your beds were found with oysters of too small a size in his possession you would have no objection to their confiscation?—No, I should not object to that.

23,297. You think it would not interfere with your interests?—No, not at all.

23,298. (*Mr. Lefevre.*) You stated some time ago that the oysters had diminished to a certain extent in the harbour?—Yes; I believe you imagined when I said half a tub I meant half the quantity.

23,299. I thought you said the quantity had diminished one-half?—No; what I meant to say was that it had come down to half a tub.

23,300. What was the catch originally?—From eight to 10 or 12 tubs a day.

23,301. How many dredgers were there employed then?—Two men.

23,302. Only two men in the whole harbour?—Two men in a boat.

23,303. How many were there in the whole harbour?—I can hardly say. That continued over a space of 25 or 30 years.

23,304. Can you give me an idea of the total number of men employed then in dredging?—No, in the first place there were very few.

23,305. But how many were there?—As the oysters became more in demand more boats were sent out.

23,306. That is not what I want to know. I want to know how many there were employed in dredging at that time?—When I first commenced I was the only one here, and I believe I was the only one here for some years.

23,307. How long is that ago?—About 48 years.

23,308. How many were there about 20 years ago?—By that time they began to multiply very fast.

23,309. How many were there?—I cannot say.

The witness withdrew.

J. Hughes.

JOHN HUGHES called and examined.

23,310. (*Professor Huxley.*) You are Collector of Customs here, I believe?—Yes, I am.

23,311. Have you been so for any considerable number of years?—I have been in that position for four years and a quarter.

23,312. Then you are thoroughly acquainted with all the regulations affecting the fishing with which the Customs have anything to do?—Yes.

23,313. Are there any local Acts here to regulate the fisheries?—I am not aware of any existing at the present time. I believe that some years ago there was a local Act regulating the pilchard fishery but I do not think that it remained in operation after the Convention Act was passed.

23,314. Has the duchy of Cornwall any power here?—Under the old pilchard fishery Act I think there was something of the kind, but I have had no communication with the duchy on the matter.

23,315. Will you be kind enough to inform us what your instructions are relating to the fisheries here?—I have only the regulations of the Convention Act. Perhaps I had better enumerate the representations which have been made to me as matters of complaint.

23,316. If you please.—I think the first complaint I had was in January 1863. That came from the Coastguard and had reference to the fisheries here. It was made by Mr. May, the chief officer of the Coastguard at St. Mawes, and related to the seines employed on the coast.

23,317. What was the nature of the complaint?—He complained that the meshes were too small. He made a special complaint in writing, which I forwarded to the Board of Trade.

23,318. That complaint was in reference to the seines?—Yes; the answer of the Board of Trade to me conveyed the opinion of Mr. Rickards the counsel employed for this purpose. The Act an infringement of which was complained of was the Act of George I. chapter 18, which states the size of the meshes that are to be employed in the seine-fishing. I was referred to that Act by the Board of Trade for my information, but they did not send the Act to me. With very great difficulty I succeeded in getting hold of a copy of the Act of Parliament, and on referring to it I found that one of the sections laid down the size of the meshes which was permissible for seine-fishing.

23,319. What size was it?—It must not be less than $3\frac{1}{2}$ inches from knot to knot.

23,320. That is laid down by the Act of George I.?—Yes, by the Act of George I. Nothing further was done in the matter, but previously when I was at the port of Dartmouth I had a great deal of communication with the Board of Trade upon matters connected with the fisheries, but I never received any instructions to prosecute.

23,321. The Board of Trade did not think proper to instruct you to prosecute under this old Act?—Certainly not.

23,322. A seine-net the meshes of which were $3\frac{1}{2}$ inches from knot to knot would not catch many of the fish they are catching here?—It would catch none whatever.

23,323. Did the Board of Trade intimate to you that you ought not to proceed in the matter?—Yes.

23,324. Then practically the Act is inoperative as far as the Government are concerned?—Yes.

23,325. Were there any other cases in which complaints were made?—As regards the oyster fishery I have had repeated complaints.

23,326-7. What has been the nature of the complaints?—There have been complaints of the infringement of the regulations, principally referring to the scale or size at which the oysters were taken. By the regulations laid down they ought not to be taken under 2½ inches. That is the size of the gauge here. It has been repeatedly stated to me by Mr. Mayne, who has already been examined here, and by others, that oysters are caught under the legal size. The Coast-guard on one or two occasions have brought several tubs of oysters for my inspection. The oysters brought to me were about the size of those now before you; many of them were smaller. They were desirous that I should prosecute the persons who had taken them. A considerable number of them came from the neighbourhood of Colchester and other places. I communicated the whole matter to the Board of Trade and received the following letter in reply:

Office of Committee of Privy Council for Trade,
Sir, Whitehall, Sept. 16, 1863.

In reply to your letter of the 4th instant, relative to the oyster fishery in Falmouth Harbour, and requesting to be informed whether persons who infringe the fisheries' regulations by removing the small oysters from the beds should not be proceeded against, I am directed by the Lords of the Committee of Privy Council for Trade to inform you that my Lords are not prepared to recommend the adoption of legal measures in such a case as that to which you refer.

There appears to be great doubts as to the meaning of the Acts by which the oyster fisheries are regulated, and as to their application to such a case as this.

I am, &c.
The Collector of Customs, Falmouth. T. H. Farrer.

23,328. What did you do on the receipt of that letter?—Before I proceeded to communicate with the Board of Trade at all I told these men that they were evidently contravening the Act of Parliament, and were liable to prosecution. I took their names down and the particulars of their infringement of the Act, so that in the event of a prosecution being directed I should be able to find them. I communicated the facts to the Board of Trade, and the result was that I received that letter, and nothing was done.

23,329. Was it that the opinion of the law officers was such that it was not quite certain how the Act of Parliament was to be applied?—Yes, there was a difference of opinion; but perhaps you are aware of the order of council of May 1857, relative to the removal of oysters on private beds. We enforce that fully here.

23,330. What is the nature of that regulation?—It is this: that no owner of any private fishery whatever shall be allowed to remove his oysters from one bed to another without a licence from the collector of Customs authorizing him to do so. Then, again, no dredge of any kind is allowed to be employed in the port for the taking of oysters during the close months. During the close months no person is allowed under any circumstances to remove his oysters unless he has received a special licence from the collector of Customs directing him where he is to remove them, and even then he is not allowed to take them out of the port under any circumstances, except he receives another special licence, authorizing them to be removed, under a bond, to another part of the coast.

23,331. Are those restrictions strictly enforced now?—Yes.

23,332. (*Mr. Lefevre.*) You do not allow any oysters to be removed from any part of the beds?—No, except under a special licence, and if they are removed from the port they require a further licence, and they give me a bond, under a penalty of 100*l.*, to satisfy me that they shall not be removed to any other place than the place to which they are licensed to remove them. For instance, if they have a licence granted them to remove them to Shoreham or Rochester they give this bond, and when I receive notice that the law has been complied with, and that the oysters have really been laid down on the beds to which they were authorized to remove them, the bond is cancelled.

23,333. (*Professor Huxley.*) Do you grant licences in that way?—Yes.

23,334. To how many people do you grant them?—They are not numerous, there are only four or five or six licences granted in the course of a year.

23,335. Have you had any complaints that that regulation has operated harshly or injuriously to the interests of the fishermen or others engaged in the oyster trade?—No; on the contrary, I should say that these regulations have been found to be exceedingly beneficial.

23,336. You are not aware that any complaints have been made?—No. If there have been instances in which persons have dredged oysters during the open months, and have not been able to carry them away before the close months came on, I have invariably allowed them to take them away. I have known such instances as this: a man has brought oysters from Ireland with the intention of taking them to Rochester, but owing to the weather and the length of the voyage he has been obliged to deposit them in our harbour here, in order to keep them alive. When he wanted to ship them again the close months might be on, and I have always allowed him, under those circumstances, to take them away.

23,337. Under what circumstances do you consider that you would be justified in refusing a licence?—I have never had an instance of the kind. I should never refuse a licence under the operation of the order in council, so long as the fishermen complied with the order in council.

23,338. Would you have power to refuse in such a case?—I think not.

23,339. You have no discretion?—No.

23,340. Are there any other regulations that affect the fisheries here with which you have to deal?—I am not aware that there are. We have only four or five trawlers here, but I may say that so far as they are concerned the regulations of the convention are entirely inoperative. I have found that out at Brixham and elsewhere. The Act of Parliament has never been put into operation. The regulation with regard to the size of the beams is probably an absurdity, but as regards the size of the mesh of the net, that is also constantly infringed. I have specimens here of the size of the nets used by the Brixham trawlers; this one (*producing one*), if it were wet, instead of being 1¾ inches from knot to knot on the line, would not be more than one inch.

23,342. (*Mr. Lefevre.*) What part of the net is that taken from?—From the cod of the net.

23,343. (*Professor Huxley.*) I understand from your evidence that you do not feel yourself bound to put in force any one of the regulations of the Convention?—No, except in relation to the fence months of the oyster fishery; that regulation is strictly enforced. I should feel bound, if I knew of any infringement of that regulation, to call the attention of the Government to it directly. There was an instance some time ago; a quantity of oysters were sent to Brest during the close months; I communicated the circumstance to Government, and in their reply they stated that on no account should it be allowed.

23,344. You are the authority in whom rests the enforcement of all the regulations of the Convention here?—Yes, but I could never institute a prosecution without directions from the Government.

23,345. If there are legal difficulties which prevent the Government from instituting a prosecution in any particular case, would not the same difficulties apply in all cases?—I do not know. I should be sorry to say that the whole of the Convention Act is inoperative. If the Government would put it in operation, I think it is operative within the three-mile limit. I am decidedly of that opinion. I have very good authority for saying so. There was an order in council, or rather a letter from the Privy Council, on the subject some time ago, in which it clearly stated

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that the Act was operative within the three-mile limit.

23,346. Have you any herring-fishing from this port?—Not much; it is very uncertain; it is very seldom that they try for herrings here. There are very few that come to this port, and there is very little fishing for herring practised.

23,347. Are there any herring-nets possessed by the fishermen here?—I think so, but I am not competent to say. The men here will be able to give you better information on that subject. I think when they catch herrings they generally employ the pilchard-nets.

23,348. Did it ever occur to you to feel bound to examine the size of the mesh?—Never.

23,349. Are you aware that there is a regulation with regard to the size of the mesh?—Yes, but it is principally the duty of the Coastguard officers to attend to that. In the event of a prosecution being instituted under the Act they would be bound to come to me for instructions, but they look after these matters more than I do.

23,350. During the four years you have been here have you received any complaints from the Coastguard?—Yes, I have received repeated complaints; the two cases I have already referred to come from the Coastguard.

23,351. Have you ever received any complaint touching the size of the mesh of the herring-net?—No, never.

23,352. Did you ever receive a complaint from the Coastguard respecting the mode of working the drift-boats?—No, never.

23,353. Did you ever receive a complaint respecting the use of vanes by the trawlers?—Never.

23,354. You have received no complaint on any of these matters?—Not here, but I have at Brixham.

23,355. (*Mr. Lefevre.*) When did you have that gauge for the oysters made?—It was made before my time. I apprehend it was made before the Act passed.

23,356. Within your time has it been enforced here at all?—So far as this, that we have tried to ascertain whether we should prosecute for non-compliance with the regulation, and we were told that we should not.

23,357. Then there has been no attempt to enforce it in any way?—Yes, there have been several attempts made, but the Board of Trade will not prosecute.

23,358. No attempts actually to prosecute have been made here?—We have been unable to get the Government to support a prosecution. Perhaps I may be allowed to say that there was one principal question that operated with me and which I told the Board of Trade. It was this: what was the age of the oyster when it was taken? There was some difficulty in ascertaining whether it was really a young oyster or a full-grown oyster. If it were a full-grown oyster I do not see that there would be much harm in taking it, and I apprehend most of the people connected with the oyster fisheries here will tell you that the fish they eat in London would all of them go through this gauge.

23,359. (*Professor Huxley.*) You mean the native oysters?—Yes, the scale is very much too large for the native oyster.

23,360. How do you use the scale in practice?—We pass an oyster through it.

23,361. Which way?—Any way.

23,362. Any way?—Yes, I apprehend that that is so.

23,363. That is not the Convention. The Convention says, "The fishermen shall cull the oysters on the "fishing ground, and shall immediately throw back "into the sea all oysters less than two and half inches "in the greatest diameter of the shell, and also all "sand, gravel, and fragments of shells"?—Exactly so.

23,364. If you take one of these oysters vertically, one twice the size would go through?—Yes.

23,365. You see from this article of the Convention that they are bound to pass it through the gauge at the greatest diameter of the shell. If you attempt to pass it through any other way you would not comply with the Act?—Yes, but I should say that one-third of the oysters I have seen are less than that.

23,366. (*Mr. Lefevre.*) Do you mean one-third of the full-grown oysters?—Some of them are very large here. The size of the oysters depends, I apprehend, on the age of the ground, the number of years the ground has been unploughed or fished. You will find that the oysters regularly cultivated are not nearly as large as those which are not regularly cultivated.

23,367. In your opinion would it be beneficial to the oyster trade if this gauge was strictly enforced?—With regard to oyster fisheries, I am of opinion that it is desirable at all times to take care that there should be fence months. Above all things in the world that regulation should be enforced, and the fishermen should not be allowed to take an oyster except during the open months. At the same time there is a difference of opinion among the people who are interested in the cultivation of oysters as to the months which should be selected for fence months. Some believe that it would be better to keep the month of April a close month, and open the month of August.

23,368. Would the fence months depend on the spawning season?—Yes; I think it does depend on the spawning season whether the months now established are the best or not, but that is a point on which I am not competent to give information. At the same time I think it would be exceedingly unwise to allow the indiscriminate fishing of oysters all through the year.

23,369. Do you think that would be objectionable during the open months?—Yes, at any time. That guage I think is a great deal too large.

23,370. (*Professor Huxley.*) You think it would be too large if you passed the oysters through in the way contemplated by the Act?—Yes, I still think it would be too large. Those oysters you have there would all pass through.

23,371. A very large oyster would pass through one way?—Yes, but the question in my mind would be what is the age of that oyster? If it were an oyster of full age, whether it would pass through or not I do not think would make much difference. There could be no objection to taking an oyster of that description; but if you are taking an oyster under growth and too small, that I think would do injury to the fishery, and I think there should be some restriction to prevent that from being done.

23,372. (*Mr. Lefevre.*) You told us that you have granted licences during the fence months to certain people to remove oysters?—Yes.

23,373. Have those licences been granted only to people who have beds here?—They have been granted to the people who have beds.

23,374. You do not allow them to dredge oysters during the close months?—No the licence only relates to their removal from one bed to another. As Mr. Mayne explained in his evidence there is a large patch of ground in the neighbourhood here. One man will have a bed upon it of four or five acres, and stones are put down to show the limit of his bed, and if he wishes to remove the oysters from one bed to another he applies to me for a licence.

23,375. You do not allow anybody to dredge oysters during that time?—No; no person whatever is allowed to dredge oysters during the close months.

23,376. Is there a large proportion of ground fit for converting into beds here?—I fancy that there is.

23,377. Is there more than is in use at present?—Yes; I think not only here but at St. Mawes and upon the Fal, considerably up the river.

The witness withdrew.

WILLIAM HENRY WILLIAMSON called and examined.

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23,379. (*Professor Huxley.*) I believe you are an oyster merchant here?—Yes.

23,380. Have you been engaged here as an oyster merchant for many years?—Yes, for many years.

23,381. For how many years?—For the last 10 or 12 years.

23,382. Is it your opinion that the supply of oysters has fallen off?—Yes, I think it has fallen off very greatly.

23,383. Has the price you are obliged to pay to the dredgers increased?—Yes.

23,384. Is the increase very much?—Yes, we have to pay now five times as much as we did formerly.

23,385. Do you purchase directly from the dredgers, or from those who possess beds here?—I purchase from both. I purchase some direct from the dredgers, and others from what we call second men, such as Mr. Mayne, Mr. Hill, and so on.

23,386. Which do you prefer?—I would as soon purchase of the dredgers. Perhaps altogether I would rather take the oysters from them.

23,387. Are the oysters when they come out of the water in as good a condition as they are after they have been laid for some time on the beds?—You mean what we call the seconds. The fresh caught are equally as good as the seconds in my opinion.

23,388. Are the first class oysters any better by lying on these private grounds for a short time?—Yes.

23,389. Then they get a higher price for those than they would be able to get for oysters of any kind newly dredged?—Yes.

23,390. You say the price has greatly increased?—Yes.

23,391. Can you state what the increase has been?—It has increased in my time from 2*s.* to 18*s.*

23,392. Has that been in consequence of the increasing scarcity of oysters?—Yes, I think so.

23,393. And what do you think is the reason of that scarcity?—I think it has arisen from dredging the small oysters and taking them away to different beds, whence they are again taken away and deposited on other beds. I think great injury has been done by removing the small oysters from the natural beds in order to lay them down on such beds as those at Flushing and St. Mawes.

23,394. Do you think they would be better if they were allowed to remain on their natural beds?—Yes, I do.

23,395. Then you are of opinion that those who possess private oyster beds do harm?—Yes; they do harm by taking the brood and the spat shells. I think it is very injurious to take them off the ground at all in that way.

23,396. Do the people who bring oysters to you directly from the oyster beds take pains to cleanse the oysters from spat, young shells, and the like?—Not so much as they ought to do.

23,397. Do they take more or less pains than those who dredge them for the purpose of laying them down on private beds?—In my opinion one does as much harm as the other.

23,398. (*Mr. Lefevre.*) Then you do not agree with the evidence of Mr. Mayne?—Not at all.

23,399. Do you buy the oysters for sale or for laying them down at Colchester?—I buy them for laying down, not at Colchester, but at Queenborough in Kent. I have beds there.

23,400. (*Professor Huxley.*) Do you think it would be expedient to put any check on the dredging up of oysters as now practised?—Yes.

23,401. What kind of check would you impose?—I would take the month of September off.

23,402. Do you mean that you would take the month of September off the close time?—No, I would take it off the dredging time.

23,403. Then you would add one month more to the close time?—Yes.

23,404. Why would you do that?—Because I think that at that time the spat is not sufficiently strong to bear the dredging which is carried on all over the grounds. The dredge goes over it and destroys it In my opinion the working of the dredge in that month kills the spat, and that is the reason the spat has fallen off so much of late. When they are dredging they drag up a great deal of culsh from the ground where the spat is, and it is not sufficiently strong to stand the wear and the chafe of the dredge. In my opinion it is that and nothing else that kills a very large portion of the spat.

23,405. Would you keep May still as a fence month?—Yes.

23,406. Then you would increase the period of close time?—Yes, I would only have seven months instead of eight in this harbour for dredging.

23,407. Do you think that under these circumstances you would not carry away any great quantity of the small oysters?—There would not be so much destroyed as is destroyed at present, and the small brood would have more time to get strength, so as to bear dredging over it, and I believe we should eventually greatly increase the quantity of oysters in the harbour.

23,408. But if the dredgers were not more careful in dredging would they not do as much mischief as they do now?—I think there ought to be a check put upon them. I would fine them for all the oysters they brought in under a certain size.

23,409. How would you have the oyster cargoes inspected?—I would have them inspected by the Coastguard when the dredger-men came in.

23,410. Could they sufficiently inspect the number of boatloads of oysters when they come in in considerable numbers?—I would put the Coastguard at such places where the oysters are taken, and they should inspect the oysters as they are sent in. But that gauge would be of no use; it was never made for this harbour, but it was made for Jersey and Guernsey, the Channel Islands, and the Isle of Wight, where the oysters grow much larger. Our oysters here are of a peculiar kind.

23,411. Are they a small oyster?—Yes; they resemble a native in the shell more than any other oyster I know.

23,412. Then you think this gauge is too large for the oysters if the oysters are to be taken right away?—Yes; such oysters as this would be fit for us to remove and cleanse and purify for the market next year. In point of fact they are the sort of oysters our merchants want to buy chiefly.

23,413. Do you think that the gauge should be so diminished that smaller oysters than this would not pass through?—Yes; I would not allow smaller oysters than those to be brought into this port at any time under a fine.

23,414. How many boatloads are brought to the quay in the season?—We take them both of the dredger-men direct and also of the second men.

23,415. How many boatloads altogether?—Sometimes 50 or 60 boatloads in a day.

23,416. Do you take as much as that for yourself alone?—Yes, I have sent in one season more than 18,000 bushels.

23,417. And many others would be doing the same thing?—I believe I was the top merchant that year, and I have sent away as many since.

23,418. How many other merchants would there be?—There was one who sent as many as myself, Mr. Wilson.

23,419. Then would you have 100 boatloads a-day?—Yes, sometimes we had more and sometimes less.

23,420. Would you sometimes have as many as 70 boatloads?—Yes, we buy of Mr. Mayne, and Mr. Hill, and Mr. Dash, and others. We also buy them of the dredger-men. We buy what we call second-handed.

23,421. How many boatloads are you getting now?—I had 20 on Saturday, I may perhaps have 40 some days.

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23,422. Would it not take some trouble to have so many boatloads properly inspected?—I do not see any difficulty. The Coastguard are always round here, and if they saw any small among the others they should make the people cull them over.

23,423. Would not that so retard the loading of the boats as to increase the price to you?—Not at all. I should be quite willing to submit to all the increased price that would be occasioned.

23,424. Then do you think that the advantage arising to the fishery would compensate for any increased price?—Yes, I think so; there would be a great advantage to the fishery. The spat, I may say, is chiefly on shells and not on the oysters at all.

23,425. On dead shells?—Yes.

23,426. Is there anything else that occurs to you to suggest to us?—I do not know that there is anything more. I have put down a few memoranda here in writing [*handing in a paper*].

23,427. I see you have already given us in your evidence the suggestions you make here. You propose to take off the month of September, you also propose to decrease the size of the gauge and make it 2 inches instead of $2\frac{1}{2}$?—Yes.

23,428. (*Mr. Lefevre.*) How many men are there engaged in the dredging?—In some seasons there will be from 300 to 400.

23,429. Two in a boat?—Sometimes there will be four; in a sailing-boat there will be four.

23,430. Has the number fallen off during the last year or two?—No, it has increased. Owing to the scarceness of oysters in other places the dredger-men have flocked here in order to get a living.

23,431. Has the quantity taken been smaller than in previous years?—Yes, the quantity taken here has been much less than in former years.

23,432. Then the price has increased accordingly?—Yes, it has increased very much.

23,433. Do you think that the failure in the supply of oysters here is in any way due to bad spat?—It may be in consequence of that to a certain extent, during the last four years.

23,434. That is said to have been the cause of the falling off on the east coast?—Yes, there has been no good spat anywhere.

23,435. Previous to the last four years was there any diminution in the supply of oysters here?—None at all; there were more here than was wanted for the market before then.

23,436. Then in your opinion is not the diminution due to bad spat and not to over-fishing?—No doubt the spat has had a good deal to do with it, together with the shipping away to foreign parts. I think something ought to be done to prevent that. The English oyster ground will not supply two nations.

23,437. Has the falling off in the supply which you said has taken place during the last four years been mainly owing to the diminution of spat, to destructive modes of fishing, or to over-fishing?—There has been a diminution of spat, but still there has been a good deal of spat here.

23,438. You have not had the average amount of spat you have had in former years?—No, we have certainly not had the average amount of spat we had formerly.

23,439. Then in Falmouth it has been the same as in all the ports on the east coast, namely, there has been a falling off in the spat?—Yes.

23,440. Is not the increased price of the oysters mainly due to that?—Perhaps so; there has been a scarcity in all parts, whether Essex, or Jersey, or here; in point of fact there is none in Jersey at all now.

23,441. What number of men were employed in the oyster-fishing here four years ago?—Not so many as are employed now.

23,442. What was the price of the oysters then?—Four years ago they would be perhaps at 2*s.* 6*d.* a tub.

23,443. A tub is a bushel?—Yes.

23,444. And now you say it is 18*s.* a tub?—Yes.

23,445. I understand from your evidence that you are mainly employed in buying oysters for the purpose of sending them to the east coast?—They are all my own beds there that I send them to. I buy for the market.

23,446. Where have you beds?—At Shoreham, at Southwick, and at Queenborough. I have also one on the Isle of Wight, and others at Westport in Ireland. I have agents who buy for me in Arklow. In point of fact I procure oysters from all parts of the kingdom.

23,447. But your places of deposit are mainly on the coast of Kent and Sussex?—Yes.

23,448. How long have you laid down oysters in those places?—I have laid them down in Sussex for the last 12 or 13 years.

23,449. For what length of time do you lay them down?—Sometimes for four, eight, or ten weeks. Then I collect them and shift them again to the feeding beds.

23,450. How long is it before they would be ready for sale?—Perhaps eight or nine months.

23,451. At the end of that time what price will they fetch?—From 22*s.* to 24*s.* in the London market.

23,452. Do they fetch a larger price than the oysters sold off the beds here?—Generally they do after we have fed them and cleaned them.

23,453. Are they better feeding grounds?—Yes, and they are more extensive.

23,454–5. Do you recollect the fishing here before the fence time was introduced?—Not much of it. The fence time was introduced about the year 1851, I believe.

23,456. What was the price of oysters when you first recollect the fishing?—I have known the people here buy them as low as 10*d.* a tub.

23,457. Was that an average price?—No, it was the price that existed when I first came here. It soon rose. In point of fact directly a merchant comes to a place like this the price always rises.

23,458. What was the price then directly after you came here?—It rose to 2*s.* and 2*s.* 6*d.* a tub.

23,459. Then the price remained steady until the last four years?—Yes.

23,460. And I understand you to say there has been an increase in the time of dredging, and a diminution in the quantity of oysters?—Yes, every year.

23,461. (*Professor Huxley.*) Have you ever tried the artificial feeding of oysters?—Yes, I tried it on one occasion for the Duke of Northumberland.

23,462. How did you find it answer?—It did not answer at all. I spent about 1,600*l.* over it and lost it all for him.

23,463. You spent that sum in the artificial feeding of oysters?—No, not in the artificial feeding, but in the artificial breeding of oysters.

23,464. Then you never tried artificial feeding?—No.

23,465. (*Mr. Lefevre.*) Are there many cargoes of oysters lost between this place and Kent and Sussex?—I lost one on the Goodwin Sands once, that is all I ever lost.

23,466. What kind of vessels do you employ in conveying the oysters from this port to Kent?—They are principally of from 70 tons down to 30 and 40.

23,467. Have they wells in them?—No.

23,468. Then are the oysters kept dry?—Yes.

23,469. Do you not lose a large proportion in that way?—No; if we can get them up in seven or eight days they are got up in very good order. We like to get them up in about four days if we can, but if we got them up in seven days they will not be hurt unless the weather is very hot.

23,470. Are the beds upon which you lay the oysters at Queenborough private property?—Yes, they are private property granted by charter.

23,471. Are there any private beds here?—There are none here of a similar description. There are no private beds here, I believe.

23,472. There is no exclusive right of fishing here?—None at all, I believe.

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23,473. Can you say what proportion of the oysters you send away is covered with spat?—As a general rule there is not one in a thousand oysters that is covered with spat. I have not seen spat on an average this season on one out of a thousand.

23,474. Then none of the oysters would have that small spat upon them which has been described?—Not one in a thousand.

23,475. Then you do not think the loss to the beds here in that way is very considerable?—Not by taking the oysters. My opinion is, that it is the bringing up of the spat-shells that does the injury.

23,476. It would not be a difficult matter to throw the spat-shells overboard?—Not at all; they ought to throw the young brood overboard.

23,477. Then, in your opinion, it would not be necessary to have an inspector to examine a cargo of oysters before they are sent away?—After we have purchased them we consider them merchandise. If anything is to be done to them at all it should be done when the fishermen are delivering them. After we have paid 13*s.* or 14*s.* a tub for them we consider them merchandise and our private property.

23,478. (*Professor Huxley.*) You spoke just now of some method of artificial breeding, what was it you referred to?—We tried it for the Duke of Northumberland by the employment of bushes on M. Coste's plan. I got a letter of introduction to see him in Paris. We made ponds and threw down branches, and so on, but it turned out to be useless and an utter failure.

23,479. Would not the spat adhere?—It adhered, but it would not live on the wood. We got some not as big as your finger-nail, but they all died off.

23,480. Did you put bushes down within the tide-marks?—No, on little reservoirs purposely constructed.

23,481. And you found that the whole thing broke down?—Yes.

23,482. (*Mr. Lefevre.*) Are any of your private beds breeding grounds?—Not at all; we buy them and lay them down for a short time before we take them to the market. Ours are merely feeding grounds. Still there are Kentish people who do breed. Our beds are some miles in extent.

The witness withdrew.

Frederick Andrews called and examined.

F. Andrews.

23,485. (*Professor Huxley.*) You belong to St. Mawes, I believe?—Yes.

23,486. Are you a dredger there?—No, I am a pilot, and I am connected with the fisheries a little.

23,487. Are you practically acquainted with the oyster-fishing?—Not very intimately, but there was a meeting convened yesterday at St. Mawes of some of the fishermen, and the result of that meeting I have been requested to lay before you.

23,488. Was that a meeting of oyster-dredgers?—Yes, and I believe that some of them are now present.

23,489. Have they come to any general agreement on the subject?—There were a few things suggested which they approved of, and they were put down in writing.

23,490. Will you be good enough to let us know what they are?—Perhaps I had better read this document.

23,491. Yes.—They say, "With regard to the "oyster fishery it is resolved, that four months, from "the 1st November to the 1st March, is considered "sufficient for this port for dredging for oysters, but "it should not exceed the last day of March."

23,492. They are of opinion that oyster dredging should stop at the end of March?—Yes.

23,493. Then they are inclined to diminish the open months during which you are now allowed by law to dredge?—Yes; they go on to say, "That no boat "should be allowed to carry more than one dredge, or "at most two, as at the Mumbles in Wales; that the "present law respecting small oysters be looked after "by a proper person to be appointed, but that the "ring might be reduced to two inches, because some "oysters when full grown do not reach that size. "That with regard to the drift pilchard fishery the "law should be carried out for the protection of the "seine fishery in the bay, which of late years has "been very much injured, and that the trawlers should "be kept one league from the land."

23,494. They propose to keep the drift-men outside?—Yes.

23,495. How do they hurt the oyster fishery?—This has no reference to the oysters, but to the pilchard fishery. They go on to say that "All ground-"seines should be six meshes to the foot."

23,496. Is that from knot to knot?—It would be two inches from knot to knot. They continue as follows: "At present there is a large quantity of "small fish of all kinds destroyed by the small meshes. "The ground-nets (commonly called ebbing nets) "destroy all small fish, soles and flat-fish especially, "and in the opinion of this meeting they should be "discontinued altogether, so that the young fish "might proceed to sea."

23,497. They speak there of ebbing nets?—Yes, there are four or five different sorts of fishing carried on at St. Mawes. There are parties here to answer any question you may wish to put to them. They go on to say in this document, "Crabs should not be "taken under six inches, shes five inches, lobsters nine "inches, craws 11 inches, and that all caught under "that size should be again thrown into the sea."

23,498. Is that the whole of the document?—Yes.

23,499. Is the document signed by anybody?—Yes, it is signed by several of the fishermen. A gentleman connected with the navy also attended the meeting.

23,500. Were the statements contained in that document all agreed to by the fishermen there?—Yes, unanimously, and there were six persons delegated to attend here in order to give you any information you might desire to have from them.

23,501. Will you give me the name of any one of them?—John Odgers is here.

23,502. Do I rightly understand you to represent these men?—Yes.

23,503. Have you any wish to say anything yourself?—No.

23,504. Then perhaps we had better call John Odgers. Does he fairly represent the views of his friends who were present at the meeting?—Yes.

The witness withdrew.

John Odgers called and examined.

J. Odgers.

23,505. (*Professor Huxley.*) Are you a fisherman at St. Mawes?—Yes.

23,506. How long have you been a fisherman there?—I have been a fisherman there all my days.

23,507. How many years is that?—I have been a fisherman now for 50 years.

23,508–9. How many fishermen are there at St. Mawes?—I should think there are between 60 and 70.

23,510. How many were there when you first knew the place?—I think there were not more than 40 then.

23,511. Then the number has increased by about one-half?—Yes.

23,512. Has the number of boats increased?—Yes.

23,513. How many are there now?—I should think that there are fully 40.

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23,514. What sort of boats are they, are they decked boats?—No.

23,515. Then they are undecked boats?—There is one about half-decked; it is decked to the mast, but there is only one in that condition.

23,516. What is the cost of each boat when it is rigged and fitted up ready for sea?—Each boat on the average would cost about 25*l*.

23,517. What is the principal mode of fishing practised at St. Mawes, what do they do there in the way of fishing?—I myself go crabbing in the summer season.

23,518. What other kind of fishing is there there?—Ground-seining; then they fish with the drawing-seine, and they also follow pilchard-driving, and mackerel-seining, and mackerel-driving, but there are no mackerel-drivers there at present.

23,519. Is there no pilchard-seining?—Yes.

23,520. Is there any herring-fishing?—A little, but not much.

23,521. Is there any line-fishing?—There is a little of that, but not much of late years. We have some herring-nets.

23,522. Have you any oyster-dredging?—Yes, dredging all through the winter.

23,523. You do not practise oyster-dredging?—Yes.

23,524. What size of dredge do you use, is it about the same they use here?—Yes, about 3½ feet.

23,525. Do you have a sail?—No; there are about three boats at St. Mawes that work under sail.

23,526. Then how do you work?—We have a winch in the fore part of the boat, and about 50 or 60 fathoms of rope on that winch. We have also a grapnel. We let it go, and then shove the boat astern, and put the dredges overboard and heave her ahead.

23,527. Then you are working up constantly to the winch?—Yes.

23,528. That is rather hard work, is it not?—Yes, but it is only like all other fishing.

23,529. Why do you not work under sail?—Because we believe that working under sail is the destruction of Falmouth Harbour.

23,530. Why do you think so?—Because the ground there will not stand the dredging under sail. Since sailing-dredging was introduced into Falmouth Harbour there has been a very great decrease in the quantity of oysters, and the ground has nearly all been destroyed.

23,531. Do you use a different weight of dredge when you are working by hand?—No, the sailing-dredge, I think, is rather a little lighter.

23,532. Then what is the difference in the work of the two dredges?—The sailing-dredge is always heaving ahead. When we are working we work against the tide, and when our dredge is full we are made to stop. The men in charge of the dredge will tell us that it is full, but the sailing boat when it is sailing and coming down before the tide with a strong wind, whether the dredge is full or not full, would go till they draw the dredge in and pick out what they have got. Then, whether they are in the Channel or on the oyster banks, overboard goes the greater part of the culch. The consequence is that they commit a great destruction. They take up young oysters and culch from the oyster beds and throw them overboard in the Channel.

23,533. When you work up to your anchor you take out the young oysters and throw them overboard where you are?—Yes.

23,534. Whereas they forge ahead and throw it overboard anywhere?—Yes, and they destroy a great quantity. We have had a considerable number of those boats in Falmouth Harbour of late years, and now there are scarcely any oysters to be found in the harbour.

23,535. Do you not practise dredging under sail at St. Mawes at all?—Yes, there are a few vessels that do.

23,536. Is the mode you have described the old mode of fishing?—Yes.

23,537. I mean working by a winch?—Yes.

23,538. Was that the only mode practised when you were a boy?—Yes, and for many years after.

23,539. Then the people have dredged under sail since you began?—Yes.

23,540. Do they get more oysters than you?—Yes.

23,541. Then they make more money than you?—Yes; there was a portion of ground where we had the best and the greatest quantity of oysters. It was nearly a mile long; it was known to several men, but it has now been entirely destroyed, and there has not been one oyster obtained there for the last 20 years past.

23,542. To what cause do you attribute that?—We do not know what the cause is, we can only guess. We believe it arose from the dredging of those vessels which came down here from Exeter in April, May, and June, when we had no Act of Parliament. They came dredging there, and the ground was so much torn up that the beds were entirely destroyed. There is nothing to be found upon them now. It has been swept as clean as this table, and there has not been anything upon it for the last 20 years.

23,543. Then would you like to see dredging under sail put an end to?—Yes, I should like to see that very much.

23,544. You would like to see all the dredging done by the warp?—Yes, and I believe if that were so there would be no injury done to the oysters in our harbour.

23,545. Do you agree with the statement contained in that document which was read just now, and which professes to embody the opinions of the persons who were present at the meeting at St. Mawes?—Yes.

23,546. You attended that meeting, did you not?—Yes.

23,547. And you agree in all that is contained in that document?—Yes.

23,548. Do all the fishermen at St. Mawes agree with it?—I cannot say that all agree with it, because all were not there. I rather believe that there are a few who are against it, and I will tell you what their opposition is. They want to put in October as the month for beginning to dredge instead of November, and that is the only opposition which has been raised in St. Mawes among any of our fishermen. They agree in everything, with this exception, that they want to add October month to the dredging months. They say that if you think proper to cut off March they are quite willing to assent to that.

23,549. Then still they would not mind having the fence months a little longer than they are now?—No, they wish it, every man engaged in the oyster fishery wishes it.

23,550. They wish to have the fence months extended through September to October?—The Act already extends them to September, but they think that September should be cut off by all means. I myself believe that a great portion of the spawn and spat cast in Falmouth Harbour is destroyed there in the month of September. I know there are a good many fishermen who are in this room now who do not agree with me, and who are opposed to me in that opinion, but I can prove what I say.

23,551. You say that the spawn is deposited there in the month of September?—Yes.

23,552. September is not a fence month, is it?—No; but I think there ought to be no dredging in the month of September, and I would add September month to the other four.

23,552*a*. You are permitted to dredge in September now?—Yes, but we wish to have all dredging in that month stopped.

23,553. In point of fact you wish to have the fence months extended to October?—Yes; there are a few oyster fishermen in St. Mawes who wish to commence in the month of October, but there are some who do not wish to commence until November.

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23,554. In all other points the fishermen at St. Mawes are generally agreed ?—Yes.

23,555. (*Mr. Lefevre.*) Do you recollect fishing here before the fence months were introduced ?—Yes, I suppose the fence time was introduced about 14 years ago, as near as I can recollect.

23,556. Was it as long ago as that ?—Yes.

23,557. In your opinion did it do any good when it was introduced in the fishing here ?—Certainly, I think it did; the oystering was beginning to fall off fast before it was introduced.

23,558. How many boats were there engaged in the fishing before that ?—I cannot tell exactly how many boats there were, but they were beginning to increase very fast, and they were working away in the harbour. The oysters were falling off rapidly, and I myself and others who were interested in the fishing made a complaint to Dr. Bowen, who is a friend of the fishermen, and who took our grievances up.

23,559. Have the boats increased since that time ?—Yes; Dr. Bowen made some interest with Sir Charles Lemon, who was a member of Parliament at that time, and he got a clause inserted in the Act for the regulation of Falmouth Harbour.

23,560. Do the weeds increase in your harbour during the fence months ?—Yes, the ground gets all covered over with weeds.

23,561. I presume that that was not the case formerly when there were no fence months ?—No, it was not.

23,562. Are you of opinion that the weeds do good to the fish ?—Yes, I think so.

23,563. Why do you arrive at that opinion ?—I think the oysters grow better, they are kept warmer.

23,564. Is there any accumulation of mud during that time ?—No, there is not any great accumulation of mud in the low part of our harbour.

23,565. What is the nature of the soil ?—It is a sandy small corally soil.

23,566. Is it hard or soft ?—It is a kind of hardish sand, but still it is not like the sand which you find on the shore, it is very different from that; it is more rough, and we call it a corally bottom.

The witness withdrew.

R. Hill.

Richard Hill called and examined.

23,567. (*Professor Huxley.*) Are you engaged in trawling here ?—Yes, I served my time to it.

23,568. How many years have you been engaged in trawling ?—For more than 50 now.

23,569. How many trawlers are there going out of this port ?—There are three now, there is one laid up.

23,570-1. What is the average tonnage of the trawlers ?—I believe there is one 23, one 32, and one 40 tons.

23,572. Where do you trawl ?—Six or eight miles off.

23,573. Do you go out every day and come back again the same day ?—No, worse luck, I have not been out last week at all.

23,574. But when the weather is favourable do you go out every day and come back again at night ?—Yes.

23,575. You do not stop out at sea for a week at a time ?—No.

23,576. You come in every night ?—Yes, generally.

23,577. Do you trawl all through the day ?—No, we have about a four or five hours haul.

23,578. Do you get plenty of fish ?—They are very scarce indeed now. I was out on Monday and caught one haul.

23,579. Have you caught less of late than you did in former years ?—That depends.

23,580. Do you think the quantity of fish has fallen off of late years ?—No; I have caught less fish years ago in the winter time than I can catch now.

23,581. What is the size of the beam of your trawl ?—It is 36 feet long.

23,582. You have it any length you like ?—No, it would not do if we had it too long.

23,583. Have all your boats a beam of the same length ?—No; one has a beam 40 feet long, another 36, and another 34.

23,584. Then does the length of the beam depend on the size of the boat ?—Yes.

23,585. But if you desired to have your beam 40 feet long could you have it that size ?—Yes, if we thought proper.

23,586. Would anybody meddle with you if you did so ?—I do not know that anybody would meddle with us.

23,587. Is there anything in your trawling of which you wish to complain ?—No.

23,588. Is there any regulation that affects your interest injuriously in any way ?—No; the tide-surveyor sometimes comes on board and looks at our catch.

23,589. Is your mesh of the right size ?—It is three inches from knot to knot in the small part.

23,590. Does he also look at your beam ?—No, he does not say anything about the size of the beam.

23,591. If you had a 40-feet beam do you think he would say anything to you ?—No; there is one boat in the port now that has a 40-feet beam.

23,592. (*Mr. Lefevre.*) Are there any oyster beds outside the harbour ?—I never heard tell of any.

23,593. Would you not discover them with your trawls if there were any ?—If there were any on the ground over which we trawl we should take them up. I have sometimes caught them in the harbour.

The witness withdrew.

A. Chard.

Arthur Chard called and examined.

23,594. (*Professor Huxley.*) Are you engaged in fishing here, Mr. Chard ?—I have been engaged in fishing here for a number of years, but I am not at present.

23,595-6. In what kind of fishing were you engaged ?—In trawling principally, and in mackerel-fishing and pilchard-fishing. I deal in oysters now, but I take no part in the catching of them.

23,597. You have heard the evidence given by the witnesses who have already been examined, is there anything that occurs to you that you would wish to add ?—The only plan which in my opinion we could adopt for the preservation of the oyster fishery is to extend the close months. I do not see that any other method can be adopted that would be equally beneficial.

23,598. Then I gather from that that you are of the same opinion as the other witnesses that the oyster fishery here is falling off ?—Yes, I have no doubt of it.

23,599. And do you believe that that is owing to a wasteful mode of fishing ?—I believe that it is.

23,600. Then your first proposition is to extend the fence months ?—Yes, I think that is the principal thing that ought to be done for the preservation of the fishery.

23,601. How far would you extend them ?—I would extend them a month in each quarter.

23,602. Then by that means you would provide six close months instead of four, as at present ?—Yes.

23,603. What months would you cut off for the dredging ?—I would add the month of September to the close months.

23,604. And also April ?—Yes, and by so doing I think I should materially benefit the fishermen themselves. I would even go so far as to extend it two

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months more. I think it would be greatly for the benefit of the oysters, but it might interfere with the interests of the fishermen, as it would prevent them fishing for so long a period. I think the oysters would be greatly better for even two months more of close time.

23,605. But would not any regulation that was for the benefit of the oysters benefit the fishermen in the long run?—Yes, perhaps it would. No doubt it would eventually, but it would exclude them from fishing for a great length of time. I do not think that catching the proper eating oysters, that is, oysters that are fed to eat, would at all spoil the spat. I think the spat is all upon the fish that are not marketable.

23,606. You do not think that there is any spat on the marketable oysters?—No.

23,607. You think the gauge used here for regulating the size of the oysters that are to be taken is too large?—Yes, it is too large. Will you allow me to see one of those small oysters which have been shewn to you (*several oysters were handed to the witness*); this (*holding one up*) is not a marketable oyster. I should not consider it at all fit for the market.

23,608. Do you think it is too small to send to the market?—Yes.

23,609. Here is another, what is the size of that?—That is a very good size.

23,610. Is that an oyster fit for eating?—Yes; that I should say is an oyster of one year's growth.

23,611. Is it fit for laying down?—Yes, I think so.

23,612. Would you interfere with the taking of oysters for laying down?—Yes; but I apprehend they are not kept on the beds to grow for another year if they can sell them at once.

23,613. Do you think they are shipped off and sold?—Most assuredly. There may be a few that are kept, but not many.

23,614. How much would you diminish the size of the gauge?—I would diminish it to two inches. I believe that would be a very good size.

23,615. Is there any other regulation or improvement that you wish to suggest?—I cannot say much about the catching of oysters, but I know that I have found spawn in them very frequently on opening them in the month of April.

23,616. You have found spawn in them in April?—Yes, and also in September, and that I think is a sufficient proof that they were not eatable at that time.

23,617. Have you noticed the appearance of spawn in the oysters that are laid down on the beds?—I mostly get the oysters from the beds.

23,618-9. Do you think that these oysters spawn about the same time as the others?—Yes, I think so. I do not think that they grow as well on the beds or that they propagate as well as in their native element. I think it does an injury to them to a certain extent to remove them from the beds when they are spawning.

23,620. One of the witnesses referred just now to ebbing nets, what are they?—I do not know. I should think that he means ground-seines. They are draw nets. I know that that description of net is very destructive to the small fish. They draw them on the beach.

23,621. That is the ordinary seine?—Yes, it is a ground-seine, and in my opinion the ground-seines destroy great quantities of the spawn of fish. I do not care how large the mesh is, because it draws in the weed and all the accumulated stuff about. It draws all before it.

23,622. Have you ever been concerned in the pilchard-fishing here?—I have not been concerned in the seine pilchard-fishing, but I have in the drift-boat fishing.

23,623. Is there much drift-fishing going on from this port?—I am not aware. As a general rule they do not hail from this port, but they call here and make it their port of call.

23,624. You heard just now that at St. Mawes they propose to keep the drift-men a league and a half off the coast?—Yes.

23,625. Do you think that that is desirable?—Yes, I do.

23,626. Would that not interfere with the interest of the drift-fishermen?—It might interfere with the interest of the drift-fishermen to a certain extent, but I think it would be very greatly beneficial to the country.

23,627. In what way?—I believe that the drift-men break the shoals when they are coming in close along the shore at certain seasons of the year.

23,628. Is there much seining practised here?—Yes, a considerable amount.

23,629. How many seines are there?—I do not know. The St. Mawes men will tell you better than I can. I believe there are six at St. Mawes. There is a great number along this shore up to the Deadman Point.

23,630. Do you think that the seining-men are injured by the drift-men?—Yes, I think so in the seining months.

23,631. And upon that ground you would keep the drift-men off the shore?—I would keep them off at least three miles; I would certainly keep them off a league.

23,632. Would it not be extremely difficult to impose a regulation requiring the drift-men to haul up their nets directly they came within three miles?—There would be very little danger if they shot their nets before they came within three miles.

23,633. Do you think that the tide has nothing to do with it?—No doubt if they shoot off the harbour the tide will bring them in towards the harbour, but a man can tell very well where to go to shoot his nets without being interfered with by the tide.

23,634. Do you think that the injury done to the interests of the seine-fishermen is so great that there should be some restriction placed upon the drift-men?—They affect other fishing as well; for instance, they carry away the crab pots and the lobster pots; they will take them away a mile from the shore.

23,635. The drift-net men do that?—Yes.

23,636. How is it that the drift-men come so near the shore as that?—They come to within a quarter of a mile sometimes.

23,637. But is it not their interest to keep clear of the bottom where it may be rocky?—No doubt it is, but they come in notwithstanding.

23,638. And I apprehend they would not be likely to catch lobster pots if they could help it?—Perhaps not.

23,639. That damages their nets, does it not?—I think they are likely to do much more damage to the crab pots than to their nets.

23,640. Have you ever known crab pots or lobster pots carried away by the drift-nets?—Yes, I have heard complaints made every year; every season it is a matter of great complaint. So far as regards trawling I may say that it was my principal fishing in my early days, and perhaps I may be allowed to state that in my opinion trawling destroys no amount of spawn whatever.

23,641. Have you been a trawler?—Yes, I used to make my own trawl-nets. There are some trawlers I believe in the eastern counties who use a very small mesh.

23,642. What mesh did you use?—It was a mesh from three to four inches from knot to knot, I never used anything less than that in the cod part of the trawl.

23,643. And you say that you never got up spawn in your trawl-net?—Never in my experience. I was 25 years trawling and I never caught a basketfull of spawn.

23,644. (*Mr. Lefevre.*) How long have you been engaged in purchasing oysters?—I have been engaged in it for the last 10 or 12 years.

23,645. Do you agree with Mr. Williamson that a decrease in the quantity has taken place within the

last four years?—Yes, most assuredly; the decrease has been very great indeed.

23,646. During the last four years?—Yes.

23,647–50. Previously to that time had there been no diminution in the oysters?—We never felt it so much, although there was a considerable falling off.

23,651. Are there any oysters sent off from the beds by train?—I believe there are some.

23,652. Where do you sell them mainly?—For the town consumption.

23,653. I think you said that a good many of these small oysters are sent off that are not intended to be laid down?—I was only speaking from my own judgment; I do not know that as a fact. I believe there are a good many of them sold in London. I was there the other day, and I saw a good many Falmouth oysters very like those you have there.

23,654. Oysters no larger than these?—Yes.

23,655. And of the same colour?—Yes.

23,656. Are they sent tinged with green?—Do you mean the shell or the fish?

23,657. The fish.—No; people would not eat it, and it would not be offered for sale if it was tinged with green.

23,658. But is it not commonly the case that that is so?—Not always; there may be some. You may find a few occasionally that are tinged with green.

23,659. Do you think that this oyster (*holding up an oyster*) is fit for eating now?—I cannot tell unless I saw the inside of it.

23,660. But do you think that an oyster of that size is fit for eating?—Yes, if it is a full-fed oyster. That, however, would be no criterion with regard to the size at which they should be caught.

23,661. Do you think that oysters of that size when first dredged up are fit for eating?—No, I do not think they are. They should be laid down again for another season.

23,662. Would such oysters fetch any price in the market?—Yes, for laying down.

23,663. But they would not fetch any price in the market for food?—No, not for present use.

23,664. Then it would not be worth while to give 18*s.* a bushel for oysters of that size for food?—If the merchants think they can get 24*s.* a bushel for them in London they would do so.

23,665. But they only get that after the oysters have been laid down?—They will find parties to buy them at that price.

23,666. But they are only bought for the purpose of being laid down?—As I said before, I saw a tub in London a short time ago of that size.

23,667. Were they all of them of that size?—Perhaps not the whole of them, but some of them certainly were.

The witness withdrew.

William Henry Williamson recalled.

W. H. Williamson.

23,668. (*Professor Huxley.*) You wish to add something to your former evidence?—I only wish to say that 95 bushels out of every 100 sold to the likes of me are sold to lay down on the Kentish coast. We buy them in Falmouth Harbour and take them away to our own beds. Many of those we get here when we come down in the season would not be fit for sale at once. Perhaps 95 out of every 100 bushels are laid down on our beds to supply the London market in the following year.

23,669. (*Mr. Lefevre.*) Then they are not sold for food at once?—No; we lay them down on our private beds.

23,670. Would it pay you to sell them at once for food?—No, we do not buy them for that purpose. There may be a few that we send away in casks. They go to London and then are sold there. We pick out the large ones expressly for London. I should be very happy to show you some that I am going to ship away to-morrow if you will go over to Flushing.

The witness withdrew.

William Collins called and examined.

W. Collins.

23,671. (*Professor Huxley.*) You are a fisherman at St. Mawes, I believe?—Yes.

23,672. Have you been a fisherman there for many years?—Yes, from my youth up to the present time.

23,673. Are you well acquainted with the seine-fishing?—I am.

23,674. How many seines have you at St. Mawes?—There are six there now.

23,675. Have they the ordinary mesh for pilchard-seines?—They are made on the old-established plan.

23,676. How long are they?—Nearly 200 fathoms.

23,677. Nearly 200 fathoms?—Yes, some are about that.

23,678. They are worked in the ordinary fashion, I suppose?—Yes.

23,679. By three boats?—Yes.

23,680. What is your regulation at St. Mawes about working turns?—The law used to be that you should ride your turn for 24 hours, except on Saturdays, and in that case you ride it for 48 hours, so that Sunday should be excluded for rest.

23,681. How many stems are there; you call them stems, I believe?—Yes.

23,682. How many stems are there in your neighbourhood?—There are three at St. Mawes, but there are some in Falmouth Bay also, and likewise up in Gerran's Bay. They used to be marked off.

23,683. Are they used by all the men?—Yes.

23,684. How at the beginning of the season do you arrange your turns?—The first in turn takes the first stem.

23,685. Do you mean the first that can get there?—The first who gets there takes the first stem; the next who rows after stops for 24 hours, and then he comes in for his turn.

23,686. You do not make any arrangement at the beginning of the season who shall take the first turn, and then who shall take the next?—No.

23,687. Have you ever had any difficulty in arranging with regard to turns?—We have had a little difficulty occasionally.

23,688. Are there any owners of small seines there?—Do you mean pilchard-seines?

23,689. Yes, small pilchard-seines.—I am the owner of one myself. I have one smaller than the rest; it is not quite as long, but it is quite as deep as theirs.

23,690. Have you had any difficulty in taking your turn with the rest?—No, I had none last year.

23,691. Did you have any difficulty before last year?—I only had it last year.

23,692. Have you known any other persons who own small seines prevented from taking their turns in their regular order?—There are some small seines I believe at Mevagissey, but I do not know that they have had any difficulty in taking their turns.

23,693. No difficulty of that kind has occurred at St. Mawes?—No.

23,694. Have you had a good yield from your seine-fishing of late years?—Yes.

23,695. Then you have done very well?—Yes.

23,696. Is it as good as it has ever been?—In my father's days there were plenty of fish caught, but of late years they seem to have greatly increased. The fish seem to have passed in a more regular manner.

23,697. Are there any drift-men who go out from St. Mawes?—There are some at Gerran's Bay; they go out from the port at St. Mawes; they are in the same port.

FALMOUTH.

W. Collins.

30 Mar. 1864.

23,698. Where is Gerrans?—It is a little place round the point.

23,699. How many drift-boats are there there?—I believe there are two there.

23,700. Do many drift-boats come off this harbour from Mevagissey and other places?—There are a great number that come off Gerran's Bay from Mevagissey and Porthloe, and elsewhere.

23,701. Do they interfere much with your seining?—Yes, I know we experienced great interference from them last year.

23,702. How do they interfere with you?—They come in right where the seines are. They came inside where the lurchers were last year. When we see the fish we generally call the seine-boat. These drift-men shot their nets from Gerran's up to the other point, so that they did not drift as there was not much tide; their nets were on the bottom of the ground and they remained steady.

23,703. Did they moor their nets?—No they were not moored, but they had no tide to carry them along.

23,704. In that case they would take all the ground from your turn?—Yes, many times we have gone out shooting in the night, and we have had our seines all drawn in and linked together.

23,705. Then the drift-men in that case shot their nets in such a way as to interfere with your using your nets at all?—Yes.

23,706. Did that occasion great loss and damage to you?—Yes, their nets were shot right inside the fish, and they stopped the fish from coming in.

23,707. Did you not try to get rid of them?—We had no wish to injure their nets.

23,708. Of course not, but would they not get out of your way?—No.

23,709. What is your regulation and custom if the drift-men get inside the seines?—They used to be allowed three miles from any headland, but the day when they observed that regulation is long gone by.

23,710. Would you as a seiner wish to see that regulation revived?—Yes, I should.

23,711. Do you think it necessary to keep them three miles off?—Yes.

23,712. Three miles off all along the shore?—No, not everywhere.

23,713. You think that a less distance would do in some places?—I am sure I do not know. I do not think that they reap much benefit to themselves by coming inside.

23,714. Besides which they actually take up your ground?—Yes.

23,715. Do you think that they interfere with you by breaking the shoal?—Yes.

23,716. Have you ever seen a shoal of pilchards broken by the drift-nets?—Yes.

23,717. Have you seen that yourself?—Yes, I have had a lugger and nets driving myself, and I have experienced it.

23,718. When you shot your nets across the shoal did it break?—Yes, we shot right through them as near as possible.

23,719. Did they not come together again on the other side of the nets?—No, we scattered the fish and they went away anywhere. We experienced that this last year. I never saw the fish go so fast. We believed it was all owing to that.

23,720. What do you do with your fish, are they mostly salted?—Yes.

23,721. Is there any market for them among the country people?—Yes, they chiefly depend on what they get from us; they would not get much fish at a low price if it were not for the pilchard-seines.

23,722. Are the salted pilchards largely exported?—Yes, very largely; Mr. Fox who is here will testify to that.

23,723. Do you export most of your fish?—Yes; but I am sorry to say we had not many last year; we sell them to Mr. Fox for exportation.

23,724. What we wish to understand is, whether the pilchards you take with your seines are devoted to the supply of the country people about here, or whether they are exported; are they sold to hawkers or exported in bulk?—When they are here they are sold fresh; when we take them in the seine, we sell a great many to the public here in a fresh state.

23,725. And the bulk goes for exportation?—The bulk is salted.

23,726. How many good hauls do you have with a seine in the course of a season?—I can hardly tell that; the year before last I caught 1,700 hogsheads in one shoot.

23,727. Would you think that you did very well if you had two or three good hauls in a season?—Yes.

23,728. Sometimes you may go for a number of weeks without getting a haul?—Yes, we did that many weeks last year.

23,729. So that the supply of fish is not at all regular?—No, but the people who consume them here generally wait for the seines to catch, because they prefer the seine-fish to those caught in the drift-nets.

23,730. But the drift-fishermen bring in a more regular supply?—Yes, they generally come in every morning, when they have fish, but they do not catch enough to supply the wants of the people. In Cornwall they salt the fish just the same as you would salt a barrel of pork to keep for winter use.

23,731. Do the drift-men not salt their fish?—The people about here do not like the drift-fish as well as they do the seine-caught fish; they do not think that they salt as well.

23,732. Is there anything else that occurs to you about the seining that you desire to mention?—I have nothing more to say about the seining, except with regard to the small ground-seines that have been spoken of. They are hauled ashore from the land; they have a very small mesh, the same mesh as the pilchard-seine.

23,733. Do you think they do harm?—I have no doubt that they destroy a great quantity of small fish.

23,734. Do you know what an ebbing-net is?—Yes.

23,735. What is it?—They shoot them across the channel in the Truro river. They have a sort of bag in them, and very little fish will run into that bag.

23,736. Then I suppose they catch everything in the river?—I have seen hundreds of fish in the market at Truro, ten brace sold at twopence and threepence about the length of my finger.

23,737. What do they consist of?—Plaice, and all kinds of flat-fish.

23,738. Do you think that that is a very destructive and wasteful mode of fishing?—Yes, you must know that as well as I.

23,739. Is that mode of fishing followed now in the Truro river?—I think it must be, but I do not know. I have been at Truro many times, and I have seen these fish on the stalls there by basketsfull. I have seen 20 or 30 sold for threepence.

23,740. And they were principally plaice?—Yes.

23,741. Are these nets only used in the river?—No, only in the river.

23,742. These are not used along shore at all?—No, they could not be used there.

23,743. (*Mr. Lefevre.*) There is a good deal of the coast I believe where you cannot use the seine-nets?—Do you mean the pilchard-seines.

23,744. Yes.—Yes, there is rocky ground, but in some places we can shoot and moor our seines.

23,745. But there is a great deal of the coast on which you cannot use your seines?—Yes.

23,746. Would you prevent the drift-nets from coming within three miles of such places as that?—I would.

23,747. Why?—Because if they go and molest the shoals as they are going along the rocks we cannot afterwards expect them to come in quietly along the sand.

23,748. But will the fish sometimes strike where you cannot use the seines?—They may do so, but I do

not know where it is. There are look-outs on the hills to look out for them. I do not know a bay where we do not look out for them. We are always waiting to catch them, and directly we see them we shoot.

23,749. But if a shoal of fish were to strike on the coast at a place where you could not use a seine-net, would you prevent the drift-boats from going in there and catching the fish?—Yes, because they would prevent the fish from coming round. If they are disturbed when they are coming along the coast, we cannot expect them to come in a shoal into the bay.

23,750. Quite so. That may be so where you can use a seine-net, but what injury would be done if they came in where you could not use a seine-net?—It is just the same as if you put some cows in a field and were then to put a gate across. If that gate is shut it is impossible for anybody to get them outside.

23,751. I understood you to say that you had a good take last year?—No, we had a bad season last year, but the year before I and a many of my neighbours had good catches.

23,752. Taking it altogether was it a good season last year?—Perhaps not in general.

23,753. Not for the seine-nets?—No; with regard to oystering I agree with what has already been said. I should be glad to see the fence months extended for two months longer.

23,754. (*Professor Huxley.*) Is there anything you would like to add to what you have already stated?—I do not know that there is.

The witness withdrew.

ALEXANDER DENNIS called and examined.

A. Dennis.

23,755. (*Mr. Lefevre.*) You are an oyster dredger?—Yes.

23,756. How long have you been engaged in dredging?—It is upwards of 20 years ago since I first went.

23,757. How many men were there dredging then?—I cannot say.

23,758. Has the number much increased since then?—No.

23,759. The oysters have decreased?—There has been a decrease in the oysters.

23,760. But has the number of men decreased?—No, the number of men has increased considerably.

23,761. What has the increase been?—I should think there are four times as many as when I first went off.

23,762. During the last few years has there been a decrease in the quantity of oysters caught?—Yes.

23,763-4. When did you first observe that decrease?—About four years ago.

23,765. Do you agree with Mr. Williamson that that decrease is in part owing to bad spat?—Yes, for a certainty we have had bad spat for several years.

23,766. Do you think it is also due to over-dredging?—It is hardly due to that, because the oysters have been falling off in other parts. That may have induced buyers to come here, and to a certain extent this port may have been over-dredged in order o supply the market. I believe there were oysters here when they were very scarce in other places, and for that reason the oysters may have been dredged here more closely than in other parts.

23,767. Do you recollect the period before the fence time was introduced here?—Yes.

23,768. Did the introduction of the fence months do any good to the fishing?—Perhaps it has done so of late years.

23,769. Do you think it would be beneficial to extend the fence time at all?—No, I do not think so myself.

23,770. You do not think so?—No, and I will give you my reason for it. There are a great number of St. Mawes men who follow other fisheries and get a livelihood in other ways, whereas hundreds of us would be in a state of starvation if the fence months were extended. In April we should not be able to get anything, and what should we do in that case for our wives and families? It is all very well for the St. Mawes men to say extend the fence months, but they would not suffer in the same way.

23,771. Do you think it would be an advantage to the fishing if sailing-dredging were prohibited?—Yes, to a certainty I believe that. While we are oyster-dredging, when we get our dredge full with the row-boat it will stop the boat, which is not the case when dredging is carried on under sail. We then take up the dredge and have an opportunity of throwing out the young oysters which ought not to be taken. A sail dredging-boat will work on until the dredge is hove up, and then they throw the culch out and put down another dredge. They very frequently dredge along on the ground after their dredge is full, and as their dredge is a great weight, by so doing there is no doubt that they kill a great deal of spat.

23,772. Are the small shells broken up?—They are very thin; some of them are only the size of my nail, or of a shilling. I work with a row-boat 14 feet in length.

23,773. Have you observed any increase in the quantity of weed since the fence time was introduced?—Yes; the weeds have increased considerably.

23,774. Does that do good or harm to the oysters?—I should consider myself that the cleaner the dead shells are when the oysters are ready for casting their spat, the more likelihood there would be of the spat adhering when it falls. There would be less chance of its sticking if the shells were covered with slime or weed, and such things naturally accumulate as soon as the dredging is stopped. If the shells are clean when the spat falls, it is more likely to adhere to them.

23,775. Do you think that any regulation for lengthening the fence time would much increase the quantity of weeds?—Yes; when we break into the ground on the 1st of September we are some hours before we can get anything up except weeds. That checks the dredge and the knife passes over it.

23,776. Do you find more weed in deep water or in shallow water?—More in shallow water, I believe.

23,777. Upon what kind of bottom?—Upon a sandy bottom.

23,778. Is there much of it?—There is not a great deal of it, but there is an accumulation both of sand and weed. I have many times struck down an oar in some places and found that it would go down from two to seven inches, while in other places it would not sink at all. In certain places there is very little mud and weed.

23,779. Where there is much mud the oysters are scarce?—Yes.

23,780. Has the increased price of the oysters compensated you for the smaller quantity you have been enabled to catch during the last year or so?—No.

23,781. Then you have not been able to make as much altogether from the oyster-fishing?—No, we have not been able to get as much.

23,782. Do you agree with Mr. Williamson that the price four years ago was 2*s.* a bushel?—Yes, I think it was.

23,783. It was not more than that?—It may have been occasionally, the price varied very often.

23,784. Had that price been the price for some years before that?—I cannot say exactly, because the price has been almost on a sliding scale. It rises and falls; sometimes it is up and sometimes down; it depends altogether on the quantity coming in and the demand for it.

23,785. But in the last four years the price has constantly been going up?—Yes.

The witness withdrew.

FALMOUTH.

W. Lower.

30 Mar. 1864.

WILLIAM LOWER called and examined.

23,786. (*Professor Huxley.*) Where do you live?—I live in Durgan.

23,787. Are you well acquainted with Helford?—Yes.

23,788. Have you been engaged in fishing there?—Yes.

23,789. Have you practised crab and lobster-fishing?—Yes.

23,790. Do you think that the crabs and lobsters are becoming scarce?—Yes, they are becoming scarce. There are not half so many as there used to be.

23,791. Within how many years has that falling off taken place?—Within the last five or six years.

23,792. Were there plenty up to that time?—Yes, they were very plentiful up to that time.

23,793. What is the reason of the falling off?—With regard to crab-fishing I think it has been occasioned by so many nets being shot round and catching the small ones before they come to be large ones.

23,794. What sort of nets do you mean?—Thornback-nets.

23,795. What sort of nets are those?—They are nets made for catching flat-fish and thornbacks.

23,796. What kind of nets are they?—They are commonly called trammel-nets.

23,797. Will you describe one of them?—They are nets with three rows of meshes; they have two outside, one very large mesh, inside a small mesh; the inside one is set slacker than the large one. The fish get in and go through, when they get into a bag and they cannot get out again. These nets destroy a great many small crabs in the course of a season.

23,798. Where are these nets set, are they between tide-marks or where?—No, they are used in the bay on a sandy bottom.

23,799. How deep are they?—Sometimes they are 8 or 9 and from that to 10 and 12 and 14 fathoms.

23,800. How is a net of that kind sunk, with an anchor?—No, by lead.

23,801. Have they a buoy fastened to them?—Yes, at each end.

23,802. How long do they allow them to remain down?—They lay them down one morning and haul them in the next morning.

23,803. Is that in the same part of the sea where the drift-net fishing is going on?—No.

23,804. You think that the use of these nets is a great cause of the falling off of crabs?—Yes, that is my opinion, but they have nothing to do with the lobsters. They do not injure the lobsters at all.

23,805. Can you suggest any remedy?—No.

23,806. Are the crabs caught in that way taken to the market?—No, they cannot get 20 up alive.

23,807. Are they all dead when they come up?—Yes, and are all smashed up together.

23,808. Then nothing short of stopping that mode of fishing altogether would remedy that evil?—No, I would not allow one of those nets to be shot.

23,809. You say that the lobsters have fallen off also?—Yes.

23,810. What is the reason of that?—There are too many small ones taken out, and as they get all the berry fish as well we cannot expect the lobsters to increase.

23,811. Do not the berry fish bring a higher price than the others?—No, they bring just the same price. If they are above 11 inches or below 11 inches they all bring the same price.

23,812. Do you think that they ought to put the berry lobsters back again?—Yes, I think so, if they want to have more lobsters.

23,813. Do they go on taking lobsters all the year round?—No.

23,814. How many months of the year are the lobsters taken here?—I cannot say. Some seasons we begin a little after Christmas and continue until August; in other seasons we do not begin until March, and we go on then until August. It depends on the way in which the weather sets in.

23,815. Do you get them in the harbour here?—No, outside.

23,816. Do you think there has been any falling off in other kinds of fish?—Yes, there has been a falling off in different sorts of fish.

23,817. Has there been a falling off in hooked fish?—I cannot say that there has been much falling off in hooked fish, taking one time of the year with another.

23,818. Is there as much whiting as you used to get?—I cannot say, because the people here do not go after it as much as they did. The weather has not been good enough.

23,819. Do they get as many when the weather is good?—No, I think not.

23,820. Has there been any falling off in hake and haddock?—Yes, there has been a great falling off. We have caught scores of hakes night after night and season after season, and now there are scarcely any to be caught.

23,821. Is that the same with haddocks?—Yes.

23,822. And with mackerel?—Yes; mackerel have been falling off ever since I have been fishing. I used to follow it up in the months of August and April, and now for the last five years I have hardly had any at all. I believe there are rather more caught in the seines which they haul ashore.

23,823. Are you speaking now of catching them with a hook?—No, of catching them in the drift-net.

23,824. And they have fallen off?—Yes.

23,825. Can you give any reason for that?—No.

23,826. Are the ground-seines used here?—Yes.

23,827. You are speaking of Helford?—Yes.

23,828. Do those seines destroy much small fish?—Yes, they are sure and certain to do that. I use them a good deal myself, and therefore I know.

23,829. What would be the best mode of preventing the destruction of small fish?—The only thing I know of would be to have a larger mesh.

23,830. What is the size of the mesh you use now?—We use now 13 and 11.

23,831. You are of opinion that that would make all the difference?—Yes, it would make a great deal of difference.

23,832. Is there much oyster-fishing carried on at Helford?—Yes, a great deal.

23,833. Is there anything you wish to say about it?—No, nothing. I know very little about it myself; it is private property.

23,834–5. Whose property is it?—Mr. Tyack rents it.

23,836. Are there regular oyster beds there?—No, the oysters are all over the harbour.

23,837. Are there any regulations enforced there about the catching of fish?—No.

23,838. The people dredge as they like?—They are employed in dredging at so much a week.

23,839. Is there any limit as to the number of persons who may be employed in dredging?—No; one man rents a place, and he hires people to draw the oysters up for him.

23,840. Is he allowed to have as many to dredge up oysters as he likes?—Yes.

23,841. May he dredge them up of any size?—I never heard anything to the contrary.

23,842. Has there been a falling off in the quantity there?—No, they have rather increased.

23,843. And yet the dredgers do just as they like?—Yes.

23,844. Then according to that it does not seem that it does much harm to take them of any size?—The small ones are not sent away, they are only sent away when ready for the market.

23,845. I presume that for their own interest they keep them until they are of a certain size?—Yes, it is for their own interest to do that; Mr. Tyack did send small ones away years ago, but he found that the oysters were falling off and he put a stop to it.

23,846. Is he obliged to keep the fence months?—Yes.

23,847. Does he lay his oysters down on beds there?—Yes, until he gets enough for a little vessel to carry away to Plymouth.

23,848. And in his hands the supply remains pretty constant?—Yes.

23,849. (*Mr. Lefevre.*) Has there been any falling off during the last four years there?—No, they have increased I have heard.

23 850. What size are they dredged up originally; are they of this size (*holding up an oyster*), or larger?—They are larger than that.

23,851. Larger than this?—Yes.

23,852. How long are they laid down on the beds?—Not more than a week or eight or nine days, some may be there only five or six days. It is according to how quick the vessel can make a passage from Helford to Plymouth and back again.

23,853. Where are they sent to?—Plymouth.

23,854. By boats or by rail?—By boats, but in addition there are some sent into the country.

23,855. Are they bought for the market?—Yes, they are all marketable oysters.

23,856. Who is the owner of the beds of which you speak?—Do you mean the beds in Helford Harbour?

23,857. Yes.—Sir Richard Vivian is the owner of one part, and the Duke of Leeds has also a part.

23,858. Is a great part of the beds bare at low water?—Yes.

23,859. Have they had good spat during the last four years?—Yes.

23,860. There has not been any falling off there?—No.

The witness withdrew.

CHARLES CLIFT called and examined.

23,861. (*Professor Huxley.*) You have heard the evidence which has been given here to-day?—Yes.

23,862. Do you think there is anything that it is desirable to add to what we have already heard?—I cannot say that I am particularly interested in the matter.

23,863. I believe you are clerk to Messrs. Fox of this place?—Yes.

23,864. Are they not largely concerned in the fisheries?—Yes, largely.

23,865. Is there any regulation enforced here which injuriously affects the interests of the merchants?—In respect of what kind of fish?

23,866. Say, for example, seining?—I have heard what has been said about the drift-boats, and the general opinion is that they have done a great deal of mischief by shooting their nets too close.

23,867. Are you aware that there is an old Act of Parliament to keep the drift-boats a certain distance from the shore?—Yes, and an attempt has been made to put it in force by seizing the nets and the boats on some occasions, but still that did not prevent it.

23,868. Within your own recollection have you known that Act put in force?—I have heard of the nets being seized. I have heard of the seiners having gone out and seized the nets after they have been shot.

23,869. Did the magistrates ever convict under the Act?—I cannot say. I do not know that the drift-men have been punished. In some cases I believe there has been a compromise in one way or another.

23,870. We are anxious to know if that Act has ever fairly been brought to a test?—I do not think it has.

23,871. Were there legal difficulties in the way?—I really cannot tell. Where you have seiners and drivers living in the same place they do not like to prosecute each other. There is a kind of diffidence in that respect.

23,872. Then there are no means of knowing, apparently, in this part of the world whether the Act has failed or not, or whether it has been put in operation?—I believe the drift-men generally think the Act is inoperative, and the seine people have not thought it worth their while to put it to a test.

23,873. There have been difficulties about it?—Yes; sometimes they have taken the law into their own hands, and I believe cases have come before the magistrates, but I do not believe that the question has ever been fairly tried or settled.

23,874. We heard at Mevagissey, where Mr. Fox is interested, a strong statement with regard to the interference of the large-seine owners with the owners of small seines, are you aware that that is the case?—I know there are some small seines.

23,875. The small owners complained that they were practically excluded from taking their turns unless they had seines of a certain size?—I do not know that there is any law that affects it but a regulation among themselves.

23,876. It has been a regulation?—Among themselves as seiners.

23,877. Yes, we so understood. Are you able to inform us if the large seines have an interest in excluding small-seine owners?—Yes, they have an interest in doing it, because these small owners cannot catch what the large ones can. If a large shoal of fish comes in the small seines would only be able to take a few of them, whereas the large seines would take them all.

23,878. Will the fact of the small ones being there prevent the others from coming in?—Yes, a large seine cannot shoot in turn while a small seine is there.

23,879. The statement made to us was that the small seine was not as deep as the large seine, and that the large seines can shoot outside the small ones; is it your opinion that that can be done?—In many places the turns are very confined. They are surrounded by rocks, and there is only a small space in which the seines can be worked at all. I do not know whether that is the case at Mevagissey or not, but it is in many places. In some instances I think they might shoot outside where a small seine would not touch the ground, but it would lead to confusion and to disputes, and even battles. In point of fact they would prevent each other from shooting. If a small seine had possession of a turn, and a large seine tried to shoot outside her, they would run their boat into the small net, and both would be prevented from shooting at all. I believe that that was done to some extent at St. Mawes last year, but I do not know whether it was done between the small and the large seines, or whether it did not occur when two large seines came in collision, and there happened to be a dispute as to whose turn it was. I know the result was that they allowed a large shoal of fish to escape while they were disputing whose turn it was.

23,880. If the small seines were allowed to compete with the large ones would they do the large ones more damage than they would do themselves good?—I think a large shoal would frequently be allowed to escape if there was only a small seine there.

23,881. You think that a large proportion of the fish might escape?—Yes.

23,882–3. But still the small seine would take a sufficient quantity to pay them handsomely?—But if they allowed a large proportion of the fish to go it would be disadvantageous to the general yield.

23,884. Do you think that that is the ground on which the large-seine owners for the most part oppose the competition of the smaller seines?—It is only of late years that there have been any small seines, and they have principally been made from mackerel-seines into pilchard-seines by adding Dungarvan net to them. I believe they put Dungarvan net in the centre and mackerel net at the ends.

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23,885. Have the large-seine owners made regulations among themselves, or have they legislative sanction of any sort for what they do?—I think it is a matter of mutual arrangement. There is one place in the county where they are governed by Act of Parliament.

23,886. Where is that?—St. Ives.

23,887. That is by local Act?—Yes.

23,888. There are no local Acts here?—No.

23,889. And the duchy cannot interfere?—No, it has no right, because they are in deep water. The duchy makes a claim to the foreshores.

23,890. Has the duchy the foreshores?—It claims them.

23,891. That is a question which is not settled yet?—I believe there is a dispute between the duchy and the Ecclesiastical Commissioners and Lord Wodehouse.

23,892. (*Mr. Lefevre.*) Possession of the foreshores would not give the duchy any right over the fisheries?—Not over the pilchard fisheries.

23,893. It would then give no right such as would enable them to make a charge for dragging a net between high and low water-mark?—No; I believe the Ecclesiastical Commissioners claim the bottom of the harbour here.

23,894. The ground of the harbour?—Yes.

23,895. Do you know anything about the private beds which exist here?—Yes, I know them.

23,896. Is there any title to them; has anybody the power of granting those beds?—There was a dispute between the Ecclesiastical Commissioners and the duchy; the duchy laid claim to them and the Ecclesiastical Commissioners also.

23,897. No rent is charged in respect of them?—No, none at all, except in some cases where parties own the land adjoining, they claim or pretend to claim down to low-water mark, and in some instances an acknowledgment of 5*s*. or 10*s*. a year has been paid for the use of the beach. It is said, however, that they have no right to make such a charge.

23,898. Do you know persons who have got beds of that nature?—There is a number of merchants here who buy oysters and who have those beds. There are also fishermen who lay down oysters in certain parts of the harbour for themselves and sell them to the merchants in the season. There may be, I should think, 150 different persons who are interested in that way.

23,899. Are the beds all staked out?—They stake them out among themselves by stones and sticks and in different ways.

23,900. Do you think the regulations respecting the stems with regard to seine-fishing might be altered so as to admit of small seines?—I really do not know in what respect you can alter them. One regulation affects the whole, and as far as I can see I do not see how you can make a different regulation from that which now exists. It is only as to the stems that these regulations are made.

23,901. But those regulations were made at a time when the nets used were all of one size?—No doubt.

23,902. Is it necessary that the regulations should require the nets to be of one size?—I believe it would be for the general advantage if it were so.

23,903. You do not know enough about the regulations to give us any information in regard to them?—The regulations vary at different places; there are scarcely any two places on this coast where the regulations as to stems are the same. It all depends on the fishermen themselves. They come to an agreement among themselves.

23,904. (*Professor Huxley.*) Have you reason to think that there has been any falling off, taking one year with another, in the seine pilchard-fishing?—Seining is a very precarious fishery. For a series of years you may probably scarcely get a fish, while at other times you will get large catches.

23,905. During a range of 10 years, for example, do you think the average has much altered?—It differs very much. I have known 50,000 hogsheads taken in a season, and in other seasons there have perhaps been not more than four or five.

23,906. During the last 10 years has there been more fish caught in that period than during the preceding 10 years?—No, not on this coast.

23,907. You think that less fish has been caught?—Yes, on this coast. The fact is, we sometimes see a very large quantity of fish off the shore; sometimes they come on the shore and yet they are not caught. There has not been any falling off in the quantity of fish which visit the shores, but sometimes there has been no opportunity of catching them. At times they have not come into the stems, and at other times, in consequence of bad weather, they have kept out for some distance, so that we could not catch them. I do not think there has been any falling off in the quantity of fish itself.

23,908. Do you think that a vast quantity of the fish caught by the drift-net fishermen could not be caught by seining?—I have no doubt of it.

23,909. Then it is for the benefit of the community to have drift-net fishing as well as seining?—I think so.

23,910. Do you wish that there should be some regulation to prevent the drift-net men from interfering with the seiners?—I think they should not be allowed to come so near the coast as to interfere with the seining.

23,911. Do you think that the old regulation of a league or a league and a half should be enforced?—I think they should be confined to that.

23,912. Have you yourself any acquaintance with the drift-fishing?—Only from seeing it carried on.

23,913. Do you think, from what you have heard the fishermen say, that any regulation of that kind would interfere with their interests?—I think it would, because when the fish are close in-shore they go just outside the harbour and shoot their nets and get their boats full, whereas if they went outside they would get no fish at all, if the fish were in-shore. It is, however, when the fish are in-shore that the seiners are looking out for them, and that is their harvest. The fish may be out for weeks and months sometimes, and yet the seiners will get no fish at all. Of late years they seem to have struck upon the coast almost at the same period of time within a few days.

23,914. The pilchard is an important article of food to the people of Cornwall?—Very important indeed.

23,915. Are the people supplied more particularly by the seine or by the drift-boats?—I think the fish supplied for immediate consumption are supplied by the drift-boats, but the people generally prefer the fish caught in the seine for salting for winter consumption. The seine fish are not bruised, whereas the drift fish are bruised, and sometimes their heads are torn in taking them out of the meshes.

23,916. Then they pay a higher price for fish caught in the seines?—No, they get them cheaper because they are caught in larger quantities.

23,917. Do you export large quantities of seine-caught fish?—Yes.

23,918. Can you give us a rough estimate of the quantity exported, and the quantity sold for home consumption about the country?—It varies in different places. There are some places where larger quantities are sold for home consumption than others. It is according to the population, and the means they have of taking them into the country.

23,919. Taking one place with another can you give us any comparison?—I should think that seven-eighths of the seine fish are exported, but that is merely a rough estimate given at a guess.

23,920. They go to the Mediterranean, I believe?—Yes, the whole of them are exported.

23,921. They are very largely consumed in the Roman states, are they not?—Yes, and in all the Italian ports, not in the Roman states alone, but at Genoa, Leghorn, Ancona, Naples, and Venice; they are taken into the interior of Italy from those places.

23,922. Do the seine men think it would be a benefit to the fishery to keep the drift-boats within a reasonable distance?—I think that is essential.

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23,923. Is there anything else that is of importance as bearing on the interests of the seine-fishing?—I am not aware of anything else. I do not know of any regulation that ought to be made in respect of turns at different places. I can hardly say whether it would be well to have regulation on the subject, or to leave it to be arranged among the seiners themselves. I think that any general legislation would not do with regard to seine-fishing.

23,924. (*Mr. Lefevre.*) Is there any quantity of pilchards sent to London?—There may be a few sent, but there is no demand for them there. There are scarcely any sent beyond Devonshire.

23,925. Is it the fact that the fish often strike the coast at points where they could not use the seine?—Yes; that occurs very often.

23,926. And they go off again without the seinemen being able to catch them?—Yes; they are frequently off the shore when the seiners are waiting for them in places where they can shoot their nets. They see them at a great distance coming into the shore.

23,927. Are they in the habit of coming regularly in-shore, or do they strike the coast and go off again? They generally strike the coast and run along the shore. Sometimes they go from headland to headland.

23,928. Without coming into the bays?—Yes, sometimes, but frequently when they come along the shore they go into the bays and all round the coast.

23,929. (*Professor Huxley.*) Might there not be some practical difficulty as a matter of police in working any regulation for keeping the drift-net men a certain distance from the shore; for instance, if you wished to enforce the regulation of a league or a league and a half, how would you carry it out in practice?—I think there should be some penalty attached to an infringement of the regulation.

23,930. But who is to keep watch and ward?—The seiners themselves would do that when they are out in their turns. If the drift-men came in to interfere with them they would see who they were.

23,931. You mean if they came fairly within reach of the seiners?—Yes; they do that often.

23,932. But suppose they are a mile off they can make nothing of them then, they cannot make out their number?—No.

23,933. Then in that case how would it be possible to carry out the regulation?—We have a Coastguard cruising about. If they saw the drift-men with their nets overboard within the restricted distance they could board them.

23,934. There is no Coastguard boat regularly rowed along the coast; the Coastguard men are mostly on the shore, are they not?—They are on the shore, but they keep long-boats at different places and crews of men. They have also a sailing vessel here which I think they could send out.

23,935. A cruising boat?—Yes, and you must remember that it is rather a difficult thing for a drift-man to get up his nets and be off at a short notice.

23,936. That operation would take up some little time?—Yes.

23,937. (*Mr. Lefevre.*) At night would it not be a difficult question to decide whether the drift-men were within a league from the shore?—Yes.

23,938. (*Professor Huxley.*) Do you think that regulation would have the effect generally of keeping them out?—Yes.

The witness withdrew.

W. H. Williamson.

William Henry Williamson recalled and examined.

23,939. (*Mr. Lefevre.*) Are there any means of ascertaining the quantity of oysters taken from Falmouth Harbour?—Not correctly; I have shipped away myself in the course of a year 18,000 bushels.

23,940. Can you give us statistics of the number sent off by yourself?—I should think during the last six years I have sent away from this port 80,000 bushels.

23,941. By referring to your books could you give us an accurate account?—I could do so in London.

23,942. Will you send a statement to the secretary?—Yes.

23,943. And also the price you have got?—Yes. I do not know that I can give you the average price we have got for them, but I can give you the average price they have cost.

23,944. That is what I want.—I shall be glad to send you a return.

23,945. Do you buy from any other place besides Falmouth Harbour?—Yes, I buy all over England, Ireland, and Scotland.

23,946. On this coast I mean?—I bought some at Saltash a few years back, and I have bought a few of Mr. Tyack of Helford, but that is some years gone by. You will not find any oysters after leaving this until you get round to Milford where I have an agent buying for me.

23,947. Is there a larger quantity exported direct or laid down in beds?—Not one bushel in a thousand is sold for London compared with what we send to our beds to be laid down.

23,948. Then the main supply from Falmouth Harbour is sent away for laying down in other places?—Yes, they are sent to the Kentish coast for market elsewhere.

23,949. Is the quantity laid down on the beds here large?—The middle man buys of the dredgers and he lays down a good many, and then when merchants like me come down we buy again of them. Perhaps some send a few by casks to London, but the greater part of them are laid down.

The witness withdrew.

W. Collins.

William Collins recalled and examined.

23,950. (*Professor Huxley.*) You wish to add something to your former evidence?—Yes, I have a little seine of my own. It is as deep as the others but not as long; but I have been thinking within myself why should I be restricted from using it. There are some persons who like to have schooners, and there are others who like to have ships. There is no objection to that, and why should I as a fisherman, if I have a seine and want to use it, be prevented from taking my turn as well as the other seiners.

23,951. In fact you are for free trade in turns?—Yes, to take the regular turn of 24 hours the same as the others. They made no objection to it last year, and I think it nothing but right that I should be allowed to fish. I am not one of a company; there are some ten in a company who have a seine here but I have thought it best for myself, even if I have only a shrimp net, to have it all to myself. There is strong opposition in companies sometimes, whereas I have no one to fall out with except myself.

23,952. Do you think that you ought to have a turn irrespective of the size of your net?—Yes; my seine has caught a large quantity of fish. In one instance a large seine caught 1,700 hogsheads. I never did that, but if I catch three or four or five it is enough for me.

23,953. Suppose some of your neighbours set up seines one third the size of yours, would you like them to compete with you?—Yes, if their mesh was of the right size.

23,954. But suppose a man with a net one third of the length of yours occupied your turn, what would you say then?—He must take his turn as well as myself.

23,955. You think that is all fair and right?—Yes, we must give in to that.

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23,956. You are prepared to stand by that ?—Yes.

23,957. (*Mr. Lefevre.*) What is the depth of your seine ?—12½ fathoms.

23,958. Is that the same depth as the larger seines? —I believe it is, but I do not know exactly, I believe there is a regular scale for the meshes of a seine, and they must all be of that size.

23,959. (*Professor Huxley.*) Is there anything else you wish to add?—There may be one seine 160 fathoms long and another 180, that however would be a large seine. Mine is 140 fathoms long and that is a small seine. I may be about 10 or 20 fathoms short of most of them, but yet I can shoot to the same depth of water.

23,960. You do not object to the chance of being shut out by a man with a smaller seine ?—No, provided that his seine is of the same mesh.

The witness withdrew, and the inquiry was adjourned until March 31st, at Penzance.

Penzance, Cornwall, Thursday, 31st March 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

J. Kelynack.

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JOHN KELYNACK called and examined.

23,961. (*Professor Huxley.*) Are you a fisherman here ?—I am a fisherman at Newlyn.

23,962. How many years have you been a fisherman there ?—All my lifetime.

23,963. How many years back can you recollect the condition of the fishing ?—I daresay for 60 years back. My grandfather was a fisherman, and I have been a fisherman all my life.

23,964. Do you know how many people are engaged in fishing at Newlyn ?—I cannot say exactly, but I was calculating it up last night, and I think there will be, taking fishing-boats and fishing-craft, and all the materials together, about 200,000*l.* afloat in Newlyn now.

23,965. You mean that there is a capital of 200,000*l.* at Newlyn invested in the fisheries ?—Yes, in drift-boats, pilchard, herring, and mackerel-boats. I should think it would take quite 200,000*l.* to put them afloat.

23,966. How many fishing boats, at a rough guess, are there at Newlyn and Mousehole ?—There are 15 at Mousehole, and 17 mackerel-boats at Newlyn.

23,967. Are they mackerel-boats alone ?—Yes.

23,968. Are the same boats that you use for mackerel-fishing used in the drift pilchard-fishing ?—Not always; we have another class of boats for that.

23,969. How many of these drift pilchard-boats are there at Newlyn ?—About 50.

23,970. How many are there at Mousehole ?—Twenty. They are not particularly drift-boats. Some of them are used in drifting for fish, and some are used as line-boats.

23,971. Are the mackerel-boats used for hooking in the same way as the drift pilchard-boats ?—Occasionally.

23,972. Have you separate boats for hooking ?—Sometimes, when the drift-fishing is poor, and we are unable to catch fish by the drift-boats, we use them for hooking.

23,973. Have you no separate herring-boats ?—Not now; we used to have them at one time, but not now.

23,974. Are there any trawlers ?—There are a few —about four or five—in the bay.

23,975. Do they belong to Mousehole ? — To Mousehole and Newlyn.

23,976. How large are the trawlers ?—They are little handy boats, from 24 feet to 30 feet keel.

23,977. Are they decked boats ?—No.

23,978. They are not decked boats ?—No, they are boats of about 10 tons.

23,979. Do you trawl in open boats here ?—Yes.

23,980. And you have about four or five of these boats ?—Yes, but the trawling here is a mere nothing. There is just a time or two when a poor man will get out in the winter months, and take a few soles for the gentry here at Penzance.

23,981. Is it not a good trawling-ground ?—It is no great things.

23,982. Have you mostly a rocky bottom ?—A great part of it is rocky, but there is a little narrow strip of sand.

23,983. Do the Brixham trawlers come off this bay? —Yes, a great deal.

23,984. But they keep outside ?—They fish about four or five leagues off.

23,985. Is there any oyster-fishing here ?—There are no oyster beds here, but I believe that from 300 to 500 men might be employed in oyster-dredging, if they were introduced here, and a nursery made.

23,986. Is there a large supply of oysters in the bay ?—We expect there is. I have understood at Newlyn that some of the fishermen there have hauled up oyster-shells in the crab-pots.

23,987. Have you any reason for thinking that oysters are spread generally over the bay ?—I daresay there are oyster banks in the bay.

23,988. Are there no regular oyster dredging-boats here ?—Not one.

23,989. Is there much crab and lobster fishing ?—There is very little now, but there used to be a great deal.

23,990. It has fallen off ?—Yes, very considerably. In my boyhood the old men used to bring in an abundance of crawfish.

23,991. Is there no crab and lobster-fishing now ? —There is very little of it.

23,992. It is not much practised at Newlyn and Mousehole ?—Not at all now ; there is very little of it.

23,993. Have you any seining ?—Yes.

23,994. How many seines are there ?—I should think there are about half-a-dozen pilchard-seines at Newlyn.

23,995. Are they the large pilchard-seines ?—Yes.

23,996. How many fathoms long are they ?—From 250 to 300 fathoms.

23,997–8. Are there many in Mousehole ?—No, not one.

23,999. How has the fishing been of late years, has it been better or worse than when you first knew it ? —It has been a great deal worse.

24,000. Have all sorts of fishing been worse ?—Yes.

24,001. Mackerel-fishing ?—Yes.

24,002. Drift-fishing? — Yes, drift-fishing of all sorts.

24,003. And the drift pilchard-fishing as well as the seining ?—Yes, but at some particular times they bring in large quantities ; but taking it generally the pilchard-fishing has gone out a great deal in our bay. When I was a young man, 27 or 28 years of age, about the year 1810, a great deal of small pilchards came here, and they thought it not worth while to take them, even for manure. We had poor markets, and did not sell them. In 1811 those little visitors came again ; there was a wonderful lot of them. We caught about 1,000 hogsheads that year, and we could have caught 3,000 if we had markets to take them to the same as we have now.

24,004. Has the number of fishermen remained the same ever since you knew Newlyn ?—The number of fishermen has generally fluctuated.

24,005. Has the number of boats remained the same ?—There was a time when there were as many mackerel boats as there are now.

24,006. Has there been any increase in the number of boats ?—They have more mackerel-nets on board, and they are larger boats than they used to be. They also go further from the land. They go up to Plymouth and to Ireland to catch fish now, such as herrings and so on.

24,007. Is there any regular herring-fishing at Newlyn ?—No, there is very little there ; we never persevere with it. There might be some taken in the season if the fishermen would try for them.

24,008. Is there any in Mousehole ?—No.

24,009. Your people go to Ireland to fish for herrings ?—Yes.

24,010. When do they go ?—They go about a fortnight before Midsummer.

24,011. Do they go in the undecked boats you have referred to?—They are hatched boats, as we call them; some of them are decked boats.

24,012. (*Mr. Lefevre.*) How many of these hatched boats are there ?—About 30.

24,013. (*Professor Huxley.*) Are they in addition to the boats you have already spoken of ?—No, they are just the same boats, some of them are from 30 to 42 feet keel.

24,014. And some of them are half-decked ?—Yes.

24,015. Do they go to Ireland ?—Most of the boats from 30 to 42 feet keel go to Ireland. There are only a few pilchard boats that remain at home during the midsummer.

24,016. When you first began fishing did you have half-decked boats ?—They had just a little deck to them in which we could put a little gear.

24,017. Were other boats smaller than that ?—A boat of 28 feet keel was a large boat in my boyhood.

24,018. What is the average cost of your boats now, with all their fittings ?—If a boat is properly fitted out for the mackerel-fishing, and if it is a new boat with all the requisites for mackerel, herring, and pilchard-fishing it will cost about 700*l.*

24,019. What would it cost when you first began fishing ?—Not so much, they were not so expensive then.

24,020. But what would a boat cost when you first began ?—A boat would cost 100*l.*, and the nets would not cost much ; nor had we many herring-nets to go to Ireland with in my boyhood.

24,021. Then the capital invested in the fishing has increased much of late years ?—A great deal.

24,022. Has it increased double since you began fishing ?—I expect that it has.

24,023. Then do I understand you to say that the supply of fish has been constantly falling off since you began fishing ?—Yes, I believe that it has. I have put down a few remarks here which I will read if you have no objection.

24,024. Is it your own evidence ?—Yes.

24,025-6. Then you may read it.—"Being requested by Mr. Bolitho to give information on the Mount's Bay fisheries, I shall endeavour to do so to the best of my ability. I have been in connexion with the fisheries above 60 years, and I find that the different orders of fishes are not so numerous now as I once knew them to be. First—the stationary fishes, the crab and its kind. I well recollect the time when they could be taken at all seasons of the year, and by simple means, but owing to their having been taken out of their season their number is considerably diminished. Secondly—the flat-fish, such as the turbot, sole, plaice, and various others that our bay used to abound with. They are destroyed in like manner by being caught out of their season by ground-nets in the offing and along the shore. Before the trawl was introduced into our bay it abounded in line-fish, especially the ling. They could be taken at from four to five leagues from the shore in large numbers. Thirdly—the mackerel. Our coast would abound with them, if they were not interfered with during the spawning season. Fishermen should cease to take mackerel about midsummer, and not recommence fishing for them till the latter part of August, for from that time they begin to improve. Fourthly—the pilchards. Their spawning season ought to be observed. They ought not to be fished for before midsummer nor after Christmas. I perfectly agree with the proposed plan of nursing fishes, for I believe that they can be greatly assisted to increase, especially here in Mount's Bay, where the water is so pure that a good nursery could be secured for all kinds of fishes."

24,027. What do you mean by the nursing of fishes ?—I think that the spawn should be kept up. I think that there should be some nurseries made in Mount's Bay, that would have a tendency to protect the fish.

24,028. What you propose is to multiply the pilchards artificially ?—I am not speaking of pilchards, because they are not in the bay all the year round. I am rather speaking of such kind of fish as crab-fish.

24,029. You would have nurseries for the crabs ?—Yes.

24,030. How would you propose to carry out that plan with regard to the crabs ?—I would have it made like a large pond, where I would put the crabs and allow them to spawn. I think we should get a large supply from them in that case.

24,031. Would you make a sort of preserve ?—Yes. They take very small crabs now. I saw a small crab the other day only a few inches long ; it was what we call a red crab or galor crab.

24,032. When you speak of flat-fish being destroyed by the ground-nets, what kind of ground-nets do you mean ; do you mean ground-seines ?—I mean herring seines. Foot-seines we call them ; they are hauled along the shore. I have seen small turbots caught in these nets and brought to the land not bigger than the top of my nail.

24,033. How many ground-seines are there used in this bay ?—Not more than three or four, there used to be more.

24,034. Where do they use them now ?—Out about the rocks about Newlyn and Mousehole there are a few used. There are not more than three or four now. At Logan rock there are many more used.

24,035. I suppose they require a sandy shore ?—Yes, they cannot haul them in unless they have a sandy shore.

24,036. Do you think they destroy great quantities of young fish ?—There is no thinking about it, because I am certain they do.

24,037. How many years have they been used here ?—They have been used here beyond my remembrance.

24,038. Were there as many in your early days as there are now ?—No, not so many.

24,038*a*. Do you ascribe the falling off of the fish to the use of these nets ?—I think the fish have been diminished by that means. Of course if you take away the small fish you must decrease the number of large ones. In warm weather in the summer time these small fish will come in our bay in very large numbers not bigger than the top of my nail. I have seen Mr. Cornish here catch a small turbot the size of his hand, and haul it over again in order that it might get bigger ; but I do not think he will ever get that fish again, the Brixham trawlers would get it.

24,039. Has the number of fish caught by the hook and line fallen off ?—Yes, a great deal.

24,040. How is it with regard to the whiting ?—They have fallen off a great deal to what they used to be.

24,041. Were there plenty of whiting here formerly ?—There were plenty in Mounts Bay, a mile and a half or two miles from Penzance, and within that to half a mile.

24,042. Is there much lobster-fishing about here ?—There are some splendid lobsters here.

24,043. Has the lobster-fishing fallen off ?—Not so much. There are a great number of lobsters caught here now, and 30 years ago they used to catch a large number, and also large crawfish ; they used to fill their pots, empty them into the boats, and put them out again, and they would catch probably about half-

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a-dozen at the next haul; but now they have to fight hard to make anything of a season.

24,044. If the fishing has fallen off for all these years, how is it that you have contrived to double the capital invested?—Our principal fishing here is the drift-fishing. The fish we catch in the drift-nets are not the stationary fish; our capital is invested in that.

24,045. Has not the drift-fishing fallen off?—Very little, because we have extended our drift-fishing to the North Sea and Ireland, that has kept up our fishing.

24,046. Then you have not made your money by the local fishing here but further out at sea?—Not altogether: we should not have got boats to go mackerel-catching if it were not for the North Sea and Irish fishing.

24,047. Does any large part of your population go to the North Sea every year?—Many of our men go to the North Sea; 20 or 30 or perhaps 40 of our boats go there.

24,048. Are they the half-decked boats you speak of?—Yes, they are hatched boats, some of them.

24,049. And do you think that the money you have made in the North Sea and Irish Channel has made up for the falling off here?—Yes, that has tended to increase the capital here.

24,050. (*Mr. Lefevre.*) What number of men are there in the boats?—They are as good seamen as any in the world. They are not all fishermen that are called fishermen.

24,051. But what number of men are there at Newlyn and Mousehole that you call fishermen?—About 700 or 800.

24,052. In the two places?—There are more than that in the two places.

24,053. Are there more than 800 in both places?—You may safely put them down at 1,000. I believe there are 1,057 now employed in the mackerel-fishing.

24,054. Has the number increased very much of late years?—It has increased a little.

24,055. A little, but not much?—Yes.

24,056-7. Are the fishermen employed in seining?—Yes, particular fishermen are employed in seining.

24,058. Do they also employ a certain number of landsmen?—Yes, most of them are landsmen in the bay about here. At Mullion we generally get fishermen. In our bay we generally employ landsmen, except a few of the best men.

24,059. Has the number of seine nets increased in the bay?—Not in this bay, but the seine nets have increased at St. Ives.

24,060. But not in the bay here?—No.

24,061. Has the number of drift-boats increased here of late years?—The drift-boats have increased by reason of the North Sea and Irish fishing, and some of our pilchard-boats have increased owing to that. They make a little bit of money from these fisheries, and they employ it in the summer season in catching pilchards.

24,062. Do more boats go out now after pilchards than formerly?—Yes, a great many more. There are not as many men employed at Newlyn in the seine-fishing as there used to be, by a great many.

24,063. When did you first go off to Ireland to fish?—We go away about a fortnight before midsummer.

24,064. But how many years is it since you first began?—Between 30 and 40 years. There were very few at that time, I cannot say how many.

24,065. Are your boats registered at Penzance or St. Ives?—Penzance is our port. They are not registered now, they are numbered.

24,066. How long is it since the trawlers first began to trawl off this part?—The Brixham trawlers have been coming here for close on to 60 years. I know there were Brixham trawlers coming here when I was a little boy.

24,067. Has the number increased of late years?—I should think it has increased. There are now three times as many visiting our coast as there used to be.

24,068-9. Do they bring in their fish here?—Sometimes the Plymouth people carry them home.

24,070. Do they come here all the year round?—No, they will trawl all the fish upon the ground, and by the latter part of April they will scarcely be able to catch a ray.

24,071. Are they off here now?—Yes, a great number of them.

24,072. Are they bringing in their fish here?—Some of them do.

24,073. Do you attribute the falling off in the quantity of fish here to the trawlers?—I should think that the ling fishery here has been almost annihilated by the trawlers; in my day we used to catch from 100 to 200 ling in the course of the day, but there was no trawling ground here then.

24,074. What distance did you go to for ling?—About four leagues off.

24,075. Is that ground that is trawled over by the Brixham trawlers?—Yes.

24,076. Do you find that ling has fallen off much of late years?—Yes; since my boyhood it has fallen off very much, we can hardly catch a ling now.

24,077. Do you think the trawlers catch the fish you used to catch?—They do not catch the fish we used to catch.

24,078. Do you think they catch a great many ling now?—They catch a few, and also conger and skate.

24,079. What are the principal fish they catch?—Turbot, sole, and brill.

24,080. They do not catch a great number of ling in proportion?—Not so many ling, because they do not trawl for ling. Ling is found at a little distance from the ground in a general way, and the trawl itself goes over the ground. Turbot and sole being on the ground they are caught. They catch more turbot by day than by night, because they are off the ground at night.

24,081. Do they bring in many hake?—Not so many as the Plymouth men, and not as many as at Plymouth, but they do not trawl here for hake in general.

24,082. How long are your boats away when they go to the north coast?—Some are away for 12 or 13 weeks.

24,083. Do they come back in time for the pilchard season?—They come back for the mackerel in November.

24,084. Does your mackerel season begin in November?—Yes.

24,085. How long does the mackerel season last?—It sometimes lasts from six to eight weeks.

24,086. Does the pilchard season then begin?—It begins at midsummer.

24,087. Do the boats come back in time for the pilchard season?—Some come back in the latter part of August. Those in the north seas generally try to go home if there are any mackerel about, but in some seasons we do not catch any mackerel.

24,088. Do you go off every year to the North Sea?—No, I never went to the North Sea, but I have been to Ireland, and I have been mackerel-catching for 14 or 15 years; I have also been at pilchard-catching.

24,089. Do you own the boat yourself?—Yes.

24,090-1. What is it?—It is one of the mackerel boats.

24,092. (*Professor Huxley.*) Have you ever been interfered with by the trawlers when drift-fishing?—Yes, when I have been mackerel-catching sometimes at Plymouth.

24,093. In what way?—They trawl in the night when we are drifting.

24,094. Do they trawl over your nets?—Yes.

24,095. What sort of lights do you carry?—We have one light up then.

24,096. Only one light?—Yes, only one.

24,097. Did you yourself ever drift for herrings?—Yes.

24,098. What lights do you carry then?—Only one light, but it is a great many years since I went to Ireland.

24,099. Do your people in general carry only one light?—Yes, generally.

24,100. Did you ever hear of any regulation about that?—I have heard something about it of late years, but our men never go out with one light alone. They carry in the vessel a flambeau, and if anything comes nigh hand to them they show that light.

24,101. They show it when they see a vessel?—Yes.

24,102. What sized meshes do you use in the herring-nets?—Generally from 10 rows to the foot up to 10½.

24,103. How many to the yard?—33 to the yard.

24,104. That is before the net is wet?—Yes.

24,105. Do you know of any regulation about that?—It used to be said in Ireland that no nets were allowed to be shot overboard that were more than 12 rows to the foot.

24,106. Is there any regulation of that kind put in force here?—None at all; a fisherman fishes as he likes here; there are no regulations or anything of that sort to affect him here. If he wants to go out trawling, seining, or shooting drift-nets he may go when he likes.

24,107. Nobody's nets are ever interfered with?—Sometimes the fishermen come in contact with each other.

24,108. But there is no inspector, no Government officer to interfere with them?—No.

24,109. Is there any regulation here about the distance the drift-men must keep off the shore?—No, I have never been annoyed with any regulations of that kind. The drift-men have never been told to keep at any distance. When I was a huer of a seine I was never interfered with by the drift-boats. I kept that position for about 30 seasons. I know the pilchards well; I was reared in the fisheries, and nobody can tell better about pilchards than I can.

24,110. Did you ever find it necessary while you were a huer of a seine to interfere with the drift-men for working over your ground?—No; I think if we seined properly, and the drift-men used their nets properly, we should never do each other much harm. If we found one coming too near the other we could always keep ourselves within bounds. Of course if I have my seine in and see the drift-men coming down upon it I should not like to have it interfered with. If I were to explain all I know about the business I think I should hurt both one and the other too.

24,111. It is our business to learn all we can with regard to your mode of fishing. You have stems here, I suppose?—Yes.

24,112. How many stems are there in that district?—There are three stems to the westward of Newlyn. There used to be five boats, two of them are not used now. I have caught pilchards in what we call the K. H. stem; five years back in the month of April I took 300 hogsheads.

24,113. Who settles the stems?—They are settled by a law among the fishermen themselves.

24,114. They arrange it among themselves?—Yes.

24,115. How do you arrange your turns?—We generally have 24-hour turns, or we keep it till we shoot it away.

24,116. What is the general custom here?—It is generally 24 hours. In my boyhood we used to keep it till we shot it away.

24,117. How do you arrange who is to have the first turn?—We all know that very well. If I get the first stem to-day another will get first stem to-morrow, if I do not shoot the stem away; that is the way in which we generally arrange it.

24,118. Is there any regulation about the size of the seine? Can a small seine come in and take a turn along with a large one?—Not a proper pilchard-seine. No seine would be allowed to lay in the way of another seine.

24,119. But suppose a man had a pilchard-seine 150 fathoms long, would he take his turn along with the rest?—Everyone has a great interest at stake, and he would not be willing that a small seine should come in and take the turn along with a big one.

24,120. Have the small-seine owners tried to take in their seines as well as the big ones?—Yes, they have.

24,121. And they have been kept out of it?—Yes; I know of one at Newlyn who had a pilchard-net put in the middle of a mackerel-seine and he was kept out of it.

24,122. By what authority was he kept out of it?—I do not know by what authority, but he was kept out.

24,123. There was no law on the subject?—No.

24,124. It was a mere matter of physical force?—Yes, and that is generally so with regard to the fishing here.

24,125. Why is it that the large-seine owners have such an objection to the small-seine owners working with them?—I cannot tell.

24,126. If you were a large-seine owner what would you do?—I should like to keep my stem good, and should not like a small-seine owner to come up and interfere with my fishing.

24,127. Is that because you think he could not catch the same number of fish, and that he would spoil your turn?—He would not catch so many fish. Sometimes the shoal of fish is very small, and then a small seine would be able to enclose it; but if it was a large shoal then it would require a large seine to enclose it.

24,128. Are the small seines of the same depth as the large ones?—Not at all.

24,129. Could they not lie inside of the others?—They would not like to have any other seines interlining them or rowing in the stem; they would keep other people out.

24,130. You think it would not answer to have nets of different depths shooting in the same stem?—Not at the same time; if I got the first chance I should like to keep it.

24,131. But suppose a shoal of fish were in the stem, and the men with the small seine were inside the other, would that do any injury?—I never saw it tried, and therefore I cannot say.

24,132. We want to know from you as a practical fisherman whether two people could, or could not use the same stem, having nets of different depths, without interfering with each other?—They might do so sometimes, but we do not like to have the fish disturbed. There might be a little shoal of fish in one part of the stem, and if the small seine went round to catch it it would have a tendency to drive a large shoal out, which I might want to have in my seine berth.

24,133. (*Mr. Lefevre.*) Are the seine nets that are used here of about the same size?—The big seines are all of about the same size. They catch fish in about 11 or 12 fathoms of water.

24,134. (*Professor Huxley.*) Do you think any arrangement could be made by which the small seines could be made to work fairly with the big ones?—Some of our people do not like to speculate on that. All the capital afloat at Newlyn and Mousehole belongs to a parcel of poor fishermen who carry on the fishing on their own capital; to them therefore it is of the utmost importance that they catch fish. The gentlemen who own the seines have plenty of money, and it is not of much consequence to them whether they catch fish or not; it is very different with us; if we did not catch fish in Newlyn and Mousehole we should go very short indeed.

24,135. But suppose a number of poor fishermen choose to invest some of their savings in a small seine, what reason is there why they should not be able to take their turn along with the rest?—I do not know, it is our job to kick against the pricks.

24,136. We have heard the same story in a great number of places. What we want to ascertain and report upon is how far these regulations are for the benefit of the fisheries, not for the benefit of the capitalists. They are two distinct questions, and we

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want to get your opinion as a practical fisherman, whether the working of the small seines would interfere with the fisheries as a whole, or whether they would interfere with the profits of the large capitalists?—I do not know that the small seines would injure the big ones so much as people think, but I as a fisherman with a small capital could better afford to work a small seine than a large one. To carry on the seining on a large scale would require more capital than a mere fisherman could employ, but I do not think that the interference of one seine with the working of the other would be so great as people think.

24,137. (*Mr. Lefevre.*) What is the value of a large seine?—It varies; the first cost of one will be from 500*l.* to 700*l.*

24,138. Are they mostly held by capitalists?—Yes.

24,139. Do any of the large seines belong to the fishermen?—No.

24,140. Have they no share in them?—Very little; there is hardly a fisherman in Newlyn who has part of a seine.

24,141-2. Do most of the boats that drift belong to fishermen?—All the boats and craft here belong to fishermen at Newlyn and Mousehole.

24,143. (*Professor Huxley.*) You have been a huer in connection with a large seine?—Yes.

24,144. Have you ever noticed the shoal of fish broken or dispersed by the use of the drift-nets?—When I was at Mevagissey I never saw a shoal of fish broken up by drift-nets.

24,145. You are aware it is often stated that such is the case?—No doubt; I have received a letter from Mevagissey stating that.

24,146. Is it within your experience that that is the case?—The drift-boats in general do not like to go and interline with the seines; they generally shoot their nets overboard when the evening is over with the seines.

24,147. Do you think it would be a hardship upon the drift-men if the regulation were enforced requiring them to keep a league and a half from the shore?—Yes, I think it would do a great deal of injury. Our coast here abounds in bays where the seines could not work, and a very large quantity of fish would be lost altogether if the drift-boats were obliged to keep off; and when our boats are fishing in the bay they drop a great many fish overboard, which tends to supply the ground with food. I think many people entertain wrong ideas on this point.

24,148. Would there not be some inconvenience if the drift-men were to drift right into the stems? For example, no seiner could shoot his net where drift-men were drifting on the ground?—You must remember that our men do not shoot their nets when it is time for seining; they go into the stem ground in the night time, after the seines have gone away.

24,149. But suppose they have shot their nets two or three miles outside, would not the tide easily drift them into the stems?—Yes, that may happen sometimes.

24,150. If that were so the seines could not shoot?—Our fishing is not managed in the same way as that at Mevagissey. We go on seining on the side. Many people if they see the fish will shoot where the drift-boats are sometimes. We cannot go out in our bay if there happen to be strong tides; we cannot go out to catch pilchards two miles off. In August the fish will come in nearly to Penzance quay, and from that to two miles off; but frequently it is impossible to stand the tide.

24,151. Are you speaking now of drift-fishing?—Yes.

24,152. Then if you were obliged to keep three or four miles out you would catch no fish?—If all our men were kept two miles outside of the Gear Rock we should regard it as the annihilation of our pilchard-catching. We should be obliged to go to Australia or somewhere else.

24,153. Then if the old regulation were enforced here, by which drift-boats are required to keep a league and a half from the shore, you would be positively ruined?—Yes, in the pilchard line.

24,154. (*Mr. Lefevre.*) I think you said that there are three stems off here?—Yes, three westward of Newlyn and two at Mousehole.

24,155. How many are there in Penzance Bay, between here and Mounts Bay?—They are not fishermen here at all; they are merchantmen and shopkeepers.

24,156. Is there no station there?—No, but on the Mount there are three stems.

24,157. There are three on the Mount?—Yes.

24,158. Is there a great deal of ground there that is not fit for seining at all?—Yes.

24,159. Is it rocky?—Yes, and you are sure to get within the headlands in what we call the eddies of the tides. It is of no good to us to go into the headlands; we want to be away. The tides where we shoot our seines overboard are of such a nature that we cannot go out 200 fathoms from the shore at Mousehole to catch pilchards.

The witness withdrew.

G. Downing.

GEORGE DOWNING called and examined.

24,160. (*Professor Huxley.*) Are you a fisherman here, or what is your occupation?—I am very little engaged in the fishing now; I have been a fisherman, but I have not been much engaged in it. The only fishing occupation I follow now is seining for mackerel occasionally.

24,161. Have you been familiar with the fishing here for many years?—Yes.

24,162. How many years have you known Newlyn and been acquainted with the fishing there?—All my time I have been here.

24,163. Is that 40 or 50 years?—No, about 30 years.

24,164. Do you put in the return which has been handed to us?—Yes.

24,165. Have you heard the evidence of the last witness?—Yes.

24,166. Do you agree with it generally, or have you any comments to make upon the statements which he gave to us?—With respect to seining I differ from him very much.

24,167. In what respect do you differ?—The pilchard-seines are required to be of a certain length and depth. If smaller seines were allowed to interfere with them they would destroy the stems.

24,168. What is the regular length of the large seines?—240 fathoms. We count five feet to a fathom.

24,169. What is the depth?—Seventy-two feet. If the smaller seines interfere with the larger class of seines they destroy the stems and berths, because the large seines are supposed to be best calculated for taking the fish. If smaller seines, such as mackerel-seines, were allowed to interfere with them, they would destroy the stems, so far as the larger shoals of fish are concerned.

24,170. But the small seines of which you were speaking just now were not mackerel-seines. They were seines of the same make, but simply smaller?—Yes, but they would interfere with the stems, because they could not go out to a proper depth, and they are not of sufficient length to enclose the large shoals of fish.

24,171. What you mean is this—that they would take up the space necessary for working the larger seines, and yet would not catch the same quantity of fish?—If they took their turns along with the other seines, the bigger seines could not come there to shoot at all in the same stems. That could not be done, and therefore there would be very great interference.

24,172. What is the extent of a stem?—They are divided off by poles.

24,173. What is the width—how many yards?—I never made any calculation; perhaps from 200 to 300 fathoms. Some stems are larger than others.

24,174. Is not the space occupied by a stem much greater than the length of a large seine?—Yes, a great deal more.

24,175. Then they are more than 200 fathoms?—Yes.

24,176. What will the length of a stem be in proportion to the size of the net?—Taking a distance of a mile from Newlyn Pier up to Pelley Point, it is divided into four stems. That would give a quarter of a mile for each, as there are four stems in that distance.

24,177. But in that case the width of a stem is not much greater than the width of the net?—Not much.

24,178. It is about the same?—Yes.

24,179. The length of a net is about 400 yards?—Yes.

24,180. And a quarter of a mile is a little more than 400 yards?—We reckon a fathom as five feet; the stems would therefore be rather larger than the seines.

24,181. But not very much larger?—No, not very much.

24,182. So that in fact there is not much more than sufficient room to shoot your large seine within the width of each stem?—We sometimes shoot two or three seines in a stem when we are taking turns.

24,183. One after the other?—Yes.

24,184. But it would not be possible to shoot them at the same time, because one net will take up nearly the entire width of a stem?—The seines are shot to a round stop; they go round and round. I have sometimes seen five shot one after another.

24,185. Not at the same time?—No, one after another.

24,186. Of course the net when it was brought round to a boat would only take up one third of the space which it would occupy lengthwise?—Yes; perhaps rather more than that, because we moor the seine the same as a vessel is moored with anchors to the tide.

24,187. I only speak at a rough guess. Two or three seines would be as many as you could well shoot, would they not?—I have seen three or four large seines shot in one stem.

24,188. At one time?—Yes.

24,189. In that case it comes back to the old point—what is there to interfere with the large and small seines being shot one after the other?—The only thing is that the small seines are not calculated to go out to the same depth as the large seines.

24,190. Would they not be more out of each other's way if they went out different depths?—You can get the others inside as well as out, and they are better calculated to take the fish.

24,191. But in all other modes in which men pursue the avocations of life they are left to take the means which they think best calculated to benefit themselves. If a man is content to put up with a smaller quantity of fish why should he be interfered with?—He would only be able to take 100 hogsheads, whereas the large seines would take 1000 hogsheads.

24,192. But why, if they were satisfied with 100 hogsheads, should they not be allowed to catch them?—We think that great injury would be done by allowing the other 900 hogsheads to get away.

24,193. But you tell me that in one stem it is practicable for three large seines to be shot one after the other?—Yes.

24,194. If the first operation of shooting the nets does not send away the shoal of fish, and the second and third operation also have no such effect, why instead of shooting three large seines one after the other should you not have first a large seine, then a little one, and then a large one again? What damage would that do?—The small seine would be interfering with and would keep out a seine that would take a larger quantity of fish.

24,195. But if a man is content to put up with a smaller quantity why should he not?—He not only injures himself but he injures those who follow him.

24,196. Those who have to follow get their turns afterwards?—The only reason I have for objecting to it is that the small seine is not calculated to take a heavy shoal of fish; that is my only reason. I certainly think that the working of the small seines in the stems would interfere very seriously with the large seines, and it must be remembered that the owners of the large seines are at a greater cost in keeping up their nets.

24,197. Is it a common occurrence for two or three large seines to be shot in the same turn one after the other?—Yes, all taking their turns regularly.

24,198. Is it a very common thing for three to be shot one after the other?—Yes, that is very common if the fish happen to be coming up.

24,199. Then the operation of shooting the seine does not interfere with the fish or disperse them?—No.

24,200. It does not interfere with their coming into the bay afterwards?—No, but there are no small seines here. The only one I am acquainted with is the one which Mr. Kelynack has referred to in his evidence.

24,201. It does not matter what the seines interfered with are; all we want is to get at the reason for enforcing the regulation?—If a smaller description of seine was allowed to interfere I believe the result would be that we should all have to come to the smaller seines. In my opinion, when the fishing was going on they would be right in the way of the others. They must come in to take their turns with the others.

24,202. You mean that they would compete with the large seines?—Yes.

24,203. You are aware that competition and driving away the fish are two very different things?—Yes, but then the small seines are not calculated to take a heavy shoal of fish, while the large ones are.

24,204. That is their loss?—Yes, but they would prevent another seine from coming in which would be calculated to take a large shoal of fish; that is what I mean. The mackerel-seines sometimes come up when the fishing is going on and interfere, and we think that very objectionable.

24,205. Is there any further remark you wish to make to us in reference to the seining part of the question?—No, I do not know that there is anything else I can say, except that I do not think the small seines are injured by being kept out of the stems. There are berths here from the stems to the Mount, where they can take up their place. There are no stems there.

24,206. Why are there no stems there?—Because it is impossible to divide the coast there into stems.

24,207. Why cannot you divide it into stems?—I do not know how it would be possible to do it; you could not put down buoys, because they would interfere with the fish. It is done by mutual agreement, and the stems are regulated between the huers and the owners. They say now that they are content to have possession of a stem for 24 hours. They used to occupy the stems as long as they thought proper until the seine was shot. If they only shot out a portion of the net then the stem was lost.

24,208. Are you aware whether there is any law giving a right to regulate the seines belonging to the seiners, or is it only a matter of agreement?—Some years ago there was an arrangement entered into upon the matter.

24,209. Between whom was the arrangement made?—Between the fishermen and the seine owners. I have now in my possession a copy of that arrangement. It was made by some authority or other, but I do not know what.

24,210. Will you let us have a copy of that arrangement by-and-by?—Yes, you shall have it at some future time.

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24,211. (*Mr. Lefevre.*) How long ago is it since the arrangement to which you refer was entered into?—About 20 years ago. It was placed in the hands of Mr. Gurney, and it was handed to me by his son.

24,212. (*Professor Huxley.*) Was it an agreement between the fishermen and the then existing seine owners?—Yes, and it is the authority on which they have acted since. It was drawn up by some of the authorities, but I do not know who they were.

24,213. With regard to the interference of the drift-net fishermen with the seiners, do you think that the drift-nets interfere with the working of the seines?—They do not interfere much with the working of the seines.

24,214. They do not interfere with the profitable working of the seines?—I think not.

24,215. Do they interfere with the fish and prevent them from coming into the bays?—Yes, I think they do. My impression is that they do, and that has always been my impression.

24,216. Have you ever seen a shoal of pilchards broken by shooting the seines among them?—That is not a very easy matter to speak of, but I give it as my opinion that it does occasionally happen.

24,217. You have handed in a return in reference to the pilchard-fishery?—Yes.

24,218. How many boats are there engaged in the pilchard-fishery according to that return?—121 apparently.

24,219. There are 50 at Portleven and 40 at Mousehole?—Yes.

24,220. That makes 90?—Yes.

24,221. Are the whole of those boats with the exception of a few which go to the North Sea at home during the pilchard season?—There may be 20 or 30 in the North Sea less than the number here now, but all of them are employed in the pilchard fishery in August.

24,222. Then you have probably as many as 120 boats engaged in catching pilchards in the season?—Yes, and I think there are even more than that. The total number of boats according to this return is 295.

24,223. That is the total number of boats of all kinds?—Yes.

24,224. I thought you were speaking of pilchard-boats only?—They are all employed in catching pilchards during the season.

24,225. Are there as many as 250 pilchard-boats?—Yes.

24,226. Two hundred and fifty pilchard drift-boats?—They are boats that go to the pilchard-fishery. There are from 200 to 250 boats constantly shooting every night when the pilchard season is on.

24,227. Are you of opinion that they do any injury to the shoals of fish?—In my opinion they break the shoals of fish and scatter them. That is my deliberate opinion. I do not know whether I am right or not, but I am bound to give you that as my opinion.

24,228. Do the drift-boats bring in all their fish every morning?—Generally they bring them in every day, because it would not do to keep them out. Occasionally when they go out to the deep sea they may keep them over for a day.

24,229. What becomes of those fish? Are they principally cured, or bought by the hawkers for home consumption?—They are principally dry-salted and exported.

24,230. The fish caught in the drift-nets are salted and exported?—Yes, they are dry-salted, packed in casks, and sent to the Mediterranean for consumption in the Italian states. I think there were as many as 3,000 hogsheads sent off from Newlyn and Mousehole in the course of last summer.

24,231. Are they not purchased by the hawkers?—Yes, some of them are, but no great proportion of the whole quantity.

24,232. No large proportion is bought for the supply of the country?—No; sometimes the farmers and townspeople buy a few. For instance, if there are only 200, 300, 400, or 500 hogsheads caught then the whole of them are taken up for the supply of the country people.

24,233. Do they use the fish caught in the drift-nets as freely for salting as they do the fish caught by the seines?—I think not. I believe they would use them more freely for home consumption. They would sooner have the drift-fish than the seine-fish for home consumption.

24,234. They prefer them in a general way?—Yes.

24,235. Can you say why that is?—I believe that in general they are rather larger fish.

24,236. The drift-nets catch larger fish than the seines?—Yes.

24,237. Do they cure as well as the seine-caught fish?—Yes, they cure equally as well.

24,238. And do they fetch the same price?—If the fishermen should fancy that they could make a better price by salting them than by selling them fresh for home consumption, you may depend upon it they would do so. If the price suited them they would hold them and salt them, but otherwise they would get rid of them at once by selling them fresh.

24,239. Do the drift-fish fetch the same price in the home market as the seine-fish?—Yes, they bring equally as high a price.

24,240. There is no particular difference either way?—No, none at all.

24,241. Then with regard to the seine-fish salted in the same way, are they generally exported?—Yes, most of them are.

24,242. Are the whole of them?—I cannot say that the whole of them are; there may be a few baskets sold fresh.

24,243. But the great proportion is salted and exported?—Yes, they make a sale of them for the foreign market in a general way.

24,244. Then the market for home consumption in Cornwall is supplied more by the drift-fishermen than by the seiners?—Yes, certainly. It is supplied far more by the drift-net men than by the seiners, and, the reason is that the seine-fishing only lasts for a very short time. The drift-fishery is carried on for two months or 10 weeks, and the market is being constantly supplied in that way.

24,245. Then the steady supply to the market is derived from the drift-fishermen?—Yes, there are two or three companies, one at the Land's End, one at Penberth, and one at Gurnards Head, who sell to the country when the shoal of fish comes to 100*l.* or 200*l.* worth; but that is not the case here, as the market is supplied with fresh fish by the drift-net fishing every day.

24,246. Would it be any particular hardship to the drift-men if they were kept outside the limits prescribed by the old Act, namely, a league and a half?—I think if that regulation was enforced it would destroy the drift-net fishermen altogether.

24,247. It would be ruinous to their interests?—Yes, it would shut them up altogether.

24,248. Then do you think that their interference with the seine-fishing is so great as to demand any restriction?—They should be kept outside of the seiners.

24,249. Do they interfere so much with the seine-fishing as to render it necessary that there should be any restriction placed upon them?—The only opinion I have upon that matter is that they ought not to be allowed to come in when the seines are working. At such times, when the fish are in the bay, they come in too near; that is the only objection I have to them.

24,250. You think they ought not to be allowed to interfere with the people who are engaged in working the seines?—Yes, they come in much too near. They come in within reach of the ground where the seiners should be working their nets.

24,251. Then would your views be met by some regulation obliging the drift-net men to keep off while the seines are actually working?—Yes, at such times they should be obliged to keep outside for a certain distance.

24,252–3. What distance do you think they should be required to keep off?—They should be obliged to keep off as far as 16 fathoms of water. There was a regulation made to that effect some time ago, and I was one of the persons who agreed to it.

23,254. Can you describe the general nature of that agreement?—I hardly remember anything at all about it now, but I believe the regulation laid down was the result of a mutual agreement between the seine-owners and the fishermen that the drift-boats should not come within less than 16 fathoms of water.

24,255. Was that as far as the seines could go out?—Yes, our seines could not shoot beyond that depth. If that regulation were observed there would be sufficient room both for the drift-net men and the seiners.

24,256. Do you think that the adoption of a regulation of that kind would not interfere very much with the interests of the fishermen?—I think not.

24,257. Is there any other branch of the fishery in reference to which you wish to make a remark?—I do not know that there is. I may say, however, that with regard to the pilchards themselves, they are in my opinion a native fish of Cornwall.

24,258. You think that they are a native fish?—Yes.

24,259. That they do not migrate?—I think not.

24,260. Then in your opinion what becomes of them when they appear to vanish?—My opinion is that they take their winter quarters in the English Channel about the Eddystone, and they break off after Christmas and go away south or south-west. If you examine the fishermen who are out with the mackerel-boats in the months of May and June driving about 10 or 12 leagues off the coast, or perhaps even further, they will tell you that they frequently pick up a great number of large pilchards. They call them spawning pilchards. My opinion is that they spawn out at that distance.

24,261. At what time of the year do you think they spawn?—They spawn in May and June. After those months we find that they strike the land on this side of the Land's End, while some of them go on the other side into the North Channel. We have here what we call a summer fishing for pilchards. They set in towards the shore in the summer time, and they would remain here if they were not interfered with. They used to come regularly at a certain state of the spring tides and visit us for a short time before there was so much drifting, but we do not have them come in now like that; we get them for a night or two only. I cannot tell what the cause of that is. I believe that they go then into the North Channel and strike the Irish shore. They will not go into the wide open water; pilchards do not seem to like it. They then come south and strike the Channel at New Quay and St. Ives; they then cast away round the Land's End and go round to find their winter quarters. My own opinion is that the pilchards spawn out at sea and the mackerel too.

24,262. The pilchards when they visit the coast here are not full?—No, but they have been here very full. They visited our shores a year or two ago in that condition, after they had left Plymouth. It was said that they came here for the purpose of spawning. They did come here and spawn for two or three years running. The firing of guns, we think, is not good for the fisheries; the shock disturbs the fish, there is no question of that.

24,263. (*Mr. Lefevre.*) Do you agree with the last witness that the drift-boats set their nets mainly within two miles of the coast?—Yes, they mostly set them about two miles from the shore; half of their time they are within two miles, or perhaps a little more. They commence their fishing about two or three leagues off.

24,264. When does the drift-net fishing begin?—It begins soon after midsummer.

24,265. And as the season goes on do they follow the fish in?—Yes.

24,266. I understand you to say that in your opinion one half of the fishing takes place within two miles of the coast?—Yes; the best half of it takes place within two miles of the coast.

24,267. Do they often set their nets in water less than 16 fathoms deep?—Very seldom; they will not set them there unless they see the fish.

24,268. But the fish, I suppose, are often in water less than 16 fathoms deep?—Yes.

24,269. Do the drift-boats follow them there?—They have done so.

24,270. Do you recollect the seining here previous to the arrangement you have spoken of?—Yes.

24,271. About 20 years ago?—Yes.

24,272. Were there more seines in use then than now?—I do not know that there were many more seines in use then than there are now; but you will find the number included in the return which I have handed in.

24,273. Were the seines of different sizes then?—They were much the same as they are now; they were no larger.

24,274. But at that time were they all of one size?—Yes.

24,275. There were no small seines in use then?—No; I never knew of any small seine except the one which was named by Mr. Kelynack.

24,276. Do you know how many men are employed here in seining in the course of a season?—Of late years there have been very few men employed indeed.

24,277. Was last year a good year for the seine-nets?—No, we have not had any fish here of any consequence for the last 10 years.

24,278. Has not the fishing improved in any respect within the last 10 years?—Not with us. We have scarcely had any good takes of fish within the last 10 years.

24,279. There has been very good fishing, I believe, off St. Ives?—Yes, they have been all right there. They have been working the fish very well.

24,280. How many men were employed here this last year in seining?—About 100 men.

24,281. Does that include the number employed all over the district between this place and the Land's End?—It includes from the Lizard Point to the Land's End.

24,282. Are there more fish altogether, in quantity, brought in by the drift-boats than by the seine-nets in the course of the year?—We have had nothing much to speak of with the seine-nets for the last 10 years.

24,283. Have the drift-nets done better?—Yes, very much better.

24,284. What has been their catch?—They have brought in from 2,000 to 3,000 hogsheads every year.

24,285. Then the supply from the drift-boats has been pretty regular?—Yes, pretty regular. Last year the drift-fishing was most productive.

24,286. Then if it had not been for the drift-boats there would not have been many pilchards brought in?—No, scarcely any at all.

24,287. Have not the seine-nets had a single good year during the last 10 years?—There has been nothing to complain of during the last 10 years with regard to the drift-nets.

24,288. Have you had one good year with the seine-nets during that time?—Very little, taking it altogether. There was one shoal or two, but that was all; there was nothing of any consequence.

The witness withrew.

JOHN ADAMS called and examined.

J. Adams.

24,289. (*Professor Huxley.*) Are you a fisherman here?—I have been a fisherman for the last 30 years.

24,290. Have you been a fisherman at Penzance, or at Newlyn?—At Newlyn.

24,291–2. Do you agree generally with what has been stated by the previous witnesses, or are there any points on which you wish to make a remark?—I agree with those who have spoken of the necessity

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of requiring the drift-fishermen to keep out for a certain distance, so that they should not do injury to the seiners when the fish are in the bay. I can confirm what the last witness said in reference to an arrangement having been made. They did infringe a little upon the seiners at that time.

24,293. What is the time you refer to?—In the month of August, when the seines went to sea. The seine owners left it to the huers to try and make some arrangement, and it was finally agreed that the drift-boats should be confined to 16 fathoms.

24,294. They were not to be allowed to come with their drift-nets within 16 fathoms of water?—No. We can shoot a seine in 13 fathoms of water, but we could not hold it there with the tide.

24,295. What is the greatest extent you can go?—Eleven or 12 fathoms is the greatest extent to which we can go, and then it must be a very easy tide indeed. The boats confine themselves to that. All the time I was a huer, and I was a huer for 20 years, I heard no complaint with regard to the drift-boats. They do not shoot until after what we consider to be the seining hours are up. After we cannot see the colour of the fish from the hill we give up seining. We do not practise that mode of fishing at night.

24,296. You do not seine at night?—No, we never carried on seining in Mounts Bay at night. I have been out in the winter season and in the autumn, when the summer fish have been coming back.

24,297. The drift-net men do not work in the daytime?—No.

24,298. Then how do the seine-men and the drift-net men interfere with each other?—They come out in the daytime sometimes when the fish are there, and they approach too near. Some of them also began to shoot a little early, but that was done away with when they agreed to compromise the matter with the seine owners by not coming within 16 fathoms.

24,299. How did you compromise the matter? What law was there on the subject?—None at all, and there was none with respect to the stations, except an arrangement among the men themselves as to the extent of the stems. Afterwards we put up two poles to define the stems. If I was on the hill looking out for the fish I should not be able to tell how near they were to the stem. If they entered half way in it the seiner would lose the stem, and perhaps lose thousands of pounds worth of fish. As soon as the seiners reached the two poles he was obliged to stop his boat, and then the next one in turn would take the stem.

24,300. Are you able to say, as a practical seiner, that it is necessary to enforce the old regulation as to keeping the drift-men off for a league and a half?—If that were done it would be tantamount to prohibiting them from getting a living altogether.

24,301. Do you think that the damage done by the drift-men to the seiners is so clearly made out that it forms a justification for taking so extreme a measure as that?—I think not. I do not think that the drift-men do any damage to the seiners. The fish are naturally scattered in the night, and collect again in the daytime. I believe every fisherman will agree with that. It is very seldom that we see anything in the shape of a large shoal of pilchards taken in the morning. But sometimes in the afternoon I have been in the bay and seen them passing up as we call it to "colour." They present a red appearance when seen in clear water. I have seen them pass up in the afternoon much thicker than in the early part of the day. After dinner the shoal is generally much heavier than before.

24,302. Do you think that the drift-net men have often broken a shoal and dispersed it by setting their nets?—They never do so in the daylight, and of course if they did so at night-time they could not help it.

24,303. Is there any evidence that they do it at night?—I never saw it done except upon one occasoin and that was in the afternoon. The fish then would not go into the nets.

24,304. If they shot their nets by day, and by so doing were to disperse the shoal, they would do no good to themselves?—No, not a single fish would go into the nets. With respect to the drift-fishery I may add that the drift-nets allow all the small fish to pass through, and the fish caught by the drift-nets and sent to the Mediterranean are much larger than those caught by the seine-nets. The reason of this is that the seine stops everything, while the small fish go through the drift-net. You cannot put more than the first joint of your finger in the mesh of the seine-net.

24,305. Have you seen large quantities of small fish caught by the seines?—Yes, and I have seen them sent away for manure. I have seen them brought up and sold on the shore for manure.

24,306. Were they small pilchards, or small fish of other descriptions?—They were principally small pilchards, but I have seen other kinds of fish caught and sold for manure.

24,307. What descriptions of fish?—What we generally call scad or horse-mackerel.

24,308. When the seine takes a large shoal of pilchards, do you find that they are almost all pilchards?—They are sometimes mixed up with scad.

24,309. Are there any other kinds of fish with them?—Very rarely; they are generally all pilchards in what we consider a compact shoal of pilchards.

24,310. But you may take a great quantity of young pilchards?—Yes, and sometimes not one out of 500 will be fit for saving.

24,311. (*Mr. Lefevre.*) Do you sometimes find a shoal consisting entirely of young pilchards?—Yes, they have been here, at times, for the whole of a season about the size of sardines, such as those which are found in the Mediterranean.

24,312. (*Professor Huxley.*) Are they like sardines?—In fact sardines are pilchards; I have examined them both at Marseilles and Leghorn, and I am satisfied that they are nothing but pilchards.

24,313. Is that all you wish to say about the question of drift-net fishing?—All I wish to say is that if the drift-men are compelled to keep two miles off, it will amount to a prohibition upon their fishing altogether; they would not be able to earn a living out of it. It should also be borne in mind that the men who are employed at the drift-fishing are all accustomed to the sea, which is not the case with regard to those engaged in seining. The drift-fishery is a great nursery for fishermen, whereas, with regard to the seine-men, if they can pull an oar it is all that is required of them. They are only employed occasionally; sometimes there are four of them and sometimes six of them employed in each boat, and they are disbanded after the season is over.

24,314. (*Mr. Lefevre.*) Are they mostly landsmen who are employed in the seine-boats?—They are all landsmen, except a particular man or two who go to the fishery thinking the wages they get are more remunerative to them during the season.

24,315. (*Professor Huxley.*) With regard to the question of turns, do you think it is objectionable that a large and a small seine should work together?—I think it would be detrimental in that respect; a large shoal may be coming up, and a small seine may attempt to take it without being able to succeed; the only result will be that they will disturb the fish, which will disappear and never come again. I have seen the seines shooting when the fish were as red as blood for colour. We give as near a guess as we can in rounding them. There may be 500 or 1,000 hogsheads of fish in about 10 or 11 fathoms of water, but instead of rising they may go down upon the ground, and you cannot see more colour than you can here. The mischief would be for a little seine in such a case to attempt to enclose the shoal; there would be more fish than they could possibly take, and thousands of hogsheads would be lost entirely through their interference. We never found that they were here long enough to afford to lose them in that way.

24,316. We have been given to understand that in

one and the same place and in the same shoal a large seine may shoot and take its share, when another seine may follow and shoot also and take its share?—That would be the case at St. Ives and Mullion, but it is not the case generally; there are frequently from 50 to 500 or 1,000 and 1,500 hogsheads in a shoal, and they follow along as if guided by a line.

24,317. Do you think that the operation of a small seine would be that it would only catch a part of a shoal and drive away the rest?—That is the only injury they would do, but that I conceive would be a very material injury.

24,318. That is inconsistent with the notion that two or three large seines can be shot one after another without breaking the shoal?—They are enabled to do that sometimes; I have seen a shoal of fish come in over three miles long, that would be enough for all the seines in the bay to shoot.

24,319. Has a shoal like that been taken up by the seine?—No, that would be too vast a shoal to take up altogether; but in such a case at St. Ives I believe that almost all the seines have shot and taken a piece out of the shoal.

24,320. Without dispersing the shoal?—Yes, they formed almost a solid body of fish, the depth of the water caused them to raise each other entirely out of the water where it was shallow.

24,321. If breaking the shoal disperses it, it would not be of much use for the man who had the second turn to shoot?—But another shoal might come up, the same shoal would not rise again in that stem. It would rise to the westward of it, and if there were strong tides it would prevent them from working the seines. They could not shoot after a four hours flood unless it is in very shallow water indeed, and by the time they were ready to shoot the shoal of fish would be entirely gone. To show you how a small seine would work, I may say that if a shoal of about 1,000 hogsheads came near a small seine, it would only be able to take out of that about 200 or 300 hogsheads, whereas a large seine would enclose the whole.

24,322. What made the fishermen fix upon that particular length of 240 fathoms for the size of the seine?—I believe the largest seines are somewhere about that size, but we only reckon five feet to the fathom. I do not know how that has been arranged, but it is so here.

24,323. Then a large seine will be 1,200 feet long?—Yes, that is as much as a boat will carry comfortably. If we had a larger seine we should require larger boats, and that would incommode us very much. If the seines were 300 fathoms long I do not think they would take much more fish than they do now.

24,324. Then fixing the length at 1,200 feet is simply a matter of practical convenience?—Yes; I suppose that the first persons who had seines had those which they thought the most convenient. I believe at St. Ives they are confined by Act of Parliament to a particular length.

24,325. Is there any Act of Parliament upon the subject that you are acquainted with?—Yes, at St. Ives.

24,326. But not here?—No, there is nothing but custom here; it is only the largest seines that are 240 fathoms long. Some of them are not so long as that by 30 fathoms.

24,327. Are you of opinion that the yield of fish here has been falling off generally in the way you described?—I think it has; for instance, the ling and conger used to be caught here in great abundance when I was a boy, and now there are scarcely any caught at all.

24,328. How do you account for that?—I think it has been caused by the destruction of the small fry, some of them no bigger than my thumb, by what we call the foot-seines.

24,329. Are there a great number of these seines here now?—We have a few on the Eastern ground between Penzance and the Mount on the sand there.

24,330. Has the number increased or fallen off of late years?—It has fallen off considerably; I think at one time there were 10 at Newlyn, and I believe there are not more than one or two now, and even these are very seldom used.

24,331. Has the quantity of fish increased since the use of the foot-seine dropped off?—I do not think it has. A few years ago they began to find that kind of seaweed which they find useful for growing early crops, such as potatoes. I have seen it on the beach from six to eight or 10 feet deep. It was left on the surface to rot, and there were thousands of worms in it. The fish were in the habit of coming in to feed on it. They now use it for manure, and in order to obtain it when it is in places which they cannot reach by hand, they employ long poles with scythes at the end, and cut it off in 18 and 20 feet of water. Whether that does any injury I do not know.

24,332. Is there anything else that in your opinion has done any injury?—I believe the trawling has done a great deal of injury. When we had an immense lot of ling here I believe they were in the habit of spawning here, but the spawn was torn up by the trawlers and the fish were destroyed.

24,333. What is the largest quantity of fish you have ever seen taken with the pilchard-seine?—The largest quantity I have ever seen taken up in a seine, or rather the largest quantity I ever had anything to do with myself, was 950 hogsheads. I believe, however, that Mr. Kelynack, the witness who was examined first here to-day, took a larger shoal than that; and down at St. Ives I believe that Mr. Bolitho's seine took 5,500 hogsheads at one catch.

24,334. Are some of the shoals too long to shoot round?—Sometimes two seines will act together, and they will bring out the mackerel-seines, and enclose the whole of the shoal.

24,335. (*Mr. Lefevre.*) Have you yourself any interest in a seine-net?—Yes.

24,336. Have you long had that interest?—Yes, for the last 20 years.

24,337. What is the amount of your interest?—My part is only very small. Mr. Davy owns the most of her. I have the $\frac{1}{16}$ part of one seine now.

24,338. Have you found during the last 10 years that the amount of money you have derived from it has fallen off?—Since I have had that seine, taking into account all she has caught, I think I shall be about 30*l.* out of pocket in the shape of loss, perhaps more. I do not think that Mount's Bay has been remunerative for seining not as a whole for the last 20 years. Perhaps in the course of those 20 years, if you take all the seines together, you will find that some particular seine has done better than others, but as a whole I think seining has not paid here.

24,339. During all that time?—Yes, I believe so. I believe there were also fluctuations years ago, for I have heard my father say that there have been seven, eight, and 10 years together when there has hardly been any fish in Mount's Bay.

24,340. How long back does that refer to?—Seventy, 80, or 100 years ago. I have heard my father-in-law say (and if he were alive now he would be over 90 years old) that three times he was obliged to leave Newlyn, and go to sea in merchant vessels, because he could not get a living there from pilchards or mackerel, or any other fish. They had fallen off altogether.

24,341. That is 70 or 80 years ago?—Yes.

24,342. Has the number of seines fallen off since that time?—I believe the same number of seines has been kept up, but they are not all put in the sea every year. The seines here hardly pay the men's wages by the fish they get. Seining here has been a dead loss for the last seven years. During that period I do not know of any seine that has taken 100 hogsheads of fish at a time.

24,343. Have the seines always been of the same size?—Yes.

24,344. No small ones have been used?—No.

24,345. What is the cost of keeping up a seine, say for a year?—Do you include wear and tear and everything?

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24,346. Yes.—That depends upon the amount of damage they get. A man cannot put the seine on board the boat I should say for less than 7*l.* or 8*l.* It will cost him that to put her on board and lay her up, and to employ one man to look after her. No man has been paid wages here for the last few years; they have been paid by shares.

24,347. What is the average cost of repairing the seine year by year?—The cost of making a new seine will come to about 500*l.* or 600*l.* The cost of repairing it will of course depend entirely on the amount of damage it has received.

24,348. But taking one year with another what would you put down as the cost of repairing a seine?—Taking one year with another, even if the seine were laying by, I should calculate 20*l.* a year upon it; it would not be much less than that.

24,349. How long, according to your calculation, will a seine last?—We are always renewing them little by little. A seine ought to be shot three or four times a year. It should last in the first instance perhaps 10 or 12 years.

24,350. Would a small seine pay as much in proportion as a large one?—The objection I have to them is that they would interfere with the large seines by cutting up the shoals; that is the only reason why I would not allow them to work with the large ones.

24,351. Would the fishermen generally find it more convenient to use the small seine?—I do not think they would.

24,352. Not if they were allowed to have their turns with the others?—I think not.

24,353. Why not?—They would find that they would require as a general rule much more seine-net than they would have in their boats. It is very seldom that we see a shoal of fish, when we are using the large seines, and find that we have any seine to spare after enclosing it. If the fish come up in one direction and are going off again we put off to enclose them, but if they get foul of the net and we find that we have not enough seine to enclose them, another seine may take our place.

24,354. What distance from the shore do you shoot your seines?—From Newlyn to the Mount about half a mile off, where it is very flat; in some places much less.

24,355. Further towards the Land's End how far do you go out?—They can go out for half a mile there, but between Newlyn and Mousehole they cannot go further than 700 or 800 yards from the shore.

24,356. Does the shore there shelve very rapidly?—Yes.

25,357. I suppose in such places the small seines would only be able to go out a very short distance?—If they were the same depth as the other seines they would be able to go out as far, but their chance of enclosing a vast shoal of fish would be much less. The evil would be that though they might probably succeed in cutting off a piece of the shoal the remainder would dip, and we should never see it again.

24,358. Are the seines nearly all of one depth?—Yes, nearly all of them.

24,359. What is the depth?—They are about 70 feet deep.

24,360. Are all of them of that depth?—No, only the deepest.

24,361. When you enclose the shoal of pilchards do you find that the fish you take are nearly all of the same size?—They vary vary much, some may be large and some small.

24,362. Do you mostly get fish of the same size in the shoal?—No, not always.

24,363. Do you find small ones mixed up with the large ones?—There is a great deal of small ones with the large, that is the case mostly.

24,364. Are the small ones sorted from the large ones afterwards?—They are put in the bulk together, and are all salted together. If there are any small ones, very small, they are selected and taken out when they have been cured properly for the Mediterranean markets.

24,365. What is done with the small fish?—They are sometimes sent to the Mediterranean, and marked "small" on the cask, and sometimes they are sold to hawkers who take them about the country.

24,366. Are the fish sold on the beach?—When the seines are shot here they are taken up by baskets into the drift-boats, and brought ashore from the eastern part of the bay. The men who carry the fish get one-fifth part for carrying them, and from Newlyn to Mousehole they get one-sixth part for carrying.

24,367. Were are they carried?—To the cellars where they are cured.

24,368. Is there a large export of cured fish here?—Mr. Bolitho, who is here, will better be able to tell you about that; he buys them all.

The witness withdrew.

J. Green.

JOSEPH GREEN called and examined.

24,369. (*Professor Huxley.*) Are you a fisherman?—I have served about three seven years to it, and I have been the master of a pilchard-boat, master of a mackerel-boat, master of a pilchard-seine, master of a ground-seine, and of every other kind of net, I believe, that is put into the salt water.

24,370. Are you a native of Newlyn?—I am a native of St. Mawes, but I have been living here for the last 20 years.

24,371–2. I believe you wish to make some remarks upon the evidence which has already been delivered?—Yes; I want to say a word or two about the pilchard seines. I was master of a pilchard-seine the year before last and last year. Last year there was a shoal of fish coming along, and one of these small seines interfered; she shot in among one of the shoals of fish, the shoal knocked against the seine, and away they all went; the large seines had no chance, and the fish were not secured at all.

24,373. Was the shoal of fish entirely lost?—Yes, it all went away; last year I saw another collision.

24,374. What was that?—A small seine wished to hold her stem, and a large seine which was already there contended that she had no right to hold a stem. It could hardly be called a regular pilchard-seine. It was a mackerel-seine with a little Dungarvan net put in the middle of it. A shoal of fish came in, and the large seine put off with her boat to shoot round the shoal, when off went the other, and rowed across her bow; both contended for it, and the result was that the shoal of fish passed, and was not caught at all. Last year I saw the same seine with a little more Dungarvan net in it. Those in charge of it shot round a shoal of fish after the other seine had shot. They meshed so in the pilchard meshes that they were obliged to put kegs round the pilchard-net to keep her up. They got her in, however, and moored the seine. They took up about 70 or 80 hogsheads, and they had about 30 meshed in the meshes. All these fish remained in the water for three days, and when they were taken up they were useless, and were sold for manure; they were all entirely destroyed. Now I contend that such seining as that ought not to be allowed to come in competition with the large seines. If it is allowed to go on I know that the result will be in many cases to throw away the shoal of fish, so that no person will be the better for it.

24,375. In the case to which you referred just now, when the large seine shot first, and the little one afterwards, it did not appear that the shooting of the large seine had the effect of breaking up the shoal of fish?—Not at that period.

24,376. The shooting of the large seine did not break up the shoal?—No; they got their shoal. There were two seines shot, and they got about 1,400

hogsheads each. Those seines were got in out of the way, and then it was that they shot the little seine.

24,377. The shooting of the large seine did not break up the shoal?—No, each seine got its share, about 1,400 or 1,500 hogsheads each.

24,378. Was it another shoal of fish that the small seine attemped to take?—Yes, the small seine tried for another shoal, but it only succeeded in enclosing a part of it. Altogether it destroyed about 30 hogsheads, and took up from 60 to 70 hogsheads.

24,379. Was the small shoal a distinct shoal or part of the same shoal taken up by the large seines?—It was a disitnct shoal. There were two seines in the stem in the first instance. They both of them shot, and were then hauled in out of the way. It was then that the little seine was shot.

24,380. The small seine tried to take a distinct shoal?—Yes, and it destroyed about 30 hogsheads of fish. They were left dead in the net. They remained in the water for about three days and were then sold for manure.

24,381. I understood you to say that that arose from their not having a proper pilchard-seine?—Yes.

24,382. Apparently it did not depend upon the length of the seine?—No, not in that case, but still I contend that a small seine cannot enclose a large shoal of fish. There was a small seine shot in Gerrans Bay last year; there was a small seine and a large one contending together when a shoal of fish came along. They shot away the small seine. The fish came up, knocked up the foot-rope of the seine, which was not sufficient to stand against the quantity of fish, and away went all the pilchards; neither one net nor the other got anything. I have seen several contentions of that kind, and I am of opinion that the small seines only injure the large ones, and do no good to themselves. Such is my opinion, and it is the result of some experience. A seine properly fitted to hold the stem ought to be not less than 180 fathoms long and 12 fathoms deep.

24,383. Is not that less than the seines used here?—As a general rule they are 200 fathoms long.

24,384. And what is the depth?—About 13 fathoms deep.

24,385. But you think a smaller seine is sufficient for holding a stem?—I think a seine 180 fathoms long and 12 fathoms deep is the smallest that ought to be allowed. It is as small as can be used if you want to enclose anything like a shoal of fish. No smaller seine than that ought to be allowed to hold a stem or turn on equal terms with the larger seines.

24,386. Do you think that the use of smaller seines than that is occasionally wasteful?—Yes, it destroys the fish, and it injures those who are entitled to hold a regular stem with the large seines. They do an injury to the large seines, and they cannot benefit themselves, because they are not sufficient to enclose and retain a shoal of fish if they meet with it.

24,387. Is there any other matter on which you wish to make a remark?—I should like to say a word or two with regard to the oyster fishery; I have been engaged in that for several years.

24,388. Is there an oyster fishery here?—No, at Falmouth, where I belong.

24,389. What do you wish to say about the oysters?—I think that each oyster will take about four years from the time it is spawned until it becomes saleable, and fit for market. Since I can remember Falmouth Harbour you could go out and in the course of two hours catch a boatload of oysters. I have known my father throw his dredge overboard 17 times, and take up 17 tubs of oysters. Now in Falmouth Harbour it will take two men a whole day to catch one docker.

24,390. What is that?—That is about one-third of a tub. I think the dredging for many years past has been practised during too many months of the year; they have been dredging eight months out of the 12. The oyster spawns in the summer months; they spawn in the four summer months, and about the 1st of September they are about the size of the nail of my finger, and quite thin. The least touch at that time breaks the shell, it is only just caught together, yet they commence dredging on the 1st of September, and they haul up all these little things. They generally stick to shells or hard substances, such as old bottles. They are then what we call cultch, yet the dredges haul up this cultch from the bottom. The dredge is emptied on board, and the brood is cleared off with a stick or trowel, a few oysters are picked out, and the rest are trampled about or thrown overboard. Now this little spawn is not hardy enough to stand that; it becomes broken, and is almost entirely destroyed. Now I think that instead of dredging for eight months, four months out of the 12 would be quite sufficient for dredging. If the close months lasted a couple or three months longer all this spawn would become hard enough to stand the knocking about and rattling it gets, and when it was thrown overboard it would still live.

24,391. I gather from what you say that you would prolong the fence months?—Yes.

24,392. How many months would you make fence months?—They begin to dredge now on the 1st of September, just when the spawn has begun to adhere to the shells.

24,393. How much longer would you make the fence months?—I think four months in the year would be quite enough for dredging.

24,394. During what months would you allow the dredging to take place?—They dredge now all through September, but I would not allow them to begin to dredge until November; the spawn spat ought to have quite three months to enable it to get hardened.

24,395. Would you still keep May as a fence month?—Yes; that is not dredging time, it is spawning time.

24,396. During what months would you allow dredging to take place?—November and December, yet I hardly think I would begin in November; I would not allow them to dredge until the 1st of December; they might dredge all through January, February, and March, and then they ought to stop altogether.

24,397. Is there any oyster-fishing about here?—No; there are a few about the bottom of the Logan river, and a few come about here and get in the holes in the quay. I believe there are some oysters about parts of the bay if they could be found out.

24,398. But there is no dredging carried on here?—No.

24,399. Is there any other matter that occurs to you upon which you wish to make a remark?—With regard to the pilchard-driving, I have been at that for several years. I think that the pilchard-drivers ought to have some limit; I would not say that they should be driven 10 miles off the land, but they ought not to be allowed to interfere with the turns set apart for the seines; they should be kept outside the stems altogether.

24,400. Have you known injury done in that way?—I have myself shot my nets in the evening before the sun has gone down, and I have seen a shoal of fish come along and strike the nets, some have gone over the net, and some under, and perhaps 2,000 or 3,000 have meshed themselves. Of course in a case like that where the fish strike against the nets in that way the tendency is to break the shoal.

24,401. How far off would you keep the drift-nets?—When I was engaged in pilchard-driving I was not allowed to come within three miles of the land.

24,402. Do you think the drift-boats ought to be kept three miles out?—I will not say that they ought to go as far out as that, but I would order them to keep outside the turns where the seines are used; that would be about a mile from the land.

24,403. You say that when you were pilchard-driving you were prevented from coming within three miles of the land?—Yes.

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24,404. Who prevented you?—The seine owners would not allow it.

24,405. Did you ever hear of anybody being prosecuted for using the drift-nets within three miles of the land?—Yes, I have heard of that.

24,406. Where did it take place?—At Mevagissey.

24,407. Did the prosecutions come to anything?—I do not recollect, but we used to take care to keep outside. The cutter was always on the look out and we kept outside the limits.

24,408. Do you ever recollect anybody being convicted for using the drift-nets within three miles of the shore?—I remember one case in which the boat with its nets and everything else was taken away.

24,409. Was that in consequence of the conviction?—No, it was taken away because the nets were shot inside the limits.

24,410. Were the boat and nets seized as the result of a conviction before the magistrates?—I cannot say whether the men were brought before the magistrates or not, but the Revenue cutter took the boat and the nets.

24,411. Did they afterwards give them back to the drift-men?—I cannot say.

24,412. How many years is that ago?—It is several years ago.

24,413. How many?—I cannot say how many.

24,414. (*Mr. Lefevre.*) How long is it since you yourself were engaged in fishing?—I was at the pilchard-fishing last year.

24,415. Were you captain of a mackerel-boat then?—I was master of a seine-net then.

24,416. How long is it since you were out after mackerel?—I have not been out after mackerel for some time.

24,417. Is it several years ago?—Yes.

24,418. Then you cannot speak with much certainty as to the state of the mackerel fishery?—I do not see that the mackerel fishery does any injury at all.

24,419. Has it increased or diminished?—It has diminished.

24,420. Do many boats come here from a distance after the mackerel?—There are a great many driving-boats here at times, but I do not know that I can give you any satisfactory account of the diminution of mackerel.

24,421. Do the Ramsgate and Hastings boats come here after mackerel?—Yes, sometimes.

24,422. And do they come from the east coast?—Yes.

24,423. Do any Frenchmen come here?—They do not come here driving, but they go to the Scilly Islands and round that coast driving. There is one remark more I would like to make.

24,424. What is it?—It has reference to the trawlers. Some years ago I was at St. Mawes when a fleet of trawlers came in; I happened to be in company with one of the masters of the trawlers, and he said "Now we have destroyed all the fishing be-"tween Falmouth and as far up as we can trawl, and "now we are going down to Mount's Bay, and we "shall soon shut up their shop."

24,425. How long ago was that?—24 or 25 years ago.

24,426. Have they been going on fishing in that part ever since that?—Do you mean the trawl-boats?

24,427. Yes.—Yes, they have.

24,428. Then it would not appear that they have spoiled their own fishing?—All I know is that the master who made that remark to me said that one trawl would destroy more in the course of 12 months than all the other nets that are put into the salt water; he said, "I have myself been hauling up in the trawl "as much as three tons of spawn at a time; I have "found it sticking all over the trawl, and we have "taken trowels and sticks and beaten it off on to the "deck; it is then trampled upon, shovelled overboard, "and all killed; one trawl," said he, "will destroy "more fish in the course of 12 months than every "other kind of net put into the salt water."

24,429. (*Professor Huxley.*) That was 25 years ago?—Yes.

24,430. Have the trawlers been trawling ever since?—Yes; in the neighbourhood of Falmouth I have heard my father say that before the trawlers were so plentiful off the coast, as much as three tons of ling and mullet and other kinds of fish have been brought in in the course of a day; now you might as well go to a reservoir to fish as there; the ground has been completely raked by the trawlers.

The witness withdrew.

J. Kelynack.

JAMES KELYNACK called and examined.

24,431. (*Professor Huxley.*) Are you a fisherman here?—Yes.

24,432. At Penzance?—No, at Newlyn.

24,433. Have you heard what the previous witnesses have stated?—Yes.

24,434. Is there any remark that you wish to make about it?—I do not know that I have anything to say on the points with regard to which they have spoken.

24,435. Do you agree pretty generally with what they have stated?—Yes.

24,436. Then is there any matter upon which you wish to make a remark?—All I have got to say has reference to the trawlers; I have been trawling for 16 or 17 years.

24,437. Where have you been trawling?—Off our and here.

24,438. Over what part?—Off our western land.

24,439. What distance off the shore?—From three and a half leagues to seven, eight, and nine.

24,440. (*Mr. Lefevre.*) What is the size of the boat you have trawled in?—A smack of 40 tons.

24,441. (*Professor Huxley.*) What is the size of the beam?—We carry a 38-feet beam.

24,442. How do you manage your trawling, do you go out and remain out several days?—No, we are out to-day and in to-morrow.

24,443. You come into Newlyn every day?—Yes.

24,444. Do you generally carry on your trawling over the same ground?—Yes, generally.

24,445. How have you found your fishing go on during the time you have been trawling?—Tolerably well.

24,446. Has there been a pretty steady supply of fish?—Yes, in the spring time of the year, but in the summer time we cannot get much of a living by trawling in the bay.

24,447. How is that?—The fish are on the coast then.

24,448. What is the chief supply of fish you get then?—It consists principally of soles, turbot, brill, plaice, haddock, hake, ling, conger; in point of fact we get every kind of fish.

24,449. Have you ever seen any large quantity of spawn brought up in your trawl at times?—Yes, scores of tons at times.

24,450. What kind of spawn?—I cannot tell you what kind of fish it belongs to.

24,451. Was it fish spawn at all?—Yes, I have seen life in it.

24,452. And you have got up a great deal of it?—Yes, I have taken up in the trawl bushels at a haul.

24,453. Where did you get it?—Off our western land where we generally trawl.

24,454. At what time of the year?—At this time, the spring time of the year.

24,455. About April or May?—We generally get it all the year round; we begin to get it about March.

24,456. You generally take up spawn in your trawl about this time of the year?—Yes, in March, April, and May.

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24,457. In what depth of water do you get it?—In from 45 to 47 and 50 fathoms.

24,458. Do you bring up great quantities of young fish as well?—Yes, we get thousands of all sorts; we get a great many of different sorts that I could mention.

24,459. Do you think that that sort of fishing is very destructive?—Yes, in my opinion the trawl net is the most destructive net that is ever thrown into salt water.

24,460. But you have not found your own fishing to fail in consequence of using it?—Yes, I have done so in the summer part of the year.

24,461. Do you think that trawling is a sort of fishing that ought to be put down?—Yes, I think it ought to be put a stop to at a certain season of the year.

24,462. What time of the year would you stop it?—I would stop it at this time of the year for two or three months.

24,463. During what months would you put it down?—During March, April, and May.

24,464. Would you have no trawling at all during March, April, and May?—No.

24,465. Then people would not be able to get many soles during that time of the year?—No, unless they went somewhere else to get them.

24,466. Then they would have to do without soles?—Yes.

24,467. And turbot?—Yes, and turbot too.

24,468. Is it a constant practice to take up this large quantity of spawn in the trawl net?—Yes, it goes on annually.

24,469. Is there anything else you wish to speak about?—No, I think there is nothing else.

24,470. (*Mr. Lefevre.*) Are there any other trawls from Newlyn?—There were three here at one time.

24,471. Have they all stopped now?—Yes.

24,472. Has your own boat gone too?—Yes.

24,473. How long ago?—About 12 months.

24,474. Was that because it did not pay?—Yes, we found it would not pay at all.

24,475. What were your three best months for trawling?—From March to May.

24,476. Then you would put a stop to trawling during the three best months of the year?—I think it is very injurious to allow it to be carried on during those months.

24,477. But if you put a stop to the trawling during those three months you would put a stop to the fishing altogether?—I would stop it.

24,478. Would not that effectually exclude the fishing altogether if you were to prohibit it during the three best months?—They are all ground-fish that they catch in the trawl, and at this time of the year they are full of roe.

24,479. Are there many trawlers that come off here now?—I have seen as many as 60 off here at a time.

24,480. Are they off here now?—A great many of them.

24,481. What distance from the shore do they fish?—From three and a half to six, seven, eight, and nine leagues; that all depends on the wind.

24,482. Do they come regularly every year at this time?—Yes, about this time.

24,483. Are they increasing in number?—There are double as many now as there were 10 or 12 years ago; there are more than double.

24,484. They do not find that it pays badly then?—Perhaps not.

24,485. Did you confine your fishing to the grounds off this part, or did you take your boat to any distance?—We confine our fishing to our own country.

24,486. And during the rest of the year, with the exception of the months you have mentioned, you do not take much fish?—No.

The witness withdrew.

EDWARD BOLITHO called and examined.

E. Bolitho.

24,487. (*Professor Huxley.*) I believe, Mr. Bolitho, that you are interested in the large seines?—Yes, I am interested in the pilchard-seining.

24,488. Can you give any opinion as to the expediency or otherwise of allowing a small seine to take a turn with a large one?—I see no objection to their taking turns with the large one provided they are furnished with nets of the proper mesh. I think a great deal of injury would be done in this bay if the meshes were not of the proper size. I did not know that there was any limit to the length of the seine, but I am not thoroughly acquainted with the subject. I know that the large seines here are about 200 fathoms long and 12 or 13 fathoms deep, but I was not aware that there was any limit as to the length. At St. Ives I know it is different, there they fish under a local Act of Parliament, and the seines are bound to be of a certain length.

24,489. Here it is custom that regulates the size of the seine?—Yes; perhaps, with regard to the drift-fishing, I may say that many years ago the boats were prohibited from fishing within three miles of the shore, and I believe a Revenue cutter had directions from the Government to protect the seine-fishermen; that I believe is not the case at present; on the contrary, the drift-boats frequently come and drift almost in the midst of the stems.

24,490. Did you ever hear of any prosecution taking place against the drift-men?—I have at St. Ives. I have been a party to one there.

24,491. Has the matter ever been fairly tried in a court of law?—I understand that it was once at Mevagissey, but I cannot speak as to the date; I believe there were one or two men sent to prison, their boat and nets were seized, and they were brought into Mevagissey.

24,492. How long is that ago?—It was about 20 years ago, and perhaps more than that; I recollect the case perfectly well.

24,493. (*Mr. Lefevre.*) I believe, Mr. Bolitho, that you export a large quantity of pilchards from Penzance?—Yes.

24,494. Do you buy largely from drift-boats?—Yes, after they are cured and ready for shipment; they are all cured and made ready for shipment by the drift-men. In this bay we export double the quantity caught by the drift-boats as compared with the seines. The drift-fishery here is of very much more importance than the seine-fishery.

24,495. Has it increased of late years?—The number of boats has increased, but I am sorry to say that on the average for the last four or five years the quantity of fish has not increased in proportion to the number of boats.

24,496. Has that been caused by the badness of the season?—Yes, I think so. The fish have not approached the shore. Our pilchard fishery is a very uncertain fishery. The fish appear to approach the shore in the early part of August, and they continue to come in at times down to the first week of November.

24,497. Do you agree with the previous witnesses who have told us that the seine fishery is bad?—I agree with them that it has been bad in Mounts Bay.

24,498. For the last 10 years?—Yes, it has been a very unprofitable pursuit in Mounts Bay during that time.

24,499. Then if it had not been for the drift-boats the fishery altogether would have fallen off and the exports would have much diminished?—Yes, that is my impression. In this bay, I think, the seine-fishing has fallen off very much for some years.

24,500. Are you interested in the seines at St. Ives?—Yes.

24,501. Do you find them more profitable there?—They take larger quantities of fish.

The witness withdrew.

PENZANCE.

Thomas Sobey called and examined.

T. Sobey.

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24,502. (*Professor Huxley.*) Are you a fisherman here?—Yes.

24,503. How long have you been engaged in that occupation?—I have been a fisherman here for the last 25 or 26 years.

24,504. Are you employed in the crab-fishing?—That is my chief occupation.

24,505. How has the crab-fishing been during the last 20 years?—It has not been so good as it was by far.

24,506. It has not been so good as it used to be?—It has been nothing compared to what it was in my youth.

24,547. How many people were employed in the crab-fishing when you were a boy?—I cannot say how many there were in Mounts Bay at that time, but at Penzance there were five or six little boats. There were others at the Mount and Portleven, Penberth, and other places.

24,508. Has the number increased within your recollection?—Yes, the boats out of the different coves come more than they did when I was a boy.

24,509. Do you think that the quantity of crabs has fallen off?—We fancy that they have done so of late years. We are of opinion that the crabs have fallen off a great deal, and as to the craw-fish we have had no opportunity of catching them at all in Mounts Bay, because we have been injured so much by the drift-fishing. We have been obliged to take our pots in, or else we should have had them dragged or cut away.

24,510. Do your buoys get caught by the drift-nets?—Yes.

24,511. Cannot the drift-men keep out of the way of them?—They could if they liked.

24,512. Does it not damage their nets when they get foul of your buoys?—Yes, I think it does; I have found pieces of their nets fast to our pots.

24,513. When they are out fishing in the night time how can they make out where your pots are?—They cannot make out where the pots are, but when they are drifting in the pilchard season they ought to know whether they are in the vicinity of crab-pots or not.

24,514. How far out are your crab-pots set?—In the spring of the year they are set a couple of miles from the nearest land. I have had my pots carried away in the spring mackerel season in May, and I have had them carried away when the drift-boats have been out driving for pilchards, so that we are safe at no time.

24,515. To keep you safe ought the drift-men to be kept two or three miles off the coast?—I do not wish to injure any man, but I should like to have protection for myself. I cannot get my bread in any other way; I cannot get it by hard work the same as a young man, because I have become an old man now.

24,516. Do you fish for lobsters as well as crabs?—Yes, for lobsters, crabs, and craw-fish. They come in the fall of the year when the pilchard season comes in, and we are obliged to bring our pots on shore or we should lose them. Out of 40 odd pots last year we saved only nine.

24,517. When you speak of the craw-fish, do you mean the spiny lobster?—Yes, the red lobster if you will.

24,518. You do not think you have been injured so much from the falling off of the fish as from being interfered with by the drift-nets?—No, we consider that if we could keep our pots out and make the best of our season we should do very well; but we only get three months out of the year when we can fish.

24,519. (*Mr. Lefevre.*) What are those three months?—April, May, and June; in June and July they begin to fish for pilchards.

24,520. (*Professor Huxley.*) Do you take your crabs of all sizes, big and little, or have you any regulation?—We have a regulation for crabs.

24,521. What is the smallest size you take?—I have caught them half as big as my hand, and from that to 12 and 14 pounds.

24,522. What is the smallest size you are allowed to take?—In regard to saleable fish the small ones are of no use to us, but they would crawl out through the bars of our pots.

24,523. Is there any regulation in the same way about the size of the lobsters?—Our agreement is that we sell to the merchants by a regular measure. If we catch any particularly small ones we heave them away again.

24,524. If they are very small they will get through your pots?—Yes, small lobsters and small cray-fish, and crabs too.

24,525. Is there anything else you wish to remark upon?—Not at present, except that I should like to have protection the same as other men.

24,526. You think that you are greatly injured by the drift-fishing?—Yes, I am sure of that, and the drift-men know it themselves.

The witness withdrew.

M. Wright.

Martin Wright called and examined.

24,527. (*Professor Huxley.*) Are you a fisherman at Penzance?—No, at Mousehole.

24,528. I believe there is a very extensive mackerel shery from Mousehole?—Yes, very large indeed.

24,529. And from Newlyn as well?—Yes.

24,530. How many boats are there employed in the mackerel season?—46 at Mousehole.

24,531. And how many at Newlyn?—I can hardly tell at Newlyn, but I believe there are about 76 there.

24,532. Is it all drift-fishing, or is it all hook-and-line fishing?—There are three hook-and-line boats from our place.

24,533. Not more than that?—That is all.

24,534. Then the fishing is mainly drift-fishing?—Yes.

24,535. What is the size of the mesh that you use for your nets?—We make them $22\frac{1}{2}$ to the yard.

24,536. What does the whole fitting up of one of your mackerel boats cost, including the boat, nets, rigging, and everything? What will it cost you to set up a boat?—It will cost well on towards 400*l*.

24,537. Has the number of these boats very much increased within your recollection?—Yes, very much since I can remember.

24,538. Then it is a thriving sort of trade?—Yes, since the railway has been opened. I do not know that the number of fish has increased, but the railway has made a considerable difference.

24,539. Has it raised the price of fish as well as provided a market?—Yes.

24,540. Is there an abundant market for as much fish as you can catch?—Yes.

24,541. Does it go straight to London?—It goes to London, and to different inland towns.

24,542. Do you think the supply of fish is as good as it was?—Yes.

24,543. There has been no falling off at all?—There has been no falling off in the mackerel fishery, but it fluctuates in different years; some seasons are better, and some worse.

24,544. But on the average there has been no falling off?—No.

24,545. (*Mr. Lefevre.*) Do the boats go a great distance after the mackerel?—Yes.

24,546. How far?—As much as 60 miles from the Lands End sometimes.

24,547. Westward of the Lands End?—Yes.

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24,548. As the season advances do they come to the shore?—No, they go further off; at this time of the year they are nearest the land.

24,549. What time of the year does the season begin?—This year it began in January, but generally speaking it commences in the later part of February, and the beginning of March.

24,550. And until when does it go on?—Until the middle of June.

24,551. Are there many boats that come from a distance to follow the mackerel fishery?—Some of the Hastings boats will come down in a few weeks, perhaps two or three weeks from this.

24,552. Do they land their fish here?—Yes, all at Newlyn.

24,553. Are any of the mackerel landed at Penzance?—No, only at Newlyn and Mousehole.

24,554. Where are they sent away from by train?—From Penzance.

24,555. From Newlyn are they sent by carts to Penzance?—Yes.

24,556. Are they sold on the beach?—Yes.

24,557. Are there dealers who purchase them?—Yes.

24,558. Do the pilchard boats go westward of the Lands End?—No.

24,559. They are mostly within a few miles of the shore?—When they commence the fishery they may go ten or a dozen miles off.

24,560. But not westward of the Lands End?—No.

24,561. (*Professor Huxley.*) Would the regulation which has been referred to for keeping drift-boats three miles or a league and a half from the land at all interfere with your mackerel-fishing?—No.

24,562. You keep out further than that?—Yes.

24,563. (*Mr. Lefevre.*) I suppose that the mackerel boats are a good deal larger than the pilchard boats?—The big boats go to the pilchard-fishing as well when they return from Ireland about the middle of August.

The witness withdrew.

CHARLES CHIVERS called and examined.

C. Chivers.

24,564. (*Professor Huxley.*) Are you a fisherman here?—Yes.

24,565. What kind of fishing do you practise?—Hook-and-line fishing.

24,566. At Penzance?—Yes.

24,567. What is the season of the year for hook-and-line fishing?—All the year round when the weather will permit.

24,568. Do you go pilchard-fishing as well?—No.

24,569. Do you confine yourself altogether to the hook-and-line fishing?—Yes.

24,570. How long have you been at it?—26 or 27 years.

24,571. Do you find that you can get as much fish as you used to get?—No, not in a general way.

24,572. Has there been a falling off in all kinds of fish?—In all that I am aware of; in all the hooked fish.

24,573. Such for instance as ling and haddock?—In an odd season years ago I have taken 50 and 60 a day, and now I have been at it ever since Christmas and can only get one, two, or three a day, and sometimes none at all.

24,574. In former years was there not a great pollack fishery here at times?—So there is now in the fall of the year.

24,575. Are there as many caught now as there were in former years?—No, they used to shoot nets for them, but there is nothing of that sort now.

24,576. Do you catch turbot with the hook and line?—No; those are the long-lines that do that.

24,577. Do you fish with the hand-line or the long-line?—Both.

24,578. What will the fitting of a boat with all her lines stand you in, taking boat, lines and everything?—From 40*l.* to 50*l.*

24,579. Are there more boats employed in the hook-and-line fishing now than when you were young?—No, not so many; the old men have died away and the young ones have generally taken to the sea.

24,580. Is that because the fishing has not been so profitable?—I expect a great deal of it has been on that account.

24,581. What do you think is the reason of that falling off?—I cannot give you any account. It would seem that all up and down the Channel the fish have taken off for some years.

24,582. Is there anything else you wish to say?—When the drift-boats come across us and we have got our anchor down they do us some injury at times; the tide brings them down upon us in the night time, we cannot always see them, and we have to cut away a rope to save ourselves.

24,583. That is when you are working the long-lines?—When we are out in the Channel fishing we are sure to be in one another's way.

24,584. When you are using the hand-lines you do not anchor, do you?—Yes.

24,585. You do not drift merely?—No, we anchor five, six, or seven miles from the land in the neap tides; in the spring tides we keep in-shore.

24,586. Do you find that the drift-men run down upon you?—They can see us if they like, but they do not shun us as they ought to do.

24,587. Could they get out of your way if they liked?—Yes, we think they could.

24,588. But if they have their nets out how can they?—They cannot then. Sometimes they come across us before we are aware of it, and then we have to get out of their way as we best can; sometimes we haul up their nets and take pieces out of them; frequently we have not time to get out of their way without injury to ourselves or them.

24,589. (*Mr. Lefevre.*) How many hook-and-line boats go out in the course of the season?—Very few.

24,590. Do you do better by bringing your fish to Penzance than you did formerly?—Yes.

24,591. Do you get a better price now?—Yes.

24,592. Does that make up for the decreased supply?—No, we cannot make as much now.

24,593. You do not make as good a living now as you did?—In other days we spent more than we can get now.

24,594. How many fishermen are there in the same line as yourself?—There are only one or two; there are very few hookers in Penzance now.

The witness withdrew.

ANTHONY SULLIVAN called and examined.

A. Sullivan.

24,595. (*Professor Huxley.*) What is it that you wish to say to us?—With regard to the pilchard-fishing the last witness has been finding fault with our nets. Now our pilchard-boats do not leave their nets out for more than an hour or an hour and a half.

24,596. You are speaking of the drift-fishery?—Yes, the drift-nets are not left out for more than an hour or an hour and a half in the course of an evening, and yet they want to do away with us altogether.

24,597. Who wants to do away with you?—The crabbers and the small-line fishermen. It is not more than that at the furthest that we keep out our nets. I do not know what we should do if we were to be limited to less than that.

24,598. What do you mean by an hour or an hour and a half?—When we shoot out our nets in the evening we have them out for an hour or an hour and a half; we then draw them in, and take them to the land. If we were to stop them during that time we should have no fishing at all. Sometimes it is an hour after sundown before we shoot them.

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24,599. Does not the length of time you keep them down depend upon whether you have a shoal or no?—No, sometimes we haul them in with not more than 100 pilchards in them.

24,600. Do you not drift with them the same as in the herring fishery?—No, the herring fishery is in the morning; the pilchard is an evening fish generally, and the herring a morning fish.

24,601. Do you mean to say that if you were to keep out of the way of the crabbers you would not have much chance of catching anything?—Yes, very often within two or three miles of the shore we catch a great deal more pilchards than we should by being further out.

24,602. Is there anything else you wish to say?—No, nothing. We do not wish to get foul of the pot-men, because when we do we tear our nets to pieces, and destroy them entirely.

24,603. (*The witness Adams.*) There are buoys attached to lines on the pots. The pots are obliged to be taken up in the early part of August until the middle of November. We do not allow them to put down pots where the seines can shoot.

24,603*a*. Is there any considerably fishery at the Scilly Islands?—There is a very large ling and conger fishery, but no pilchards.

24,604. How many men are there employed there?—I do not know; perhaps a score or two.

The witness withdrew, and the inquiry was adjourned until Friday, April 1st, at St. Ives.

St. Ives, Cornwall, Friday, 1st April 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

ST. IVES.
J. Hain.
1 April 1864.

JOHN HAIN called and examined.

24,605. (*Professor Huxley.*) Are you connected with the fishery here, Captain Hain?—I am not connected with the drift-fishery.

24,606. With what fishery are you connected?—With the seine-fishing.

24,607. Are you an agent and merchant here?—Yes.

24,608. For the Messrs. Bolitho?—Yes.

24,609. How long have you known this port?—All my lifetime.

24,610. What is the principal mode of fishing practised here?—The pilchard fishery and the mackerel fishery.

24,611. Is the seine-fishing the principal pilchard-fishing here?—Yes.

24,612. How many seine-nets are there?—247, I think.

24,613. Two hundred and forty-seven nets?—Yes, I think that is the number.

24,614. Each net has three boats?—No, each has four boats here.

24,615. Is that the practice here?—Yes; there is one seine-boat, two tow-boats, and one volyer.

24,616. What is the length of your seine?—It averages from 160 and 170 fathoms to 200 fathoms.

24,617. What determines the length of the seine? For what reason do they make their seine-nets of that length?—We have an Act of Parliament here which requires that our seine-nets shall be over 160 fathoms long.

24,618. Why, then, do you make them longer than that?—We do that in order to catch the large shoals of fish. Sometimes the shoal is very great here, and it takes a very long seine to enclose it.

24,619. Do you think a longer seine is more convenient than a shorter one?—Yes.

24,620. But beyond a certain size would it not be inconvenient to work a seine?—Yes, it would be too heavy.

24,621. What is the size of the mesh of the seine here?—I suppose after they are tanned they will be 20 rows to the foot. They are counted 18 or 19.

24,622. How deep is the seine?—From eight fathoms to 10 fathoms.

24,623. Is there any regulation on that point?—Yes, they must not be less than six fathoms deep.

24,624. But you have not found it convenient to go as low as six?—There are none as low as six now that I know of.

24,625. Is that because it is more convenient, and because it enables you to keep in deep water so that you can surround the fish better?—We can go further off with a net 10 fathoms deep than with one of six. Ten fathoms is quite deep enough for us to go out on account of the tide.

24,626. Are your nets leaded along the bottom?—Yes.

24,627. And corked on the head-lines?—Yes.

24,628. Will you describe the mode of fishing practised here? Suppose you were going to shoot your seine, how would you go to work?—In the first place, we should have men sufficient on the hills, whom we call huers. They see the fish in the water before they come in. They frequently see them playing upon the water. When they see the fish they give a signal. The signal is made with two white bushes. Then the boat is put off from the shore, and according to the directions given by the men on the hills they make off to where the fish are. The men who make the signal have the sole management of the direction in which the boats are to go; they always control them.

24,629. Have the boats taken their turns before this takes place?—Yes.

24,630. Each boat then before this must be in its turn?—Yes, they must have taken their stems and been registered.

24,631. Then suppose you get to the shoal of fish, what takes place then?—They shoot their net round it. They have two boats, a stop boat and a tow boat. The seine net is taken by one boat in one direction, and the tow boats go in another until they meet.

24,632. Do they pay out the net from the seine boat?—Yes.

24,633. Are both boats loaded with nets?—Yes.

24,634. Is the middle of the net between the two boats?—We fasten both together when we commence to shoot.

24,635. And you pay out from the middle part?—Yes, from both boats, and surround the fish.

24,636. Do they bring the two ends together?—Yes.

24,637. And you make them fast together?—Yes, we make them fast together. The net hangs perpendicularly in the water, and when we put them in we attach them together.

24,638. Do you tow the net when you have made it fast round the fish into shallow water?—Yes; out of the tide.

24,639. Then you are obliged to tow it into the stem?—Not always; after the seine is shot, and the fish in the seine, it does not matter in what stem the fish go then.

24,640. Do you take the stem before you enclose the fish?—Yes.

24,641. If the fish drift away in a particular direction before you have completely shot round them, have you a right to go into another stem?—If we are certain that the fish are there we can then follow them.

24,642. How are the fish got out of the net?—We have got what we call a tuck net.

24,643. How large is that?—About 70 fathoms long and about 10 fathoms deep.

24,644. Has it any pocket in it?—It has not a pocket but it has a great deal of slack twine. There is room for the fish to go into a bag which is almost equal to a pocket.

24,645. Are the fish taken out of that?—Yes, by baskets, and then they are put in the boats.

24,646. Are there salting-cellars here?—Yes, a great number of them.

24,647. How many are there in this place?—I can hardly tell.

24,648. Is that because there are so many?—There are more than 100 I suppose, nearly every fisherman has one of his own.

24,649. Then the salting-cellars do not belong to merchants here?—Yes; the merchants have salting-cellars as well as the seiners.

24,650. Has not every seiner a sufficient amount of salting accommodation to enable him to salt the fish that are caught in the seine?—Yes, unless he gets what we call above an average season.

24,651. Are the salting-cellars that belong to the fishermen used for the seine-fish?—No; the fishermen who belong to the seine get one-ninth part of the catch, and they put that in their own salting-cellars.

24,652. Do they get one-ninth part of the fish in lieu of wages?—They are paid partly in wages and partly by a share of the fish.

24,653. How many men are required to manage each seine?—They go eight men in the seine boat, six in each tow-boat, and two in the volyer.

24,654. What do you call a tow boat?—She carries the stop seine.

24,655. Then altogether how many men are there?—Generally 22.

24,656. That is more than they have on the south coast?—Yes; they have from 12 to 16 men in charge of each seine-net on the south coast.

24,657. But you have 22 men here?—Yes, sometimes we have six less.

24,658. Are the majority of them sailors?—They are all fishermen and sailors.

24,659. Are they all fishermen who live by nothing else but fishing?—Yes, generally.

24,660. You do not employ agricultural labourers here?—No, not in our boats. We may sometimes employ a man who has not been in the habit of fishing all his life, but who can row an oar very well.

24,661. The crew generally are all fishermen who depend on fishing for a living?—Yes.

24,662. How are they engaged?—They commence now about this time in the mackerel-fishing. They go on with that from this time or until the middle part of June. Then they go chiefly on the Irish coast to fish for herrings. They come back in August and then they go with the seine-nets. Some of them are employed in line-fishing.

24,663. Do the seine owners make an agreement with the fishermen?—They make it each year before the fishing commences.

24,664. What is the arrangement?—The men are to have one-ninth part of the fish and 45*s.* wages per month.

24,665. Do you engage the full crews of all your boats for the season?—No, these 22 men would take eight seines. They take their turns as they come round the stem.

24,666. How many seines does a seine owner commonly own?—Some are owned by companies. Some will have eight, some 10, and so on; the number differs in different cases.

24,667. Does each seine owner commonly have a sufficient number of seines to employ a crew for himself?—Yes.

24,668. How do they make an arrangement with the men?—It is made in the beginning of the season.

24,669. Do they promise to give 45*s.* wages per month as long as the season lasts and one-ninth part of the fish?—Yes.

24,670. (*Mr. Lefevre.*) Are the fish divided at once when they are taken?—Yes, they are divided at once on the beach.

24,671. (*Professor Huxley.*) Then of course their profits depend very much indeed upon the take?—Yes.

24,672. They get nothing at all besides their wages if they get no take?—No.

24,673. Are they bound during the whole time of the pilchard-fishing to remain here, and be at the call of the seine owners?—Yes, they are bound to be every day on the water when the stems are in hand.

24,674. Cannot they take any other occupation during the time?—No, but sometimes they are enabled to go away at night during the mackerel season.

24,675. Your seine-fishing takes place during the day?—Yes.

24,676. How long does the pilchard-fishing last?—From the commencement of August to the commencement of December.

24,677. It all depends upon the time the fish come in and the length of time they remain?—Yes.

24,678. You have no fixed duration for fishing of any kind?—No, but it generally lasts about three and a half months, and sometimes four.

24,679. And as long as the season lasts you are bound to give the men 45*s.* a month?—Yes.

24,680. And, upon the other hand, they are bound to be ready for your work?—Yes.

24,681. How much does a seine-net cost complete, boat and all?—About 300*l.*, or rather more than that.

24,682. More than that?—Perhaps a little more, if you take stop-nets and all.

24,683. I take everything that is required for the seining operation?—It would depend very much on the size of the concern and the size of the nets. Some months ago a seining concern was sold here, consisting of ten nets and everything required, for 2,000*l.*

24,684. That would be about 200*l.* a seine?—Yes, but it would take more than that to buy them now.

24,685. Do you think then that 200*l.* is a fair price for each seine-net?—It will take more than that to start a new concern.

24,686. What would it cost to start them now?—From 250*l.* to nearly 300*l.* a seine. To take ten seines, and have everything requisite for a concern of that character, it would cost 300*l.* a seine.

24,687. Does that include the cost of the boat?—Yes, the cost of the boats also.

24,688. Do the seines cost much to keep them up?—Not a great deal; they are shot very seldom.

24,689. How many times in the course of the season do you expect to shoot a seine?—Sometimes a seine is not shot at all. Some may shoot two or three times in a season, and sometimes none. It depends altogether upon the fish.

24,690. How many shoots will be a fair average for the season?—It does not depend upon the season how many times a seine would be shot.

24,691. How do you manage about arranging the stems?—We have an Act of Parliament to regulate that.

24,692. Have you got the coast here divided into stems?—Yes.

24,693. How are they taken?—They are taken when we first put our seines in the sea. Every stem is registered. We have a register belonging to each concern. Every seine pays its money and is registered for the season. If a seiner goes down to Carrack Gledden with five men, and takes his warp on shore, that constitutes stemming.

24,694. (*Mr. Lefevre.*) Does he start from here?—Yes, from the pier.

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24,695. May any man row out and take any stem he likes?—If there is no one there he may.

24,696. How is the order of succession for taking stems arranged?—That is arranged before we commence the season.

24,697. What is the arrangement?—It is arranged according to the number each person has.

24,698. According to the number of seines?—Yes.

24,699. Does the man with the greatest number of seines take the first turn?—He takes the greatest turn, that is, the largest proportion of turns.

24,700. What I want to understand is this: suppose I want to take a turn, and somebody comes after me, and has a right to take it after me, how does he get that right?—He gets it in the same way that you have got yours.

24,701. By pulling into the stem?—Yes, and throwing his warp ashore.

24,702. He gets the turn the day after?—Yes.

24,703. Then his succeeding does not depend on any arrangement made at the beginning of the fishing?—Yes, it does.

24,704. It is rather difficult to comprehend the nature of this arrangement?—There is a gentleman present who will be able to explain that matter better to you than I can.

The witness withdrew.

W. Roberts.

William Roberts called and examined.

24,705. (*Professor Huxley.*) Can you explain this matter to us? — There are 247 seines, and, of course, with such a large number there must be a private arrangement. The Act of Parliament is the basis of our arrangement. That describes how a seine is to become qualified for taking a stem. The boat must have a sufficient quantity of warp and material of different sorts. Before we proceed at all at the commencement of the season all the representatives of the owners meet, and arrange a list based on the number of seines. Last year, with 247 seines, we were all united into five companies. The smallest company had 42, another 46, another 48, and another 62. We had to make an arrangement to give to each of the associated companies a proper proportion of stems. There are five or six stems, I believe. When we have agreed to that (and there is sometimes some little difficulty in coming to an agreement), that forms the basis of the arrangement for the year. So that you or I know, if we have a certain number of seines, exactly how many stems we have in which to take our turns.

24,706. Do you arrange a sort of roster, so that A takes first turn, B then, and C follows?—We take them in regular order, and very frequently we have 15 or 16 boats keeping their turns or stem. They are all qualified to take their turn, but can only take one turn per day or per tide.

24,707. Must they succeed each other in the regular order fixed before the season begins?—Yes.

24,708. (*Mr. Lefevre.*) Does that regulate the first turn on each day?—Yes, and if a boat shoots the next in turn will be entitled to take the turn on that day. If it do not shoot, then the next in turn is only entitled to take it next day.

24,709. (*Professor Huxley.*) The next in turn has his turn by virtue of this arrangement?—Yes.

24,710. So that there is a kind of roster?—Yes.

24,711. How long does each stem last?—The stem lasts for 24 hours.

24,712. (*Mr. Lefevre.*) If the first does not shoot during the day the next man gets his turn on the day following?—Yes.

24,713. And the one who has shot is last on the list for his next turn?—Yes.

24,714. (*Professor Huxley.*) The difficulty in understanding this arrangement arose from the circumstance that, in other places, it has been suggested that there was always a kind of racing in order to get first turn. I imagine that that must occasion great confusion?—That would not do for us at all.

24,715. (*Mr. Lefevre.*) Did I apprehend you correctly that the slightest confusion would put the whole of your fishing into a bad condition?—Yes. Now and then, when there are new persons coming in to work the seines, a little bit of jealousy springs up, and there is some difficulty in making a private arrangement. It would be impossible, however, to carry out the business properly with so large a number of seines, if there were not some fixed arrangement. They have all now consented to be associated in companies, and to the offering of a premium to some one to make out the list. It is done by some one who takes a little time in giving to each its proper proportion of turns.

24,716. Then the Act of Parliament has been modified to some extent with respect to taking turns?—We stick to the Act still, and we only arrange the order in which the turns should be taken. We assume that each seine is legally qualified to take a turn.

24,717. I understand from you that the boat is bound to be there on the spot, with the warp and five men?—Yes, if that were not so she would disqualify herself.

24,718. She would disqualify herself if she were not there?—Yes, or if she were there in an illegal position; for instance, if she had only four men. If I saw your boat there with only four men, and I had the next turn, I could send out my men legally qualified, and could go and take your turn.

24,719–20. Then there is to be a boat there to entitle the seine to take its turn?—Yes.

24,721. And that is the case with the boat that is to take its turn after that?—It is quite a matter of private arrangement after that. If you have the second turn, and thought that you had any chance of being able to shoot, in consequence of the first one shooting away his turn, you would send your men and boat to be in readiness in case such a thing occurred.

24,722. But if you are second on the list, and do not send your boat, are you able to take the turn on the following day first?—Yes, and your going second to-day would not disqualify you from taking the first turn to-morrow, unless you get a shoot.

24,723. (*Professor Huxley.*) Does the Act of Parliament give you a right to make byelaws?—Yes.

24,724. Do you consider that these regulations are in the nature of byelaws?—No.

24,725. Do you make that arrangement every season?—Yes, before the season commences.

24,726. Do you consider it a private arrangement, having nothing to do with the powers given to you under the Act?—Yes, we regard it entirely as a private arrangement. I am not aware that we have made any byelaws under the Act at all.

24,727. There is a clause in the Act which gives you power to do so?—Yes, but we have not made any. These are regulations which come within the character of byelaws, but they have never been registered as byelaws. We have always gone on the principle that the arrangement we make in this respect is sufficient for the time being. We should hardly like to bind ourselves for another year. The whole circumstances might be changed in another year, or the people might come in with a larger number of seines.

24,728–9. (*Mr. Lefevre.*) Or any person might come in with only one seine and break up the arrangement?—Yes.

24,730. (*Professor Huxley.*) Do you think the Act here has been beneficial to you?—I think so. It would be almost impossible to go on without such an Act.

24,731. The regulations of the Act are exceedingly minute?—Yes; now and then we find that they squeeze some of our toes, and we are inclined to wish that such and such a clause had not been there. Probably the next day we should alter our opinion and feel glad that it was there.

24,732. Are all these regulations as to the size of the rope and with regard to minor details matters absolutely necessary to be regulated by law? Would not each man's interest dictate what was best for him?—We fancy it is not as necessary now that there should be regulations. Our fishing property here has been materially improved within the last 20 years. I can quite conceive that when the Act passed such regulations were absolutely necessary. The nets were then very old and of an inferior description, and boats were admitted to be used in the fishing which were not fit for the business; therefore, as you may easily imagine, circumstances made it necessary at that time that regulations should be imposed, whereas now, as Captain Hain has justly observed, we are all in a better position. Even then the minimum length of the nets and their depth were provided by the Act. All the nets used here now are both longer and deeper.

24,733. Do you find that these minute regulations act as restrictions in preventing you from improving your fishing gear?—No; the Act simply says that we shall not go lower than a certain length and depth, which means that a seine less than 6 fathoms deep and 160 fathoms long, which would not be efficient, and which would militate against the public weal if an attempt were made to take fish with such a net, shall be considered illegal and not entitled to a turn.

24,734. Then on the whole do you consider that the operation of the Act has been beneficial?—Yes.

24,735. (*Mr. Lefevre.*) How did you regulate the fishery before the Act came into operation?—I have scarcely any knowledge of that. My knowledge of St. Ives is confined to the last 30 years. The Act passed about 28 years ago I believe.

24,736. The Act passed in 1841, 23 years ago?—Yes, it was somewhere about that time.

24,737. You spoke of nets inferior in quality, do you mean in size?—In size, in length, and in the quality of the material.

24,738. Such inferior nets existed at the time of the passing of the Act?—Yes; we were not bound then to shoot the seine. The boat must hold the seine, and when the time came round the seine was to be put in, but now we are obliged to shoot the seine.

24,739. Were there many nets of inferior size at that time?—Yes, I believe there were.

24,740. Were they prohibited from being used by the Act?—They were prohibited if they were not of the proper length.

24,741. (*Professor Huxley.*) There is a regulation here that no mode of fishing other than the seine-fishing shall be carried on within a distance of 1,000 fathoms from the shore while the seine-fishing is going on?—Yes.

24,742. Do you think that the distance of 1,000 fathoms is sufficient to prevent every kind of disturbance to the seine-fishing?—I believe so; I never heard the distance complained of. There have been contests occasionally with persons who have trenched within the limits.

24,743. Is the object of the regulations to prevent you from being seriously interfered with, by the drift-fishermen, for example, or any other mode of fishing?—I think so; but my impression is that the drift-net fishermen cannot drive until after sundown anywhere. I am not quite sure that that is so, but I think it is.

24,744. Then the drift-men here do not interfere with you at all, because you seine here in the daytime and they drift during the night?—The only interference on their part would be by their fishing when our seines are in.

24,745. Have you any reason to believe that the operations of the drift-fishermen on this coast interfere with the seine fishery by breaking up the shoals or dispersing them?—They would undoubtedly if they used the drift-nets by day.

24,746. But do they interfere in that way by drifting at night?—No, we think not.

24,747. Then they do not interfere with you?—I think not. Our shoals come generally in large bodies. Our fish principally come in the month of October, and the drift-nets would be a very small obstruction to them.

24,748. Is there a large body of drift-fishermen here?—There are about 60 or 70 boats.

24,749. All drift off the coast in the season?—Their principal employment is in the mackerel-fishing.

24,750. But they do use the nets in drifting for pilchards during the season?—Yes.

24,751. And are they drifting at the same time that you are seining?—Yes.

24,752. But you never thought that you had reason to complain of them for interfering with the seine-fishing?—No, except when they go down with their nets before sundown.

24,753. So long as they fish at night they do not interfere with you?—No.

24,754. (*Mr. Lefevre.*) Have there been any prosecutions under the provisions of the Act?—I think there have been one or two instances where fishermen have been brought before the magistrates.

24,755. Have the Custom House authorities or the Preventive men the power of enforcing the provisions of the Act?—We have the power ourselves. We have an officer called the registrar whose duty it is to prosecute. Now and then there is a little bit of jealousy with regard to the fishing of the drift-net men. We sometimes think that they trench upon our fishing by going off with the drift-nets before sunset. We think that they interfere with us and we have threatened to prosecute, but it generally ends there. There have been only one or two prosecutions.

24,756. Are the provisions of the Act with regard to the registration of turns adhered to?—Yes, strictly.

24,757. What is the convenience of that?—It prevents those from coming who have not the proper materials for catching a shoal of fish. It obliges them to be in a position in which they may fairly expect to enclose a shoal. If a man were to go down with a net inferior in depth or in length, or with a smaller number of men than is necessary to manage it, he would simply destroy the chance which an efficient person with proper nets would have of taking the fish, without being able to take them himself.

24,758. Then the registrar would refuse to register a man for a turn unless he was properly equipped?—Precisely.

24,759. And if he were not registered another person would be entitled to keep his turn in his place? Yes.

24,760. (*Professor Huxley.*) Is it commonly the case that after a properly qualified net has been shot once in a turn, and has enclosed all the fish it could, that a second net has been enabled to come and enclose a second shoal of fish in the same place?—Yes.

24,761. And even a third net?—Yes, and a fourth and a fifth, and even a tenth.

24,762. Then I take it that the operation of shooting the net does not disperse the fish?—No, I have seen as many as 40,000 hogsheads of fish in the bay at one time. The utmost ever saved was 5,500 hogsheads in one shoal. That, however, was an extreme case.

24,763. You do not disturb the fish, and you can come again?—Yes, the fish are continually moving.

24,764. Do they move fast?—Pretty fast.

24,765. How many knots an hour would they go?—Perhaps three or four, or perhaps not more than one and a-half miles in an hour. I can hardly tell, they are constantly moving along.

24,766. (*Mr. Lefevre.*) What is the length of the stations here?—I do not know, I have never measured them. They are all laid down, however.

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24,767. What extent of ground will the six stations here cover?—I can hardly say, because one station will take the whole of three stems at low water. It depends on the state of the tide. The turns are of different extent at different states of the tide. They are of one extent at high water, of another at an intermediate state of the tide, and another at low water. All these things, however, have been regulated by the experience of the fishermen in days gone by. I believe there was an Act of Parliament in existence before the Act of 1841, but it was repealed by that Act. As I understood the Act of 1841 it was mainly directed towards getting the property into a more efficient state. It had been allowed to go down very much before that Act was passed.

24,768. With regard to the provision preventing drift-net fishing within 1,000 fathoms of the stems, I want to know what amount of ground that cuts off from the fishermen?—Our fishery extends, that is to say, the stems extend, from the back of our bar down to the foot of Hayle Bay; that would be about three miles.

24,769. Then the six stems are included within these three miles?—Yes, and any drift-net fishing within 1,000 fathoms is illegal.

24,770. How do you measure the distance?—From the shore.

24,771. Not from line to line drawn between the points?—I have never tested the matter so closely as that.

24,772. That would make a very great difference, would it not?—Yes; when we go down to Carrack we have six pieces of warp in a boat, 120 fathoms each, that is the furthest we go. I daresay the regulation of 1,000 fathoms resulted from a knowledge of that.

24,773. (*Professor Huxley.*) Can you give us any idea of the amount of capital invested in the seine-fishing here?—I agree with Captain Hain's statement that the cost of a seine would be about 250*l.*, and there are 247 seines. New seines would cost perhaps 300*l.*, but the other day a company sold a number at the rate of 200*l.* per seine.

24,774. (*Mr. Lefevre.*) Is there any variation in the depth of the seine?—A little; some are not more than seven fathoms, and some are about 10½ fathoms.

24,775. Then six fathoms is the minimum?—Yes.

24,776. Would it be a great inconvenience to the fishing if seines of a smaller depth were used?—The water would be too deep for the seines to touch the bottom, or the fish would get out under the net, and it would be of no use attempting to catch them.

24,777. (*Professor Huxley*) Is there anything else that occurs to you which you would like to state?—No.

The witness withdrew.

Capt. Hain.

Captain Hain recalled and examined.

24,778. (*Professor Huxley.*) You were saying that you have known the fishery here for a great number of years?—Yes.

24,779. Has there been a great variation in the seine-fishing within your knowledge?—Some years we had none.

24,780. Some years you have had more?—Yes; and in some years we have had very great catches.

24,781. Do you recollect whether it has been bad in any particular season?—Yes; it is just within my remembrance that for seven years there were hardly any fish.

24,782. How long ago is that?—The fish came in 1822; for seven years before that there had been none caught.

24,783. Was it not the same on the south coast?—Yes, I think so.

24,784. Since then how have matters gone on?—In some years we have had none, in some we have had moderate catches, and in others we have had very great catches.

24,785. When there were no fish caught here, was it because there were no fish on the coast?—I think so.

24,786. Have you any distinct recollection of what occurred so far back?—No; I know that the drift-boats used to be drifting for herrings, and that they came in winter after winter without any pilchards. If there had been any pilchards they would have caught them.

24,787. Does it often happen that the seines get none and the drift-boats do?—Yes; sometimes the drift-boats catch fish when the seines do not.

24,788. Do the drift-boats often get a large supply when there are very few or none at all taken by the seine-nets?—No, not a large supply.

24,789. Generally the drift-nets and the seines go pretty much together?—Yes; I can hardly remember a cargo having been taken by the drift-boats without some having been taken by the seines.

24,790. Is the supply obtained by the drift-boats more steady than that obtained by the seines?—Very little, in the summer perhaps it may be. In the latter part of July they are able to take them five or six leagues off in the offing.

24,791. Do they not bring in their fish every day pretty regularly by the drift-boats?—Yes.

24,792. How long does that go on?—It goes on for some months, but not regularly, some months they get none.

24,793. That is by the drift?—Yes, by the drift.

24,794. How many drift-boats are there employed here?—I think there are about 67 in the mackerel fishery.

24,795. Are the same boats employed in pilchard-drifting?—Some of them.

24,796. Not the whole?—No; some smaller ones take the place of the mackerel boats.

24,797. How many are there employed altogether in the drift-pilchard fishery?—Somewhere about 50; sometimes not more than 20. The average employed in the drift fishery varies very much.

24,798. Are there sometimes very few?—Yes.

24,799. How is that, does it not pay?—No.

24,800. How long will a fleet of pilchard-nets be?—They carry what we call 15 nets, each net will be about 75 or 80 yards.

24,801. What is the size of the mesh?—The fishermen generally use the old herring nets for catching pilchards.

24,802. Shrunk herring-nets?—Yes.

24,803. How many meshes to the yard?—When they are first made they are 33 meshes to the yard, but they come down to 24.

24,804. Will the old herring-nets do to catch pilchards with?—Yes.

24,805. How far will the mesh have shrunk down? To 12 rows to the foot.

24,806. What is the size of the mesh they use for catching herrings?—32 or 33.

24,807. Is not that rather a large mesh?—They are 32 or 33 when they are made, the tanning shrinks them. Some have 32, but in general 33 is preferred as the best mesh.

24,808. What time of the year are the pilchards full here?—We never see them full; at the time we take them they have no roe in them at all.

24,809. What time of the year do you think they are full?—In February or March, to the best of my belief.

24,810. Early in the year?—Yes, I think so, but I am not clear on the point.

24,811. At the time you take them they are never full, are they?—They never have any roe in them at the time we take them.

24,812. The next great fishing you have here is the mackerel-fishing?—Yes.

24,813. How many mackerel-boats are there here?—67, I think.

24,814. Sixty-seven ?—I think so.

24,815. They are almost all decked boats, are they not?—Yes, partly decked, not entirely decked.

24,816. Is there a large space for a main hatch in the middle ?—Yes, they are hatched over.

24,817. Where is the chief fishing ground?—Somewhere about seven or eight or nine or 10 leagues from this place, north, north-north-west, and north-north-east.

24,818. They go occasionally to the Irish coast ?—Yes, for herrings.

24,819. Not for mackerel ?—No, they have not been for mackerel for many years.

24,820. What is the tonnage of the mackerel-boats? —I think from 12 to 18 tons.

24,821. Twelve to 18 tons ?—Yes.

24,822. What is the size of the mesh of your nets ? —When they are new somewhere about $8\frac{1}{3}$, some of them are 8.

24,823. Eight to the foot —Yes, but it depends on the size of the twine.

24,824. Of course you are measuring now from knot to knot ?—Yes $8\frac{1}{3}$ is about the size.

24,825. How long will a fleet of nets be ?—About a mile and a quarter.

24,826. Are they made in the same fashion as herring-nets ?—No, they are shoaler. The herring-nets are 15 score meshes deep, the mackerel-nets only six.

24,827. Six score meshes ?—Yes.

24,828. Then the mesh being larger they would be deeper ?—No, they are not equal in depth.

24,829–30. But they are buoyed in the same way ? —No, the floats are put on the rope. The rope swims on the surface of the water ; that is on account of the mackerel always swimming high, they are not like the herrings.

24,831. What will a mackerel-boat with all its fittings cost ?—Nets and all.

24,832. Yes, everything ready for sea ?—We generally calculate that a good boat will cost 250*l.*

24,833. What will the fleet of nets cost ?—Each net will cost about 2*l.* or 2*l.* 5*s.*

24,834. That would be about 200*l.* ?—They average that or more.

24,835. About 300*l.* perhaps ?—Yes.

24,836. How many men are there in the crew of a boat ?—They average six, some of them have seven.

24,837. Do they go out and come in again every day ?—When they can fish and have good weather they do.

24,838. Has the number of boats increased much within your recollection ?—Yes

24,839. How many were there when you first knew the place ?—I can remember when there were only 17.

24,840. There are four times that number now ?— Yes, four times the number.

24,841. Has the yield of fish been pretty good — Some years it has been good and sometimes slack.

24,842. On the whole how has it been ?—On the whole it has been good.

24,843. Do the boats belong to the fishermen here ?—Yes.

24,844. Not to the seine owners ?—No.

24,845. Do any of them belong to the tradesmen of the town ?—Only very few out of the 60.

24,846. Are they mainly built and paid for by the fishermen here out of their own savings ?—Generally.

24,847. Then there has been some money made out of the mackerel ?—Yes, some.

24,848. Is there any hook-and-line fishing here ? —Yes.

24,849. Is there much of it ?—Not a great deal.

24,850. Do the same boats go mackerel-fishing ?— They catch some with the hook and line when they are mackerel-fishing. They use the hook and line at the same time as they are riding their nets.

24,851. They use the hook and line on such occasions ?—Yes.

24,852. Large fish, such as cod and ling, they take ?—Yes.

24,853. Is that with the hand-line ?—Yes.

24,854. Is there any long-line fishing here ?—Yes, with what we call the bulter.

24,855. During the mackerel season do the great mass of the fishermen go mackerel-fishing ?—Yes, nearly the whole.

24,856. Has the yield of hook-fish remained about the same, or has it fallen off or increased of late years ?—I suppose there has been more search after them, and there have been more taken ashore because there have been more men engaged at that employment. Perhaps this last winter there was a falling off.

24,857. How has the supply of whiting been here ? —It has been very slight, indeed it has almost fallen off altogether.

24,858. How has the supply of conger been ?— Pretty good in the summer.

24,859. And hake ?—We get some here.

24,860. Has the supply fallen off ?—I think it has.

24,861. Is there any trawling here ?—A little in the bay in the winter.

24,862. Are there any regular trawlers here ?— No, there is no regular trawler. The same boats go fishing for mackerel and herring, and in the winter season go trawling.

24,863. What is the size of the beam they use ?— It is quite a small trawl, with a beam of not more than 35 or 36 feet.

24,864. (*Mr. Lefevre.*) Do the Brixham trawlers come here ?—No, they cannot trawl in our offing.

24,865. Is the ground rough ?—Yes.

24,866. (*Professor Huxley.*) Then they cannot trawl in the bay ?—No.

24,867. When does herring-fishing commence here ? —In the middle of October.

24,868. How long does it last ?—Sometimes till Christmas.

24,869. What condition are the fish in ?—They are full at the latter part of the season, but our herrings have fallen off during the last 20 years.

24,870. How many nets are there now ?—About the same there always were.

24,871. Do you ever see full fish here in February? —No.

24,872–3. Do you ever see herrings here in February ?—No.

24,874. Are the herrings abundant here ?—They have not been abundant here during the last 30 years.

24,875. Were they abundant here in former years ? —Yes.

24,876. What becomes of the herrings when they are caught ?—They are salted generally, and some of them are carted away and sold fresh They are carried to Wales and Ireland.

24,877. Are there any curing houses here ?—No.

24,878. Used there to be ?—There used to be one, but it is gone now.

24,879. Have you any ground-seines in the bay here ?—A few.

24,880. Have you any great number ?—No, not any great number, perhaps half a score.

24,881. What time of the year are they used ?— At any time, they are not particular.

24,882. What sort of fish do you get in them ?— All sorts of fish.

24,883. Soles ?—No, not many soles ; they are used in the herring season, and in the fall of the year.

24,884. What is the principal kind of fish they catch ?—They catch the herrings.

24,885. They use them for herrings ?—Yes.

24,886. Do they haul them ashore ?—Yes.

24,887. When the herrings come in-shore ?—Yes, when they come in-shore, or pilchards, or anything else.

24,888. Do you think that by the use of these seines a great quantity of small fish is destroyed ?— I think so.

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24,889. Have you seen that yourself?—Yes.

24,890. You have seen large quantities of small fish brought up?—Yes, and left behind on the beach dead.

24,891. Have you ever seen large quantities of small fish of that kind sold for manure here?—No, not for manure.

24,892. Is there any complaint of the damage done to the fishery by this practice?—I have heard it complained of by some of the fishermen that they kill the spawn.

24,893. Is there any complaint made here with regard to the operations of the trawlers?—I have heard the same complaint made with regard to the trawlers.

24,894. That they destroy the spawn?—Yes, that they hurt the spawn, and that they kill fish not fit to be killed.

24,895. Has ground-seining been practised here ever since you have known the place?—It has been to some extent, but not so much as now.

24,896. Do you think that damage has been done to the fish in consequence?—Yes, to flat-fish, whiting and so on, but I do not think that they do much damage to the pilchards.

24,897. (*Mr. Lefevre.*) What is the whole number of men regularly employed in seining here?—About 220 or 230 men.

24,898. Are they in the receipt of regular wages?—The fishermen have regular wages.

24,899. And besides them you have a number of landsmen?—We employ men we call blowsers, who get no wages, but are paid so much per hogshead.

24,900. Do any of the fishermen hold shares in the seine-nets?—No, I think not, scarcely any of them.

24,901. I suppose the ownership of the seines and the working of them is rather a risky trade?—Yes.

24,902. Does it occasionally happen that a seine does not get any turn?—Yes, sometimes one will not get any fish, while others will.

24,903. Then there is a great deal of chance about it?—Yes, it is all chance.

24,904. Are there any seines eastward of Hayle?—There are two at a place called St. Agnes, and six or seven at a place called Newquay.

24,905. Do you know the number of fishermen employed there?—No.

24,906. Are there any westward of St. Ives?—There are one or two at Gurnard's Head, and one down at Sennen.

24,907. Are the fish exported from St. Ives?—Yes.

24,908. Where do they go to?—To Naples, Civita Vecchia, Genoa, Leghorn, and other places.

24,909. Is the export trade in the hands of a few merchants?—Yes.

24,910. Do they have a brand of their own?—Everyone puts his own name upon the casks.

24,911. There is no Government brand then?—No; at St. Ives everyone puts on his own name and the date.

24,912. Do the fish generally run of the same size?—Some of the shoals are very large and some are only small.

24,913. But do the fish themselves run of the same size?—No; sometimes the barrel will hold nearly 3,000, and sometimes not more than 1,000 or 2,000.

24,914. Do you find in the same shoal a considerable number of small fish as well as large?—Not often; sometimes we find a few small ones, but in a large shoal of fish the fish are generally largest.

24,915. (*Professor Huxley.*) Has any proposition ever been made within your recollection by anybody engaged in the seining and exportation of fish to have a Government brand or a Government mark placed on the fish, or any Government inspection?—Not that I am aware of.

24,916. No one has ever desired that?—No; there was a time when there was a bounty on the fish, and then there used to be a Government mark; since the bounty was taken off all that has ceased.

24,917. Did the fish get a better or a worse market after the Government mark was taken off?—No.

24,918. Was there no difference made when the bounty was taken off?—Not that I know of.

24,919. Is the curing of the fish a delicate process?—No, they are salted in the bulk. First a layer of fish and then a layer of salt. They are dry-salted.

24,920. Do the fish differ much in quality from different curers?—Sometimes they do a little.

24,921. But not a very great deal?—No.

24,922. There is no smoking of the fish?—No.

24,923. They are entirely cured by layers of salt?—Yes.

24,924. Is there any remarkable difference abroad in the estimation in which the fish of different merchants is held; is the fish sent by one merchant preferred to that exported by another?—I think not.

24,925. There is no great difference in the quality?—No.

24,926. (*Mr. Lefevre.*) Had the taking off of the bounty an injurious effect upon the fishing here?—There was only a loss of the money, that was all I know of.

24,927. There was no falling off of the fishery in consequence?—Not in the least.

The witness withdrew.

W. Rouse.

WILLIAM ROUSE called and examined.

24,928. (*Professor Huxley.*) Are you a fisherman here?—Yes.

24,929. How many years have you been fishing here?—About 30 years.

24,930-1. Have you been drift-fishing all that time?—Yes.

24,932. Have you been at all engaged in the seine-fishing?—Yes.

24,933. And in hooking as well?—Yes, in hooking also.

24,934-5. Have you also been engaged in the mackerel-fishing?—Yes.

24,936. Have you heard what has been stated by Captain Hain?—Yes.

24,937. Is there anything that occurs to you to remark upon; have you heard anything stated upon which you wish to say anything?—Yes, I should like to say something about the drawing-seines.

24,938. Are those the seines which have been called ground-seines?—Yes.

24,939. What do you wish to say with regard to them?—I think they do a great deal of injury.

24,940. How do they do injury?—They kill the spawn.

24,941. Have you seen them used?—Yes, I have been using them.

24,942. Have you noticed that they do bring up spawn?—Yes, spawn that is not saleable or good for any person.

24,943. By spawn you mean small fish?—Yes.

24,944. Do they bring up a great quantity of small fish?—Yes.

24,945. Of what sort?—Flat-fish.

24,946. Plaice?—Yes.

24,947. Soles?—Yes.

24,948. Turbot?—Yes, very small turbot.

24,949. How small have you seen those fish?—I have seen some of them not bigger than half a crown.

24,950. No market could be got for fish of that description?—No.

24,951. Then you think that that is a waste?—Yes.

24,952. What is the proportion of large saleable fish that you get?—We get them of different sizes, but when we get them of that small size they are not saleable, nor are they fit to eat.

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24,953. Is there a large proportion of that unsaleable fish in proportion to the quantity of good fish taken?—They get more small fish than large.

24,954. I suppose you think that is very wasteful?—Yes.

24,955. Have you been drift-fishing?—Yes.

24,956. Are you in the habit of drift-fishing?—Yes, all the year round.

24,957. Do you drive for pilchards?—Yes.

24,958. Would you feel it any hardship if you were kept 1000 fathoms outside the stems, or would it be a matter of any consequence to you?—No, we manage our fishing in the night and not in the day.

24,959. Then it would not make much difference?—No, if they let us have the night.

24,960. You do not feel it any grievance?—No, if they let me have the night to drift where I like, but I should not be bound to keep outside for 1000 fathoms in the night time; very often I could get a good night's work within that distance when if I were obliged to go further off I should get nothing.

24,961. Do you feel you are prohibited, as the law now stands, from going in within 1000 fathoms in the night time?—I am told that I must not do that; the Act of Parliament tells me that I shall not come within 1000 fathoms.

24,962. Have you acted upon that; have you always kept outside for 1000 fathoms?—I have been afraid to go in the drift-fishery, although many times we might have done much better by going in.

24,963. (*Mr. Lefevre.*) Do you think that a good many of the fishermen do set their nets within 1000 fathoms at night?—Yes, and within 100 fathoms of the shore too.

24,964. (*Professor Huxley.*) What you base your opinion on is this clause in the Act of Parliament: "And be it enacted, that, from the said 25th day of "July until the 25th day of December in any year, no "person shall fish for any hook fish, or throw or lay "any boulter or ground-tackle for taking fish, or "make use of any trawling-net or any other net not "belonging to and lawfully in use in the pilchard "seyne fishery under this Act within the distance "of 1000 fathoms from the shore within the limits of "any of the six several stems and stations in this "Act mentioned; and that every person offending "herein shall for every such offence forfeit any sum "not exceeding the sum of 10*l.*" Is that what you are referring to?—Yes, I am afraid of going within that distance for fear I should be fined.

WILLIAM ROBERTS re-called and examined.

W. Roberts.

24,965. (*Professor Huxley.*) Are you aware whether any prosecutions have taken place against any drift-fishermen under the clause of the Act which I have just read?—No.

24,966. Is it understood by the seine owners and those whose interest it is to enforce the Act that it is necessary to enforce that clause?—Yes, if it is infringed.

24,967. By night as well as by day?—I take it that according to your reading of the clause that it would be an infringement to come within 1,000 fathoms even at night. Yet, I have no doubt that it is infringed all the season through at night-time.

24,968. No one takes any notice?—No, I think not. I have heard it said that these boats go out at night, and that they go where they please.

24,969. Have no informations been laid or convictions been taken under that Act for a trespass committed under the Act?—I am quite positive that there has not.

24,970. (*Mr. Lefevre.*) Have you found any injury result from fishing during the night-time?—No; except in the morning when we are ready to put out. The drift-boats may hardly have got clear and away but have been drawing their nets as we go down. I recollect once or twice that the drift-boats have been enclosed in our seines; they have been fishing within the limits of our stems, when we have enclosed the fish and the drift-boats with all their materials. We never conceive that if they fish close in-shore in the night-time that it is really an infringement of the Act.

24,971. The seine owners have no objection to the drift-men fishing close in-shore in the night-time?—No, we never consider that that does us any injury, because we ourselves cannot work at night.

The witness withdrew.

WILLIAM ROUSE re-called and examined.

W. Rouse.

24,972. (*Professor Huxley.*) Although you feel that it would be a hardship to enforce that clause of the Act, yet we hear that it is not enforced in reality. Is that so?—We have been fined sometimes.

24,973. For drifting at night?—No, for bringing up.

24,974. By night?—No, by day.

24,975. What I am talking about now is drifting at night; when is your time for drifting; you do not drift by day?—No.

24,976. Then you have no occasion to interfere with the seining during the daytime?—No; we wish to drive from sunset to sunrise in any part where we think that we can do a night's work.

24,977. As we understand nobody interferes with you if you confine yourselves to fishing from sunset to sunrise?—I do not know how it would be at sunset. I think we might be meddled with then; the Act says, one hour after sunset and one hour before sunrise.

24,978. That is in the previous clause?—Yes.

24,979. With regard to anchoring within the limits of the stems?—Yes.

24,980. But there is nothing about driving or fishing. The previous paragraph to which you refer is this: "And be it enacted that no drift-net boat or "other fishing-boat or vessel other than and except "the boats employed in the said pilchard fishery "under this Act shall within the time between one "hour before sunrise and one hour after sunset, on "any day between the 25th day of July and the 25th "day of December in any year, anchor within the "limits of any of the six several stems or stations, "unless at a distance of more than 1,200 fathoms "from the shore; and the master or other person "having the care or ordering of any boat or vessel "anchoring within the said limits aforesaid contrary "to the said Act, shall forfeit any sum not exceeding "the sum of 5*l.* for every offence." By that clause you are not allowed to anchor within the limits?—No, 1,200 fathoms from the shore.

24,981. The penalty is 5*l.* for every offence?—Yes.

24,982. That relates entirely to anchoring?—Yes.

24,983. Not to driving within the limits?—No.

24,984. Do you know of your own knowledge that either you yourself or any of your friends and acquaintances have been brought up and fined?—Yes, for anchoring there by day.

24,985. That is contrary to the Act?—Yes.

24,986. Do you think that that is any particular hardship? Why do you want to anchor there by day?—I do not think that we have any occasion to go there to anchor by day, but the distance is not far to start from the harbour and go to shoot.

24,987. When you are anchoring there you are interfering with the seine-net people, without doing any good to yourselves?—I do not see that they have any right to anchor there, but I do not see why they should not drive there at the time the seines cannot.

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24,988. As we understand that part of the Act has never been enforced. Have any of your acquaintances or friends ever been brought up for driving in the stems during the night?—I do not know of anyone about here who has been fined, but they have threatened to bring them up. I do not know whether they have a byelaw upon the subject.

24,989–90. You never heard of anybody being really brought up?—No, except for being there at anchor.

24,991. How do you think the supply of fish has been since you were a fisherman?—The fish have gone a great deal scarcer.

24,992. What sort of fish?—Hooked fish, the plaice and dabs, and herrings.

24,993. Has the whiting got scarcer?—Yes, it is not half so plentiful as it used to be when I first commenced fishing.

24,994. Do you have to go further out to catch it?—If we go out as far as we like we cannot catch it now.

24,995. How is that?—A great deal of the spawn has been killed.

24,996. What is the reason of the scarcity?—I think it is owing to so many hooks being shot, and to the use also of small tackle and boulters. They take up the smallest of all kinds of fish, and they kill all the spawn.

24,997. Do you like hand-line fishing better?—I think hand-line fishing suits all parties best.

24,998. Is hand-line fishing the old-fashioned fishing?—Most of the fishing now is carried on by boulters.

24,999. Forty years ago was there more hand-line fishing than there is now?—Yes, a good deal more than there is now.

25,000–1. There were not so many boulters?—No. The fish have gone scarcer since so many of them have been used.

25,002. Do they catch more fish with the boulters?—Yes, more than they do with the hand line.

25,003. Then do you think it is over-fishing that has made the fish scarcer?—Yes, together with the killing of the spawn. Of course if you were to kill all the boys there would be no men.

25,004. How do you contrive to catch small fish with the long line. Do you not use large hooks with the long line. You cannot catch small fish with the boulters?—Yes, we can; they are very small hooks.

25,005. What sized hooks do they use for the boulters?—I can hardly say, but they are very small.

25,006. You do not happen to have one here?—No.

25,007. If you catch very small fish you do not get a very good market for them?—Not so good a price as we get for the bigger fish.

25,008. What is the smallest whiting you have seen caught by the boulter here?—Not more than three or four inches.

25,009. There is not much sale for whiting of that size?—We have no whiting at all in regard to size compared with what we used to catch with the hand-line.

25,010. What do you use for bait for the boulters?—Generally launce or sand eels.

25,011. The sand launce?—Yes.

25,012. Do you use the same bait for the hand-lines?—Sometimes they use pilchards and herrings for bait.

25,013. Do you use any shell-fish?—Yes, mussels.

25,014. Do you get plenty of mussels here?—No, they are not plentiful on this coast.

25,015. But you get plenty of bait one way or another?—Yes.

25,016. Do you think anything ought to be done to prevent this falling off in the hooked fish?—Yes, I think drawing nets ought to be done away with.

25,017. (*Mr. Lefevre.*) The ground-seines?—Yes.

25,018. (*Professor Huxley.*) Is there anything else?—I think boulters ought to be done away with.

25,019. The boulters as well as the ground-seines?—Yes; let every one take his line and go out.

25,020. You would have nothing but hand-line fishing?—No.

25,021. (*Mr. Lefevre.*) How many ground-seines are there in use here?—Ten or a dozen, or more than that. There may be a score as far as I know. They never stop dragging them.

25,022. Where are they mostly used, just in the bay here?—Yes, and all the coves.

25,023. Wherever there is a sandy bottom?—Yes.

25,024. Have they been used ever since you can recollect?—Yes, but not one-fourth part as many.

25,025. Have they increased in number quite lately?—Yes, during the last ten years.

25,026. What has been the increase lately?—I cannot say.

25,027. Have they doubled the number?—Yes, I should think they have in that time.

25,028. Are they used all the year round?—In general they are used all the year round.

25,029. When the weather will permit?—Yes.

25,030. How many men are there employed in drawing them?—I cannot say, sometimes six or seven.

25,031. Six or seven?—Yes, or seven or eight.

25,032. What distance from the shore?—They go out with a couple of pieces of warp about 200 fathoms from the shore.

25,033. Are you the owner of a drift-boat?—Yes.

25,034. Do you go out to the mackerel-fishing with it?—Yes.

25,035. Do you go to the coast of Ireland in pursuit of herrings?—Yes.

25,036. Do any of your boats go to the Isle of Man?—Yes, I have been there many times.

25,037. And up to the west coast of Scotland?—Yes, I have been fishing there too.

25,038. From St. Ives?—Yes.

25,039. Do any of your boats go to the north and east coast of England?—I go up the Clyde, and right round.

25,040. What number of boats go to the Irish fishery?—Sometimes 50 or 60 sail, and sometimes not half that number.

25,041. How many go up to the Isle of Man?—I do not know the number.

The witness withdrew.

H. Geen.

HUMPHREY GEEN called and examined.

25,042. (*Professor Huxley.*) Are you a fisherman here?—Yes.

25,043. How many years have you been fishing here?—I suppose I have been fishing here for 30 or 40 years.

25,044. What sort of fishing have you practised?—All kinds of fishing.

25,045. Are you a long-line fisherman?—Sometimes.

25,046. Do you use the boulters?—Yes.

25,047. What do you think about the boulters, do you think that that is a good way of fishing?—Sometimes it is, and sometimes it does nothing at all.

25,048. Do you catch small fish with the boulter?—Not smaller than we catch with the hook and line.

25,049. Do you mean the hand-line?—Yes, the same hooks are used.

25,050. The same hooks?—Yes, the same are used in the hand-line fishing and with the boulters.

25,051. Do you not sometimes use smaller hooks with the boulters?—In general they are all of one size; there are small ones and big ones; the boulters are of different sizes.

25,052. Do the small ones use different hooks?—No, they are pretty much about the same, the same hooks are used with boulters as with hand-lines.

25,053. Then do they sometimes use small hooks with the hand-lines also?—Yes, for catching whiting.

25,054. Whether they are large or small the hand-line men and those who use the boulters have the same?—Yes, they are both alike, there is no difference.

25,055. Is there a great quantity of small fish caught by the boulters ?—Sometimes.

25,056. More than by the hand-lines ?—Yes, according as they come in the bay ; sometimes they come in in shoals.

25,057. Small fish ?—Yes, the whiting do.

25,058. Do you think the supply of fish caught by the hook and line has fallen off ?—I do not know that it has.

25,059. Within your recollection can you catch as many fish as you did formerly ?—Not so much as I have caught, at least not this season. Some seasons we get a good deal of whiting.

25,060. How has it been for the last ten years, taking one year with another ; comparing the last ten years with the ten years before that, do you have less whiting now than you used to have ?—I have been catching a good deal of mackerel during the last ten years.

25,061. Have you any distinct opinion upon the matter ?—Some seasons the fishing has been good and in other seasons bad. One season is not governed by another, some seasons are very good and some are only slight ; it is just the same with the mackerel and all other fish, some years we get a good catch and in others we have only a slight season.

25,062. Did you hear what the last witness said about the ground-seines ?—Yes.

25,063. Do you think they do much harm ?—I suppose they do good and do harm too.

25,064–5. How do they do good ?—They catch fish for the people to eat. Many in our town would not have a bit of fish if it was not for the tackle fish, and what is caught by these drawing-nets and by these blind-haul nets.

25,066. What is a blind-haul net ?—A ground-seine ; we call them blind-haul nets in St. Ives, because they cannot see what they are going to catch before they haul them in.

25,067. What is the harm done by them ?—Sometimes they catch small fish.

25,068. You think that does harm ?—Yes ; but I do not think they catch as much small fish as they do big ones. We never see many small fish.

25,069. (*Mr Lefevre.*) Have you yourself any share in a ground-seine ?—I have two.

25,070. You have two of your own ?—Yes; I made one here the other day.

25,071. (*Professor Huxley.*) Do you think the poor people are largely supplied by these ground-seines ?—Some are, and some of the fishermen are glad to go with them in order to get a shilling or two to buy a loaf of bread.

250,72. Do you think that the ground-seines do so much mischief that they ought to be put down ?—I do not know that they ought to be put down.

25,073. Do you think that they destroy the brood of fish ?—I do not believe they do.

25,074. How long have you had two of these ground-seines ?—Ever since I was a boy ; my father had one.

25,075. How often do you haul them ?—Perhaps once, twice, or three times in the night, sometimes four times.

25,076. At what time of the year ?—At different times ; perhaps now, if it was fine weather, they would be out with them.

25,077. Do you haul them on the sandy beaches ?—Yes ; sometimes we catch salmon and mullet with them.

25,078. Do you put back the salmon again ?—No, we take them up very carefully, because we generally can get a good price for them ; we take care of them more than we do of any other fish.

25,079. Has the net a pocket ?—No.

25,080. Only a bunt ?—Only a bunt, it is made of herring-twine. In the summer time we take all the Dungarvan out of it and use herring-net only.

25,081. What is the mesh with the Dungarvan only ?—About 20 to the foot.

25,082. Rather more than half an inch ?—Yes.

25,083. (*Mr. Lefevre.*) What is the value of a ground-seine ?—If we are going to have a bran new one it would cost about 20*l.*

25,084. (*Professor Huxley.*) Do you know when sprats are on this coast ?—Yes.

25,085. Have you caught them ?—We have sometimes.

25,086. At what time of the year ?—In the winter season.

25,087. In November ?—In November and December.

25,088. Are there many persons engaged in catching them ?—Sometimes.

25,089. Do they come in large quantities ?—They catch them for bait for the boulters for taking whiting.

25,090. You catch them for bait ?—Yes.

25,091. Not to sell ?—Sometimes they are sold.

25,092. Do they often come in large quantities ?—Sometimes they come in in shoals.

25,093. (*Mr. Lefevre.*) How many men does it take to draw in the ground-seine ?—Sometimes seven, and sometimes more.

25,094. Do you generally shoot the ground-seine at night ?—Yes.

25,095. Do you find that you catch a good number of small fish in them ?—Not so much as I have heard reported. Those who have not got any ground-seines generally speak against them.

25,096. What are the small fish you catch—turbot and sole ?—Yes, and plaice and flukes, and any flat-fish of that kind.

25,097. You mostly get flat-fish ?—Yes, it is flat-fish generally.

25,098. What do you do with the small fish ?—We generally sell all we catch.

25,099. Do you not throw any of the small fry back into the sea ?—When they are very small we throw them into the sea in order that they may get large.

25,100. When they are so small that they will not fetch any price in the market you throw them back again ?—Yes ; if we see any of that nature we let them lay in the water ; we do not meddle with them to kill them.

25,101. How many of these ground-seines are there in use along this bay ?—I don't know.

25,102. Are there many others besides yours ?—There are several of them, perhaps half-a-score, or somewhere in that way.

25,103. Do you go off the coast of Ireland after herrings ?—I have been there.

25,104. Where does the herring fishery generally begin there ?—At Howth.

25,105. Do you follow them up to the north coast of Ireland ?—Yes, to Douglas in the Isle of Man.

25,106. Do you come back again for the pilchard season here ?—Yes.

25,107. (*Professor Huxley.*) Is there any other remark you wish to make about the fishery here ?—No, there is nothing particular I wish to say except with regard to the drifting-boats. There has been some murmuring about their shooting here before and after sunset, but I do not think that the fishermen themselves think anything about it, because they can always go anywhere they like in the stems.

25,108. Nobody has meddled with the drift-boats when they have been fishing at night ?—No.

25,109. (*Mr. Lefevre.*) Where do the men who go to the Irish fishery sell their fish ?—At Howth there are buyers to buy it.

25,110. (*Professor Huxley.*) Do you think it would be a hardship if the drift-men were prevented from anchoring in the stems during the day ?—No; I do not see that they have any occasion to go there at all during the daytime.

The witness withdrew.

ST. IVES.

J. Cocking.

1 April 1864.

JOHN COCKING called and examined.

25,111. (*Professor Huxley.*) Are you a fisherman?—Yes.

25,112. How long have you been fishing here?—Upwards of 40 years.

25,113. What kind of fishing have you principally practised?—The mackerel-fishing and the pilchard and herring-fishing.

25,114. And hook-and-line fishing?—Yes, hook-and-line also.

25,115. Have you used the ground-seine?—Yes.

25,116. Do you possess one?—Yes.

25,117. Have you two?—I have two in number, one is for a shoal of fish.

25,118. Is the other used along the ground?—Yes, for drawing.

25,119. Do you work the drawing-seine pretty regularly?—Yes.

25,120. Do you get plenty of fish with it?—At times we do.

25,121. What sort of fish do you get most of?—Such as sole, or brill, salmon, bass, or mullet, and sometimes whiting. Sometimes we get a young cod-fish; we catch different sorts of fish.

25,122. Is there any other way of catching soles except by the seine-net?—Yes, by the trawl.

25,123. Is there only one trawl?—There may be two or three.

25,124. Is the principal catch of soles taken by the ground-seines?—Yes.

25,125. Do you bring up spawn in your net?—Yes.

25,126. A great deal of it?—Not a great deal of it, it depends how far we go from the shore.

25,127. When you speak of spawn do you mean small fish?—Yes.

25,128. What sort of small fish do you bring up?—Small plaice, and some other kind of flat-fish we call flukes or flounders, that is their general name; as many of these that we catch as are not saleable we heave back again into the sea if it is possible; we do not bring them home if they are not saleable; if we were to bring them home we should make a mere nothing out of them.

25,129. Then it is not worth your while to do so?—No, we heave them away again; all we do not consider saleable in a general way we heave overboard.

25,130. Do you think that you destroy a great quantity of unsaleable fish in that way which you cannot help destroying?—For my own part I do not think they do.

25,131. Do you think they get back again into the water alive?—We always throw them into the water; of course it hinders our time to some extent when we are taking up good fish to have to throw back again those that are not saleable. We do not injure the spawn if we can help it. Many a time I have hove the small fish into the sea again, and I suppose I have been engaged in fishing for more than 40 years.

25,132. Among the small fish what are the principal sorts you get, do you get small haddocks?—No; we do not get any of them in the drawing-seine.

25,133. Do you get small whiting?—Yes.

25,134. Considerable numbers of them?—No, very slight; I hardly recollect catching a basket of whiting in my life in the drawing-seine.

25,135. What is the chief sort of small fish you get?—The chief part we get in the drawing-seines consists of soles.

25,136. But I mean small fish?—There is some amount of small spawn, but if they were all big we should not make our fortunes. We get a good deal of plaice, and you must have a very large plaice to fetch 3*d.* in this place. It would take a very large one indeed to fetch 6*d.*, so that if we were to catch a great many of them we should not make much.

25,137. Do you not get small turbot?—Yes, we are very glad to catch them.

25,138. Do you not get small ones sometimes?—Sometimes not bigger than the palm of my hand, but as soon as we get them we heave them into the sea again, it would be of no use to carry them home. They might make something, but it would be very little and hardly worth having. Sometimes there are men with me blind-hauling and I charge them strictly to heave the young ones into the sea. I think there are now some blind-haulers in this room who have been with me.

25,139. Have you been long-lining?—Yes.

25,140. Have you found that the catch of fish in long-lining has been falling off?—Yes, just as my friend stated who was examined just now, some seasons are better than others.

25,141. But on the whole has there been a falling off during the last 10 years?—The fish have been scarce lately in summer as well as in winter. I do not know what has become of the spawn of them, neither do I know where all the spawn of the herrings is gone to for the last 20 years.

25,142. Has there been a falling off of the herrings lately?—Yes.

25,143. Have you heard the evidence which has been given already?—Yes.

25,144. Do you agree with it generally?—I suppose it will be the best way for every man to enjoy his own opinion.

25,145. Well, we want to know what yours is?—As far as I have stated I think I am pretty correct. I do not wish to say anything out of the way, and I do not think we shall ever make our fortunes by the drawing nets. I do not believe in that at all. I have two, a long one and a short one, and the short one I started with; I do not care very much about them. There is one I should not like to be without, and if anybody tries to cry them down, why then I shall endeavour to lift them up.

25,146. What do you mean?—I should not like to give up my long net it is about 28 years since my father got it up, and ever since I have been going round the shore looking out for shoals of mullet and shoals of bass. They pass our shore at this time of the year, and there are others to look out for them as well as myself, but I do not think there is anybody gives as great attention to that fishing as I do. I like it and I practise it, and I have got a net for that sort of work which I use whenever I have the opportunity. If that net were sacrificed it would do me a great deal of injury; at the same time I would not hold up my hand to keep it if all the others were destroyed. Of course I would not expect to keep mine more than other people.

45,147. Suppose the ground-seines do not catch mullet and bass, is there anything else to catch them?—Yes.

25,148. How are they caught?—By keeping a look out on shore for them.

25,149. Are they caught by the hook and line?—They may at odd times get mullet and bass by chance with a hook and line.

25,150. Are there any other men employed in catching them?—No, only those who have the drawing nets.

25,151. (*Mr. Lefevre.*) How many men are there who have these blind-haul nets?—I cannot tell to one or two, but there may be 10 or 12.

25,152. How often do you draw them in in the course of the season?—Do you mean in the course of the season or in the night?

25,153. No, in the course of the season?—I do not know. We may go 15 or 20 times in the course of the summer, the fish are so scarce, and generally the weather is so wet and cold that there are not many men who like to follow the employment.

25,154. How do you pay the men for helping you?—They get their equal part per share.

25,155. Does the owner of the net get no share?—If I am the owner I get my share the same as another man, and then two shares for the net. Every other man gets a share; they all share alike.

The witness withdrew, and the inquiry was adjourned until May 7th, at Shoreham.

Shoreham, Sussex, Saturday, 7th May 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

GEORGE GRIGGS called and examined.

25,156. (*Mr. Caird.*) Have you been long connected with the fishing interest of Shoreham and its neighbourhood?—I have.

25,157. For many years?—Yes; I was the first man who introduced the trade into Shoreham of sending oysters to London by rail.

25,158. When was that?—About 15 years ago.

25,159. Had you any previous connexion with the fishing interest of Shoreham?—I have been connected with it ever since I was a lad, for about 40 years.

25,160. Are oysters the chief kind of fish that are caught at Shoreham?—Yes.

25,161. Are there any others?—No, we have no trawling here at all.

25,162. The trade of the place is in oysters?—It is.

25,163. Can you tell us how many people are engaged in it?—No, I do not think I can, there is such a number of boats that come from Colchester and other parts.

25,164. Do they come from Colchester to Shoreham for the fishing here?—They come into Shoreham with their oysters and we buy them. Some go to Newhaven and Littlehampton and elsewhere along the coast.

25,165. You cannot tell us how many people are engaged in the oyster-fishing out of Shoreham Harbour?—No, not at present.

25,166. Is the number increasing or diminishing or is it stationary?—It is increasing.

25,167. Do you speak of the whole period of the last 15 years?—We have more oyster-fishing in Shoreham now than we had 15 years ago, more than we had six years ago; it is increasing every year.

25,168. Was there any dredging at all previous to 15 years ago?—Yes, a good deal.

25,169. At an earlier period than 15 years ago, and before you commenced the trade to London, were oysters caught in the deep sea and brought into Shoreham?—Yes, 39 years ago.

25,170. Has the trade gone on increasing ever since that time?—Not all the time. I used to go dredging myself along the coast by Worthing upwards of 30 years ago, and I sometimes saw as many as 200 sail.

25,171. During what months is the fishing carried on with the greatest vigour?—It used to be carried on all the year round until they put a stop to it.

25,172. How long ago was that?—Between five and six years ago. The Custom House officers seized the gear.

25,173. You are speaking now of the deep-sea fishing?—I am.

25,174. Was that in consequence of the Convention with France?—It was.

25,175. And it began between five and six years ago?—It did.

25,176. Previous to that time were you in the habit of fishing on the deep-sea oyster beds during the whole year?—Yes, the whole year round, but then the Frenchmen began to cruize about and take the dredges away, sometimes heaving the oysters overboard.

25,177. During the last five or six years there has been no deep-sea fishing for oysters after the beginning of May?—No, none from May till September.

25,178. Then there are no oysters brought from the deep-sea beds into Shoreham between those months?—None.

25,179. Is that a great hardship to you?—I think so; it keeps a great many people out of employment.

25,180. You say the oyster trade has increased within the last few years; has it increased notwithstanding the fact that you are prohibited from fishing during the fence months?—We have no oysters brought in here during those months; it is different Essex way.

25,181. I am speaking now of the oyster-fishing at Shoreham alone. I understand you to say it has increased considerably in recent years, but you also say that within the last five or six years there has been no importation of deep-sea oysters during the fence months. What I want to know is whether, notwithstanding that prohibition, the supply of oysters has increased?—No, it has decreased, because we get no supply during the fence months.

25,182. Will you describe to us the system followed here from the time you catch the oysters in the deep sea till the time you send them to the London market?—We begin fishing in September; that is the worst month for deep-sea oysters. In May and June they are in the best condition.

25,183. You begin to catch them in September and you go on during the winter and spring, leaving off at the beginning of May, and as they are caught in the deep sea you bring them in boats to Shoreham. What is done with them then?—We send them to London and to all parts of England.

25,184. When do you begin to take them off the ponds in Shoreham Harbour?—That depends upon the demand for them. Sometimes they are taken off in a day or two.

25,185. Then during the whole season you are sending them from Shoreham?—Yes, during winter and spring.

25,186. Have you yourself been upon the deep-sea oyster beds in mid-channel?—No, I never dredged there.

25,187. You do not of your own knowledge know anything of the state of the beds there?—I only know what has been told me.

25,188. Do these beds continue to yield as largely as ever they did?—Some beds do not, but others do. There are plenty of beds in the English Channel, but where the men are continually dredging there are not so many oysters as there used to be.

25,189. What kind of oysters is brought from the deep sea to Shoreham?—Very large ones.

25,190. They are very different from the natives, are they not?—Yes, they are. Our dredges will not catch small oysters. The rings are $2\frac{1}{4}$ inches and the meshes of the net are 4 inches. They don't take small oysters at all, in fact we don't want them.

25,191. Can you give us any idea of the quantity of oysters that may be brought in here during the fishing season from the deep sea?—I cannot.

25,192. Do you always put the oysters you bring in from the deep sea into the ponds in Shoreham Harbour before you send them to market?—Always.

25,193. You never send them direct from the boats to market?—Never.

25,194. What is the reason of that?—If they are allowed two or three days in the ponds they get cleaner and better.

25,195. Do they spawn in the ponds?—Very little. That is not the time of the year for spawning. We are not allowed to dredge during the summer months, and the spawning season is from the middle of July till the end of August, during the hot weather.

25,196. That is in the deep sea?—Yes.

25,197. Then you do not make it a business to breed oysters here?—No, not at all.

25,198. You merely use your ponds as storing places, that is the sole object?—It is.

25,199. With the view of enabling you to supply the market regularly?—Yes.

25,200. Does that supply go on during the whole summer?—No, we cannot get enough then.

25,201. Which months are the best for the Shoreham oysters?—We say May and June. During those two months if we got more we could sell as many again as at present. Ours are large oysters, and in the warm weather there is a great demand for them.

25,202. Do they remain long in the ponds in the harbour?—That depends upon the state of the market. Sometimes they are one month sometimes two months in the ponds.

25,203. Do the oysters you bring from the deep sea in one season ever remain in the ponds till the next season?—Never.

25,204. They are always disposed of during the same season?—Always.

25,205. To what market chiefly do you send them?—The London market.

25,206. Do they all go to London?—A great many do, but from London they are sent all over the country. I send them to many of the principal towns in England—Manchester, Leeds, York, Hull, Newcastle, and other places.

25,207. Is there any loss sustained in the ponds from frost?—Sometimes there is loss in that way.

25,208. Any serious loss?—Not much, I think, because we have not many oysters at that season.

25,209. Does fresh water injure the oysters in the ponds?—Yes, it does.

25,209*a*. Sometimes loss is sustained from that cause?—Yes.

25,210. You cannot speak of the beds in the Channel from your own knowledge?—No, I cannot; but I daresay there are men in this room who can. I know that if we could dredge for two months longer the ground would be thoroughly cleaned, and then the spat would live.

25,211. How can you tell us that if you do not know the beds yourself?—I know very well what an oyster ground is. If it is clean the spat will lodge on the stones and shells, and will live. But in the summer months, when there is no dredging, a deal of weeds spring up on the ground, and if the spat lodges on weeds it will die.

25,212. What do the fishermen who go to the deep-sea beds say as to their not being allowed to fish after April?—Some would like to dredge one month longer, some two months.

25,213. You mean they would like to dredge in May and June?—Yes.

25,214. Some would be satisfied with May?—They would.

25,215. Because they think an extension of the fishing season over May would be a great advantage to them?—That is it.

25,216. Are the fish in as good a condition in September as in May?—No, they are in a worse condition then.

25,217. The deep-sea fish are not in good condition in September?—No, they are not. Oysters spawn in August, during the hot weather, and they are very weak in September.

25,218. Are they in good condition in May?—Yes, and in June too.

25,219. Then you would think it an advantage if a month were added to the end of the season and taken off the beginning, so that the fishing should commence in October and close in June?—It would be an advantage to the fishermen and to the grounds also.

25,220. Are there any beds near the coast?—There are beds all over the Channel.

25,221. But are there any within three miles of the shore?—No, not to do any good with.

25,222. Do you know the limits of the deep-sea fence months in the Channel?—There are no fence months to the east of the North Foreland.

25,223. Fishing is not allowed during the fence months on this side of the North Foreland?—None at all.

25,224. And there are no fence months on the other side of the North Foreland?—No.

25,225. The existence of fence months on this side is in consequence of the Convention with France?—Just so.

25,226. Are there any Revenue, Custom House, or other Government officers who enforce the articles of the Convention within the prescribed limits?—Yes, there are.

25,227. Do you know where the Essex fishermen get the deep-sea oysters with which they supply their beds during the fence months?—I cannot tell that. I could tell if I saw the oysters.

25,228. But you do not know?—No, because I have never been to see them.

25,229. Could the Shoreham fishermen go upon the same ground to supply themselves during the fence months?—I cannot see why they should not. They are not allowed to bring their dredges in here, but I do not suppose there is any law which permits oysters to be seized, although that was done once.

25,230. The law only allows the gear to be seized?—Yes, but the oysters were seized once, though only once in Shoreham.

25,231. Do you suppose that if anybody were to fish on the oyster beds in the Channel, and then carry the oysters to the other side of the North Foreland, any fault would be found with him?—The Government officer might ask him where he got the oysters, and he might say east of the North Foreland, where there are no fence months.

25,232. Do you think that during the fence months any fish are caught on the grounds closed by the Convention with France?—There is no doubt about that at all.

25,233. Is there any prohibition to your taking dredges in your boats from one part of the coast to another during the fence months?—There is; dredges are not allowed to be taken out of Shoreham from May to September.

25,234. In what respect is that a grievance?—Because the dredges might be used somewhere on the other side of the North Foreland.

25,235. But you are not allowed to take dredges out of this harbour at all during the fence months?—No.

25,236. East of the North Foreland you could take dredges out?—Certainly; but here the cutter takes away the gear.

25,237. Has the price of oysters increased or diminished, or has it remained stationary during the last few years?—It has increased.

25,238. Within the last year or two?—Within the last two years, but particularly last year.

25,239. What was the cause of that?—Because the Frenchmen have been buying so many; the French merchants get nearly all their supplies from English vessels.

25,240. Do the French merchants come to buy oysters in your harbour?—They do.

25,241. Is there any large quantity of oysters sold to go to France?—There is.

25,242. Does it form any considerable proportion of the whole fish caught?—It does; but we are obliged to keep some for the London and other markets.

25,243. Is one half of the whole take sent to France?—No.

25,244. One fourth?—I do not know, but at Newhaven very nearly all the fish are sent to France.

25,245. Has the fact of the French merchants buying so many increased the price?—It has.

25,246. Do your smacks go into the French ports?—The Jersey smacks go, but they won't allow our smacks to go.

25,247. Do you think it would be an advantage to the fishermen here if they were allowed to carry their oysters in their own boats direct to the French market?—They would like of course to go to the best market.

25,248. Would they make the most money if they were allowed to go direct to the French market?—No doubt of it, but the French ports are only open to the Jersey smacks.

25,249. Are the beds which yield the best oysters and the largest quantities, nearer the French coast than the English coast?—I think they are in general.

25,250. Then if the French ports were open to them it would be a shorter run for your smacks?—It would.

25,251. It would also be an advantage to your fishermen to be allowed to go either way according to the wind?—Yes.

25,252. But at present English smacks are prohibited from taking fish into a French harbour?—Yes, to sell them.

25,253. But in point of fact do English fishermen ever take oysters into a French port?—Sometimes they are allowed to take a few in, but there is a duty on English vessels carrying in fish in that way.

25,254. (*Professor Huxley.*) You have said that you yourself dredged many years ago?—Yes.

25,255. How many years ago?—When I was a young man.

25,256. You dredged off this place?—Yes, 39 years ago.

25,257. Did you go to the deep-sea beds?—No, I dredged along the coast.

25,258. At that time were there considerable oyster beds near the shore?—Yes, there were.

25,259. What has become of them?—They are fished out.

25,259*a*. Then there is no oyster-fishing at that distance from the shore now?—None to speak of.

25,260. None of any consequence?—None.

25,261. How far out do your boats go now?—Sometimes 60 miles, sometimes 50. Sometimes they see the English land, sometimes the French, sometimes no land at all.

25,262. Are steam-dredges ever used in the deep-sea fishing?—No.

25,263. You never heard of that?—Never; I don't know what a steam-dredge is.

25,264. Have you never heard of a steamboat being used to drag the dredge along?—That is a different thing. A dredge is one thing, and a steamboat to drag the dredge along is another.

25,265. But have you ever heard of steamboats working dredges?—I have heard tell of them, but never saw them,

25,266. Are they employed on the deep-sea beds at all?—Not from Shoreham.

25,267. Is the weather bad here in October and November?—Yes, sometimes.

25,268. Bad enough to prevent the smacks going out?—Yes; at that period there are short days and long nights; the weather is coarse and bad, and sometimes the smacks cannot go out for a week—sometimes for a month.

25,269. You own a boat yourself?—I do.

25,270. Only one?—Yes; but I used to have more.

25,271. Is your boat as big as the others?—It is as big as any that goes from Shoreham.

25,272. What size is it?—Twenty-seven tons new measurement.

25,273. It is decked, of course?—It is.

25,274. And can keep the sea?—Yes.

25,275. How is it rigged?—It is dandy rigged.

25,276. What is about the cost of a vessel of that kind?—If she were built new and fitted out complete she would cost 600*l*.

25,277. What sort of dredge do you use; what is the weight?—From 35 to 40 lbs.

25,278. The dredge alone?—Yes, the dredge itself.

25,279. How wide is the mouth?—About $2\frac{1}{2}$ feet or 3 feet.

25,280-1. When your smack goes out, how long does she take with a fair breeze to get to her ground?—About six or seven hours.

25,282. How long does she dredge?—In fine weather all the week—till Friday or Saturday.

25,283. She has to keep the sea for a week?—Yes, she has. The smaller boats cannot keep the sea in rough weather, but are obliged to go into harbour. Sometimes they are only out one day.

25,284. That depends upon the weather?—It does.

25,285. But in fine weather they dredge for a week?—Yes.

25,286. Do you put all the oysters into the hold?—Yes.

25,287. Don't they spoil in the hold?—No; in fishing weather they will keep for a week, or even a fortnight.

25,288. Do they dredge at night as well as during the day?—Yes.

25,289. Did you ever hear of an article in the Convention about dredging at night?—According to the Convention they should not dredge after sundown.

25,290-1. Does anybody look after them to see that no fishing takes place at night?—No; it would be a great hardship if they were not allowed to dredge at night. Sometimes they cannot dredge at all during the day, and then they begin, say in the afternoon, and dredge all night. If they were not allowed to dredge at night they would sometimes get no fish at all. The men could not make a living.

25,292. How is the bag of your dredge made?—With iron rings of $2\frac{1}{4}$ in. and 4 in. meshes.

25,293. Does the bag wear out pretty fast?—It does.

25,294. What sort of bottom is it where you fish?—At some places it consists of shells and stones, at others of all sorts of things.

25,295. What is the cost of a dredge?—About 25*s*.

25,296. How many do you use in a season?—I have lost five this season. Others have lost two or three.

25,297. That is by fouling?—Yes, by catching on rocks and such like.

25,298. You would not expect to lose so many from ordinary wear and tear?—No.

25,299. Are the oysters picked when they come on board, or are they put into the hold without culling?—They are picked, and shells and things of that kind are thrown into the sea again.

25,300. Is care taken to catch the right-sized oysters only?—Yes; the rings are $2\frac{1}{4}$ in. and the meshes of the net 4 in.

25,301. But the regulation is that no oyster less than $2\frac{1}{2}$ in. over the greatest diameter of the shell should be taken. Now your rings are only $2\frac{1}{4}$ in. How, then, can you avoid taking small fish?—We find that small oysters always work through the meshes, which are 4 in.

25,302. Does anybody inspect the cargo when it comes ashore?—No.

25,303. So that if there were a few oysters less than $2\frac{1}{2}$ in. nobody would be the wiser?—No, but there are none brought in less than $2\frac{1}{2}$ in. What are brought in are too large rather than too small. We should be glad to see them smaller.

25,304. Why?—Because the large ones don't sell so well. We have sometimes oysters brought in that will not go more than 250 to the London bushel. At some parts of the ground we get them 300 to the bushel, and at others 500 to the bushel.

25,305. How long have they been fishing upon the deep-sea oyster grounds from this port?—About 17 years.

25,306. You have said that the number of smacks fishing in that way is increasing?—Yes.

25,307. How many are there altogether?—I cannot tell. Some go to Newhaven, and some to other places. There may be 300 sail altogether.

25,308. But how many from this port?—I cannot say at present.

25,309. Is the yield of oysters still good?—Yes.

25,310. You don't find any falling off?—No; the men find fresh grounds.

25,311. Are there any complaints of the beds getting fished out in consequence of the increased number of boats?—No.

SHOREHAM.

G. Griggs.

7 May 1864.

25,312. I understand you do not keep the oysters long in the ponds in the harbour?—We do not.

25,313. Is that because the demand is so great?—It is.

25,314. Supposing you were to work as hard as possible during the open months, for how many weeks' demand in May and June could you provide?—Perhaps for six weeks' demand, if all the ponds were full.

25,315. Could your ponds not accommodate more than that?—They could not, but I do not suppose we could get more fish.

25,316. So that the accommodation afforded by your ponds is not enough to allow you to provide for more than six weeks' demand, however hard you might work during the open months?—It is not.

25,317. Could you not get more accommodation?—We cannot get the oysters.

25,318. Supposing you could get the oysters, could you provide more accommodation?—Yes, we could make more ponds; but we do not want to do so, because we cannot get the fish.

25,319. But, supposing it were desirable, could you provide more pond accommodation?—Yes, we could increase the number of ponds.

25,320. Could you make as many as you might want?—I suppose so.

25,321. By employing more smacks could you not get almost as many oysters as you like from September to April?—We cannot get more smacks; the number is greatly increased.

25,322. Supposing the present regulations were to remain in force, would it be possible to increase the number of ponds and to stock them sufficiently to provide for the summer demand?—No, because we could not get the oysters. We have a great quantity to send to the London market, and, besides, the Colchester men take a great many away.

25,323. If the Colchester men can come here and fish in the deep sea, carrying the oysters to their own beds, why cannot you go to their grounds for a supply for your ponds? Supposing a smack were to come in laden with oysters during the fence months, would the cargo be seized?—I don't know. We have never tried the question since the order came down from the Custom House to seize the oysters.

25,324. Surely, with the great demand for oysters, it is worth while ascertaining the state of the law?—We are all poor people, and cannot stand against the Government.

25,325. All that has been done hitherto has been to seize the dredges?—Yes.

25,326. No oysters have been seized here?—Only once, and no oysters have been brought in since.

25,327. There were oysters seized once?—Yes.

25,328. How long ago?—About six years ago.

25,329. By whose orders?—By the orders of the Custom House people. They took the oysters out of the vessel.

25,330. Did nobody think it worth while to try the legality of that?—No, and not a word has been said about it since.

25,331. So you feel yourselves prevented from landing oysters here during the fence months?—We do.

25,332. And your great complaint is that just round the North Foreland, your fellow countrymen are not prohibited in the same manner?—Yes.

25,333. And can compete with you at an advantage?—Yes; they are allowed to take out their gear and we are not.

25,334. (*Mr. Caird.*) Are you quite certain that is the case?—Yes.

25,335. Have you any proof of it?—I have been told of it.

25,336. Do you know whether the Frenchmen fish much upon the deep-sea beds?—I think they always close at the beginning of May.

25,337. But during the open months do they frequent the beds much?—Yes.

25,338. Are there as many French boats on the beds as English ones during the open months?—I do not believe there are, but there are some men here who can speak to that better than I can do.

25,339. Do you know whether the people of any other nation fish upon these beds?—I do not know.

25,340. Are there any Dutchmen?—No, I think not. I never heard tell of any but Frenchmen and Englishmen in the Channel.

25,341. You sell the oysters by the bushel?—Yes.

25,342. Do you know how many natives there are in a bushel?—From 1,400 to 1,600.

25,343. And what is the price at present?—70*s.* or 72*s.* the bushel.

25,344. Are the Jersey oysters intermediate between the natives and the Shoreham oysters?—Yes, but we get no Jersey oysters now.

25,345. The Shoreham oysters run from 250 to 500 in the bushel?—Yes.

25,346. What is the price per bushel of the Shoreham oysters at present?—7*s.* 6*d.* and 8*s.* The price varies according to the quality.

25,347. Do you mean that natives bring 70*s.* or 72*s.*, and Shoreham oysters only 7*s.* 6*d.* or 8*s.*?—Yes, here.

25,348. Take the London market?—In London the Shoreham oysters may bring 10*s.*, but that is on account of the expense of getting them to the London market.

25,349. In London Shoreham oysters bring 10*s.* per bushel and natives about 70*s.*?—Yes. There are some kinds of oysters which bring from 20*s.* to 25*s.* the bushel.

25,350. Shoreham oysters vary in size from 250 to 500 in a bushel. Is there much difference in quality?—There is not.

25,351. Are the smaller better?—They are no better in quality, but they are better for the retailers.

25,352. And therefore fetch a higher price?—Yes, perhaps 1*s.* more. The people who sell oysters two or three for a penny will give more for small oysters than for large ones, buying them by the bushel, because there are more of them.

25,353. Has it been a prosperous business for the fishermen here?—Yes, very good this spring, because the prices have been good. Some have done well, but others not so well.

The witness withdrew.

S. Saunders.

SAMUEL SAUNDERS called and examined.

25,354. (*Mr. Caird.*) You are the harbour master here I understand?—Yes.

25,355. Have you been long here as harbour master?—I think it is now 22 years.

25,356. Can you tell us the number of boats engaged in the oyster fishery that frequent this harbour?—No, I cannot.

25,357. Nor the number of fishermen engaged in oyster-fishing?—No, we do not keep a register of the number of boats or fishermen. We only keep a register of the vessels which pay the dues. We keep a register of all the vessels which pay the dues. Fishing vessels are exempt from paying dues.

25,358. The fishing vessels pay no dues here at all?—No, but I think they do at the Custom House.

25,359. (*Professor Huxley.*) They are registered at the Custom House I suppose?—I think they are, but I am not able to state precisely; the Coastguard, however, knows the whole of them.

25,360. (*Mr. Caird.*) Have you no means of ascertaining the number of boats or of men engaged in the oyster-fishing here?—No, none at all.

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25,361. Are you able to say whether the number of late years has been increasing or diminishing?—I should say that it has been increasing.

25,362. Has it increased much within the last five or six years?—It has increased within the last two years, and I think also for some years previously.

25,363. To what cause do you attribute that increase?—I can hardly say, unless it is owing to the greater demand for oysters.

25,364. Have they fetched a better price?—Yes, and this has induced other people to take part in the fishing.

25,365. Has there been a larger importation of oysters from the deep sea?—Yes, much larger.

25,366. Is it still increasing?—I should say that it is, I judge so from the number of beds we have here.

25,367. The number of beds here are increasing?—Yes.

25,368. Are they increasing every year?—Yes.

25,369. Is there still plenty of space for the further increase of the beds?—There is not a very great deal of space. There is a little on the eastern branch, but there are not many good places on the western branch beyond those which are at present occupied.

25,370. Can you yourself give us any information as to the advantage of allowing the oyster-fishing to be continued here during the month of May?—I am not practically acquainted with the question, but I know what the opinion of practical men is.

25,371. What is their opinion?—They all seem to agree that no harm would be done by extending the months for fishing so as to include the month of May.

25,372. You have no knowledge upon the subject yourself?—No, I am not practically acquainted with it.

25,373. Is it within your knowledge that the oyster-fishing here has been a prosperous business for the fishermen?—I think it must have paid our people, or they would not have embarked in it as they have done.

25,374. Are there a good many boats coming from different parts of the coast and engaging in the fishing?—Yes, the number has increased in that way.

25,375. Have you ever heard any of the fishermen complain that while they are prevented from fishing, in consequence of the fence months maintained here, the oyster fishermen to the east of the Foreland are able to continue their fishing?—Yes, I have heard such complaints. I have heard them say that they are prevented from fishing at a time when they could manage to catch very good oysters. I have no doubt that the French people watch them pretty narrowly, but I suppose that they sometimes dredge during the night and escape them in some way. If they succeed in passing the Foreland they get clear altogether.

25,376. I understand that of your own knowledge you do not know anything of this?—No.

25,377. (*Professor Huxley.*) Do you know of any other kind of fishing being practised here except oyster-fishing?—There is very little indeed of any other kind of fishing.

25,378. Have you no hook or line fishing?—No.

25,379. Is there any herring-fishing?—There are some boats which belong to Brighton and Hastings which occasionally frequent this harbour in bad weather.

25,380. But you have no boats belonging to this place which are regularly engaged in herring-fishing?—No, I think not.

25,381. (*Mr. Caird*) Are there any salmon in this river?—No.

25,382. (*Prof. Huxley.*) I understand you to say that there has been a great increase in the oyster-fishing here, and that the prices obtained for the oysters are higher than they were in former years?—Yes.

25,383. Do you think that the railway has had anything to do with the increase of the oyster-fishing?—Yes, I think it has.

25,384. The railway station here must have afforded immense facilities for transporting the oysters to London and other towns in the interior of the country?—Yes.

25,385. How long have you had a station here?—About 22 or 23 years.

25,386. As long as that?—Yes, I suppose the line we have here was the first portion opened; it was opened before the main line was completed.

25,387. How long has there been a regular run up to London from Shoreham?—About 20 or 21 years.

25,388. A great increase in the oyster trade has taken place here within the last 16 or 17 years?—Yes, or even less than that.

25,389. Within what length of time has an increase been noticeable here?—Perhaps within the last 15 years. I think this will be the fifteenth year.

25,390. (*Mr. Caird.*) Can the large smacks come into your harbour at any state of the tide?—No, not at low-water. Perhaps at low-water neap tides they might be able to get in.

25,391. Is this the only harbour along the coast that they could take at high water or at half tide?—I think there is about the same depth of water at Newhaven as we have here, but at Littlehampton there is not so much.

25,392. Is there no harbour into which these smacks could put nearer than Newhaven?—No.

25,393. Then I presume that naturally, from its position as a harbour, it is able to command a large proportion of the deep-sea oyster-fishing?—We have greater room here for laying oysters down after they are brought in than they have at Newhaven or Littlehampton. In those harbours there is very little space that can be adapted for such a purpose.

25,394. You have peculiar facilities here for that purpose?—Yes.

25,395. The tide runs up a long way inland?—Yes, we have a great deal of room here, and we have therefore made beds upon which we lay the oysters down. In doing this the people interested in the oyster fishery here have not interfered with the navigation. The Navigation Commissioners, I believe, gave their permission to the formation of the beds, provided that the navigation was not interfered with.

25,396. Do you think that the facilities you have for forming oyster beds increase the oyster fishery here?—Yes, there can be no doubt of that.

25,397. Together with the convenience of your harbour?—Yes.

25,398. I suppose it is a safe harbour to run to?—Yes, it is very safe indeed.

25,399. What depth of water have you in the harbour?—There are about 15 feet of water in the harbour at high-water neap tides, and about 20 feet of water during spring tides.

25,400. Your boats are engaged in the oyster-fishing during the winter?—Yes.

25,401. Are there many boats lost when so engaged in the winter months?—I think not.

25,402. Then there is not much loss of life or property in connexion with the oyster fishery?—I never heard of much. There are very few boats lost from this place.

25,403. Are they good sea boats?—They are most of them very nice little craft indeed.

25,404. I understand you to say that of your own knowledge you do not know anything with regard to the mode of fishing practised in the Channel oyster fishery?—Nothing whatever; I have never been engaged in it practically.

The witness withdrew.

S. Allen.

Samuel Allen called and examined.

25,405. (*Mr. Caird.*) You are the master of a dredge-boat, are you not?—Yes.

25,406. Have you had considerable experience in connexion with the oyster-fishing?—I have been engaged at it all my life, ever since I was 13 years old.

25,407. What is the tonnage of the boat of which you are master?—25 tons.

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25,408. Is it a decked boat?—Yes.

25,409. How many men have you on board of her as the crew?—Six altogether; there are five besides myself.

25,410. Is that the usual crew of an oyster-boat?—Yes, we generally carry six at the oyster-fishing.

25,411. But yours is rather a small-sized boat, is it not?—No, it is a fair size.

25,412. What is about the average tonnage of the oyster-boats at Shoreham?—They average from 20 to 25 and 27 tons.

25,413. Have you nothing larger than that?—No.

25,414. You are giving me the tonnage according to the new measurement?—Yes. Some of them would be 50 tons by the old measurement, and 27 tons according to the new measurement.

25,415. Whereabouts in the Channel are the other beds where you get the most successful fishing?—They extend from Beachy Head over the deep sea, right across the Channel, and from the Isle of Wight to Havre.

25,416. Within what distance of Beachy Head are you able to find oysters?—About 20 miles sometimes; sometimes 25, and sometimes 30.

25,417. Is there any particular place in the Channel where you can go to and always be quite sure of finding oysters?—No, we have to look about for them until we find them.

25,418. If, for instance, you go out between Beachy Head and Dieppe are you sure to come across them?—Yes, we should be almost certain to find oysters somewhere or other.

25,419. Are you in the habit of constantly changing your ground when you are engaged in the oyster-fishing?—Yes, almost every week we are fishing at different places.

25,420. Do you not go much east and west of the line which you mentioned just now?—No, we do not go much east of Beachy Head.

25,421. Do you go far to the west?—Yes, we go a long way sometimes to the west.

25,422. How far west do you go?—Down to the Isle of Wight.

25,423. How far off the land?—From 22 to 23 or 25 miles.

25,424. Now in all parts of the Channel, from Beachy Head to the Isle of Wight, can you find oyster beds?—Yes.

25,425. Are they very plentiful?—In some places they are, and in other places there are none. Occasionally we come upon a sandy bottom or beds of stone where there are no oysters, but in other places we find them very plentiful.

25,426. Do you think that there are many oyster beds in the Channel which neither you nor anybody else has yet happened to come across when you have been fishing?—Yes, there are plenty of oyster beds in the deep sea which have not yet been fished; there can be no doubt of that.

25,427. Do you find that you are at all exhausting the beds now?—I do not see much difference in them.

25,428. Are you getting as many oysters now upon the beds you frequent as you have been in the habit of getting?—Yes.

25,429. Do you get more now than you did in former years?—No, I do not know that we get more, but we get quite as many.

25,430. You have noticed no falling off?—No, we can get as many now as we were able to get 10 years ago.

25,431. Are there more boats going now to the oyster fishery than there used to be when you first commenced?—Yes, there are a great many more than there were some years ago. All the Jersey fleet come to fish in the Channel now, and a few years ago there were none.

25,432. Why do the Jersey boats go there?—The Jersey grounds have all been a loss of late years, and they therefore come into the Channel where we fish.

25,433. How many boats are there engaged in fishing on these grounds altogether?—I can hardly say, but there will be as many as 300 sail in the course of a season.

25,434. Are many of them French boats?—I am not speaking of the French boats, I do not include them in that number.

25,435. Are there many French boats fishing on the same ground?—Yes, a good many.

25,436. How many?—200 sometimes.

25,437. Besides the 300 English boats?—Yes.

25,438. Then there will be 500 altogether?—Yes, I daresay there will be, French and English altogether.

25,439. Are the French boats of the same size as those which you use?—No, they are generally larger.

25,440. How much larger are they?—Some of them will be boats of 100 tons.

25,441. Are they more successful in the oyster-fishing than your boats?—No; they do not catch as many oysters as we do.

25,442. Then do you think that there is a larger supply caught in the English Channel by Englishmen for the English market than there is caught by the Frenchmen for the French market?—I do not know.

25,443. Do the French boats use the same description of dredges that you use, or are they different?—Some of them use the same kind of dredge and others do not. Formerly they were all different, but of late years they have had dredges similar to ours.

25,444. Have they been gradually getting rid of the old dredges and having others of the same description as those you use?—Yes. Some of them have had dredges made at Shoreham and sent over to France.

25,445. Just the same as yours?—Yes.

25,446. Is yours a handier kind of dredge than theirs?—Yes, it is handier for us. We should not like to be obliged to use the one they have.

25,447. Are their dredges very cumbersome?—They are very large and bad to manage as compared with ours.

25,448. Do they catch more oysters with them than you do with yours?—I do not know. I don't think they do; but I am not able to say whether they do or not correctly.

25,449. Do you ever dredge for oysters during the night-time?—Yes; if we did not dredge at night we should find it very difficult at times to get a living.

25,450. Do you catch more at night than you do during the day?—No.

25,451. Do you continue dredging as long as you remain out on the fishing grounds, whether it is day or night?—Yes, we keep at it as long as we can.

25,452. How long are you out altogether?—Do you mean on each voyage?

25,453. Yes; how long on the average, when you leave the harbour and go to the fishing, do you remain out at sea?—All the week if the weather is fine, we go according to the wind and weather.

25,454. When you remain out as long as a week at a time do the oysters keep in perfect order all the time?—Yes, we bring them in alive and fresh.

25,455. Do you keep any water in the hold for the purpose of keeping the oysters in good condition?—No.

25,456. I believe you commence with the oyster-fishing in the month of September?—Yes.

25,457. Do you find that the oysters are in good condition then?—No, they are not.

25,458. When do they begin to get in good condition?—Not until the next month.

25,459. The month of October?—Yes.

25,460. What are your best fishing months?—We think the best fishing months are two of the summer months, when we are not allowed to fish, May and June.

25,461. Do you go on fishing for oysters during the whole of the winter months, from September until the end of April?—Yes.

25,462. Which of the months on the whole is most productive of oysters? Have you observed any particular difference, taking one month with another?—

When we first begin the oysters are not as good as they are afterwards.

25,463. Do they get better as the season progresses?—Yes.

25,464. Do they also become more plentiful?—No, they are not more plentiful.

25,465. But they get better in quality?—Yes. When we first commence fishing in September the young oysters have not sufficient strength to enable them to live if they are taken up, nor at that time are they fit to sell or to eat.

25,466. In the month of October are they better in quality?—Yes, they are a great deal better then.

25,467. Do they continue to get better as the season goes on?—Yes.

25,468. And when are they best?—Now.

25,469. Are they best just when it is about time for you to stop fishing for them?—Yes. During this month and next the oysters we get are as good as they are at any time of the year.

25,470. Have you ever fished for them in the month of May?—Yes.

25,471. And have you found them then in good condition?—Yes, as good as at any time.

25,472. Have you taken any up in the month of June?—Yes.

25,473. You are not allowed now to fish for them in the months of May and June?—No; we are prevented from oyster-fishing then, but we think the restriction ought to be taken away.

25,474. Have you ever seen the French fishermen fishing upon the oyster beds during the months of May and June?—No.

25,475. Do they never go out then?—No.

25,476. Then the same regulation applies to their fishing as to yours?—Yes.

25,477. Have you ever seen any foreigners fishing on the fishing grounds except the French? Have you seen any Dutch boats there?—No.

25,478. Have you of late years seen any English boats fishing on the fishing grounds to which you go during the months in which you are prohibited from fishing?—No.

25,479. Have you been there during the months you are not allowed to fish?—Yes.

25,480. And you have seen no boats there?—No; I have not been fishing during the months of May, June, July, and August for the last 10 years.

25,481. You have not been out to the oyster-fishing during the four summer months?—No.

25,482. It has been stated to us that there are fishermen who come from other parts of England where there is no prohibition as to taking the dredges out, and who fish with their boats during the fence months. I want to know if you are aware whether that is the fact or not. Have you ever seen anything of the kind?—Yes, I have seen them.

25,483. What have you seen?—I have seen them at work.

25,484. You have seen them fishing during the fence months?—Yes.

25,485. When?—Last summer.

25,486. Where did the vessels come from that you saw fishing?—They came from Colchester, and they were catching oysters just off Brightlingsea Creek.

25,487. How many vessels were there?—From 50 to 70 altogether.

25,488. Were they fishing on the same ground on which you are in the habit of fishing?—Yes.

25,489. And during the time that you were prohibited from fishing?—Yes.

25,490. Could you not have gone out and have fished as well as they?—We had the same chance to do it as they had.

25,491. But you did not do it?—No. This is our home, and we do not wish to get the oysters when they ought not to be taken. On the contrary we want to get them here.

25,492. Was there any French authority upon the oyster-banks to look after the interests of the fisheries?—Yes.

25,493. Did they interfere with the fishermen who were fishing contrary to the law?—Yes; they took away one vessel that was fishing there.

25,494. Do they cruise on the fishing-banks during the summer when oyster-fishing is not allowed?—Yes, they did that week.

25,495. And you say that one vessel was seized?—Yes, they took one vessel.

25,496. What was the consequence, did the rest stop fishing and go away?—Yes; the rest got their dredges up and got away as they could.

25,497. Did they not go back again?—They went back again the very next week.

25,498. Then they would be quite aware that they were running a risk in continuing, and that they were liable to be taken?—Yes, they knew that well enough.

25,499. Do you know anything of the state of the grounds upon which the oysters are dredged on the fishing-banks?—I know that the cleaner the ground is kept the better the oysters are, and the sooner the spat takes.

25,500. If the spat falls upon clean ground it adheres and lives?—Yes.

25,501. Under other circumstances it dies?—Yes.

25,502. How is the ground kept clean?—By constantly working over it.

25,503. With your dredges?—Yes.

25,504. Can you not over-work it?—I do not think we can.

25,505. Are you able to say whether in the course of your experience there is any part of the Channel, upon which you have been in the habit of fishing, which has been over-worked, and has in consequence fallen off in the yield of oysters?—No, I think not.

25,506. Do you know anything about the Jersey beds?—No; but I believe there are no oyster beds there now worth speaking of. The Jersey oysters are all caught and lost; that is the reason why the Jerseymen have come to fish upon the grounds where we go.

25,507. You cannot of your own experience tell us anything of the Jersey oyster beds?—No.

25,508. Have you not been there?—No.

25,509. You say that the ground ought to be kept clean?—Yes.

25,510. The object of that is to increase the supply of oysters on the beds?—Yes.

25,511. Can you tell us that from any experience of your own?—If the spat falls upon dirty ground of course it will not live.

25,512. How does the ground get dirty?—The dirt settles down from the water; it settles upon the bottom.

25,513. Do you think that it would increase the supply of oysters if you were allowed to dredge on the beds during what are called the fence months?—Yes.

25,514. Would you suggest that dredging should go on during the whole of the fence months?—No; only for two out of the four months.

25,515. Do you mean May and June?—Yes.

25,516. Are you able to say from your own knowledge that the oysters in the deep sea do not spawn earlier than July?—I do not think that they do spawn before then.

25,517. Do you think that they spawn earlier in shallow water?—Perhaps they may in shallow water, but I have been speaking of the deep-sea oysters.

25,518. Have you ever observed, from the state of the oysters when they have been caught in the month of June, that they are not likely to spawn until July?—I have never seen any that were in a condition to spawn before July.

25,519. Have you never caught any in June that had spawn in them, and were ready for spawning?—No.

25,520. You say that when you catch them at the commencement of the open season, in the month of September, they are in poor condition?—Yes.

25,521. Do you agree with the previous witnesses, that it would be an advantage to you, and also to the French fishermen, if the month of May were made an

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open month, and the month of September were made a fence month?—Yes; I think that would do us a great deal of good.

25,522. You think it would be an advantage to everybody concerned in the oyster-fishing?—Yes.

25,523. To the French fishermen as well as to the English?—Yes.

25,524. Have you ever taken your boat into a French port?—I have been in a French port.

25,525. Have you ever sold your oysters in a French port?—Yes.

25,526. Have you been at Dieppe?—Yes.

25,527. Have you sold oysters there?—No.

25,528. Could you not have sold them there?—No.

25,529. Would the French law have prevented you?—Yes.

25,530. Would it be of advantage to you as a fisherman to be able to go into the French ports and sell your oysters there?—Yes; I think it would.

25,531. Would it be of advantage to you if the French fishermen were allowed to come here and sell their oysters, and you were permitted to go into French ports and sell yours there?—Yes; I should not object to that.

25,532. You think it would be of advantage to you?—Yes.

25,533. As an English fisherman you think you would be all the better for such a change being made?—Yes.

25,534. Do you sell any of your oysters to the French oyster merchants?—No, I never have done so.

25,535. Do you find that any of the French oyster merchants come here to buy oysters?—Yes.

25,536. Have they bought them of any of your neighbours who are fishermen?—I believe they have at Newhaven, but not at Shoreham.

25,537. Is it not the case that the demand for oysters in France has increased the price of oysters here?—Yes, I believe it has.

25,538. Is it not the case that the increased price you are now able to obtain for your oysters has arisen in consequence of the French oyster merchants giving you a higher price here?—I have no doubt that the reason we have been able to get more money for our oysters is that the Frenchmen have been in the market for them.

25,539. Do you know what the Frenchmen do with the oysters when they take them, do they lay them down on beds the same as you do here?—Yes, I believe they do.

25,540. They are never taken to the market direct, any more than they are here?—No; they lay them down on beds.

25,541. Are the oysters when you catch them in the deep sea unfit to be sent at once to the market?—Yes.

25,542. They are not fit to be sent to the market for consumption until after they have been laid down upon the beds for a short time?—No; they require to be laid down upon the beds first.

25,543. What change takes place in them after they have been laid down on the beds?—The laying of them down cleans them I believe.

25,544. Is that always done when the oysters are brought in here?—Yes.

25,545. You never sell your oysters to go into the market direct?—No.

25,546. (*Professor Huxley.*) Do you find a ready sale for the oysters you bring in here in the month of September?—Yes.

25,547. You can sell them all, as many as you can bring in?—Yes.

25,548. Notwithstanding the fact that at that time they are out of condition?—Yes; we can always find a sale for them.

25,549. Do you get as good a price for them then?—No; they never bring as much when we first commence catching them.

25,550. What difference is there in the price then as compared with the price you get later on in the season?—About a shilling a tub.

25,551. When you speak of their being out of condition do you mean that they have not got into good order after spawning?—Yes.

25,552. How do you know that the oysters in May or June are not spawning?—I never saw any that were spawning then.

25,553. Have you opened them yourself at that time?—Yes.

25,554. Are you in the habit of eating many of them?—I have opened some sometimes, but I never found any that were spawning.

25,555. Could you get as good a price for oysters here in May and June as you could at any other period of the year?—Yes.

25,556. The oyster merchants would not give you a less price for them?—No.

25,557. Have you any notion of what takes place when the oysters are spawning?—No.

25,558. Have you ever seen the spawn in the inside of the shell when you have opened an oyster?—I have seen the oysters what we call "sick" when I have been opening them.

25,559. At what time of the year has that occurred?—Generally in the height of the summer, in the hottest part of the weather.

25,560. Did you ever notice the spat when it was young?—Yes, on the shells.

25,561. But not swimming about in the water?—I have never seen that to know it.

25,562. Have you ever heard of that being the case; have you heard anything said about the spat rising to the surface after it is exuded from the shell?—I have heard people talk about it, but I never saw it.

25,563. How many men are there in the crew of your boat?—Six, five besides myself.

25,564. That is the master and five men?—Yes.

25,565. How do you arrange with regard to the profit of the boats, do the men receive wages?—We do not pay wages, the men go by shares.

25,566. How do you arrange the shares?—There are eight shares in all.

25,567. How are they divided?—The vessel takes two shares, and there is a share for each of the men who go with the boat.

25,568. What does the master of the boat get?—Only a share like the other men.

25,569. He only shares with the rest?—Yes.

25,570. He gets nothing extra on account of having the management of the boat?—No, the shares are all equal.

25,571. Do you work with one dredge down at a time?—We work with four dredges; we keep heaving them up and then putting them overboard again.

25,572. You have altogether four dredges?—Yes.

25,573. Where do you heave them out, on the two quarters?—One at the stern and one at the bow.

25,574. Then you work two at the stern and two at the bow?—Yes.

25,575. Do you work them both on the weather and on the lee side?—No, they are both heaved overboard to windward if we can get them there.

25,576. At what sort of rate do you go when you are dredging?—Never very fast.

25,577. Can you do two knots?—No.

25,578. Not so much?—No, we do not want to do as much as that.

25,579. Is one knot enough for you?—Yes.

25,580. Do you haul the dredges up in turns one after the other?—Yes.

25,581. Does it take as much time to get one clean as it takes to get another up?—Yes.

25,582. Do you have a capstan to haul the dredge up with?—No, we use a winch.

25,583. How long does it take to take up a dredge?—Sometimes it takes about 20 minutes.

25,584. What is the depth of water in which you dredge?—About 22 or 23 fathoms and sometimes 24.

25,585. If you get foul with a dredge of the size you generally use I presume that you carry away

your ropes?—We carry away the hoop and lose the dredge; sometimes we bring up.

25,586. How many dredges do you expect to lose in the course of a season?—That all depends upon whether we get caught fast or not. We can never tell when that is going to happen. We have lost four this season; some have lost more and some have lost less.

25,587. Then the loss you sustain in that way does not add a very great item to your expenses?—No.

25,588. The cost of a dredge here is 25*s*. I believe?—Yes, about that.

25,589. Does the smack generally belong to an owner ashore or to the men who fish with it?—Generally to an owner ashore.

25,590. Then he takes two shares, I suppose, as payment for the use of her?—Yes.

25,591. Do you work with the tide or under sail?—With the tide and under sail too.

25,592. Will there be enough tide for you out where you are in the habit of fishing?—Yes, and very often too much.

25,593. You have very strong tides towards the southward?—Yes, the spring tides are very heavy.

25,594–5. Do you ever work against the tide?—No.

25,596. Do you work with the tide for one six hours?—Yes.

25,597. How much ground will you cover in that time, a good many miles, I suppose?—Yes, but I have taken no account of the space we cover.

25,598. Perhaps six or seven miles?—Not as much as that.

25,599. Do you work up to the next tide?—Yes, and then come back again to the next tide.

25,600. Are you careful to pick your oysters and throw the small ones overboard?—Yes; it would be of no use to bring the small ones here. We want nothing but what is fit for the market.

25,601. The oysters which you consider fit for the market are large ones?—Yes.

25,602. Have you any notion how long it takes for an oyster to grow until it becomes fit for the market?—No.

25,603. What is the common opinion about it?—It takes about four years I believe. When you first see the spawn it is like a tallow-drop.

25,604. (*Mr. Caird.*) Are you aware that it is forbidden to dredge for oysters between sunset and sunrise?—No.

25,605. Was there never any authority here that enforced such a restriction as that upon you?—No.

25,606. Has no one ever given you any information that that is the state of the law?—No.

25,607. Would it be very injurious to you as fishermen to have such a restriction enforced?—It would be a very bad law, I think, if it was carried out in regard to the fishing in the Channel.

25,608. You consider that it would be very injurious to you?—Yes.

25,609. Do you fish night and day as the weather suits you?—Yes, and sometimes even then we do not get a day and night's work in the course of a week.

25,610. Then it would be a great hardship to you if you were obliged to take up your dredges at sunset?—Yes, we don't want to be compelled to do that.

25,611. You are aware that there is such a regulation?—Yes.

25,612. And suppose it were enforced and you were obliged at sunset to haul up your dredges, would you not be obliged to come ashore or to lay-to all night?—Yes.

25,613. You would therefore lose your time?—Yes.

25,614. What possible benefit could arise from the enforcement of that prohibition against fishing after sunset?—I do not know. As it is we can only fish now and then in the Channel.

25,615. It does you good to be allowed to fish both night and day?—Yes; I believe that those regulations are intended to apply only to the inshore fishers. They are supposed to begin at sunrise and to leave off at sunset.

25,616. The inshore fishers?—Yes.

25,617. But I take it to be a rule that applies equally to all oyster fishers?—Yes, but ours is a very different kind of fishing. That is a regulation intended to apply to fishermen who were engaged in a different description of oyster-fishing before the deep-sea Channel fisheries were found out at all.

25,618. (*Professor Huxley.*) Are you obliged to carry any particular light?—Yes.

25,619. You are always practically at anchor?—We always light up at night.

25,620. When you are dredging you are practically as good as anchored?—Yes, and we always have a bright light then.

25,621. Where do you hoist it?—On a ring.

25,622. At your mizen?—Six or seven feet above the deck.

25,623. On a post of its own?—No, on the vessel's rigging.

25,624. In any particular place?—No.

25,625. You have no particular regulation with regard to that?—No.

25,626. How long have you been engaged in fishing on the deep-sea beds?—About 13 years.

25,627. Is that as long as they have been known?—No, not quite.

25,628. How long have they been known?—About 17 years.

25,629. Were they known as far back as the year 1839 or 1840?—No, I think not.

25,630. Have they fished in this part all along within that time?—I do not know. That is before my time.

25,631. (*Mr. Caird.*) Are you aware whether the French oyster merchants sometimes meet the oyster boats at sea and buy the fish before they are landed at all?—I do not know of that.

25,632. You have never seen it?—No.

25,633. Can you tell us at all what extent of ground in miles these Channel oyster beds cover?—No, but they extend from Cherbourg up to Dunkirk and all over in different places.

The witness withdrew.

JAMES HEDGETHORN called and examined. *J. Hedgethorn.*

25,634. (*Mr. Caird.*) You are an oyster merchant here I believe?—Yes.

25,635. Have you also been practically engaged in the oyster-fishing?—Yes, ever since I was nine years old.

25,636. Have you been in the habit of fishing on the Channel oyster beds?—Yes; but I have not been in the Channel fishing for some years. I have only been connected with the oyster beds here as an oyster merchant.

25,637. Have you been engaged in fishing upon the oyster beds where the deep-sea oysters are caught?—I was fishing in the deep sea for oysters 35 years ago off Beachy Head.

25,638. Are they the same beds which are now being fished?—Yes, I have no doubt of it.

25,639. Are the beds yielding as many oysters now as they did at the time of which you speak, namely, 35 years ago?—We could get plenty of oysters 35 years ago. I have gone for one whole tide over a distance of 15 or 20 miles, driving the whole tide with a dredge full of oysters off Beachy Head.

25,640. Then do you think that there was a more plentiful supply of oysters then than there is now?—I do not say that. We could always get our dredge full then, and I believe they can do the same now.

25,641. Then the supply now is about the same as it was at the time of which you speak?—Yes, pretty much about the same.

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25,642. Are you able to tell us over what extent of the Channel the deep-sea oyster beds are to be found?—They cover a very wide extent. I can hardly give you any limit. I have known the people go out from here when I was here 12 or 14 years ago in great numbers. There would be 60 or 70 sail lying in this harbour at one time, and when they went out to the oyster-fishing I question very much whether they would see one another so as to know each other until they came back again from the fishing.

25,643. Do you mean by that that after they leave the harbour they spread about so much?—Yes.

25,644. What distance will they cover?—I can hardly tell you.

25,645. Can you not give a rough guess? Will it be 20 or 30 miles?—Yes, and more than that; many of the fishing boats will be 30 or 40 miles apart.

25,646. You are speaking now of 12 or 15 years ago?—Yes.

25,647. Does the same thing occur now?—Yes, new oyster beds are being constantly found.

25,648. New beds are frequently found in the Channel?—Yes. Only this last year there were oyster beds found in the Channel which were not known before.

25,649. Are you able to say from your own knowledge and experience that the supply of oysters in the Channel is increasing?—Yes, there are more oysters to be found in different places now than ever we knew of before. At one time there was only one place to go to for catching oysters, but now they go all over the Channel. The boats that are out fishing can get oysters in sight of the French land and in sight of the English land too. They are all over the Channel.

25,650. Do the French and English boats fish together?—Yes, sometimes.

25,651. Do the French and English boats fish indiscriminately all over the Channel?—I believe that the French fishermen keep more to their own side than the English do.

25,652. Do you know whether the number of boats fishing from this place has much increased of late years?—No, I think not.

25,653. Has there been any decrease in the number of boats?—More boats were in the habit of using this harbour 14 or 15 years ago than we have now. There has, however, been a considerable increase lately.

25,654. What is that owing to?—To the Jersey fishermen.

25,655. Do the Jersey boats come here?—Yes; the fact that the Jersey oyster grounds have been lying dormant for the last few years has caused the whole of the Jersey fleet to come here, and we get so many of their boats now that perhaps altogether there are rather more boats that come here now than did before.

25,656. Do you know anything of the Jersey fishing?—Yes, I have been there often. I have been acquainted with the Jersey fishing, in fact, all my life.

25,657. I understood you to say that the Jersey grounds are lying dormant?—Yes.

25,658. What is the cause of that?—I believe it is owing to the regulations which have been put upon the fishing.

25,659. Do you think that the law which is enforced there for the regulation of the oyster fisheries has worked injuriously?—Yes. I think if the French people were to allow the English vessels to dredge at Jersey for so many months in the year, and were simply to see that they threw overboard all the small oysters they took up in their dredges, there would always be plenty of oysters, and so there would be everywhere else if that was done.

25,660. What in your opinion is the mode in which the fisheries have been injured?—I think myself that the Kentish companies who go there do a great deal of harm. They go there and buy the brood at 2*s.* 6*d.* and 5*s.* a tub. They will take anything. They buy them as small as the fishermen can get them.

25,661. What do they do with those small oysters?—They carry them away to their own place.

25,662. Do they lay them down on beds of their own?—Yes, they carry them away and lay them down on private grounds in August and September.

25,663. Do they improve upon those grounds?—Yes, they grow there and remain until they are ready to be taken to the market.

25,664. Then it is not from any restrictions with regard to setting apart certain months as fence months that the falling off has taken place?—No.

25,665. Have there been any new restrictions enforced with regard to the Jersey oyster beds?—No.

25,666. What falling off has really taken place there?—In my opinion the falling off has taken place in consequence of the ground not being so well cultivated as it ought to be.

25,667. I am not asking why. How many years back is it since there was a good fishing at Jersey?—About seven years ago I took 20,000 bushels of oysters there and sent them over to England.

25,668. Did you take that quantity yourself?—Yes.

25,669. Then seven years ago there were plenty of oysters there?—Yes, but there are very few there now. Seven years ago we could get a dredge full of oysters there at any time.

25,670. There are not plenty to be found there now?—No; there are not many there now, and the grounds will all be lost if something is not done to re-establish them. I have no doubt myself that if the grounds there had been worked as they ought to be there would have been plenty of oysters now, and the ground itself would be more likely to take the spat than it is now.

25,671. Why would the ground be more likely to take the spat?—When the ground is clean the spat has a much better chance than when it is dirty. If the spat falls on a clean piece of shell it will live. The spat will readily adhere to anything if the ground is only clean. In Harwich Harbour I have found five or six spat on an old bottle or a piece of an old hat, or anything.

25,672. The spat has a much better chance of living if the ground is kept clean?—Of course. If it falls on anything clean it would set, but if it falls on a filthy dirty piece of ground there is no doubt that it will very soon die.

25,673. What is it that makes the ground filthy or dirty?—It soon gets dirty if it is not worked.

25,674. Does it require to be dredged over backwards and forwards in order to keep it clean?—Yes.

25,675. And if it is kept clean in that way the spat lives?—Yes; when the spawn falls upon clean ground it lives.

25,676. Are you aware of any restriction being enforced in regard to the oyster beds on the coast of Jersey which has prevented the ground from being kept clean?—Yes.

25,677. What is it?—In former years we were allowed to work constantly all over the ground. Then after that, three or four laws were passed and we were prevented from working. The consequence has been that the beds have been nearly all destroyed, and the Jersey fishermen are obliged to go somewhere else.

25,678. Do you know whether the laws of Jersey are different from those which are enforced in regard to the oyster fisheries in the Channel?—Yes, I think they are in some things.

25,679. In what respect do they differ?—There is one matter of which the fishermen often complain.

25,680. What is it?—That the fishing vessels should be required to bring up in the night-time; I never saw that done except in Jersey.

25,681. Do you mean that the oyster boats are not allowed to dredge in the night-time?—Yes; a French steamer is sent out to protect the oyster ground, and an English steamer is also sent out from Portsmouth to protect the fisheries. As soon as it is sundown it is the duty of the commander of the steamboat to fire a gun. When that has been done they make all the fishermen leave off fishing. If the boats hoist a flag the steamer takes them into the harbour for safety

in case it might come on to blow fresh. If it comes on a gale of wind they are afraid that they may be driven too near the French coast and be obliged to interfere with the French limits.

25,682. They take the boats into harbour in order to prevent them from going within the French limits?—Yes.

25,683. Has the result of recent interference ir Jersey been to drive the Jersey oyster fishermen away from the beds upon which they have been in the habit of fishing into the deep-sea fisheries in the Channel?—Yes; but there may have been other reasons as well. When these oyster beds in the Channel were found out 15 or 16 years ago, the people fishing from Jersey were induced to leave their own place and come here. A great number of them came to Shoreham Harbour, to Bosham, and to other places down our coast close at hand.

25,684. What was the cause of that?—Being so near the railway they probably thought that they could get the oysters into the London market cheaper than upon any other part of the Kent or Sussex coast.

25,685. Then one reason why the Jerseymen have ceased to fish on their own beds is that they can find a better market with more rapid and cheaper communication by coming here?—Perhaps so; but the Jersey grounds have now been lost altogether. They are not properly worked, and the spawn instead of falling upon clean ground and living is entirely lost. It cannot be expected that oysters will live on that ground or on any other dirty ground. There would be plenty of oysters there again if the ground was properly cleaned.

25,686. Is the supply of oysters which you obtain from the Channel oyster beds increasing very much?—We have never found any lack of oysters there; but the fishermen have been constantly finding out different beds in different places.

25,687. Have you found that in any particular place where you have long been in the habit of fishing the beds have become exhausted in consequence of over-fishing?—There are not so many oysters as there were on some of the beds when we first went to them. But you cannot expect it to be otherwise, as there have been no small oysters to take the place of the large ones which have been removed. If there comes a spat in the Channel there will be as many as there ever were.

25,688. Is there any complaint that you wish to make to us with regard to the mode in which the oyster fisheries here are regulated beyond what you have already stated?—No.

25,689. Have you any observation you wish to make upon any point in which you think your power of catching oysters is restricted or impeded?—I think myself, and I believe that all the people in Shoreham connected with the oyster-fishing agree with me, that there should be another month or perhaps two added to the open fishing, and taken away from the time when we are not allowed to fish. All of us who have been brought up to the oyster fishery are ready to prove that the oysters are better in the months of May and June and sometimes in July than they are at any other time of the year. The oysters we catch are not like those which they get at Harwich or Falmouth. Ours are caught in from 18 to 20 fathoms of water, and they never spawn until the months of August and September. We are allowed to take them in September, and that is just the time when we ought not to be allowed to go after them, as they have only just spawned and are in very bad condition; in fact they are in a worse condition in the month of September than they are at any other time.

25,690. Then you would rather lose the month of September if you could get the months of May and June?—Yes, for my own part I would hold up both hands for that.

25,691. You think that would be an improvement?—Yes, I have no doubt it would.

25,692. And that it would be of advantage to the interests both of the French and of the English fishermen?—The French people are in a very different position from us. They have not got a body of fishermen like ours. All they have is a lot of people who have been accustomed to go to this fishery part of their time, but they have no class of fishermen like we have regularly engaged in oyster catching. Many of our men come from Kent and Essex and have served a seven years' apprenticeship to it. We do not know anything else; we are regular oyster-fishermen. We have been brought up to that and nothing else.

25,693. Do not the French fishermen in large numbers go to the oyster beds in the Channel?—Yes, no doubt they do, but they do not confine themselves to that. They are not regular oyster-catchers like we are. They can go with their boats to Newfoundland, fish with the trawl if they choose, or they can go out mackerel-catching and herring-catching.

25,694. They are not confined to the oyster fisheries alone?—No.

25,695. But at the same time they do go oyster-fishing?—Yes.

25,696. And in large numbers?—There are a good many of them sometimes. I have seen them in great numbers when I have been at Jersey.

25,697. And they follow the oyster-fishing in the same way that you do?—No, not altogether in the same way that we do.

25,698. In what respect is there a difference?—I do not know what they do now, but in former years, when I was better acquainted with the fishing, they used to haul everything they got in the dredge on board and carry it in to Granville. There they would discharge it, and heave overboard all that was of no use to them. We never did that.

25,699. In what way did you conduct your fishing?—We used to cull the oysters on the beds when we were at Jersey, and we threw over everything that was not fit to carry away.

25,700. You did that at Jersey?—Yes.

25,701. Did you do the same thing on the Channel beds?—Yes.

25,702. Do the French fishermen also do so on the Channel beds?—I daresay they do upon the Channel beds, but they did not when they were fishing on the beds at Jersey.

25,703. Have you fished on the Channel beds where the boats from this place go now?—No, I have not been fishing on the deep-sea Channel beds except 35 years ago off Beachy Head, but I have fished for a considerable time at Jersey.

25,704. Is there any other point which you wish to bring under our notice?—I think I have said pretty nearly everything that is necessary. I may tell you, however, that if you gentlemen wish to make any alterations with regard to the way in which the oyster beds are to be worked, you ought to compel all the fishermen to confine themselves to a certain size.

25,705. Do you mean that they should be restricted from taking oysters under a certain size?—Yes, I would never mind how large you made it, but I think you ought to confine the fishermen to a particular cull or size. They should take all above that size, and I would never mind whether they took a spat-shell or not.

25,706. You would not allow the small oysters to be carried away at all?—No, and why I say this is because I know that in the Mersey, on the Essex coast, the Colne, the Crouch, and the River Blackwater as much as 100,000 mashes of culch have been taken away from the ground in the course of the year. They have been taken away entirely for the benefit of the Kentish and Essex oyster merchants, who do not care, so long as they can get them, what amount of injury they do to the oyster beds. In Falmouth I have been told that the same thing has been going on.

25,707. What sort of regulation do you think ought to be laid down?—All the oyster-boats should be required to cull to a size.

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25,708. You would require that no oyster below a certain size should be brought ashore?—Yes, they should not be allowed to be brought ashore anywhere. The commons should all be of a certain size, and likewise the natives.

25,709. But that is exactly what the law says at present?—Then it is not followed.

25,710. This Act of Parliament says:—The fishermen shall cull the oysters on the fishing-ground, and shall immediately throw back into the sea all oysters less than two and a half inches in the greatest diameter of the shell, and also all sand, gravel, and fragments of shells."

25,711. Do you ask that that law shall be enforced?—I should very much like it for one.

25,712. Do you think that if that particular article of the law were strictly enforced it would be of more advantage to the oyster-fishing than the restriction with regard to the fence months?—Yes, and it would be of more benefit to the working classes of the people.

25,713. Is the size $2\frac{1}{2}$ inches the size you require?—I think $2\frac{1}{2}$ inches would be a very good size for commons, but with regard to natives it would be necessary to come down to an inch or an inch and a quarter.

25,714. Do they get any natives in the deep-sea Channel fishery?—No, only on the private grounds in Maldon River, the Blackwater River, Harwich, Whitstable, and such places.

25,715. They are kept on private grounds?—No, it is all common ground.

25,716. Are the natives kept on common ground?—Yes.

25,717. Are they not laid down upon private property?—It is private property where they are hoarded up, but they are also upon common ground.

25,718. Is there much injury done to the brood of oysters on the common ground by fishing them below the size which you desire?—It is much destroyed, I think.

25,719. You think it is much destroyed there?—I am certain that it is, and I can prove it if necessary.

25,720. But with regard to the deep-sea fishery, you think that if the oysters were prevented from being taken below a size of $2\frac{1}{2}$ inches that would be enough?—Yes, from 2 to $2\frac{1}{2}$ inches would be quite small enough.

25,721. (*Professor Huxley.*) Did you ever see the oyster spawn swimming on the surface of the water?—No.

25,722. Did you ever hear of it?—We know when it is swimming. I have seen hundreds on a shell like tallow-drops.

25,722*a*. Have you ever heard it stated that oyster spawn rises to the surface?—Yes, but I do not think that any man in the world ever knew anything about it.

25,723. Do you think that it is all fancy?—Yes.

25,724. Have you ever seen oyster spawn in the deep water earlier than July?—No; I have been at it all my lifetime, and I have worked all the year round, and I never saw oysters come before July or August, and then they are good for nothing; they are all water, and fit for nothing.

25,725. Are they in spawn in September?—You might catch a few in spawn then, but they are principally in spawn in the latter part of July and the beginning of August.

25,726. Are you allowed to go within the three-mile limit on the French coast?—It is five miles I think from headland to headland on the Jersey ground.

25,727. Do they keep you from coming within that limit?—Yes, they did so when they could, but we have been there a good many times—a good many hundred times when they could not keep us out.

25,728. How was it that they could not keep you out?—They had a cutter, but the cutter used to go away and then we went to work. When they came out again it would be daylight in the morning.

25,729. Would you have any objection to allow the French fishermen to come over here within three miles of the coast?—Not if they allowed us to go there within three miles of their coast.

25,730. Would there be any objection to allow the French fishermen to come here to sell their fish if you were allowed to go there?—I think not. I don't think it would make a bit of difference.

25,731. You would rather have free trade?—Yes; there is only one thing that we do not think is right.

25,732. What is that?—That the Jersey freighters should be able to take oysters out of our vessels and carry them into France when we are not allowed to do so.

25,733. Jersey freighters?—Yes.

25,734. Will you explain what you mean by that? You say that fishermen come out of Jersey and take oysters from your vessels which they carry into France?—Yes; they pretend to have a claim or right to do that. They put their dredges on board of other vessels and then go in as a coaster.

25,735. Do they go in as a French coaster?—No, as an English coaster. They get a clearance, and a form which they fill up themselves, and they go in as coasters from the Channel. They have gone into France in that way hundreds of times during the present year.

25,736. If an English vessel is not known to be a fishing vessel can she go in?—Yes, they are freighters; but our vessels do not go in there as Jersey vessels.

25,737. Do they make a distinction between the Jersey vessels and yours?—Yes, they work against us; that is what we complain of. If there is to be free trade, let it be proper free trade. We want the merchants who come into the harbours of Newhaven, or Shoreham, or Portsmouth, to be in the same position that we are in ourselves.

25,738. Do you mean to say that any Jersey vessel can go into the harbours of France and be dealt with as a French vessel?—They say that the Jersey vessels have that privilege, and that they can do all that the French vessels can.

25,739. You do not think that that is fair?—No, I do not. If we are to have free trade, let us have it. Let us all be placed on the same footing.

25,740. Are there more oysters on the French coast than on the English coast?—I have no doubt that there are plenty there, but we are not allowed to go after them, and the French themselves will not take the trouble to do so.

25,741. Why do not the French come into the deep Channel after oysters in as large numbers as the English?—Because they are not brought up to it as we are; they know nothing about it. There are several here in the room now who by looking at the shell of an oyster would be able to tell you where it came from, and almost from what part of the fishing grounds it was taken. There are several here now who have been brought up to oyster-catching all their lifetime.

25,742. (*Mr. Caird.*) Is there any particular part of the Channel oyster beds which the French are more anxious to protect than others?—If they could get more upon their own coast, they would like it best; but as the beds nearer their own country have been done away with, they like to come here, the same as we would like to go there, if there were plenty of oysters to be got there, and none here.

25,743-4. Have you ever fished to the westward of Cherbourg?—I have been at Jersey, and I have fished off the French coast at Cherbourg. I have known vessels which used to leave Jersey Harbour 30 years ago and fish off Cherbourg breakwater. In a very short time they would get their vessels full, and then they would bring them into Jersey.

25,745. Would you have no complaint to make against the Convention if you were permitted to fish

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outside a line drawn 15 miles from the French coast?—I do not know why I should complain if I were prevented from fishing within 15 miles of the French coast, so long as they were not allowed to come within 15 miles of our coast. But we would rather have the line five or six miles than 15.

25,746. Are the beds upon which you fish now in the Channel within 15 miles of the French coast?—Yes; very frequently we are fishing more than 20 or 30 miles off the French coast. We are as far off as that during the best part of the year. We are generally about midway—half way athwart the Channel, taking the general run.

25,747. There is a memorial here from the inhabitants of Shoreham to the Board of Trade in which they say:—"We would venture to propose to be "restricted to that part of the English Channel lying to "the eastward of a line drawn from Cherbourg to the "Isle of Wight, which would exclude and protect the "beds of the Channel Islands about which the French "authorities are so solicitous." Are you aware whether there are any particular oyster beds in the neighbourhood of the Channel Islands for the protection of which the French are very anxious?—No, I never heard that there were.

25,748. Nor anywhere in the Channel?—No.

25,749. If a line were drawn from Cherbourg to the Isle of Wight, and you were allowed to fish to the eastward of that, would it satisfy you?—A line drawn from Cherbourg to the Isle of Wight. I hardly understand the question.

25,750. If you were allowed to fish to the east of a line drawn between those points, would you then think that all cause of complaint would have been removed?—I think that would be quite sufficient. I do not think our fishermen would care anything about having a line drawn from Cherbourg to the Isle of Wight, if they could fish without being interfered with within that.

25,751. Do you seldom go to the westward of a line drawn between those two points?—I do not think that many of our boats go westward of a line drawn from Cherbourg to the Isle of Wight. It is only boats which go down to Falmouth and to other places on that coast which go to the westward of that.

The witness withdrew.

H. Tyler.

HENRY TYLER called and examined.

25,752. (*Mr. Caird.*) Are you an oyster fisherman here?—Yes.

25,753. Have you been long accustomed to that business?—I have been at it now for nine years.

25,754. What is the size of the boat that you fish in?—It is about 36 tons I think.

25,755. How many men does it take to man it?—Six altogether, a captain and five men.

25,756. Are you in the habit of fishing in the deep-sea Channel fishery?—Yes, I have never fished anywhere else.

25,757. When do you begin oyster-fishing, in the month of September?—Yes.

25,758. And do you continue fishing until the end of the month of April?—Yes.

25,759. Then you are fishing altogether for about eight months in the year?—Yes.

25,760. Have you ever fished at all during the fence months?—No.

25,761. Have you been on the grounds during the fence months?—Yes.

25,762. Have you ever seen anybody fishing on the grounds during the fence months?—Yes.

25,763. Fishing vessels?—Yes.

25,764. What vessels were they?—They were the east country boats, the Brightlingsea boats.

25,765. Do they frequent the fishing grounds in the fence months, when you are not allowed to go oyster-fishing?—Yes, a great part of them do.

25,766. Have you seen a large number of them fishing there in the fence months?—I have seen about 10 of them fishing on those grounds at one time.

25,767. Were there any French boats there at the same time?—I never saw any French boats there oyster-fishing at that time. I have seen French boats fishing there, but I do not know whether they were dredging for oysters, or fishing in the ordinary way. There are trawlers there constantly; they go trawling upon those grounds.

25,768. In the open months, when you are permitted to go out oyster-fishing, do you meet many French boats on the same ground dredging for oysters?—Yes.

25,769. Is there a large number of French boats engaged in oyster-fishing?—Yes.

25,770. Do they fish in the same way that you do?—They fish very much in the same way, but they have different gear.

25,771. In what way is their gear different?—Their dredges are bigger than ours, but some of them are just the same.

25,772. Is there any French Revenue or other vessel employed to look after the mode in which the fishing is carried on by the French boats?—I never saw any.

25,773. Is there no kind of authority, either English or French, upon the fishing ground to see whether the fishing is carried on in a proper manner?—No.

25,774. Then nobody interferes with your fishing in any way during the open part of the season?—No.

25,775. Is it within your knowledge that the French boats throw over the small oysters in the same way that you do? Do they throw them back again into the sea uninjured?—Yes, I think they do.

25,776. Do your fishing boats always do so?—Yes.

25,777. You do not bring any small oysters in with you?—No, they would be of no use to us; we could get nothing for them if we did.

25,778. Have you any gauge by which you test the size of the oysters?—No.

25,779. Then do you merely pick them over by hand?—Yes.

25,780. Do you throw the small ones overboard again?—Yes, but we do not often get many small ones.

25,781. What time in your opinion are the oysters in the best condition?—They are good about this month; they are generally very good now.

25,782. Are they good in September?—No; that is the month when we begin our fishing, and they are hardly worth catching then.

25,783. Then do you agree with the previous witnesses that it would be an advantage to alter the months that are now set apart for fence months?—Yes.

25,784. You would take away the first month of the open fishing, and add to the last month of the open fishing the first month now set apart as a fence month, namely the month of May?—Yes.

25,785. In point of fact you would make September a fence month, and May an open month?—Yes; and in that case I as an oyster-fisherman would be able to earn more money than I can now.

25,786. Would it be an advantage to the fishery generally?—Yes, I think it would.

25,787. It would not in any way be destructive to the fishery?—No.

25,788. You do not think that it would be followed by any destruction of the spawn?—No, I think not.

25,789. Do you think from your own knowledge that the oysters in the deep sea do not spawn in the month of May?—Yes, they do not spawn then.

25,790. Have you any evidence of that; what makes you come to that conclusion?—I have seen no spawn in that month. Later on I have sometimes seen a little spat on a dead oyster shell.

25,791. (*Professor Huxley.*) In what month have you seen that?—In the month when we first begin oyster-fishing.

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25,792. That is in the month of September?—Yes, in September.

25,793. Have you ever seen any in May?—No.

25,794. (*Mr. Caird.*) Are you aware, from your own experience as a fisherman, that any particular oyster beds in the Channel have been exhausted in consequence of having been over-fished?—No; but we have not caught a wonderful many fish this year.

25,795. How is that?—Because we have had bad weather, and we have not been able to do much at it.

25,796. That is another matter altogether, that has nothing to do with over-fishing the beds?—No.

25,797. If the weather had been good you could have gone on fishing the same as usual?—Yes.

25,798. And if you had been fishing there do you think there are as many fish there to catch now as there have been in other years?—Yes.

25,799. Do you find that there are as many boats now from all quarters coming to fish upon the grounds as there ever were?—Yes.

25,800. Are there more boats engaged in the Channel oyster fishery now than there were some years ago?—Yes.

25,801. Do you think that every one of them are making as good a catch as a boat used to make in former years?—I do not see that there is much difference.

25,802. Then there must be a large increase in the whole quantity caught compared with what was caught in former years?—Yes, there must be a very great increase.

25,803. Is there any particular ground that you would avoid now when you go out to fish in the Channel, because you believe it to have been over-fished?—No, I don't know that there is. We fish now in mid-channel, we used to go right over until we could see the French land at one time.

25,804. Do you find that it does not answer your purpose now to go so near the French coast as you did formerly?—Yes; we can get more oysters now by not going so far out for them.

25,805. Is there much difference in the depth of water in the Channel?—No.

25,806. Is there much difference, for instance, in the depth of water in mid-channel, and nearer the French coast?—No, there is not much difference in the depth of water at all; it generally runs from 20 fathoms to 22 fathoms.

25,807. Is the depth on all the Channel oyster beds something like from 20 to 22 fathoms?—Yes, there is not a great deal of difference.

25,808. Is it much harder work to fish in water 20 fathoms deep than to fish in much shallower water?—Yes.

25,809. The deeper you go the more difficult your labour becomes?—Yes, the deeper the water we go in, the more rope we have to give the dredge.

25,810. I think you heard me say to one of the other witnesses that there is an article in the Act of Parliament which forbids oyster-fishing during the night-time, from sunset to sunrise?—Yes.

25,811. But you have never observed that law, have you?—No, I have not.

25,812. Would it be a great hardship upon you if that law were strictly enforced?—Yes, it would be a very great hardship indeed upon us poor fishermen. We should not be able to get a living if we were prevented from taking oysters at night. We should get next to nothing.

25,813. Are you aware of any advantage that would be gained by the fishery if that law were strictly carried out?—No.

25,814. It would take you double the time to catch the same quantity of fish?—Yes.

25,815. Do the oysters remain in a good condition in the boats during the time you are out fishing and until you can come to the land?—Yes.

25,816. Do you never lose them in consequence of their getting spoilt in any way?—No.

25,817. Are you ever in the habit of sending any from your boats direct to the market?—No.

25,818. You always lay them down in the oyster ponds before you send them to market?—Yes.

25,819. Do you know anything of their treatment when they are in the oyster ponds?—Yes.

25,820. Have you watched them there?—Yes.

25,821. Do they spawn there?—No.

25,822. You have never seen them spawn there?—No.

25,823. Not in the summer months?—No.

25,824. (*Professor Huxley.*) What is the kind of ground which you find best adapted for oysters?—The clean ground.

25,825. Such as broken shells and gravel?—Yes.

25,826. Do you ever find weed on good oyster ground?—There is not a great deal of weed there.

25,827. You leave the oyster-fishing in the month of April?—Yes.

25,828. Do you go back in the month of September?—Yes.

25,829. When you go back to the fishing grounds in September, do you find that there has been any considerable growth of weed upon the oyster beds?—There is a good deal of weed about then.

25,830. Is there much more then than there was when you left the grounds in the month of April?—I think there is.

25,831. Do you often bring up much in your dredge in the early part of the season?—No.

25,832. Do you bring up more in the earlier months of your fishing than in the later months?—I don't think there is much difference.

25,833. Several witnesses have told us that the operation of dredging tends to keep the ground clean?—Yes.

25,834. That is also your opinion?—Yes, the more we work over the grounds the cleaner they get.

25,835. But I understand you to say that you do not find much difference at the end of the dredging season compared with the beginning?—I understood you to ask me only as to the beginning of the season.

25,836. At the beginning of the season, as a rule, do you find a great deal more weeds on the fishing grounds than you do at the end of the season?—Yes, there are a good deal more then than when we knock off dredging. The more the ground is worked the cleaner it gets.

25,837. When you bring your oysters into port how are they disposed of? Who takes them to the beds?—The oyster merchants.

25,838. Are they unloaded out of your smacks?—Yes, into barges. We get them out in small boats and put them in barges.

25,839. Are they then taken to the oyster beds?—Yes.

25,840–1. Who puts them on the beds?—We have to heave them on to the beds.

25,842. How many men do you employ to do that?—We employ the crew of the smack.

25,843. Is that done at high water?—It all depends upon the time we get in.

25,844. The beds are always covered with water are they not?—Yes.

25,845. They are not laid bare at low water?—Yes, they occasionally are.

25,846–7. Do the beds become high and dry at low water?—Yes.

26,848. Do you lay the oysters down when the beds are covered with water?—Yes.

25,849. Do you take your barge over the beds, and scatter the oysters as you go?—Yes.

25,850. Are there many oysters lost here by the frost in the winter?—Yes, if we have a sharp winter we lose a part of the oysters; the fresh water will come down and kill them.

25,851. But does the frost kill them?—Yes, sometimes; but that depends upon when the oysters are laid down. If we get them laid down two or three weeks before the frost sets in we never lose anything by the frost.

25,852. (*Mr. Caird.*) How is the Convention in regard to the fence months enforced here? Who is there to enforce it?—I do not know.

25,853. Does any authority ever say to you, "You "shall not take your dredge into your boat?"—Yes.

25,854. Has it ever been attempted here?—Yes, once.

25,855. Was that some time ago?—Yes.

25,856. Who interfered with you?—The officers of the Custom House.

25,857. Did they say that you should not go to sea with your dredges?—Yes.

25,858. Did you then desist?—Yes, we stopped then.

25,859. Has anybody since attempted to go out to dredge in the fence months?—Last year we were going out two days before the time, and we were told by the Custom House officers that we could not go to sea.

25,860. Do you mean that you were going out on the 28th of April, two days before the fence months came in force?—Yes.

25,861. They would not allow you to go out on the 28th of April?—No.

25,862. That appears to be rather a straining of the law?—I have been prevented a day before the time. That was done the year before last.

25,863. Then the articles of the Convention are very strictly enforced here?—Yes.

25,864. Have the Shoreham fishermen any other complaint to make except this, that the Convention prevents them from fishing in the month of May?—No.

25,865. The fishermen here are of opinion that if that article of the Convention were not enforced the month of May would be a good month for taking oysters?—Yes.

25,866. That is really the only complaint they have to make?—Yes.

The witness withdrew.

JOHN WELLING called and examined.

J. Welling.

25,867. (*Mr. Caird.*) You are an oyster merchant here, I believe?—Yes.

25,868. Have you long been acquainted with that trade here?—Yes, for the last 14 or 15 years.

25,869. Are you able to say whether the supply of oysters is increasing here?—I do not think it is.

25,870. What is your own knowledge upon the point?—I do not believe that the trade is increasing, and I don't think it is increasing. It would increase I have no doubt, but the fact is that we do not get a sufficient quantity of oysters to take to the market.

25,871. Do you mean that you do not get from the deep sea as many oysters as you require to supply the market?—Yes, we do not get sufficient.

25,872. Do you not find that there are as many oysters got during the open months now as there used to be?—Yes.

25,873. Do you agree with the statements of the other witnesses as to the advantage which you would derive from having the month of May as an open month?—Yes.

25,874. Is the only objection you have to make that you are not allowed to continue to fish during some of the fence months?—That is not all. We have other people in our market now to buy the oysters when they are brought in, as well as ourselves, and that causes us to be short in the supply we require for our own markets.

25,875. Do merchants come here to buy for the foreign markets?—Yes. During the last six or eight months we have had a good many foreign merchants to contend with. They have taken over from 30,000 to 40,000 tubs to France, when perhaps only 15,000 have gone into the English markets.

25,876. Has that quantity of oysters been taken away from this market?—Some of them have gone from here, but they have gone principally from Newhaven.

25,877. Then your complaint is not that a larger supply does not come from the sea, but that you are not able to get as large a supply for the English market?—Yes.

25,878. Are you able to say from your own knowledge that the oyster beds in the Channel have been so much over-fished that the supply of oysters obtained from them has decreased?—No.

25,879. You do not think that that is the case?—No; I believe that there are many different pieces of ground in the Channel which have not been fished upon at all.

25,880. Have you any particular knowledge of the management of the oyster beds and ponds in the harbour?—Yes.

25,881. How many years is it since that system began?—It is about 16 years since it began here.

25,882. Has it gone on increasing ever since?—Yes, it has increased very much.

25,883. Do you not breed any oysters upon those beds?—No.

25,884. Do the oysters never spawn on the beds?—I have seen spawn in the ponds some chance time or so, but it has been very rare.

25,885. Is it not usual for the oysters to spawn on the beds?—No.

25,886. Nor is it encouraged?—No.

25,887. You are not of opinion that that is a system which would answer?—No; in fact we have no oysters here in the spawning time.

25,888. Have the oysters at that time all gone to the market?—Yes.

25,889. When do the beds become exhausted?—That depends on the stock and upon the demand. I have had oysters left here up till the middle of July; but this year I shall not have oysters enough to last out the month of May.

25,890. Have you begun this year with a smaller stock in the fence months than is usually the case?—Yes, and yet I have taken all I could get. I have not refused a tub anywhere during the last eight months.

25,891. Is the demand so good that you cannot keep them?—I cannot get enough to supply the demand.

25,892. Then the result is that they are not kept as long on your beds as they used to be?—They are not as long on the beds now as they were in former years.

25,893. Do they improve in condition after they have remained for some time on the beds?—We do not fancy that they improve much.

25,894. Then why do you put them on beds if they do not improve?—We put them down on the beds in order to preserve them for the market. If we were to keep them in the vessels until we could dispose of them in the market they would die.

25,895. It is of importance to you to feed the market regularly?—Yes.

25,896. And you also try to prevent the market from being over-stocked at any time?—Yes, we send a supply according to the demand.

25,897. Have you lost many oysters on your beds in consequence of the fresh water coming down, or from the frost?—We have not lost many by the frost, but sometimes we lose a good many by the fresh water.

25,898. Is that owing to floods?—It is owing to the river running so far up, and to so much water coming down from the hills in the wet season.

25,899. Does the number destroyed in that way sometimes amount to a large proportion of the whole quantity?—At that time we do not often have a large stock on the ground. The wet season is in the winter months, at the later part of the fall of the year.

25,900. At that time you have not a large stock on the ground?—No.

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25,901. When is it that you have a large stock on the ground?—At the close of the season we expect to have a large stock on the ground.

25,902. Is that because the price is better?—No, we keep a stock to supply the market with during the fence months.

25,903. Does the price rise in the fence months?—We anticipate so; but we do not find that it does always.

25,904. What is the fact? Does it rise generally?—We think it rises, and we always anticipate that it will rise.

25,905. I do not ask you what you anticipate, but what you have found to be the fact. Does the price begin to rise after the month of May?—Sometimes it does.

25,906. Do you get more for your oysters during the fence months than you do in the open months?—Yes.

25,907. Then the price does increase in the fence months?—Yes; and of course it costs more to supply the market then, because our labour and our expenses increase.

25,908. Do you find that if you bring in the oysters small and lay them on the beds, that they improve as much as when they are brought in large and in good condition?—We have no small oysters here.

25,909. There are no small ones brought in here at all?—No, we have no demand for small oysters here; nor could we keep small oysters on our beds so as to make them of any advantage to us.

25,910. Can you tell me what quantity of oysters there may be here at the commencement of the fence season?—I cannot tell you that.

25,911. Could that be ascertained?—Perhaps it might.

25,912. It is not of much importance. It is rather a matter of curiosity than anything else. What may be the probable supply in Shoreham altogether?—I can give you no idea of that.

25,913. Are there a great many hundred tons?—Yes, and thousands of tons, too.

25,914. But you cannot put any figure upon the quantity?—No, I will not engage to do that.

25,915. What number of oysters will there be lying on the beds at one time at the beginning of the fence months?—That depends upon the quantity brought in in the open season, and upon the demand.

25,916. Can you give us no idea of the quantity on the grounds at the beginning of the month of May?—No; it all depends upon the quantity brought in in the open season.

25,917. But suppose an average quantity had been brought in during the fishing months, what would be the quantity on the beds at the beginning of the fence months?—I can hardly tell you. We should have to calculate first what value they were per tub.

25,918. You can give us no idea with regard to the quantity?—No.

25,919. Are you able to say what extent of surface your beds cover?—No.

25,920. Do they cover a great many acres?—Yes, they will, if you take all the beds together.

25,921. I am speaking now of all the beds in the harbour?—Yes, they cover a good many acres.

25,922. Is there any payment made to the owners of the soil for the use of the beds?—Yes.

25,923. Who is the owner of the soil?—The Duke of Norfolk.

25,924. Do you lease them?—Yes, we lease them. We have all leases of the grounds we use.

25,925. Do you pay so much for a certain extent?—Yes, and for a certain number of years. We pay so much per year.

25,926. At what rate do you pay for the use of the beds?—Each pays according to the quantity of ground he hires.

25,927. Suppose you take a quarter of an acre, what would you pay?—It is arranged in this way: we have so many ponds, and there is so much paid for each pond. If they average three-halfpence per yard it is calculated what that will be for each pond, and all the beds are taken together in one sum.

25,928. Does it amount to any considerable sum?—The rent is not much, but it costs us a good deal to keep up the beds. The ground requires a great deal to keep it in repair.

25,929. Does the tenant keep it in repair?—Yes, the occupiers have to keep the beds in repair.

25,930. Then the owner of the ground pays nothing for that?—No, he receives his rent after we have made the ground.

25,931. Does the occupier of the ground prepare the beds for the reception of the oysters?—Yes, at the onset we make the beds. The ground was quite level in the first instance. We dug the ponds ourselves and arranged the beds, so that they should always be full at low water.

25,932. Was that done in order that the oysters should always be under water?—Yes, unless we choose to leave them dry. We have sluices by means of which we are able to run all the water out into the river.

25,933. Leaving the oysters dry?—Yes.

25,934. Do you think that it is of advantage to do that sometimes?—Yes.

25,935. Why?—At times we have a good deal of fresh water in, and the water is so thick that you cannot see the oysters. We let off about two-thirds of it and the water then comes clear.

25,936. Do you think that the mud would be injurious to the oysters?—Yes, the foul water comes down the river and runs to the shores, creating a muddy thickness which would be very injurious if it was allowed to remain. We open the sluices and let that thick water off. It is very thick indeed.

25,937. (*Professor Huxley.*) Is that the only preparation your ground has?—Yes.

25,938. In the first instance it is a mud flat?—No, it is a beach.

25,939. A pebble beach?—No, a gravel beach.

25,940. Then in the first instance it was a great flat upon a gravel beach?—Yes.

25,941. And then you dug these ponds?—Yes.

25,942. How large will a pond be?—They differ in size. Perhaps one will be 1,000 yards or 1,500; some may be more and some less.

25,943. A thousand square yards?—Yes, but they vary a great deal in size.

25,944. Are the banks very easily washed down?—No, we board them up inside.

25,945. The banks do not cost much to keep up?—No, but a great deal of settlement takes place. A great deal of stuff gets on to the grounds, and it costs a considerable sum to clean it out. We have to cart it away, and it involves a great amount of labour to keep the beds cleaned.

25,946. If you have much of the mud on the beds the oysters will not get on very well?—No, we like them to be as clear from that as possible.

25,947. Do you allow many dead shells to accumulate?—If the oysters die we bring them out.

25,948. How do you do that?—We have tools for the purpose. The men pick the dead shells out as they go along. They put them into baskets and carry them away.

25,949. How do you get the oysters for sale out of the ponds? Is the water let off?—We let part of it off. We leave about six inches of water and then take the oysters out.

25,950. You do not let the beds go perfectly dry if you can help it?—No.

25,951. When you let them go dry your only object in doing so is to enable you to get out the mud?—No, it is also done when we want to turn the oysters over.

25,952 What is that done for?—To clean them. They gather a kind of settlement after they have laid there for some time, and that settlement if not removed causes the lower oysters to go black. If nothing was done with them they would all die.

25,953. You therefore turn them over?—Yes, we turn them up and bring the bottom ones to the top.

25,954. Suppose you have laid down a cargo of oysters in your pond, what course of operation would you pursue with regard to that cargo of oysters ?—I should let them remain there for some days.

25,955. For how long ?—Perhaps for four days.

25,956. In the first place you would scatter them over the bottom of the bed ?—Yes, they are laid over a space of ground about 40 yards long and 50 yards wide. They are spread overboard from the barges, and in some places they are laid down a foot thick.

25,957. One oyster over another ?—Yes, we then let them lie there for perhaps two or three days, and then we send men in to spread them out thinly over the ground.

25,958. You let them lie over each other in the first instance ?—Yes.

25,959. Why do you do that ?—Sometimes they are weakly, and we think that if we meddle with them when they are in a weak state it causes the filth to go into them. They are not strong enough to spit it out. After they have laid for a certain time in the water they recover strength, and then we spread them out.

25,960. Do you let the water out to a considerable extent to do that ?—Yes.

25,961. Do the men wade through the water when they are performing that operation ?—Yes, but there is not much water in then.

25,962. Do they turn them over with their hands ? No, they turn them over with a kind of utensil they have for the purpose.

25,963. A kind of fork ?—Yes.

25,964. Do they spread them evenly over the bottom ?—Yes.

25,965. How long do you allow them to remain before you consider them fit for sale ?—That depends upon the condition in which they come in. If we require them directly for the market, we should pick some of them out in the course of two or three days ; but if not, we should let them lie there for perhaps six weeks or two months.

25,966. By that time have they got thoroughly cleansed ?—Yes.

25,967. I suppose they will then have got all the fine sand and stuff they might have picked up out of their stomachs ?—Yes.

25,968. Did you ever try any method of feeding oysters ?—I have heard talk of feeding them, but I never tried it.

25,969. Have you ever heard of anybody who did try it ?—Only the fishmongers in London.

25,970. They feed them with oatmeal ?—Yes.

25,971. How do they manage that ?—They only put it in the water I believe.

25,972. Does it do any good ?—I do not know from experience whether it does or not.

25,973. You only cleanse them here ?—Yes.

25,974. Do you think in warm weather that the oysters spawn in your ponds ?—Yes, they spawn much sooner here than they do in the deep sea.

25,975. If you bring them from the deep sea in the warm weather, when they are not in a spawning condition, will they quickly be brought into a spawning condition here ?—Not very quickly ; we very seldom see them in a spawning condition here, but still I have seen it.

25,976. In the month of April do you find that any which are brought in spawn in that way ?—No, nor yet in the month of June. I do not think that these deep-sea oysters spawn until the latter end of July.

25,977. Do you know anything of the Dutch oyster-fishing ?—No.

25,978. Do you know whether any of the Dutch boats come upon our grounds during the fence months ?—No.

25,979. You have heard what has been stated with regard to the east countrymen coming here ?—Yes.

25,980. Do you think that is the case ?—I cannot say.

25,981. Do you think that any considerable damage is done to your trade by preventing the fishing of oysters in May and June ?—I think it would be beneficial to us, and to the town generally, if those two months were granted.

25,982. Could you not get enough oysters to lay down in March and April if you had sufficiently extensive ponds ?—No. I think I have already explained that so far as I am personally concerned I have bought every tub of oysters I could get, and yet I do not believe that I have a stock on hand sufficient to last throughout the present month.

25,983. Would it not be worth your while to encourage the fishing by giving a larger price for the oysters ?—I think we give too large a price already.

25,984. But would it not encourage more smacks to engage in the trade if a higher price were offered ? —I do not think it would.

25,985. I understand that there has been a steady increase in the number of smacks following the business since the price has been higher ?—Yes.

25,986. Is that not the way with all these things ? —Yes ; but it would not pay for us to give more for the commodity than we can get by it.

25,987. You think it would not pay you ?—I know it would not.

25,988. At what time of the year do you have the greatest demand for oysters ?—About this time, during April, May, and June.

25,989. Just at the time your supply begins to fall short ?—Yes. In warm weather people eat oysters more than in the cold weather.

25,990. Is there no great demand for oysters in the months of September and October ?—No, the demand is not very great then.

25,991. Then it would be no great loss to you to have those two months cut off from the fishing season and made fence months ?—No.

25,992. But it would be advantageous to you to have May and June added to the open season ?—Yes, very much so.

25,993. Would you willingly give up the fishing in September and October in return for being allowed to fish in May and June ?—Yes, and it would do no injury to the oysters, because there is a great difference in deep-sea oysters and oysters in shallow water.

25,994. (*Mr. Caird.*) Do you think it would be necessary to say September and October—would it not be sufficient to give up September and take the month of May ?—Yes.

25,995. Would you then confine your suggestion to September as the end of the season, and May as the beginning ?—If you will only let us have May, we do not care about your taking away September.

25,996. Do you think that in the month of May a large additional supply of oysters could be brought here if you were allowed to fish in that month ?—Yes.

25,997. As the weather in that month is finer and more favourable for going to the deep sea, would it not be more productive than either of the open months ?—Yes. The weather here is very coarse at times towards the end of the year, and as the days are very short the fishermen can get but very few oysters. Sometimes they will go out one tide, and it will blow so hard the next tide that they can do nothing. Some of them will be barely able to earn enough to obtain for them victuals to eat, and they are exposed to all sorts of weather in the long dark nights at sea, yet they are obliged to be out in order to obtain a livelihood.

25,998. I gather from what you have already said, that in your opinion if you were allowed to fish in the month of May you could considerably increase the supply of oysters for the market without doing any injury to the oyster beds themselves ?—Yes, I do not see that it would do any injury. We are all aware that the oysters do not spawn in the deep-sea in the month of May.

25,999. The oysters have not begun to spawn then ?—No.

The witness withdrew.

SHOREHAM.

G. Dudley.

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GEORGE DUDLEY called and examined.

26,000. (*Mr. Caird.*) Are you an oyster-fisherman here?—Yes.

26,001. Have you been long engaged in that business?—Yes, I have been at it for the last 30 years, on and off.

26,002. Have you heard the evidence which has been given to us by other men engaged in the same business?—Yes.

26,003. Is there anything you would like to add to the statements they have already made?—I do not know that I have much more to say. I should like to see the month of May granted as a fishing month, and the month of September taken away.

26,004. The month of September made a fence month?—Yes.

26,005. Do you think that that would be beneficial to the fishermen both here and in France?—Yes.

26,006. Do you ever find that the French fishermen are fishing upon the oyster-grounds in the month of May?—No.

26,007. Did you ever hear them say that it would be beneficial to their interests if they were allowed to fish in the month of May?—No; I have been in most of the French ports, but I never heard them say anything about it.

26,008. You never heard them say that it would be an advantage to them to be allowed to get oysters in the month of May?—No.

26,009. Is there anything more you would like to add to what has already been said to us?—No, there is nothing further than that.

26,010. That is the principal point you wish to call our attention to?—Yes.

26,011. That appears to be the general opinion of all the persons engaged in the fishing trade at Shoreham, or connected with it in any way?—Yes, I believe it is.

26,012. There is no other point that they seem to complain of?—No; I have been a long time at it myself and that is all I care about.

26,013. (*Professor Huxley.*) Did you ever see oyster spawn swimming on the top of the sea?—No, I never did.

26,014. Did you ever meet with anybody who had ever seen it?—No, I can't say that I ever did, but I have seen oyster spawn when it was very small.

26,015. Do you think that it ever rises to the surface?—I never saw it, and I never heard of anybody who had seen it. I have seen the spawn when it was only as large as a pin's head, and I should say that that would be almost as soon as it had fallen from the oyster. I have seen it in various rivers and shallow waters.

26,016. But you do not believe that it ever rises to the top of the water?—I never saw it on the top of the water, and in my opinion it does not rise. I think that it settles as soon as it drops. It naturally settles to the bottom, and the more you cleanse the bottom the more likely you will be to preserve it when it does fall.

26,017. (*Mr. Caird.*) You have not found in the course of your experience that any part of the Channel has become fished out?—In my opinion some of the old grounds are getting slight.

26,018. Some of the old grounds in mid-channel?—Yes.

26,019. In your opinion they are becoming fished out?—Yes.

26,020. Are there any particular grounds that you would avoid, because you know that they have been fished out?—Yes, we avoid now what we call the old Kelvidosh grounds, and some of the grounds off the Head.

26,021. Off Beachy Head?—Yes, about 13 or 14 miles off the Head.

26,022. What is the cause of those grounds not being so productive of oysters as they used to be?—I think it is owing to so many vessels having been engaged in catching the oysters there; they have carried them all away.

26,023. Do you think the day will ever come when the same thing will occur with regard to the fishing beds all over the Channel?—That will depend upon what spat there is in the course of the season.

26,024. Have you sometimes good spat and sometimes a bad season for spat?—Yes, it varies a great deal.

26,025. There is a great variation in the spat season?—Yes; we sometimes see 15 or 20 and even 100 of the spat on a spat shell, and at other times we may not see more than one or two.

26,026. Then will a good season bring with it a good crop of fish?—Yes, a great abundance of oysters may come all at once.

26,027. In the course of your experience as an oyster-fisherman have you noticed whether the yield of oysters in the Channel has continued increasing?—There are many more smacks at work in the Channel than there used to be some years ago.

26,028. Does every smack get on the average as many oysters as one used to get when you began fishing?—I do not think that it does in a regular way.

26,029. How long is it since you first went to sea as a fisherman?—23 years ago.

26,030. Then 23 years ago could you catch as many oysters in the course of the season as you can now?—Perhaps not. At that time we did not have the same class of vessels we have now, nor did we work for as many hours.

26,031. Was the class of vessels you had 23 years ago smaller than those you have now?—Yes, and there was not as much work done then as we do now.

26,032. Do you work the larger class of vessels now with the same number of men?—Yes, and we have a different mode of working them.

26,033. Is it a better method of working them?—Yes.

26,034. And is the result of that that you are enabled to bring more fish ashore?—It all depends on the weather. Taking the general run I do not think that they catch as many.

26,035. Do you mean that each boat does not catch as many?—I think that a boat does not catch as many now as it did 10 years ago.

26,036. Has there been a great increase in the number of boats altogether?—Yes, taking them altogether, and counting them from all parts.

26,037. (*Professor Huxley.*) Do you think that if the regulation respecting the throwing back of the small oysters into the sea were observed, that that would keep up a sufficient supply to stock the fishing grounds?—I do not think that we haul up many of the small ones; they are enabled to pass through the ring and the four-inch mesh. They are open to work through that.

26,038. Then how would it be possible to exhaust the beds if that is the case, and if the little ones all go through the mesh would they not all grow into big ones?—Yes.

26,039. Do you not think that the growth of the little ones up to full-grown oysters would make up for the number of full-sized oysters dredged?—No, because we have so many smacks working upon the beds. Two or three years ago we had as many as 200 or 300 smacks here. A good many of them came from Jersey.

26,040. How many years do you think it takes for an oyster to grow to its full size?—It takes about three years for these Channel oysters to become full sized.

26,041. Is that the general opinion here?—Yes, I think it is the general opinion.

26,042. What do you go by in forming that opinion?—The oysters themselves have a kind of ridge on them every year, from which we can form an idea how old they are. Anyone who has been in the habit of watching them will be able readily to judge what their age is. You will see a little score round each shell that tells how much they grow every year. We watch them when they are very little bigger than

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a tallow drop, and it will take three or four or five years to come to a full-sized oyster. We catch them sometimes as soon as ever it is possible to see them, when they are only a little speck not bigger than a pin's head.

26,043. You lay them down here ?—Yes ; it takes I think about three years before they are fit to be sent away to the market. We reckon about four years for a native oyster.

26,044. Do you think that the native oyster takes a longer time to grow than the deep-sea oyster ?—Yes ; we calculate about four years for a native, but I can produce a good oyster on my ground at home in three years.

The witness withdrew.

ROBERT FIELDGATE called and examined. *R. Fieldgate.*

26,045. (*Mr. Caird.*) I believe you are a Custom House officer here ?—Yes.

26,046. Have you received any particular instructions as to the regulation of the oyster fisheries during the fence months ?—Do you mean as to stopping the fishing ?

26,047. Yes, keeping the fishermen from taking their dredges to sea, or anything of that kind ?—Yes, we have received instructions.

26,048. What are they ?—I do not know what they are, but I believe that an order has come down to that effect.

26,049. Have you had occasion to carry it into effect ?—The Coastguard do that. The carrying out of the instructions has not been so much in the hands of the Custom House as of the Coastguard.

26,050. Then you cannot give us any information in regard to the manner in which those instructions have been carried out ?—No.

The witness withdrew.

WILLIAM GOUGH called and examined. *W. Gough*

26,051. (*Mr. Caird.*) Are you an officer of the Customs here ?—I am surveyor of the Customs.

26,052. Have you had any instructions placed in your hands with regard to restricting the oyster-fishing during the fence months ?—No.

26,053. Have you had no orders to carry out from the Customs which are applicable to the fishermen ?—Wehave had no orders to stop the dredges ; but I understand that an order came down from the Board of Trade to the Coastguard in reference to the dredges.

26,054. But there was an order sent to you ?—No, not to us.

26,055. You have received no orders from your department to pay attention to that subject ?—No; our practice has been, when they come in in the last week of April, to allow them to go home with their dredges and warps on board. We did so this time, when we heard that an order had come down from the Board of Trade to stop them, and to take the dredges. They were to take the dredges out of the vessels.

26,056. Was that during the last week in April ?—Yes, or in the first week of May.

26,057. But that is not an order which has come down to you, or which you have had to enforce ?—No, I believe it has been enforced in Newhaven.

The witness withdrew.

JOSEPH FAIRHALL called and examined. *J. Fairhall.*

26,058. (*Mr. Caird.*) I believe you are the Station master here ?—Yes.

26,059. Can you give us any information as to the effect of the restriction upon the fishermen which prevents them from taking their dredges out to sea after the 1st of May ? What has the effect of enforcing that regulation been ?—They have brought them up to the railway station for us to take away instead of taking them in their own boats.

26,060. Have they sent them away to some other part of the coast ?—Yes, we have had six or seven to send away this week.

26,061. What number may have been sent away in this way ?—I cannot tell. I do not know how many they take in each boat,

26,062. Where have they been sent ?—They have been sent to Colchester. They have been sent home to Colchester.

26,063. Do they belong to Colchester people ?—Yes.

26,064. What was the reason they were brought to you ?—They would not allow them to take them out of the harbour, and therefore they brought them to me to have them sent home by rail.

26,065. You do not know that they are going to be put on board the boats again, and used when they get to Colchester ?—No.

26,066. Then have they been sent to Colchester because they belong to Colchester people ?—Yes.

26,067. It does not follow that because they have been sent there they are going to fish on any other part of the coast with them ?—No.

26,068. (*Professor Huxley.*) Then substantially it seems to be a tax upon the fishermen. They have to pay for the conveyance home of their dredges, instead of carrying them with them onboard their boats ?—Yes.

The witness withdrew.

JAMES HEDGETHORN recalled and examined. *J. Hedgethorn*

26,069. (*Mr. Caird.*) I believe you can give me some information with regard to the difficulties the Colchester people have had in sending their dredges home during the fence months ?—Yes, after the season has been over we have been allowed a few days to carry our dredges home with us. This time it was understood that our vessels were to clear from the Custom House for going home. I went to the Custom House officers, and asked for a clearance, but they would not allow a clearance to be given unless all the dredges were put on shore. We then asked if they would allow us a clearance if we put all the dredges on board of one vessel, but they would not even do that.

The witness withdrew, and the inquiry was adjourned to Monday, July 25th, at Edinburgh.

Edinburgh, Monday, 25th July 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

The Hon. BOUVERIE FRANCIS PRIMROSE called and examined.

EDINBURGH.

Hon. B. F. Primrose.

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26,070. (*Mr. Caird.*) You are the secretary of the Scotch Fishery Board, I believe?—I am secretary of the Board of British White Herring Fishery. That is the proper title of the Board.

26,071. How long have you been secretary of the Board?—Since the year 1848.

26,072. Then you are intimately acquainted with all its functions and operations?—I think so.

26,073. Will you describe to the Commission the nature of its functions?—Its functions are, in the first place, to supply clearances to herring fishery vessels fishing and curing at sea; to receive notice from curers on shore of their intention to cure; to see to the measures for the delivery of herring as between seller and buyer. There is an established measure, and we have to see to its size. We have also to see to the size of the barrel for British white cured herring; to the quality of the cure; branding the first quality and collecting the fees for the same; attending upon the export of British white cured herring to inspect them and ascertain that they are in proper order before exportation; preventing the use of such nets at the herring fisheries as Parliament has declared to be illegal; protecting the sprat fishermen in their right of boundary; maintaining order at the fishing grounds, and, in connexion therewith, the police regulations for naming the boats and numbering them, &c.; receiving and restoring lost fishery property; building fishery piers and harbours; protecting the spawn of the herring, and the herring fisheries generally, according to the Acts of Parliament; maintaining the herring close time as fixed and appointed by Parliament; furnishing returns and statistics of the herring fisheries of Scotland and the Isle of Man; and aiding in maintaining the Fishery Convention with France. These, I think, comprise the whole of the functions of the Board of Fisheries, or nearly so. They comprise the whole, except the carrying out of these duties in their details as derived from the Acts of Parliament.

26,074. And within what limits of the coasts of Great Britain do you suppose that their functions extend?—The functions of the Board extend over the whole of the coast of Scotland; and, as regards the collection of statistics, over the coast of the Isle of Man; and, in respect of the branding of herrings, over the northern portion of the coast of Northumberland.

26,075. As well as Scotland?—Yes, as well as Scotland.

26,076. Then it includes all Scotland and the northern portion of the coast of Northumberland?—Our function in respect of the branding of herrings extends to the coast of Northumberland, but by the Acts of Parliament our jurisdiction extends over the whole of Great Britain. It so happens, however, that there is nothing on the coast of England for us to do; there is no British white herring fishery there.

26,077. When you say there is no British white herring fishery, will you be good enough to define what you mean by that?—I mean the cure of herrings on the system of the white herring cure.

26,078. Do you mean salting them?—Yes, salting them in barrels.

26,079. You do not mean that there are no herring fisheries on the coast of England?—Certainly not.

26,080. But because the herrings are not cured in the manner you conceive to be under your jurisdiction you suppose that your jurisdiction does not exist?—Perhaps I can explain it better by mentioning what has already occurred. In 1848 a Commission of inquiry was appointed and carried on by Sir John Shaw Lefevre. At that time the Board had eight officers in England, but their duties were found not to be so important or onerous as to require their continuance. They were therefore withdrawn, but as the Acts of Parliament still retained in the wording of the different clauses the terms "British white herring fishery," and as it was possible that a white herring fishery such as existed in former times might be revived there, the Board claimed that their jurisdiction should not be diminished, which was reserved by the Treasury accordingly.

26,081. Where were those eight officers stationed, on what part of the coast of England?—There was one officer at North Sunderland, one officer at Scarborough, one officer at Yarmouth, two in London, one at Bristol, one at Penzance, and one at Whitehaven.

26,082. Were those eight officers under your jurisdiction?—Yes, exclusively.

26,083. And they took their directions and orders entirely from you, and made their returns to you?—Entirely.

26,084. And since the year 1848 have those officers been entirely given up?—Yes.

26,085. And you no longer exercise any jurisdiction or make inquiries on those parts of the coast of England?—None, except about North Sunderland. The Scotch officer stationed at Eyemouth passes along the coast of Northumberland to inspect and brand the herrings which are cured there.

26,086. Was it the duty of those officers to carry out very much the different heads you have mentioned as the functions of the Board at those respective places?—Pretty nearly, only there was not at that time what exists now—a clause about protecting the spawn of the herring, or providing a close time; that has all originated since 1860.

26,087. And since the extinction of these offices in those different parts of England you have had no official inquiry or otherwise as to the progress of the fisheries there?—None.

26,088. You have no official communication with those parts whatever now?—No, none; only that in aiding the fishery Convention with France we communicate with the officers in command of the cruisers on the coasts of Yorkshire and Northumberland.

26,089. Then, practically, your functions now are confined to Scotland and the northern coast of Northumberland, so far as the surveillance of the fisheries is concerned, and are extended to the Isle of Man so far as the collection of statistics is concerned?—Yes.

26,090. These, then, may be held to be the practical limits of your jurisdiction?—Precisely.

26,091. With regard to the funds from which the expenditure for the discharge of those duties is made, whence are they derived?—By votes of Parliament

26,092. By an annual vote of Parliament?—Yes, and also in part from fees received for the branding of herrings.

26,093. Can you tell us the amount received under each head?—*See the detailed return furnished hereto.* (*Appendix.*)

26,094. A portion of your expenditure, as I understand, is devoted to making or improving the harbours for the convenience of the fishermen; is that not so?—Yes; we receive an annual grant by Act of Parliament of 3,000*l.* for that purpose.

26,095. And on what principle do you allot your expenditure?—On the principle that not less than a quarter of the cost of the work is contributed by the party promoting the work; but through the influence of the Board we have got as much as half, and sometimes a proportion between a quarter and a half.

26,096. You are guided, I suppose, in your allotment of the expenditure by the importance of the port as a fishing station?—Yes.

26,097. And the public advantage that would result from the work being done?—Exactly; but in certain cases, when the grant was not being expended,

promoters came forward and asked for works; rather than not expend the grant, we laid it out to such demands though not of the first necessity.

26,098. Have many harbours within the last few years been erected or improved by means of that expenditure?—Yes, a very great number.

26,099. Can you tell us what harbours have been so erected and improved within the last five years?—Within the last five years the number has not been so great.

26,100. Then take the last 10 years?—There is a heavy work being executed at Dunbar under particular circumstances. I have a list of the harbours here that have been assisted.

26,101. Is it a long list?—Yes, it is pretty long.

26,102. Will you be good enough to enumerate the harbours, and what has been done upon them?—In the first instance there was an expenditure upon a pier at Rockfield.

26,103. In what county is that?—In Ross-shire, on the east coast; it appears to have been built and improved at different times between the years 1828 and 1851.

26,104. Is it an important fishing station?—It is very important; it produces excellent herrings, herrings of very fine quality, and the boats could hardly deliver the fish without a pier.

26,105. Has there been a large expenditure upon it?—No, it is not at all a large expenditure.

26,106. What is the next?—Hilton on the coast of Ross-shire.

26,107. When was that done?—Between 1828 and 1855.

26,108. Extending over so long a period as that, are you able to say whether the work consisted of additions and repairs?—There were small additions and repairs.

26,109. Then do you think yourselves bound to keep in repair as well as to improve the harbours?—No, not at all.

26,110. Perhaps you will give us the expenditure in each?—The total expenditure upon Rockfield has been 526*l.* 6*s.* 5*d.*, and the total expenditure upon Hilton has been 291*l.* 7*s.* 6*d.*

26,111. Is that the total expenditure on the part of the Fishery Board, or the total expenditure altogether?—That is the total of all the expenditure together.

26,112. What proportion has come from you?—The proportion paid by the Fishery Board has been in the case of Rockfield 370*l.*, the promoters having paid 155*l.*

26,113. And that expenditure has extended from the year 1828 until 1851?—The first work was done in 1829; that was finished in 1830. Then nothing more was done until the year 1851.

26,114. The works in that case must have been small repairs?—They were very small. I believe the works in 1830 were exceedingly small, but as the fishing extended the works became greater.

26,115. Was a small expenditure of that description not within the reach of the proprietors and people upon whose property those places were situated?—Not in those days; it might be now.

26,116. Then at the present time do you make grants of such small amounts for the assistance of harbours?—We should be glad to do so, but the grant is absorbed by the large works now going on at Dunbar under an Act of Parliament, and also at Anstruther Harbour. Some of those small works are, I must confess, most important to the fishermen.

26,117. Have they been a great advantage to the fisheries?—In some places there would have been no fisheries without them. For instance, at Sarclet on the coast of Caithness, the first expenditure was 2,093*l.* The total expenditure there has been 5,947*l.*, or in round numbers 6,000*l.*

26,118. Has that expenditure provided a harbour large enough for the largest-sized fishing vessels?—It does not take in a single fishing vessel only boats.

26,119. Only fishing boats?—Yes.

26,120. Then it is just a shelter to cover them when there is a heavy sea?—It is both a shelter in that respect, and it also enables them to deliver their fish on an exposed coast.

26,121. It enables them to go alongside the pier?—Yes, and deliver their fish over to the curers to enable the curers to carry on their work.

26,122. Are those open boats?—Yes.

26,123. It is not large enough for decked vessels to go into, and yet in the construction of that harbour you have expended the sum of 6,000*l.*?—Yes; large vessels could not be enabled to go there. It is an exceedingly difficult coast to work upon.

26,124. Will you be good enough to go on with your enumeration?—Then there is Dunglass, in the county of Berwick, upon which 2,600*l.* has been expended; there has also been a considerable expenditure upon Keiss, in the county of Caithness.

26,125. With regard to Dunglass, has that expenditure of 2,600*l.* resulted advantageously?—Yes, very advantageously; the boats could not fish without it.

26,126. Has it given an increased depth of water to the pier for the fishing boats? Can boats go up to the pier when the tide is further out than they could have done before the expenditure was made?—Before the expenditure was made I apprehend there was nothing but an open beach there; now there is a complete shelter within which the boats can lie in safety.

26,127. Is it a pier they would run to at low tide?—There is no harbour anywhere on the coast which they could run to at low tide.

26,128. What is the next?—Perhaps you will allow me to say that in that case the proprietor contributed 745*l.*

26,129. I think the next you mentioned was Keiss, in the county of Caithness?—Yes, upon that there has been expended altogether 1,962*l.* 10*s.* 6*d.*

26,130. Has that also been of advantage?—Of very great advantage. It is within a short distance of Wick, and it is a very important fishing station. Among other advantages of these small harbours is this, that they serve to disperse the boats instead of having them all congregating together at one place on the fishing grounds. When they have these small places to fish from the fishermen spread over various parts of the coast, and catch fish in greater abundance.

26,131. It also affords them increased opportunity for running in in bad weather?—Yes, and not merely that but it enables the whole business of the fishing to be carried on at once. It is of importance for the fish to be delivered, gutted, and cured within 24 hours after they have been caught, therefore a boat cannot go out to fish far away from the place where it delivers its fish. Most of them are engaged by the curers and are under engagement to the curers, and the curers must have a shore station in order to receive the produce of each boat.

26,132. At each of these harbours is there a curing establishment?—Yes, they have led to the erection of curing premises.

26,133. Well, what is the next?—At Cellar Dyke, near Anstruther, 2,359*l.* has been expended.

26,134. If you can refer to any one of these places in which the expenditure has not been of advantage to the interests of the fishermen I should be glad if you would specify it?—I am not aware of any on the east coast. To continue, at Burnmouth there has been an expenditure of 2,043*l.* 14*s.* 6*d.* Now Burnmouth is a place where the fishermen are extremely anxious to have a further extension of their harbour, because since that work was done in 1836, the boats have greatly increased in size, and the fishermen reported to me the other day that they had collected no less than 1,000*l.* of their own money in order to effect some improvement on their harbour.

26,135. In what county is that?—In the county of Berwick; it is very near Eyemouth. Then at Coldingham 2,117*l.* 17*s.* 0*d.* has been expended. There also they want an improvement. They could not fish without that harbour, nor could the Burnmouth men do without what they have got. The Coldingham harbour is too small for the large-sized boats, the boats have increased in size so much of late years.

26,136. Then in consideration of that increased size of the boats do you adopt any different plan with

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regard to the improvements you now execute in the fishery harbours?—We endeavour to get more money from the proprietors, but for the last few years the grants have been so very much absorbed by Dunbar, under particular circumstances which I will explain when I come to Dunbar.

26,137. Perhaps you will name the leading places where money has been expended without going through the whole of the expenditure?—Yes, I can do that.

26,138. But perhaps it will save further time if you send in an official list, so that we can put it in the Appendix. (*List supplied by the witness accordingly for the Appendix, together with copy of the Regulations for administering the Grant for Fishery Harbours.*) What is the present state of your expenditure? What operations are you at this moment engaged in with the view of improving the fishery harbours?—For several years past we have been engaged in finishing the works of Dunbar harbour. That was a work that arose out of peculiar circumstances. The sea broke in upon the sea wall there and forced an entrance into the basin of the harbour, and if the harbour had not been immediately repaired the whole of it would have been lost to the fishing community.

26,139. Is it a fishery harbour?—It is for fishing purposes only. By arrangement with the Treasury, when it was pointed out that considerable improvements might be made in the harbour, and that to save the sea wall would involve a very heavy expenditure, as it must be done with granite of great solidity and strength, the provost and town council of Dunbar were empowered by the Treasury to obtain a loan from the Public Works Loan Commissioners to the amount of 20,000*l.* as the proportion which they were to advance towards these works, and on the other hand the Board of Fisheries were to carry them to completion by means of their grant of 3,000*l.* per annum.

26,140. Have you any idea of the amount of liability they have thereby assumed?—The expenditure at present has amounted to 17,000*l.*, and the works are now pretty nearly finished.

26,141. Has 20,000*l.* been expended on the part of the people of Dunbar?—Yes.

26,142. So that nearly 40,000*l.* has been expended altogether?—Yes, nearly 40,000*l.*

26,143. Has the result been beneficial?—The result has been very beneficial indeed. There will now be four feet of water at the entrance.

26,144. At all times of the tide?—Yes.

26,145. Is four feet sufficient for the ordinary-sized boats which frequent that harbour?—It is not absolutely sufficient, but it enables them to get in almost immediately after flood is made, and it enables them to get out at three-quarters ebb.

26,146. This is an annual expenditure for fishery purposes?—Yes, by the Board, but they will expend a larger sum at Anstruther on the opposite side of the Firth of Forth, which will give about seven feet of water there.

26,147. Do the people of Anstruther contribute towards the expenditure?—They are to obtain a loan in the same way from the Public Works Loan Commissioners.

26,148. And are to be aided by the Fishery Board?—The terms are that they are to obtain a loan to the amount of 16,500*l.*, and the Board has then to advance 12,000*l.* by way of gift, and 6,500*l.* by way of loan. That makes 18,500*l.* altogether which the Board will be called upon to advance.

26,149. In making these advances to Dunbar and Anstruther, you have shut yourselves out altogether, in consequence of the annual amount you have received from Government being limited, from making any expenditure upon any other place at the time that expenditure is going on?—No doubt the Board have been shut out already in consequence of the case of Dunbar. Dunbar was the first instance of the kind, and Dunbar was inevitable from the public necessity which existed for saving the harbour. The condition of the sea wall rendered it absolutely necessary that something should be done to save it, and it could only be saved by that large expenditure. I may add that the object was one worth the expenditure.

26,150. During the time the expenditure was going on the Board has not been able to make any other expenditure on the harbours along the coast?—No.

26,151. And you have now undertaken the work you referred to at Anstruther?—Yes.

26,152. That must last also for several years?—Yes.

26,153. And during that time you will find yourselves unable to comply with any demand that may be made on behalf of any other harbours?—That is a question that has been raised by the Treasury. We are under an obligation to do certain things by Act of Parliament, and the Treasury has put this question to the Board: "Would it not be better to allow your "fund to accumulate at the rate of 2,000*l.* per annum "for Anstruther, leaving 1,000*l.* free for other places, "instead of laying out 3,000*l.* at once in getting "Anstruther done?" The Board replied that it would be far better to get the whole work done at Anstruther and then be left clear to take up other works, for this reason, that if the fishermen get a harbour at the entrance of the Firth of Forth, with seven feet of water on the one side and a harbour on the other side of the Firth at Dunbar with four feet of water, these harbours would afford such immense advantages to the fishing interest that they ought, in the existing state of the negotiations and arrangements, to take precedence of anything else upon the coast.

26,154. Then we are to understand that Dunbar and Anstruther are two of the most important fishing harbours on the coast of Scotland?—They are very important for the supply of fresh fish.

26,155. Is there a railway to Anstruther?—There is a railway to both places.

26,156. Have you had urgent demands for an expenditure at other places during the time you have been precluded from entertaining them?—I think Burnmouth is an urgent demand, and Coldingham is an urgent demand. To some extent, however, the fishermen at those places will be benefited by the two harbours of Anstruther and Dunbar. There has been another proposal, and a most valuable one It is to erect a breakwater for a refuge for the fishing-boats on the coast of Banffshire at Craigenroan. It is close to Banffshire, if not actually in that county, but the money was not forthcoming to enable it to be entertained. (*The witness produced and put in Report by Messrs. D. & T. Stevenson, engineers of the Board, upon the proposed breakwater at Craigenroan as a boat harbour of refuge for the coast of Banffshire.*)

26,157. Has there been any application with regard to an expenditure in the harbour at Wick?—No.

26,158. Has it not been entertained by the Board at all, for it is a question that has been often brought before Parliament?—Wick is a peculiar place. The harbour there belongs to a company, the British Fishery Society, who have large funds of their own. The harbour of Pulteneytown entirely belongs to them, and it is by them and the Government that the harbour has been improved. With a large and wealthy company like that, and looking to the immense expenditure required to do anything effective at Wick, the Board could not with its very small annual grant entertain a proposition for assistance there.

26,159. Have you made any expenditure upon the west coast of Scotland similar to that you have made upon the east?—In former years some expenditure was made.

26,160. Is it not as necessary on the west coast as the east?—It is not nearly so necessary there.

26,161. Is that partly because there are not so many fishermen, and partly because the coast is much more sheltered naturally?—Yes.

26,162. With the experience you have had over so many years with regard to the expenditure in fishing harbours, is the result satisfactory to your mind that it has been beneficially made?—Yes, very satisfactory indeed.

26,163. You think it has been of great advantage to the interests of the fishing around the coast?—Yes, of immense advantage.

26,164. And these improvements would not probably have been made if you had been unable to assist the local proprietors?—They never would have been made.

26,165. Is there not a sufficient interest on the part of the local proprietors, or those who are interested in the fisheries, to induce them to do those works themselves without Government assistance?—It is such a very expensive thing to construct harbours or piers on the coast. It is so frightfully expensive that the proprietors would hesitate to embark in such a matter at all, knowing that they would get very little return from it.

26,166. Can you show by statistics of the fishing and returns of the catch of fish whether there has been a considerable increase in those different harbours where the expenditure has been made in consequence of the improved harbour accommodation afforded?—I should think I could; but I have never had my attention directed to the question in that way. Of course returns of the herring fishery, I think, would show something of that kind.

26,167. Can you take any one of those harbours in which an expenditure has been made, and by looking back to returns previous to the expenditure being made, and last year's returns of the same harbour, show us the progress the fishery has made during that time?—I should require to refer to the places themselves. I have not got any data in my office from which I could supply such information.

26,168. Has there been any corresponding expenditure on any of the English harbours for the same object—on the coast of Northumberland, for instance?—There has been none made by this Board.

26,169. I presume that no part of your expenditure goes beyond the limits of Scotland?—None; I do not think the Act will allow it.

26,170. Does the Act specify that it is to be upon the Scotch coast?—Yes, I think it does. There has been at the same time 5,000*l.* given to Ireland.

26,171. 5,000*l.* a year?—Yes.

26,172. Your functions never extended to Ireland, did they?—No. The vote we receive for harbours is is for the encouragement of the fisheries on the sea coast of Scotland. It could not, therefore, be devoted to England or the Isle of Man.

26,173. There have been several Commissions of inquiry, I believe, as to the operation of the Acts regarding the herring fishery in Scotland?—Yes.

26,174. Can you name the various inquiries that have sat within the last 15 years?—There was a Commission of inquiry in 1848, conducted by Sir John Shaw Lefevre, and there was a Commission of inquiry in the year 1856. Sir John Shaw Lefevre reported in 1849.

26,175. Was there any special object in his inquiry?—His inquiry was to consider the utility of the expenditure of the Board of Fisheries, and indeed, of the Board itself.

26,176. Can you put in a copy of that report?—I can only put in a copy bound up with the books belonging to the Board.

26,177. What inquiry was there in 1856?—That was an inquiry of the same kind, conducted by three commissioners—Mr. Bonamy Price, Mr. St. John, and Captain (now Admiral) Sulivan.

26,178. Under what circumstances did that inquiry originate, if the Commission of 1848 reported fully upon the subject?—It originated under these circumstances: Mr. Wilson, who was then Secretary to the Treasury, thought the Board could be dispensed with, and he drew up a minute of the Treasury proposing to carry that into effect. Upon that the Board communicated with Mr. Wilson and drew up a statement pointing out that the Board subsisted by Act of Parliament, and also what the functions of the Board were. When it was ascertained that the Board subsisted by Act of Parliament, and what its functions were, and after a deputation had waited upon Lord Palmerston to explain the case, a Commission of inquiry was appointed.

26,179. What was the result of that Commission?—The commissioners were divided in opinion; two of them, Mr. Price and Mr. St. John, maintained the opinion that the Board and the brand ought to be continued, while Admiral Sulivan was for doing away with the system of the brand, but for increasing the grant for harbours, to be administered by the Board, an increase concurred in by the other two commissioners. Sir John Shaw Lefevre had reported in 1849 the expediency of imposing a fee upon the brand, and the two commissioners considered that that experiment of a fee upon the brand ought to be carried into effect.

26,180. Had it not been carried into effect before?—No; they were of opinion that the fee upon the brand would be a proper compensation for the working of the brand. They also anticipated that it would throw out of branding a large number of barrels of herrings every year, that at least 70,000 barrels of herrings would cease to be branded; they thought too that very probably the imposition of a fee would knock the brand on the head, that the trade were not sufficiently interested in the brand to carry it on with a charge upon it; but instead of that there have been more barrels of herrings branded since the fee than before.

26,181. (*Professor Huxley.*) I think Admiral Sulivan objected to the brand altogether?—Yes.

26,182. (*Mr. Caird.*) Then the result of that second Commission was to a certain extent to confirm the report of 1848?—Yes.

26,183. And then there was another Commission subsequently to 1856, was there not?—Yes, there was a commission in 1862.

26,184. What was the special object of the Commission of 1862?—The object of that Commission was to consider the effect of the Acts of 1860 and 1861.

26,185. It had no reference to the existence of the Fishery Board?—None at all.

26,186. That was the Commission of which Professor Huxley was a member?—Yes.

26,187. Can you tell us something of the operation of the recent fishery Acts of 1860 and 1861?—One of the operations of those Acts upon the west coast has been to prevent herring fishing from the 1st of January to the 31st of May from the Mull of Galloway to the Point of Ardnamurchan, and till the 20th of May north of Ardnamurchan to Cape Wrath. That is the herring close time established by these Acts.

26,188. Do not those Acts apply to the east coast of Scotland?—Not at all, as regards the herring close time established by them.

26,189. They are limited entirely to the west coast?—Yes, as respects the close time fixed by Parliament.

26,190. Are you aware of any complaints that have arisen under the operation of that close time on the west coast?—Complaints have arisen that it prevents the capture of herrings for bait for the cod and ling and other white fisheries.

26,191. That recent legislation had also in view the system of what is called trawling for herrings on the west coast?—Yes, it suppresses that.

26,192. What has been the effect in regard to the mode of fishing called trawling for herrings?—Its effect has been to suppress it.

26,193. Is it entirely suppressed now?—Yes; I think I may say it is entirely suppressed, and the Commission of inquiry of 1862 state distinctly that it is so.

26,194. Have any complaints arisen on the west coast in consequence of that mode of fishing being suppressed?—The persons who used to fish by means of trawling complain very much of its being suppressed.

26,195. Are you able to say whether the suppression of trawling has increased or diminished the supply of fish for the public?—The first year after the Act of 1861 was carried into effect the fishing was uncommonly good, but last year it was not so good.

26,196. Do your returns or the statistical information which you are able to get at enable you to form an accurate opinion as to the take of fish by all methods by which they are caught on the west coast? Do they include trawled-fish?—They would include trawled-fish, but there has been no trawl-fishing.

26,197. Because you have suppressed it. Then at this moment there is no trawling whatever?—There is next to none; it is nearly extinct.

26,198. Was there any large proportion of fish caught by the trawl-nets?—Formerly a very large proportion.

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26,199. Do you suppose, in consequence of the extinction of that mode of fishing, that there is now, by the single mode of fishing now practised, as large a quantity of fish caught as used to be caught by both modes?—I should think not.

26,200. Have you any knowledge of the fact?—I can hardly say I have an accurate knowledge of the fact. It is so difficult to get returns of the quantity of the fish caught, but I have no doubt in my own mind.

26,201. Do you imagine that all the fish that used to be caught by the system of trawling, are now lost to the public?—Not all, because there has been a great deal more drift-net fishing.

26,202. And has there been an increase on the whole in the take by drift-net fishing since the suppression of trawling?—There was an extraordinary take by the drift-net immediately after the passing of the Act, but that has not been sustained since; and then again a great number of trawlers finding that they could not go on trawling, took to drifting; and others of the trawlers have become part of the crews of the drift-boats: so that the whole cannot be lost.

26,203. Is the law also applied to the sprat-fishing in the Firth of Forth?—The law was brought to bear upon the sprat-fishing from the circumstance that the sprat-net became prohibited, in consequence of no net being allowed to be put into a boat during the herring-fishing which had not a mesh of one inch from knot to knot, nor any seine-net, which is the net by which sprats are taken. Now the sprat-fishing and the herring-fishing go on together, and in that way the sprat-fishing was affected by the law.

26,204. I believe that an amended Act then came into play the next year, by which certain limits were given within which the sprat-net could be used?—Yes; that was done by the Act of 1861.

26,205. Are those limits satisfactory to the sprat-fishers?—They wish them extended, and would like to have them brought a little further out.

26,206. You say that the fishermen themselves are not satisfied with the limits prescribed to them. Are you able to say whether it would be advantageous to the public interests that those limits should be extended?—I should say that it certainly would.

26,207. At present the limit is to the west of a particular line?—Yes, west of a line from Queensferry pier on the south through Bimar beacon to the north.

26,208. How much further to the eastward would you extend the limit?—I would have no limit at all, that is my own opinion.

26,209. Do you think that sprat-fishing could be followed without any prescribed limit whatever and without doing any injury to the herring fishery?—Yes, I think so, as regards the produce of the herring fishery, and as regards the influence and effect it would have upon the herring fishery; but there must be a rigid police to prevent the two sets of nets from coming into collision, because the sprat-net and herring-net could not be worked well close together.

26,210. Would it be practicable to establish such a rigid system of police without great expense?—I think a good deal might be done, but perhaps the easier way is a boundary.

26,211. Are there not some particular parts of the shores of the Firth that are generally found by the fishermen most productive of sprats, within which it is possible to define a better boundary than is at present defined?—The difficulty is in not knowing where the sprats come from. Last winter's fishing in the Firth of Forth opened our eyes to great peculiarities. The winds had been extraordinarily strong from the westward, and the sprats never went up the Firth at all till late in the season, but swarmed into Granton Harbour and Burntisland.

26,212. Neither of those places are within the limits within which sprats could be legally fished for?—No.

26,213. Then by carrying out that law you interfere with the natural law which sends the fish in a different direction?—I should say so, and of course there was a great deal of excitement and difficulty on the subject. In the first place, the authorities of Granton Harbour considered that the fishermen had no right to fish within the area of the walls at all. We were put in this position—they might fish within the area of the walls, as far as we were concerned, if they fished legally. We had nothing to do with guarding the harbour, but we could not allow them to fish with illegal nets.

26,214. In consequence of the state of the law, is it a fact that a large portion of food was thus lost to the public, owing to the impossibility of the fishermen catching it?—Ultimately the fishermen became too strong for us.

26,215. They broke the law, in fact?—We could not help it.

26,216. But that is the fact?—Yes.

26,217. Rather than let the fish escape altogether, the law was broken?—The force we had was not strong enough to put the fishing down. In one case the harbour authorities applied to the guardship for assistance from the gunboats, but the gunboats considered that it was not expedient to interfere.

26,218. Suppose the gunboats had interfered and driven off the fishermen, would not the result have been that to that extent the public would have been deprived of a useful and nutritious article of food?—Last season undoubtedly they would.

26,219. And an article of food which could not have been caught within the bounds prescribed by the law?—None would have been caught there at that time.

26,220. So that if the law had been enforced, there would positively have been a large portion of food lost to the public?—Last season certainly there would.

26,221. What would you recommend as a beneficial change in the present state of the law, as regards sprat-fishing in the Firth of Forth?—I would restore the law to what it was before—that is to say, before the passing of the Acts of 1860 and 1861. I would even go beyond that, because the sprat fishery was not even then free. The original law of 1809 made it compulsory to have a net of one inch from knot to knot at the herring fishery. In consequence of that law no net ought to have been used on the ground except a net of one inch from knot to knot; but as there was this sprat-fishing the Board of Fisheries to a certain degree permitted these nets to pass up the waters for the purpose of catching sprats, understanding that the fishermen were not out for the purpose of catching herrings. That is the way in which the law was worked. I think if arrangements were made to some extent like that of the French Convention Act—that the seine-boats should keep at a certain distance from the drift-net boats, and that there should be a rigid system of numbering the boats and sails, so that offenders would be immediately detected—the water might be left free for both kinds of fishermen.

26,222. Do you think that no other law is necessary than the law of police for preventing the interference of one mode of fishery with the other?—I am of opinion that nothing more is necessary.

26,223. Would you make that apply to the whole coast of Scotland wherever sprats or other smaller fish are caught?—Yes.

26,224. Is there a smelt-fishing here?—There is at Alloa, and it is not interfered with.

26,225. Would not a small net interfere with that fishery?—No.

26,226. With regard to the different functions you mention as appertaining to your Board of Fisheries, I believe the first was giving clearances to herring-fishing vessels?—Yes.

26,227. Did you give clearances to all the vessels employed in fishing all round the coast of Scotland?—Only to those vessels that took on board nets and barrels and salt, for the purpose of curing on board.

26,228. They are all decked vessels?—Yes.

26,229. You did not give clearances for fishing-boats?—No.

26,230. Could not that be done by the Custom House if you did not do it?—I cannot say whether it could be done by the Custom House or not. It scarcely applies to the east coast. There are not many vessels following the system of curing herrings afloat now. They have decreased in number every year.

26,231. What is the second function of your Board?—We receive notices from the curers on shore of their intention to cure.

26,232. What is the public benefit derived from your receiving these notices?—In that way the whole system of curing is brought under the eyes of the officers of the Board. The notice states how much salt is on shore, and then the officer proceeds to the premises and watches the cure.

26,233. Then can no one without giving notice commence a curing establishment?—No one.

26,234. It is placed under the inspection of the law?—Under the inspection of the Board.

26,235. By the law?—Yes.

26,236. Is the Board in any way responsible for the methods used in curing fish?—They are not in the least degree responsible in that respect, but they are responsible for the size of the barrels, and of the cran which is the measure for the fresh fish.

26,237. They do not impose any regulation as to the mode in which the curing shall be effected?—Only as regards obtaining the brand.

26,238. I see you say that you look to the measure used between the seller and the buyer?—Yes.

26,239. Do you enforce the use of any particular kind of measure?—Where the fish are sold by measure the cran must be used.

26,240. But do you not think that the buyers and sellers could protect their own interests in regard to the measures used? What advantage do the public derive from your surveillance in that respect?—There are no disputes of any sort. The fishermen come in with their boats loaded; the curer for whom they fish knows at once the quantity he gets as the fish are measured off by the cran.

26,241. Then it is like a measure stamped with the Imperial seal?—Precisely.

26,242. The same as weights and measures are stamped all over the country?—Yes.

26,243. Do you regulate the barrels in the same way?—Yes.

26,244. With regard to the quality of the cure, is it part of the business of the Board to attend to that?—Before you leave the point of measures I wish to say that the Commission of inquiry appointed in the year 1856 were satisfied that the Board alone could maintain these measures, and that the duty could not be transferred to any other department. They were of opinion that the inspectors of weights and measures could not do the work, owing to the immense number of barrels employed in the fisheries. They came to the conclusion that if the functions of the Board were abolished the barrels would cease to have any standard of measure.

26,245. Then are we to understand that the Board or their officers see that every barrel is of the proper measure and size?—Yes.

26,246. Is it branded to show that it has been examined by them?—Not the barrel.

26,247. Then how can you be satisfied that the same barrels are used?—They are tested when they are full for branding.

26,248. Are all the barrels of herrings branded?—No, not all.

26,249. Then only those for which the fee is paid are branded as having been tested by the Board?—Yes, in that sense; but it is not allowed to cure herrings except in the standard barrel. The barrel must be of a fixed size whether the herrings are branded or not.

26,250. But if you do not impress any stamp upon the barrel to show that it has passed under your inspection, in what way can you be certain that it is the same barrel if it does not subsequently come under the brand?—The only way is this, that the officers are passing through the premises all the time the coopers are making the barrels, and when the barrels are stored in immense numbers in preparation for the fishery they are measured over and over again. It would be more trouble and loss to the owners to change them than to use them.

26,251. With regard to the other functions of the Board, I understand you to say that it is part of the business of the officers of the Board to attend to the quality of the cure?—Yes.

26,252. In what way can they determine the quality of the cure?—By inspection. They see the fish through the whole process. They are constantly moving about the stations during the curing.

26,253. That is, the process of curing in the different curers' establishments?—Yes.

26,254. Then are there grades of brands to show the quality of the fish?—There are two grades of branding.

26,255. Is it a first and a second brand?—There is the Crown full brand which is given to fish full of milt and roe, and the Crown brand which is given to fish wholly spent or mixed full and spent.

26,256. But that relates to the fish itself, and has no reference to the mode of cure?—Yes, the distinction of brands refers chiefly to the fish itself, in the sense of the assortment of the fish.

26,257. Suppose that one man is more skilful in curing his fish than another, how would your officers determine in a case of that sort that one barrel was better than another? Suppose, for instance, that some brought in fish fresher and in a better condition than other fish which had been two or three nights at sea, would you affix the same brand to both barrels of fish?—It would not be branded at all if the fish had been two nights at sea.

26,258. But suppose that one lot of fish comes in fresher than another?—If the fish are not fresh enough for the brand, they would not receive it.

26,259. Still there would be a difference in the quality, and yet the two kinds of fish might receive the same brand?—There may be a slight difference, but never to any great extent.

26,260. Your officers do not brand in any way so as to notify whether the mode of cure itself is better conducted by one curer than another?—They notice it, but if the fish comes up to a proper standard of cure according to the Act of Parliament, then they would brand it.

26,261. If it contained the particular quality of fish you mention, and was packed in the same way, it would as a matter of course receive the Crown full brand or the Crown brand, as the case may be?—Yes, if it fulfilled the conditions on which alone the brand is given.

26,262. Under the system of branding, is it not practically the case that there is no distinction whatever in the quality of the cure by different curers?—Not as regards the application of the brand. The brand is open to all curers alike.

26,263. So that if one man is a more skilful curer than another, that would not be shown in any way by the brand?—No.

26,264. (*Professor Huxley.*) Supposing that the cure had reached the level imposed by the law, the brand would be given?—Yes.

26,265. The degrees of excellence above that level would not be noticed?—No; but on the other hand the superior curer would get this benefit out of the brand that he would have increased facilities for the market given to him.

26,266. But his rival who just comes up to the level of the brand would get that as well?—Yes.

26,267. (*Mr. Caird.*) Is the name of the curer placed upon the barrel?—Yes.

26,268. As well as the Government brand?—Yes. The Government brand is for the foreign trade. The foreign merchants deal almost entirely by the brand, and it is generally believed that they pay for it.

26,269. Are the fees received for branding employed in diminishing the other accounts of the Board?—They are carried by Act of Parliament to the consolidated fund.

26,270. Then they do not come into your accounts?—They do not come into our accounts at all; they are paid by the Board to the Exchequer and carried to the consolidated fund.

26,271. So that substantially they are so much towards diminishing the general cost to the country of this Fishery Board?—Yes.

26,272. What may be the average during the last few years?—I can give you an exact return, year by year. It begins in the year 1859. In that year the return was 2,644*l.* 12*s.* In the year 1860 it was 3,865*l.* 4*s.* 6*d.* In the year 1861 it was 4,422*l.* 9*s.*

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In the year 1862 it was 5,801*l.* 12*s.* 4*d.* And last year, when the fishing was not so good comparatively, it was 4,618*l.* 16*s.*

26,273. Has the rate remained the same from the commencement until now?—Yes, the rate has remained the same.

26,274. Was it fixed by Act of Parliament?—Yes.

26,275. At what rate?—At 4*d.* per barrel.

26,276. Then that progressive increase would indicate a large progressive increase in the quantity of fish branded?—Yes. Of course the quantity of fish branded must vary with the production from the fisheries.

26,277. (*Professor Huxley.*) It appears from these returns that the country has received from the brand more than it has given you to expend upon your fisheries and harbour works. I understand you to say that the country gives you 3,000*l.* a year?—Yes.

26,278. And your average receipts are much higher than that?—Yes; the total receipts are 21,349*l.*

26,279. That is for four years?—No, for five years.

26,280. And is at the rate of upwards of 4,000*l.* a year?—Yes.

26,281. Then the branding has returned 1,000*l.* a year more than your Fishery Board get for their expenditure on harbours?—Yes. I may say that the opinion of several members of Parliament at the time was that the fee should have gone to the harbours instead of being carried to the consolidated fund.

26,282. (*Mr. Caird.*) The seventh head of the functions of the Fishery Board you state to be preventing the use of illegal nets?—Yes.

26,283. Do you execute that function with much stringency?—Yes, with the greatest possible stringency.

26,284. That is chiefly on the west coast?—Yes.

26,285. Have you had occasion to exercise that function at all on the east coast?—Yes. Occasionally the nets by barking become too small, and the fishermen are warned to lay them aside, partly because a standard of mesh is one of the stipulations of the Convention Act with France, and partly because it is laid down in the Acts of Parliament.

26,286. With regard to the maintaining of order on the fishing grounds, that I suppose means maintaining police regulations?—Yes.

26,287. Is that an onerous duty?—In narrow waters it is a very onerous duty.

26,288. Do you keep a police for that purpose regularly in narrow waters?—We have a shore police on the west coast, and there is a cutter belonging to the Board which can cruise on either of the coasts, and, generally speaking, there are one or two steamers lent to the Board permanently by the Admiralty.

26,289. Do the police form part of your annual expenditure?—Yes.

26,290. I presume that the vessels lent to you by the Admiralty do not come into your expenditure?—Only to the extent of 100*l.* a year paid to the commander as naval superintendent under the Act.

26,291. Another of your functions is receiving and restoring lost fishery property?—Yes.

26,292. Have you much to do with receiving and restoring lost fishery property?—A good deal at Wick.

26,293. When fishery property is found at sea is it brought to your officer?—Yes, to the officer at Wick, or wherever there is a Fishery officer.

26,294. You do not take any means yourselves for finding it? You do not consider that it is part of the business of your cutter to look out for lost fishery property?—If she saw any adrift she would immediately pick it up, or if the fishermen mentioned that they had lost property she would proceed to the spot, and endeavour to recover it. Occasionally a large quantity of nets have been sunk in consequence of the immense quantity of fish in them, or cut away in bad weather. Our vessels have in many instances been able to recover the nets from the sea, and to restore them to their owners.

26,295. I believe we have already inquired into the next portion of your functions. I come now to the 15th, which is aiding and maintaining the Fishery Convention with France. Is that a duty which is of an onerous character?—Yes, it is of a very onerous character, and involves us in great difficulty.

26,296. Have you much to do in that way?—Both British and French vessels are on the coast here in the summer, and we have a great deal of labour imposed on us in communicating with the Admiralty ships and conveying them instructions.

26,297. Are there many French vessels that come on the coast of Scotland?—Yes, a considerable number.

26,298. Do they in any way hamper your fishermen?—They are apt to come in within the boundary prescribed by the Act.

26,269. Under your direction do the cruisers placed at your disposal enforce the regulations for preventing them from coming within the boundary prescribed against them?—Yes. The cruisers have the Act, and the commanders receive instructions on the main points of the Act from the Fishery Board. Any questions they may consider it necessary to put to us are answered here.

26,300. Do the fishermen, if they have any complaints to make, come to you?—Yes; they either come to us, or write.

26,301. The last portion of your functions to which I wish to direct your attention has reference to the statistics of the catch of fish, showing the progress of the fishery within recent years, and coming within the objects of our inquiry as to whether the supply of fish is increasing, stationary, or diminishing. Can you answer the question generally as to the east coast of Scotland whether the supply in recent years is increasing, stationary, or diminishing?—It has been increasing, I should say, certainly.

26,302. Can you give us the figures for any series of years that would indicate the amount of that increase?—Would you wish to restrict the returns you ask for to the east coast?

26,303. If you have them all together we had better take them all together; but if you can give us the east coast and the west coast separately, we should prefer having them in that way, as there are two different sets of legislation applicable to them?—I can give you with complete accuracy the statistics of the cured fish on both coasts.

26,304. Then will you be good enough to do that?—It will take a little time to separate the east from the west coast, but I can give you the gross now.

26,305. Then give us the gross, and perhaps you will be kind enough to prepare a statement showing us the returns for the east and the west coasts separately. I think it would be very useful to put returns of that nature in?—I cannot give you a return of the fresh fish. It is impossible to collect that with sufficient accuracy to depend upon, except at such an immense expense and such an increase of our staff as would hardly be warranted. Do you wish now to go back to an early period?

26,306. To what early period can you go back?—As far as the year 1809 or 1810. That includes England, and gives returns for Great Britain. In that year the total number of barrels cured was 90,185, whilst in the year 1862, for Scotland only, including the Isle of Man, the cure was 830,900 barrels.

26,307. Did that first return include the whole coast of England?—Yes, the whole coast.

26,308. The entire cure within Great Britain?—Yes, for the year 1809-10.

26,309. The total of that year was only 90,000 barrels?—Yes; and in 1862, in Scotland alone, the total was nearly 831,000 barrels.

26,310. Then we may take it from that, that in the course of 50 years there has been an increase in the quantity of fish caught in Scotland alone equal to nine times the quantity of fish caught on the whole coast of Great Britain in the year 1809?—Yes, as regards the cured fish.

26,311. Do you suppose that the proportion of cured fish at this moment, as compared with fresh fish, has not diminished rather than increased within that period in consequence of the greater facilities which are now afforded for sending fresh fish to the market?—The proportion of fresh fish must have increased very much in consequence of the facilities afforded by railways for sending it up to the large

consuming towns in the kingdom. It has very much increased from certain places in the south of Scotland, but not much from the north.

26,312. In the north there are not many railways?—No.

26,313. Wherever railways have been opened up the proportion of fish sent fresh to the market has increased?—Yes; but as regards herrings the proportion sent fresh to market must be limited by distance, inasmuch as you cannot get them into the market fresh from very remote districts.

26,314. Taking the whole of that period of 50 years, and subdividing it into decennial periods, can you give us the return for each 10 years?—Yes, but it would take a little time. (*This decennial return furnished by the witness for the Appendix.*) The export to the continent is one great cause of the increase. The export to the continent has increased enormously.

26,315. How could that be the cause of an increase?—It has occasioned an increase in the cure.

26,316. Do you mean that there is a greater demand and a larger price paid for fish to go to the continent than was formerly the case, and that therefore a new outlet has been found for the fish?—There is a much better market, although I am sorry to say there has not been a new outlet. It all goes to the same markets, or rather the outlets have been diminished. There used to be a great market in the West Indies, but that has been taken away in consequence of the abolition of slavery. The outlets on the continent remain the same, but the demand has increased. There would be a still further increase if the duty upon fish abroad was lowered. If, for instance, Austria would lower her duties to the same amount as Prussia, and if France would also lower her duties, there would then be new outlets, and the exportation would increase enormously.

26,317. Do you think there would be more fish cured than at present, and less fish sent to the market?—There would be more boats and more nets and more fishery, and there would be altogether a greater stimulus given to the fishery.

26,318. In your experience do more boats and more nets mean more fish?—I think on the whole they do.

26,319. Then I suppose you have not found that the sea has shown any indication of being fished out?—No, I do not believe that it is fished out. There are great fluctuations arising from unknown causes, as far as anybody connected with the Fishery Board can explain them; but apart from those fluctuations I do not believe that there is any want of fish in the sea.

26,320. Then it is your opinion, from the experience you have derived from your constant familiarity with the fishery for many years, that with the gradually extending number of boats and fishermen and nets there has been a proportionate increase in the amount of fish caught?—Certainly.

26,321. And as far as you have seen there has been no limit arrived at yet from which you can say there has been any exhaustion shown by the sea in consequence of its being over-fished?—Certainly not.

26,322. Does that apply to any other fish than herrings?—I cannot speak with regard to any other fish.

26,323. Then you have not taken under your cognizance any other description of fish than the herring?—Scarcely any. We take statistics of the cod and ling, but only as regards the cured fish, and that arose out of the system of the bounties.

26,324. With regard to the duty levied by Austria, would it be advantageous to the exportation of fish if it was reduced to that of Prussia? Perhaps in the first instance you will tell me what the duties are in Prussia and Austria?—I think the duty in Prussia is 3*s.* per barrel.

26,325. What is the duty in Austria?—The duty in Austria is about 9*s.* or 10*s.* With the transit duty added it amounts to 15*s.* or 15*s.* 6*d.* The duty alone is upwards of 10*s.* and the carriage is about 5*s.* 6*d.* The duty in France is also prohibitory. It has been reduced, but it is still prohibitory.

26,326. That is the duty in France?—Yes.

26,327. Then in Austria and in France the duty is more than double what it is in Prussia?—Yes, a great deal more than double.

26,328. Has the consequence of that been shown by your tables of exports to operate very much against the export of fish to those countries?—There is no export to those countries to speak of.

26,329. You do not export fish to Austria or France?—No, very little.

26,330. How is it with regard to Spain?—Spain takes no herrings, but she takes cod and ling from Shetland and the north.

26,331. Would they take herrings there but for the Customs regulations?—Being a Roman Catholic country, I should think Spain would take herrings.

26,332. Does the same answer apply to Portugal also?—Yes.

26,333. There is no export to Spain or Portugal?—There may be an export of red herrings, but not of our white cured herrings.

26,334. Then to what countries are your herrings exported?—Our herrings are exported to Prussia Polish Prussia, and Russia.

26,335. Is Russia on the same footing with regard to its duties as Prussia?—I suppose the duties are nearly in the same ratio. Fish are exported from here to St. Petersburg, Riga, Memel, Konigsberg, Bremen, Rotterdam, Belgium, Stettin, and other places.

26,336. (*Professor Huxley.*) Do all the Scotch herrings go to the Russian and central European markets?—Yes, of those that are exported to the continent.

26,337. (*Mr. Caird.*) Is it at all complained of by those who are engaged in the herring-fishing, or in the trade generally, that there should be prohibitory duties in any of the large consuming Catholic countries of Europe?—It is complained of very much.

26,338. Within your knowledge have any representations been made to the Government in order to obtain a relaxation of those duties?—Very frequent representations have been made both by the Board and by the trade.

26,339. Have those representations never been followed by any action on the part of the Government?—I believe that the Foreign Office wrote to our ministers abroad, and have received a sort of undertaking on the part of Austria that her rate of duties shall be considered next year when arrangements have to be entered into with Prussia, and it is hoped that they will be considered with a view to reduction.

26,340. With regard to France, has anything been done there?—There were representations made by the Government to France, and in the new Commercial Treaty with France there was a reduction of the duty to some small extent, but it was not sufficient to enable a trade to be carried on. I believe it is the object of France by means of her own fisheries to maintain her navy.

26,341. Can you say whether, within your own knowledge, any of the methods of fishing practised on the Scotch coast involve a wasteful destruction of fish or spawn?—It has been stated that beam-trawling involves a wasteful destruction of fish and spawn.

26,342. Have you any knowledge of that yourself? Have you observed any wasteful destruction of fish or spawn by any mode of fishing which has been carried on under your jurisdiction?—No; such observations as we have made with regard to spawn would rather disprove that assertion. I have two reports here which were made by Dr. Allman in reference to a small piece of ground where beam-trawling has been interdicted. It is a piece of ground about three miles square. The experiments and investigations carried out by him decidedly disprove the theory.

26,343. They disprove the allegation that injury is done by means of beam-trawling?—Yes.

26,344. Can you give us the facts as shown by that investigation; can you state in substance what was the result?—We employed divers to examine the ground, and search it over for spawn; with great difficulty they found a small quantity, but since the regulation prohibiting beam-trawling has subsisted the spawn does not appear to have been deposited there in the way in which it was represented to exist before,

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I may add that the ground has been very closely searched by us at different times.

26,345. During the different seasons of the year?—Yes, and it has not been found that the spawn has been laid down there in the quantities that were described before, but still some was got. The spawn indicated vitality after being brought up with the dredge and exposed to the air. It was carried away from the ground to Dr. Allman's house in Edinburgh and yet it vivified, and the conclusion arrived at was that if it was allowed to be thrown back into the sea, as it would be by the shaking of the nets after being taken by the trawl, no injury to it would follow.

26,346. Was that the result of several experiments?—Yes.

26,347. And the spawn all vivified in the way you mention?—Yes, a great portion of it.

26,348. Who was the gentleman who conducted the experiments?—Dr. Allman, professor of natural history in Edinburgh.

26,349. And the result of those experiments was to lead to the conclusion that even although the spawn were dislodged and dropped again into the sea, no great injury would be done?—That is the result he has come to.

26,350. Over what period did his investigations extend?—His first report was made towards the end of the year 1861. There was another report made in June 1862. (*Copies of these reports were produced and handed in by the witness.*)

26,351. Had that report any reference to a second investigation?—Yes.

26,352. A second investigation upon the same ground?—Yes, and in the meantime there had been divers sent down.

26,353. Was that done in order to see the state of the bottom?—Yes, and to try to get spawn.

26,354. Did you meet with very little success in getting spawn?—We did not meet with much success upon the ground where beam-trawling had been interdicted, but more spawn was obtained about the Isle of May; it was found more abundant on the west and east sides of that island than on the prohibited patch off Pittenweem.

26,355. Is the ground a soft bottom?—I believe the commander of the cutter will be able to describe that better than I can.

26,356. Then I gather from your answers that you cannot say there is any existing mode of fishing practised upon this coast which involves a wasteful destruction of spawn or fish?—There is no mode of fishing practised here which involves a wasteful destruction of spawn. The wasteful destruction of fish is a more difficult point to speak upon There are modes of fishing practised by which the fishermen take great quantities of young fish, but I do not know whether that is a wasteful destruction of fish or not.

26,357. But as a fact there are modes of fishing practised by which considerable quantities of young fish are taken?—Yes, but I cannot say whether that is wasteful or not.

26,358. Do you suppose that any legislative restrictions could be framed which would increase the supply of fish?—As regards legislative proceedings for increasing the supply of fish, I regard them with great doubt myself, and I may say with great dislike; but in giving that answer I wish it to be understood that I am only representing my own opinions, and not those of the Board.

26,359. I am only asking you for your individual opinion now?—My individual opinion is decidedly opposed to legislative restrictions.

26,360. Are there any legislative restrictions that operate injuriously at this moment?—Yes, I think so.

26,361. What are they?—I think the existence of a herring close-time operates injuriously to the supply of fish.

26,362. Is there any good reason why there should be a close-time on the west coast of Scotland and not on the east coast?—I know of none.

26,363. What was the impelling cause of regulations of that exceptional description?—I believe the regulation was established at the strong desire of the fishermen themselves, but I never could find out why a close-time was imposed. I believe that the Commission mention in their report that they found the close-time to be a most popular thing on the west coast.

26,364. (*Professor Huxley.*) The answers we have had from you explain the jurisdiction and functions of the Board; we have had a great deal of information from you coming under those heads, but we have not heard much as to the organization of the Board itself. Will you now be so good as to tell us under what Act the Board of Fisheries is constituted?—It was constituted by the 48th George 3. c. 110.

26,365. In what year was that passed?—In the year 1808.

26,366. Is that the only Act under which you perform your functions?—No, there are several other Acts.

26,367. As far as regards your general jurisdiction, and so forth, are there any other subsequent Acts which modify the range and organization of the Board?—They do not modify the jurisdiction or range of the Board, but they do its organization. For instance, one of the Acts increases the number of commissioners, but it does not substantially alter the organization of the Board.

26,368. Does the organization of the Board remain the same as it did in the year 1808, with the exception that the number of commissioners has been increased?—Yes, but there have been some details of duties added.

26,369. What was the organization of the Board under the first Act? Of whom was it made to consist—of what number of persons?—It was made to consist of seven persons. Formerly there was what was called the Board of Trustees for Manufactures and Fisheries in Scotland. That Board existed previously to 1809, and consisted of 21 persons.

26,370. Was it a public body?—It was a public body which had existed since the Union, and which received a grant of 2,000*l.* per annum.

26,371. Was it mentioned in the treaty of union?—I do not think it was, but the Board arose out of the circumstance that under the treaty of union malt duties were imposed in Scotland, and in return for that a perpetual annuity was to be paid to Scotland of 2,000*l.* for the improvement of its manufactures and fisheries. Of that sum of 2,000*l.*, about 1,000*l.* was paid to the fisheries and 1,000*l.* to the manufactures.

26,372. In 1809 was that society suppressed?—No, it continues to the present day.

26,373. Does the Board of Fisheries take upon itself the functions of that society?—No. The Board of Fisheries is independent of the society altogether.

26,374. Quite independent?—Yes.

26,375. The Board of Fisheries cannot be regarded as having had transferred to it the rights of that society?—Not in the least; but when that society found that a separate Board was going to be established by Parliament they ceased to lay out any of their money on the fisheries.

26,376–7. I presume the society of which you now speak was something like the Royal Dublin Society in Ireland?—It is obligatory by the Act that the seven commissioners originally forming the Board of Fisheries should be elected out of that society, and the number of members of the society was increased to 28 in order to provide these seven commissioners. The body of which I speak originally consisted of 21. In 1809 it was increased to 28, from which seven commissioners were appointed to the Board of Fisheries. They were nominated by letters patent under the Crown.

26,378. Under the commission what officers were constituted by the Act?—Under these commissioners there were fishery officers, who by Act of Parliament must be coopers by trade.

26,379. How many of these fishery officers were constituted?—There must have been a considerable number, and they were gradually increased.

26,380. Was the number limited by the Act of Parliament?—No, not at all.

26,381. Had the seven commissioners the power of appointing any number of fishery officers they liked?

—They had the power of nominating. The Treasury appoint.

26,382. And there was no limit to the number?—No, except the necessity for their services.

26,383. Was the secretary nominated by the commissioners?—The commissioners are empowered to appoint a secretary, clerks, and other officers to do the duty of the head office, and they present to the Treasury the names of coopers by trade fit to carry on the outdoor duties of fishery officers.

26,384. Then there is no practical limit to the number of officers who may be appointed?—No.

26,385. Was anything said as to the salaries of the officers or the amount of money to be granted?—That is all provided by the Treasury.

26,386–7. Then is there no limit fixed by the Act?—None at all.

26,388. The commissioners are not paid?—No.

26,389. The only persons paid are the secretary and the officers?—Yes.

26,390. Are the fishery officers still obliged to be coopers?—Yes, all the fishery officers must be coopers.

26,391. For example, you have cutters acting under the orders of the Fishery Board; the commander of each of these cutters must not be a cooper, must he?—He must have been a fishery officer until the Act of 1860.

26,392. Is it a matter of fact that before the year 1860 the commander of the cutter was a cooper?—Until close on to the year 1860 the commander of the cutter was a fishery officer.

26,393. He had as a fishery officer been a cooper to begin with?—Yes, I suppose so; but he had been employed upon the sea as mate in the excise service during the years 1808, 1809, and 1810. Before he got the command of the fishery cutter he must have been a cooper.

26,394. Do you construe the word "cooper" rather elastically?—No, I construe it strictly.

26,395. The secretary is not obliged to be a cooper, is he?—No.

26,396. Were all the other persons paid by the Fishery Board obliged to be coopers?—No, the clerks were not.

26,397. But all the officers called fishery officers must be coopers?—Yes.

26,398. And the commanders of the vessels must be fishery officers?—The Board has only one vessel, and the original commander of it was for 50 years in the service of the Board, which would bring him very nearly down to 1860.

26,399. Did any subsequent Act modify that regulation?—Yes. The Act of 1860 modified that regulation. The Act of 1860 gives power to appoint superintendents of fisheries, who shall have all the powers conferred on naval superintendents appointed by the original Act.

26,400. Then can you appoint persons who were not coopers under that Act?—Yes, but not to superintend the curing of herrings and branding the barrels, which duties are specially excepted by the Act, and therefore remain exclusively reserved to the fishery officers under the original Act of 1808.

26,401. What officers have you now under the control of the Fishery Board?—In the first place the secretary.

26,402. And then the clerks of the office?—Yes.

26,403. And what next?—If you take the outdoor establishment, there is the general inspector and assistant inspector, and 26 fishery officers; that makes 28 altogether. Then there is the commander of the cutter, who is a fishery superintendent, and his mate, who is also a fishery superintendent. They take a complement of men on board and send out guard boats. Then in addition to that staff there is a sergeant of police on the Ayrshire coast who is also a fishery superintendent. There is another on the Argyllshire coast who is also a fishery superintendent, and who has under him nine fishery constables.

26,404. Is that principally for carrying out the Act of 1860?—Yes, these sergeants of police and fishery constables never existed before.

26,405. Is that the whole of your establishment?—No, there are the engineers of the Board, who have a retaining salary from the Board, and who are paid by fees for the work they perform.

26,406. Are they employed on the works which have been carried out?—Yes, the engineers are exclusively employed when the works are being carried out. They have also harbour inspectors.

26,407. What vote do you have for meeting the expense of that organization?—One year with another, including the vote of 3,000*l.* for harbours, the total vote made to us is about 14,000*l.* or perhaps 15,000*l.* a-year.

26,408. Has that remained about the same since the first establishment of the Board in 1809, or has it greatly increased?—It has diminished I think.

26,409. What was the grant in 1809?—Perhaps it was not so much in that year, that being the first year. The officers were not then appointed.

26,410. Then take 1812, or say 1814, that is 50 years ago?—The expense was about 12,000*l.* then, but at that time we had no police to pay. At that time we did not get a direct vote; it was paid to us out of the Excise.

26,411. Still you can ascertain what sum was expended?—Yes.

26,412. Will you send us in a return of the average expense in every 10 years?—Yes. (*This return furnished by the witness for the Appendix.*)

26,413. Under your Act of constitution what was your jurisdiction?—Great Britain.

26,414. The whole of Great Britain excluding Ireland?—Yes, excluding Ireland.

26,415. And the Isle of Man?—No, we had the Isle of Man added into our jurisdiction in 1821 by the Act 1st and 2nd Geo. IV. cap. 79.

26,416. Have you the precise terms of the Act conferring jurisdiction over the whole of Great Britain?—I think I had better read the preamble of the original Act, 48th Geo. III. cap. 110:—"Whereas the "improvement of the British white-herring fisheries is an object of most essential importance to the "wealth and commercial prosperity as well as to the "naval strength of this kingdom, and for the attainment of which it is expedient that more effectual "regulations should be made in order to secure attention to curing and salting;" and so it goes on and speaks, as do several subsequent Acts, of the fisheries as British fisheries, and of the vessels as owned in Great Britain and manned in Great Britain, and as to be superintended over upon the coasts and in the bays of Great Britain.

26,417. Then that Act limits your functions and jurisdiction entirely to the white-herring fishery?—Entirely to the white-herring fishery.

26,418. It gives you no power to meddle with the cod or long-line fishing?—None whatever. Nor does any Act give us power to meddle with them, but we had the power of punching dried cod, ling, tusk, and hake, because there was a bounty upon them.

26,419. Was that power given to you by a subsequent Act of Parliament?—Yes.

26,420. What was the date of the Act which thus enlarged your power?—It was the Act 1st George IV., cap. 103, passed in 1820, which gave power to pay bounties for the cod.

26,421. Does that Act give you power to make regulations?—Only in respect to the bounties.

26,422. Does not the first Act?—No.

26,423. What does the first Act empower you to do?—To see to the curing of herrings. It gave us also naval superintendents to protect the fishermen from their enemies (you must remember that that was war time) and at the same time to go on board and inspect the registries of fishing vessels. It further gives bounties for deep-sea fishing and compels the fishing vessels to go to Shetland at certain times of the year and not to begin fishing till the 24th of June. It also gives the naval superintendents power to maintain order on the fishery grounds. The fishery officers have the same powers given to them as are given to the naval superintendents, but the chief functions of the fishery officers are for the curing of the herrings and the collection of relative statistics.

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26,424. Does the Act prescribe any particular method of curing the herrings?—There are certain things prescribed upon which alone the herrings could receive the bounty.

26,425. What is the nature of those regulations?—In the first place the officer sees that the barrel contains 32 gallons, English wine measure, that the herrings are properly gutted, cured, and packed, and he then brands them as evidence that those herrings had been brought before him and had passed inspection. The brand originally denoted that the owner was entitled to receive the bounty from the Excise.

26,426. Does that Act make any regulations about the size of the mesh of herring nets?—The 12th section of that Act does.

26,427. Does it prescribe that the inch mesh shall be used?—I imagine that this Act is the first Act that so prescribes it. I have never been able to find out any other.

26,428. Does that Act merely empower you to grant a bounty under certain conditions, or does it enable you to interfere with persons catching herrings in any other way? For instance, could you prevent persons catching herrings with any other kind of net? Suppose they said, "We don't want your bounty, but "we want to catch herrings for ourselves," could they catch herrings with any net they pleased?—Certainly not. They were restricted to nets with meshes of one inch.

26,429. Does it make it penal to use any net except a net having an inch mesh?—They might use the seine-net or any other net, provided it had a mesh of one inch from knot to knot.

26,430. They might catch herrings in any way?—Yes, in any way they liked, but they might not use any net with a mesh that was prohibited. Perhaps I had better read the clause:—"And be it further enacted, "that from and after the 1st day of June 1809 no "person shall use on any river or loch or at sea in or "on the coast of Great Britain any herring-net, or "any trawl-net, drag-net, or any other sea net for "the taking of herrings which hath a mesh of less "than one inch from knot to knot, or any false or "double bottom cod or pouch, or shall put any other "net though of lawful size behind the others to "destroy the small fish; and that any person offending "herein shall forfeit every such net as aforesaid and "the sum of 40*l.* for every such offence; and it shall "be lawful for the commissioners for the herring "fisheries to be appointed pursuant to this Act to "cause every such net to be burnt."

26,431. That relates to the whole coast of Great Britain?—Yes.

26,432. And it is the first Act that limits the size of the mesh?—It is the first Act as far as I know. The great object of this Act was to enable the British fishermen to contend with the Dutch, and I imagine that the Dutch fishermen had that regulation.

26,433. Is it your impression that these regulations were passed on account of any falling off in the supply of fish, or to enable our herrings to compete with the Dutch herrings?—I think they were passed with the double object. The chief object I believe was to enable our herrings to compete with the Dutch; but there was also the common idea that the herrings came in-shore to spawn, and that to destroy the young fish would lessen the produce every succeeding year. It was regarded as a matter of the greatest consequence in those days to let the young fish grow, and it is thought so at the present time by a great body of the fishermen.

26,434. Then there may have been two motives in establishing the inch mesh, one to secure the sorting of the fish, and the other to allow the escape of the small fish?—The general tenor of the Act seems to indicate that the sorting of the fish must have been a motive. The other motive, to facilitate the escape of small fish, is declared in the Act.

26,435. When the nets are fishing in-shore?—It says nothing about in-shore, and nothing is said in regard to the Dutch fishermen or in regard to the curing of the fish. It certainly looks as if the chief object of the clause was to secure the preservation of the fish.

26,436. The Act gave you no power over any other kind of fishery than the herring fishery?—None.

26,437. It gave you no power of interfering with the long-line fishermen?—No.

26,438. Have you had any power given you since to interfere with them or to make regulations for them?—We have had no power given to us to interfere with the long-line fishermen.

26,439. Did that Act empower you to do anything with regard to the pilchard-fishing?—Nothing.

26,440. When the Board was first established were the fishery officers scattered over the whole of the coast of Great Britain?—Yes.

26,441. What did they do, since at very few parts of the coast excepting in Scotland this mode of curing fish took place?—I believe that it did at an early period, owing to the bounties that were given. The fish in those times were cured in order to obtain the bounties.

26,442. But did that mode of curing take place in the Bristol Channel for example?—I think so.

26,443. Used there to be curing houses there?—I believe that there used to be an officer at Bristol whose duty it was also to see to the export of herrings. The fishery officers at that time were stationed at the chief points of export.

26,444. Are you aware of any subsequent Act which gives you larger powers, except those with regard to bounty? Was there any Act which gave you more extensive powers than were conferred upon you by the original Act?—Yes, the Act of 1860 does.

26,445. That Act has reference to the west coast of Scotland?—No, it has reference to the whole coast of Scotland.

26,446. What further powers does it give to you?—It gives the Fishery Board power to interfere with other fishings for the protection of the herring-fishing.

26,447. Will you be good enough to read the particular section which thus enlarges your powers?—It is the fifth section of the Act, but both the fifth and sixth sections give enlarged powers. The fifth section says, "The commissioners may from "time to time make such regulations as they shall "think fit for the more effectual government, manage-"ment, and protection of the herring fisheries on the "coast of Scotland, and for the preservation of order "among the persons engaged therein; and any person "who commits any breach or contravention of any "such regulations shall be liable to have his boat "detained by the superintendent or any person acting "under his orders, or by any officer of the fishery, or "by order of any sheriff, justice, or magistrate having "jurisdiction under this Act, and shall be liable to a "penalty of not less than 5*l.* and not exceeding 20*l.* "for every such offence." You see the clause gives them power to make "such regulations as they shall "think fit," and then the sixth section particularly applies not to the herring fisheries but to other fisheries. It says, "The commissioners may on appli-"cation made to them, and after such inquiry as they "shall think necessary, by regulations to be made "by them from time to time prohibit, on the coasts "of Scotland and within such limits, and for such "periods as they may think fit, the use of any trawl, "drag, or beam net which in the opinion of the said "commissioners is injurious to the spawn or other-"wise to the herring fishery; and any person who "commits any breach or contravention of any such "regulations shall be liable to a penalty of not less "than 5*l.* and not exceeding 20*l.* for every such "offence, provided that this provision shall not in any "way affect any of the prohibitions or requirements "of any of the recited Acts in so far as relates to "fishing for herrings." Now that clause I take it empowers the commissioners to interfere with beam-trawling for codfish.

26,448. Or for soles?—Yes, or anything, if the Board choose to exercise the power.

26,449. With respect to the functions of the Board, there is a large class of these functions which may be called entirely regulative?—Yes, entirely.

26,450. Police functions, with regard to the enforcement of the Act?—Yes.

26,451. Do you consider yourselves bound to enforce the Convention between England and France?—Certainly, so far as the force and the circumstances under which that force is lent to the Board admit of; but it is impossible that a man-of-war or an officer in command of a man-of-war can take orders from a civil board. They are only put in communication with the Board.

26,452. Let me put a case to you so that my meaning may be quite clear. For example, here is an article—the 24th, which says, "Trawl-fishing is forbidden in all "places where there are boats engaged in herring or "mackerel drift-net fishing." I give this merely as an example. Suppose that I made a complaint before the Board that persons were engaged in trawling upon the east coast of Scotland while herring-fishing was going on—would the Board feel themselves empowered to act under the Convention with France?—Undoubtedly, to the extent of communicating with the naval superintendent and drawing his attention to the matter, provided that the French were at the time fishing upon the coast, so as to bring the Act of Convention into operation as an available Act.

26,453. What would be done then?—I presume that the naval superintendent would act according to his own discretion.

26,454. Have you any reason to believe that he would act at all? Is the opinion of the law officers of the Crown as to the validity of this Convention in the Scotch seas so clear that the naval superintendent would consider it his duty to act?—I do not know that they ever have hesitated to act. But there is a great doubt as to the scope of the Act. Anyone who reads the title of the Act must feel a certain doubt, but it never has been disputed by the French.

26,455. Has it been acted upon?—How do you mean acted upon?

26,456. Are you aware of any instance in which the captain of a man-of-war has interfered, such, for instance, as in the case I referred to just now—has he prevented trawl-fishing on the Scotch coast while herring-fishing was going on?—I do not know that he has prohibited trawl-fishing, but he has taken fishing-vessels into port for a breach of the Convention. There have been instances in which he has taken vessels in tow, brought them into port, and brought the fishermen before the magistrates.

26,457. On what part of the coast has that occurred?—It has occurred at Berwick over and over again, and at Dunbar and various places.

26,458. Then by the decisions of the courts here you have settled the question that the Scotch seas are "between England and France?"—That has been settled over and over again. French fishermen have been fined 10*l.* for fishing on Sunday at Dunbar. The officer in command of a French cruiser complained, I believe, of the excess of this fine.

26,459. You are aware that a question as to the limits within which the Convention applies has been raised?—Yes.

26,460. But in Scotland you consider it to be settled, and act upon the Convention as it stands?—The French claimed the right to fish three miles from the shore of the main land inside the Fern islands, and the naval officers in charge considered that the distance should be three miles from the outside of the Fern islands. The question was referred to the Judge-Advocate-General, upon reports from me and from Captain Strange of Her Majesty's ship "Archer" to the Admiralty, and the opinion of the Judge-Advocate was that the boundary should be three miles from the outside of the Fern islands.

26,461. Then you do consider that you are empowered to carry out the conditions of the Convention?—Certainly.

26,462. And that it is the duty of the Fishery Board to do so?—Yes, as far as their means allow them.

26,463. Has there been any Act of Parliament passed subsequent to the first Act which limits your jurisdiction?—Not that I am aware.

26,464. Then your jurisdiction extends throughout the whole coast at present?—Yes. As regards the Convention Act we act as an aiding Board; it is the Board of Trade that are appointed to carry out that Act.

26,465. Then is it your business to call the attention of the proper authorities to breaches of the convention?—Certainly. The Board here is placed in communication with the Board of Trade and also with the Admiralty upon this Act.

26,466. As your jurisdiction has not been curtailed, any breaches of the law occurring on the Scotch coast are properly speaking under your notice, and you are bound to take cognizance of them?—Well, hardly; the Convention has been a sort of appendage tacked on to the Fishery Board. The Convention Act was passed long after the original Act constituting the Board, and as the Board was found subsisting here the Admiralty felt it to be expedient for their officers to be put into communication with us, we having had a good deal of experience in regard to the local fisheries.

26,467. But the jurisdiction of your Board extends over the whole coast?—It would be impossible for us to take up the English Channel in that way with only the force we have now.

26,468. It is very important for us, in endeavouring to understand what is practically the state of the law respecting fisheries, to inquire what your jurisdiction is, and how far you are disposed to carry it out. Your Act of Parliament appears to give you jurisdiction over the whole coasts of Great Britain?—Some of the Acts do, but the Convention Act is not one of those Acts.

26,469. But if your original Act gives you power to act under the Convention, and to enforce it in one part of the district, surely it must give you power to enforce it in another?—I do not know that it does give us that power; I will explain exactly the state of the Convention Act, because it is somewhat peculiar. In the first place, the Board of Trade is empowered to employ certain persons nominated for the purpose to carry out the Convention Act. When the Convention Act was passed it appeared desirable to the Fishery Board that as the French frequented the east coast of Scotland very much, the fishery officers should receive commissions from the Board of Trade in order to enable them to carry out the Convention. The Fishery Board therefore applied for a commission to be given to each fishery officer; of course a shore officer is fully engaged in superintendence of curing, and cannot do much in carrying out the Convention but still he can communicate with any of Her Majesty's ships on the coast, especially as we have a naval superintendent appointed under the original Act to look after the herring fishery. This superintendent being a naval officer, and looking after the fisheries, he has his separate commission to carry out the Convention Act.

26,470. Then your officers do not carry out the Convention Act as being your officers, but upon a special warrant from the Board of Trade?—Yes.

26,471. Strictly speaking, as the Board of Fisheries, you know nothing about the Convention?—No, we are only an aiding body to give intelligence, and by means of the cruisers put in communication with us, carry out the provisions of the Convention.

26,472. Then in point of fact the Board of Trade has recognized the Convention as binding and effective on the coast of Scotland?—Yes, by giving commissions to the fishery officers.

26,473. And the Board of Trade has obtained convictions on the coast of Scotland?—Yes.

26,474. Then in that case the obtaining these convictions was not your act, but that of the Board of Trade?—Yes, it is the officers in command of the cruisers who enforce the Act and obtain the convictions.

26,475. The reason why I press you upon this matter is this—we have been making a number of inquiries on the south and east coasts of England, and there we find that this Convention with France is purely a dead letter; it has never been enforced, nobody troubles himself about the regulations contained in it, and the Board of Trade and all the

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official authorities seem to have their own reasons for not enforcing the regulations?—Possibly.

26,476. What I want to get at is why the Scotch Board of Fisheries are of a different opinion and enforce the provisions of the Act; why you in the northern half of the kingdom act differently from the authorities in the southern half. If you are all acting together under the Board of Trade it is evident that this Convention Act is carried out by the Board of Trade in one way on the coast of Scotland, and in another on the coast of England, yet in each case you exercise your power under the same Act and under the same Convention?—I cannot speak about that; I know that on the coast of Northumberland the Convention is said to be a dead letter, but I believe that that is saying too much. Not a single season has passed that French vessels fishing off the coast of Northumberland have not been towed into port and fined. I believe that full vigilance has been applied to that part of the coast. I am not prepared to say that the efficiency of the mode in which the Convention is carried out may not rest with the officers in command of the cruisers; no doubt to discharge their duties properly they would have to exercise extreme vigilance, and those officers who are active and fond of fishery service would find the duty by no means a light one. I know that the commander of the "Victoria" cutter, Mr. Smith, became quite obnoxious to the French in consequence of the number of French fishing vessels he seized; at the same time it may happen that a cruiser may lie in port, and not discharge her duty at all. It rests much with the officer in command.

26,477. We learned in Northumberland that there had been some activity displayed, but in our inquiries further south we found that there had been none, and it appeared as if the activity of the officer was coterminous with the Fishery Board of Scotland. You say now that the Fishery Board has no jurisdiction, but only sets the Board of Trade in motion, so that, at your instance, it would appear the Board of Trade acts in the northern half of the kingdom, and in that case why should it not act in a similar manner in the southern half?—The Board of Fisheries consider it their duty to carry out this Act. They are bound to do so. That is the principle which is acted upon, and whether the duty be right or wrong, it is a duty to be done, and they must do it.

26,478. But you can only get this duty done by acting upon the Board of Trade?—No, we scarcely communicate with the Board of Trade at all, and never upon the details of duty connected with the Act.

26,479. Then how is it that the duty is done?—In this way. We know perfectly well that if our cruisers are not on the coast the French will do an enormous deal of damage to the British fishermen. Therefore early in the season we point this out to the Admiralty, and we ask what is going to be done in order to carry out the Convention. The Admiralty write back to say that they mean to send such and such ships down, and to put their commanders in communication with the Board. Upon the ships arriving the officers in command report their arrival to me, and I put myself in communication with them, and having constant intelligence coming to me as to the state of the fisheries and coast, I send information and instructions to them, which I get them to act upon.

26,480. Suppose that a breach of the Convention takes place—who is the prosecutor?—The commander of the cruiser who takes the offender in.

26,481. Does he lodge an information before a magistrate?—Yes; he will take the fishing boat in; he will tow her in, and have the fishermen up before the magistrates at once.

26,482. Does he simply produce the Act to the magistrates?—Yes; I have pointed out to them the alternative of detaining a French vessel for two or three months, seized for breaking the law, which they have power to do instead of fining the crew. I have reported upon this matter to the Admiralty, and asked their opinion upon it.

26,483. The great point I want to get at is this—I learn from you that you do not consider the power of the Board of Trade lends the slightest additional force to the Convention?—Not at all here, as an active power.

26,484. So that if the Convention is lawfully operative on the coast of Scotland, it ought to be operative on the south and the east coast of England as well?—I always understood that it was. I have heard the commanders of cruisers state that they have carried it out on the south coast of England and in the English Channel. If you go to Greenock and happen to fall in with Captain Sicklemore, you may obtain some information from him upon this subject. I believe that he had charge of the southern coast, and I have heard him say that he enforced the regulations of the Convention Act there. You will obtain the same information from Lieutenant Parkes if you see him.

26,485. Then I gather from your answers that you find it perfectly possible in consequence of the existence of the Board of Fisheries here to get all these Acts carried out?—I do not say that the whole of the regulations contained in them are carried out. The Convention Act is a very difficult Act.

26,486. But practically you carry it out?—We carry it out as much as we can; but with such a lot of French boats fishing off the coast there is no doubt that some of them will occasionally break the law and escape.

26,487. I understood from a passage in one of the later Acts you read that you have a full and rather an extensive power of making byelaws?—Yes, we have a very extensive power.

26,488. In fact there seems to be very little practical limit to the power given you in that Act?—It is limited by the words "any trawl, drag, or beam net." It does not apply to line-fishing.

26,489. Suppose it was the pleasure of the Board to pass a number of regulations similar to the Convention, it seems to be empowered to have those regulations enforced according to that passage of the Act of Parliament?—If it appeared to be necessary for the protection of the herring fishery, I suppose by the 5th clause of the Act of 1860 they would have the power to make such regulations.

26,490. Then the Board of Fisheries has power by that Act of Parliament to pass regulations almost coextensive with this Convention?—We could not pass any regulations that would alter the provisions of the Act; for instance, we could not permit seining for herrings.

26,491. But it would allow you to make very positive and stringent regulations?—It is something like Don Quixote's helmet, it has not been tested yet.

26,492. But the power is very broad?—Yes.

26,493. Has the Board the power or not of enforcing byelaws on the south coast of England?—Do you mean the provisions of the Convention.

26,494. No, I mean any byelaw it may choose to make?—The Act giving them power to make byelaws is limited to Scotland.

26,495. To Scotland exclusively?—Yes.

26,496. Have you no powers under it generally?—No, the word "Scotland" is expressly introduced throughout the Act.

26,497. But still within Scotland it gives you very extensive powers?—Yes, very extensive indeed.

26,498. You are aware that there have been very great disputes as to the power of the Convention, as to where it applies, and so forth?—Yes.

26,499. Suppose it was decided that it does not apply to Scotland, would the Fishery Board have power to pass byelaws of its own and to enforce them?—No, I apprehend it would not. I imagine that anything of the sort as regards a foreign power must be limited by the territorial boundary of Great Britain.

26,500. I did not mean byelaws with regard to foreigners alone, but regulations affecting the fisheries?—Then I should say yes, as regards the home herring fisheries.

26,501. So that so far as relates to the home fisheries the Fishery Board has sufficient powers to enable

them to enact and enforce byelaws without the necessity of a further application to Parliament?—It could enact them, but enforcing them is another thing; besides it would be necessary to increase the establishment of the Board.

26,502. I am not speaking of the practical point, but simply of the power which the Board possesses under this Act?—No doubt it has the power.

26,503. Has the Fishery Board under the same Act any power of relaxing existing regulations?—They have no power of relaxing any regulations except those which they make themselves.

26,504. But how was it with regard to the sprats, I believe that the Board relaxed their regulations in that case?—No, they did not.

26,505. Did they not, by allowing the sprat fishermen to work outside the limits within which they had confined the sprat-fishing?—They seized several of the boats and fined the crews heavily.

26,506. But was there not subsequently a relaxation?—There was not a relaxation exactly, but it got so hot at last that it was considered best to move a little out of the way.

26,507. (*Mr. Caird.*) But there was a change in the law, was there not?—No.

26,508. There was a subsequent Act passed in the following year which made certain limits within which the small-mesh net might be used?—There was that degree of change in the law, but the sprat-fishing was not positively interdicted before, it was only interdicted by deduction.

26,509. (*Professor Huxley.*) But did not the Board of Fisheries of its own motion allow the sprat fishermen to work outside the prescribed limits with their nets?—Previous to the passing of the Act of 1860 the Lord Advocate interfered and obtained a liberation.

26,510. Was that on the motion of the Board of Fisheries?—No, it was not on the motion of the Board of Fisheries; it was on his own motion. It was before the Act of 1860, and that was the peculiarity of the case, viz., that it was before the Act of 1860; it was under a revival by the Board of the Act 14 & 15 Vict. c. 26.

26,511. You are aware that very great difficulties and disturbances took place in Loch Fyne which were attributed to the Board not enforcing the Act of 1851—the 14 & 15 Vict. c. 26?—The Sheriff Substitute of Argyll in the summer of 1859 complained to the Lord Advocate that the Board by not enforcing this Act were bringing on riots of a serious kind at the herring fishery in Loch Fyne. The Lord Advocate, as the guardian of the public peace, wrote a letter of remonstrance to the Board upon the subject. The Act, having been condemned by the Commission of Inquiry of 1856, had fallen into abeyance, but the Board upon receiving this letter from the Lord Advocate felt compelled to revive the Act, and it was revived accordingly. The Act being a General Act for all herring fisheries in Scotland, its revival brought it into operation at the Firth of Forth winter herring fishery of 1859–60, whereby it bore heavily upon the sprat-fishing going on there simultaneously, which it threatened to suppress. The Lord Advocate then interfered on behalf of the sprat fishermen, and desired the Fishery Board to cease to press them so heavily, and to return the sprat-nets which had been seized, upon the understanding that his lordship would introduce a bill into Parliament in the session of 1860 of a liberative kind.

26,512. But did the Board do that?—It felt obliged to do it when the Lord Advocate ordered it.

26,513. Has the Lord Advocate any power over the fisheries?—We act in accordance with his Lordship's advice.

26,514. (*Mr. Caird.*) He represents the executive government in point of fact?—Yes. His Lordship also consulted the Home Office, and the Home Office wrote a letter to say that liberation of the sprat-fishing should be given in view of a possible change of the law, and stating that the Board of Fisheries might do what the Board of Trade had done, namely, temporarily suspend the operation of the law until Parliament had an opportunity of re-considering the Act.

26,515. (*Professor Huxley.*) You would feel in a case of that nature—when under pressure—that you had power to relax the regulations until you could obtain a change of the law?—Precisely so. In 1860, Parliament considered the question, but instead of liberating made the Act more stringent than before.

26,516. But you do feel that in a case of emergency you have the power of relaxing the regulations and applying to Parliament to bear you out afterwards?—Properly speaking the Board has not that power at all; but they are the more prevented from assuming it as respects the Act of 1860 and the Act of 1861 by being most peculiarly circumstanced as towards those Acts. It must be borne in mind that the 14th and 15th Vict. cap. 26, which was the Act of 1851, and the first suppressive Act against trawling for herrings, had been relaxed by the Board, and the opinion of Parliament invited upon this relaxation by a liberative Bill in 1860. Parliament, however, had rejected this liberation, and instead of accepting the bill had converted it into an Act (the Act of 1860), with provisions more stringent than those of 1851. With such a decision by Parliament, it must be very doubtful whether the Board could take power to introduce relaxation upon the Act of 1860; and as regards the Act of 1861, it was even still more stringent than the Act of 1860, and was passed expressly to supply the deficiencies in stringency of that Act.

26,517. In point of fact you were coerced by the Lord Advocate or by the higher powers?—Yes, to some extent.

26,518. (*Mr. Caird.*) The executive government took it into their own hands to relax the law, relying upon Parliament to relieve them from the responsibility they had incurred?—Yes. It was a very difficult matter for the Board to know what it was right for them to do under the circumstances.

26,519. You took your orders from those who were responsible for the peace of the country?—I wish it had been orders. The disagreeable part of the matter was that it was advice, and not orders. The Board did not wish to be put in the position of being compelled to revive the Act of 1851 in one part of the country and to liberate it in another; but they did so on the faith of the whole being liberated by an Act in 1860, instead of which the Act was made more stringent. I do not think they would go through the same process a second time.

26,520. (*Professor Huxley.*) Would the Board not feel itself empowered to relax a regulation under which distress had been occasioned until it could obtain power to do so by an Act of Parliament?—I think they would do nothing to liberate from the Acts of 1860 and 1861, unless they were compelled. Because of the peculiar circumstances under which those Acts were passed.

26,521. You do not feel yourselves to be in the position of redressers of grievances as well as makers of laws. You would not take up a case of distress arising from legislation, but you would represent it to the Government?—We certainly should have taken up such a case previous to the passing of the Acts of 1860 and 1861.

26,522. I ask you this particularly on account of a case which doubtless must have come to the knowledge of the Fishery Board. You are acquainted with the report of the Royal Commission upon the operation of the Acts relating to trawling for herrings?—Yes.

26,523. In the report of that Commission there is an official letter from Mr. Frazer the Sheriff Substitute of the Isle of Skye?—Yes.

26,524. In that letter there are strong passages with regard to the operation of the existing Acts of 1860 and 1861 in reference to the people of Skye—as for example this: "Whatever may be thought of the "views of the Skye people as to the effect of the "close-time upon the fishing, there can be no doubt "of the disadvantages and hardships which that restric- "tion imposes upon themselves. Speaking generally, "the herring fishery in summer and autumn was "looked to in this country for the money which it

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"produced, and the fishing in winter for the food "which it afforded; and the importance of a winter "fishing to a people whose food resources are so "scanty and precarious in bad years as this to the "people of Skye cannot easily be over-estimated. "The present close-time deprives the people of this "resource. Nor is this the only evil effect. The "long-line fishing for cod, ling, &c., is in some "parts of Skye an important branch of industry, and "to extend and foster it is a matter of acknowledged "public interest. In most parts of Skye, where not "prosecuted for sale, this kind of fishing is resorted "to for food. Now I believe that herrings though "not the only are the best bait for this fishing, and "that it is in the winter and spring months that it is "most successfully pursued. What the effect is upon "this fishing, whether regarded as a branch of indus-"try to be encouraged or a source of food to be "preserved, of a law which makes it penal to catch "or use a herring for bait from the 1st of January to "the 20th of May, must be obvious." There are a number of other forcible passages of the same kind. There is this one, for instance: "I have entered into "these details because it appears to me that the ques-"tion as to the maintenance of a close-time in the "herring fishery seems of graver importance when "regarded in connexion with the food prospects of "the people. I have already adverted to the views "of the people of Skye with regard to the expediency "of the close-time, and to the feeling with which they "have hitherto submitted to its enforcement; but I "must add that the Act is also regarded as unjust, "because it restricts the people on the west coast of "Scotland, while the people on the east coast are left "unrestricted, and they complain that they were pre-"vented last winter from taking herrings for food to "their families and for bait for their long-lines at "the very time when their neighbours in Caithness "were fishing for sale and getting a high price for "their fish." This report I presume would come in a certain sense officially before the Board?—The Report of the Royal Commission upon trawling for herrings has never come officially before the Board except at the instance of the Board, who themselves asked for copies of it. It never has been sent to the Board.

26,525. You are aware that this complaint does not come from the commissioners but from the Sheriff Substitute of the Isle of Skye?—Yes.

26,526. It is difficult to imagine a more powerful representation of the evils of the present state of the law than this. There is indeed a stronger passage contained in this letter in which the Sheriff Substitute says: "I have no reason to believe that any one case "occurred during the period referred to of death from "starvation, and it would I think be erroneous to "attribute the excess of mortality exclusively to "deficiency of food and fuel operating indirectly; "but I cannot doubt that to a considerable extent "the excess of mortality was connected with that "deficiency." In fact the highest official in Skye says that the existing regulations are not only unjust but that they are the cause of an increased mortality in the island. Is that a statement on which the Fishery Board would feel called upon to act?—If it was addressed to them officially they certainly would, but it was not addressed to them.

26,527. But in consequence of the want of that form would the Fishery Board not think it proper to inquire into the assertions contained in that letter? The winter of 1863-64 must have passed by under similar circumstances. Would you allow another winter to pass over without making some inquiry?—If you had asked me that in 1859 I should have answered you at once that inquiry would have been made, but I cannot separate the circumstance referred to from the two Acts of 1860 and 1861 which have since been passed.

26,528. But what would the Board do?—The Board is not in the same position as it was before the passing of those Acts, and it would be necessary to have regard to the whole of the circumstances which occurred in relation thereto.

26,529. Before 1859, if such a document as that had been published, coming from the highest official in the island of Skye, would the Fishery Board have considered it right to look into the matter, and if the facts turned out to be as they were stated would they have made representations to the Government?—If such a representation had been made to them previous to the year 1859, there would have been a meeting of the Board formally to consider the matter, but they would not have proceeded to deal with it unless the Lord Advocate, or, in the absence of the Lord Advocate, the Solicitor-General, had been present to advise them what they were to do.

26,530. Then they would have thought it their duty to consider it?—Yes.

26,531. But they have not considered it now?—The complaints have never been laid before the Board. May I go on to explain?

26,532. Yes, certainly.—The Board previous to the year 1860 having allowed the Act of 1851 prohibiting trawling to fall into abeyance because its abolition had been recommended by a Commission, and because the extreme hostility against trawling had abated, were brought to task because it happened that in the years 1858 and 1859 the fish passed high up Loch Fyne, and the trawlers brought on riots. Then the sprat-fishing occurred in the winter in the Firth of Forth, and serious riots became imminent there. The strongest police force only could have kept the peace, accompanied by the presence of cruisers, and the Board were assured that a liberative measure would be introduced if they relaxed the regulations. The law, however, being against relaxation, they placed themselves in communication with the Lord Advocate, and the draft of a bill was prepared, founded on the knowledge and information possessed by the Board, and to a considerable extent founded upon a bill prepared with great consideration by my predecessor as far back as 1846 or 1847. Every clause in the proposed bill was to be liberative, so far even as to liberate the inch mesh from knot to knot, and it was upon the experience of the Board that that bill was introduced into Parliament.

26,533. (*Mr. Caird.*) In what year was that?—In 1860, but the bill itself was completely changed by Parliament.

26,534. (*Professor Huxley.*) It was changed in committee, was it not?—It was changed altogether in committee, but not without the Board protesting against the change. I, as secretary, wrote a protest against the change, which was afterwards recognized by the Board.

26,535. You are aware I presume at whose instance it was changed?—No, I know nothing of the proceedings of Parliament.

26,536. (*Mr. Caird.*) Where did your protest go to?—It was sent to everybody. It was sent to all the leading towns in England and Scotland.

26,537. (*Professor Huxley.*) Have you a copy of that protest?—Yes.

26,538. (*Mr. Caird.*) Did you send it to the persons who were in charge of the bill?—Yes, to everybody, and I wrote a special letter to the Lord Advocate. One of the protests was written in a great hurry to anticipate a deputation that was proceeding with herrings to London from Glasgow in order to make strong charges against the Board for not putting down trawling for herrings. That protest had expressions in it not certainly as official as they ought to have been. In point of fact the paper was never revised, but was printed and sent off as rapidly as possible. Here are the two protests which I forwarded. I see that the date of them is April 1860.

26,539. (*Professor Huxley.*) Have you any objection to put them in?—None. (*The witness produced and put them in accordingly.*)

26,540. But in spite of all these representatations the Act was carried through the House?—It was carried through the House, and not only that, but the boundary proposed for the sprat fishermen, which corresponded to the boundary which the Board had established when the Lord Advocate interposed on

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behalf of these fishermen, was rejected by Parliament, and carried higher up the Firth of Forth, diminishing thereby the area for the sprat-fishing. The Act of 1860 thus passed was handed over to the Board to be carried into effect. The Board's character had been slurred upon in many quarters for not having carried into effect the previous Act of 1851. This Act had just been under the deliberate reconsideration of Parliament, and Parliament had deemed it so insufficiently stringent as to cause the Act of 1860 to be passed; therefore when the Act of 1860 was handed over to the Board to execute, what could the Board do but carry the Act into effect? The immense amount of abuse heaped upon the Board from the west coast and from other parties for letting the Act of 1851 fall into abeyance, must be kept under recollection in considering the obligations put upon the Board to carry out to the letter the Act of 1860. Further, in the winter of 1860 the sprat fishermen of the Firth of Forth, who felt the heavy pressure put upon them by the Act of 1860, brought a case against the Board into the Court of Session in order to test the Act. The court decided against the fishermen, and in giving its decision declared that the provisions of the Act were imperative. Afterwards the interests of these sprat fishermen, who had no boundary given them by the Act of 1860, were taken into consideration by Parliament in 1861, who gave them a boundary within which they were to be free to fish, but added in all other respects to the stringency of the Act of 1860; and this additional Act of 1861 was handed over to the Board to be carried into execution. Can anything be more decided law and instruction to the Board to carry out those Acts through thick and through thin than the passing of them and committing them to the Board in this way? To make this still stronger, previous to the year 1860 there were 15 commissioners of the Board, but the Act of 1860 gave power to appoint five more; of these five, three were selected from members of Parliament to give confidence that its provisions would be carried into effect. Under the concurrence of these circumstances, power may be said to have been taken from the Board of considering complaints against the Acts of 1860 and 1861, at least until those Acts had been long and thoroughly tested. In reference to the position of the Board, as to its instituting inquiries in respect to the operation of these two Acts, there is also the further question of time. The report of the Royal Commission upon trawling, which was not made to the Board, and was received by the Board from the Treasury only incidentally, had not produced conviction or given complete satisfaction to the public, and complaint had been made that the evidence on which it proceeded had not been published with the report, and in May 1863 an address had been moved in the House of Commons for a copy of the minutes of the whole of this evidence. Its production was not accomplished until towards the close of the session of 1863, and coincident with its production the present Sea Fisheries Commission, before which I am giving evidence, was appointed, a Commission which would necessarily have to investigate again the whole matter. The question, however, of the Board making inquiry was considered by the Board in the presence of the Lord Advocate, and the Lord Advocate, knowing the circumstances of the case, the position of the Board, and the different Commissions that had been appointed and were in existence, deemed that it would not be expedient for the Board to enter upon inquiry as to the operation of these Acts. That was in the beginning of this year. The majority of the Board concurred with the Lord Advocate, but one if not more of the members present were of opinion that inquiry ought to be made.

26,541. (*Mr. Caird.*) Do you make an annual report to Parliament?—Yes.

26,542. In that annual report do the Board not feel it its duty to notice circumstances arising such as those you have mentioned in regard to the sprat-fishing, in which they would show the injury sustained by the public in consequence of the present law?—The subject of the annual report has of course become more difficult from the position in which the Board is now placed. It can only contain those things which the Board agree shall appear upon it.

26,543. As I understand, it is part of the duty of the Board to take general cognizance of the state of the fisheries along the coast of Scotland?—Yes.

26,544. If a strong case like this should present itself to you in the course of that inquiry into the state of the fisheries, would you not think it the duty of the Board to report to Parliament, so that Parliament should be informed of its existence, as there is no other official means by which it would know of the case?—But its existence is disputed, and the causes are disputed also.

26,545. But the facts cannot be disputed?—They are disputed.

26,546. (*Professor Huxley.*) But here is the official report from the Sheriff Substitute?—Yes, but I am not prepared to say that everybody agrees with that.

26,547. But it is an official report?—Yes; but on a matter which lies with the Government and not with the Board.

26,548. In a matter affecting the fisheries who would be called upon to take the initiative?—That would depend on the case. The Board might take the initiative if the point was not disputed, and had not, as trawling for herrings has done, created so much excitement both within and without the Board.

26,549. You would not consider the fact disputed that sprats had appeared in Granton Harbour and not within the limits prescribed by law; that is a fact, is it not?—Yes, that is a fact, and it is stated and commented upon in the Board's report of the year.

26,550. Is the law commented upon in the report as one that is injurious to the supply of fish?—The report does not go so far as that.

26,251. Is not attention called to the fact that the law being so the supply of fish has diminished?—That is a disputed fact. The fact that the sprats were in Granton Harbour is mentioned, and the difficulty it created with regard to the superintendence, but that the supply of fish was diminished from so casual an incident in the course of the season is a deduction which the Board are not prepared to make.

26,552. I refer entirely to the statement of the Sheriff Substitute of the island of Skye. He says in so many words, that in consequence of the Skye fishermen not being allowed to catch fish during a certain time they were deprived of the food which they used to have and were starving in consequence. That surely is a matter which admits of no doubt or dispute?—That was a matter which under the circumstances concerned the Home Office and the Lord Advocate, (if it were true), and which belonged to the channels of communication between the Home Office and the Lord Advocate. It was a matter for the Government to deal with and not the Board of Fisheries.

26,553. But is that not the sort of thing that the Board of Fisheries having the enforcement of these regulations would inquire into? Would they not feel themselves called upon to say whether the regulations are expedient regulations or not? Would it not occur to them to say there is no doubt that in this particular locality these regulations operate very hardly indeed? Is it not a point which the Board of Fisheries exercising a superintendence over the fishing population and looking after their welfare would bring under the notice of Parliament?—If it had occurred say some years before, that is, at a time when these Acts of 1860 and 1861 had not been passed under the peculiar circumstances I have described, I have no doubt that notice would have been taken of it.

26,554. Would you have made some inquiry into the matter?—Yes, but there is also this to be considered—if you have executive officers appointed to carry out Acts of Parliament of so stringent a character as these two Acts are, you cannot proceed as a Board to inquire into the operation of the Acts themselves without lowering your authority and power to carry them out, and without introducing that very difficulty and disturbance which was the original cause of the Acts being passed.

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26,555. You consider the natural action of the Board is restricted by these Acts of Parliament?—Precisely. The whole experience of the Board, and they have now had 50 or 60 years' experience, has all tended towards relaxing restrictions and liberalising legislation. I think that is the experience of the public servants of the Board, it is the experience of those officers who are really practically acquainted with the matter.

26,556. It is your own experience?—Yes, and that also of the higher officers of the Board.

26,557. Then the more narrow restrictions which have been imposed of late years have not been established at the suggestion or wish of the Board, but have really been enforced upon them *ab extra*?—Certainly, but then I must state that the opinion of the majority of the practical men engaged in the fisheries is the other way—it is quite in favour of restrictions.

26,558. Do you mean by practical men engaged in the fisheries, fish-curers or fishermen?—I mean both. There is a much greater number of fishermen in favour of restriction than against it, and the fish-curers are also in favour of restriction. The difficulty is to resist the desire for restriction which is felt by the fishermen.

26,559. (*Mr. Caird.*) Is there any desire for restriction on the east coasts?—Yes, an enormous desire for restriction.

26,560. Is there any desire for a close-time on the east coast?—There was a rumour of that kind at Wick. There has been an enormous desire to put down beam-trawling in the interest of the herring fishermen.

26,561. But no restriction has been demanded by the herring fishermen in regard to their own fisheries on the east coast?—There would be an immediate desire for restriction if any other net appeared on the ground except the drift-net.

26,562. (*Professor Huxley*). There are a series of operations performed by the authority of the Board which may be almost called registrative, such as the collection of statistics. Your officers are employed largely in that way, are they not?—Yes.

26,563. They register, as far as they can, the catch of herrings?—Yes.

26,564. What do you think of the utility of these statistics when they are collected together? I suppose, as far as cured herring is concerned, you can have them collected with great accuracy?—Yes.

26,565. Does that apply only to fish that are branded, or to fish that are not branded also?—To both.

26,566. Have you the power of inspecting those that are not branded?—Yes, all cured herrings.

26,567. Can a man cure herrings on the coast of Scotland without their being inspected by some fishery officer?—No. He is obliged to give notice of cure.

26,568. Then it is not a matter of choice with him?—No.

26,569. Then the brand must be put upon his barrels if they are exported at all?—No; he can export as much as he likes unbranded.

26,570. Then what is the good of the inspection? If a man salts fish badly they are still exported?—He would get only a bad price for them.

26,571. But what can the Fishery officer do in the matter?—He can refuse to brand.

26,572. And that is all?—Yes.

26,573. All that the Fishery officers have is simply the power of inspection and refusing the brand?—And of seizing a barrel of herrings if it is not the full size, on account of its being incorrect in measure.

26,574. So that a man cannot export herrings unless the barrels are examined?—No.

26,575. But he can export any trash he likes so long as the barrel is big enough?—The more trash he exports the better pleased we are.

26,576. You cannot prevent him exporting any bad fish he likes?—No, not in the least. We have no wish to do so.

26,577. You think it brings the brand out better in contrast?—Yes.

26,578. Is a man obliged to send you a report of the quantity of fish he exports?—He is obliged to make a return of the quantity of fish he cures.

26,579. Whether he obtains the brand or not?—Yes.

26,580. What do you do if he does not make a return?—There are penalties.

26,581. What are they?—5*l.*, and refusal of the brand.

26,582. Have you no means of getting a return of the quantity of fresh fish?—No.

26,583. So that your returns, although they show the quantity of cured herrings, are of no value as regards the catch of fish?—No; they are only valuable as indicating that if such quantities are cured there must be a large catch.

26,584. That would be a very rough indication?—Yes. The Fishery officers do endeavour to obtain returns of fresh fish, but I have no confidence in their figures; I find they change so very little.

26,585. One of the great points of our inquiry is to ascertain whether the supply of fish is increasing, stationary, or diminishing?—Yes, I am aware of that.

26,586. We wish to know how far the system of collecting statistics is good for that purpose. It would be a matter of vast importance if there could be a register of the quantity of fish caught year by year?—Yes, no doubt it would.

26,587. Your present system is really of no practical good for that purpose?—There is no doubt that it is very imperfect. We tried for one year in Loch Fyne and got returns pretty carefully and accurately, but it was accompanied by great expense. The officers were constantly travelling in summer and doing nothing else but collect the returns.

26,588. But it could be done if it was thought worth while?—It would require a large staff of officers, because the boats all come in at the same time and the fish are hurried away by the cadgers before the officers can get sight of them.

26,589. But if it was thought worth while to go to the expense it could be done and a fair estimate obtained?—I think you would require to compel, under a penalty, every boat to return the quantity of the fish caught by it.

26,590. Even then the return would be somewhat rough?—Yes, but it would be sufficiently accurate. You could not do it, however, without a penalty.

26,591. (*Mr. Caird.*) It could not be indicated by the number of fishermen employed one year with another?—No. The fishermen may be employed and the fish not be there to catch. They are employed for the season.

26,592. Still one year with another, if there was a steady increase in the number of fishermen it would indicate an increase in the quantity of fish caught?—Yes, I think it would.

26,593. Under the usual law of supply and demand?—Yes.

26,594. (*Professor Huxley.*) Supposing we were to address to the Fishery Board an inquiry as to whether the yield of fish, such as the herrings on the Scotch coast, had been increasing, stationary, or diminishing, could you give us any trustworthy information with regard to that matter during the last 10 years?—We could give you a good deal of information by sending the fishery officers round. I don't know that we could give you exact figures.

26,595. But you could give us nothing that would enable us to say with some degree of accuracy whether the quantity of fish had diminished or increased on the average during the last 10 years?—There are points that almost prove it. For instance, the size of the boats has immensely increased.

26,596. Is your statistical organization sufficiently perfect to enable you to help us?—I think not; we could not go back to the past for the fresh fish.

26,597. You have no system of registration with reference to these questions which could be organized without enormous expense?—I do not think the expense would be great if you established a good penalty for not giving information.

26,598. Could you yourselves compel fishermen to make returns?—With better means of communication no doubt we could. With a few more active officers we could draw up forms of returns and write them

out for the fishermen. There might be some difficulty, however, on the west coast, in the Hebrides, and such places.

26,599. It would be an important thing to obtain, if possible, something like definite information as to the quantity of fish caught, so as to enable us to ascertain if there has been a decrease or increase in a series of years?—You could not do that unless you imposed a penalty upon fishermen for not making a return.

26,600. Would there be any great practical hardship in making the fishermen give to the fishery officer a return of the fish they caught each morning?—They don't like to expose their business in that way. In the first place they might have tricked the curer. If they were obliged to make a return of that kind, there is the difficulty in the way that the return might tell too much. I think that to require such returns to be sent would interfere too much with the trade.

26,601. One of the most important points in our inquiry is, that we should ascertain if something cannot be done in order to establish good means of collecting statistics, but you don't seem to think that this is very practicable?—I think it is open to a great deal of difficulty and objection. For instance, if the curers have some five, six, seven, eight, or ten boats, they are all rivals with others in the trade, and each curer is anxious to be supposed at the top of the tree in extent of business.

26,602. They don't want it to be known how much the boats have produced?—They don't wish that at all, nor how many herrings they have got stored, which affects the price of the market. If you had compulsory returns of fresh fish it would be known exactly how many A.'s and how many B.'s boats had brought in, and so on.

26,602*a*. Then it would be a matter of difficulty if not impossibility to organize a system for ascertaining the quantities of fish caught every year?—Yes, I think so, unless the objections to compulsory returns could be removed; but I should be glad if you were to ask that question of any of the fishery officers; their position on the coast must make them well acquainted with the general sentiments on such a subject within their respective districts.

26,603. The other functions of the Board might be described as promotive of the prosperity of the fishing interest, such as building piers and harbours, renewing and restoring property?—Yes.

26,604. The funds of the Board are practically mortgaged for the next five years for the works at Anstruther?—It looks rather like it.

26,605. So that whatever may happen with regard to other ports you will be unable to do anything for them?—I hardly see how we can; the money is pledged to Anstruther, both by an Act having been passed and by communications and promises from the Treasury to the people of Anstruther.

26,606. One anomaly about the Board is this, that the power of expenditure does not seem co-extensive with the power of jurisdiction. No case is known of expenditure on an English port?—No, because the grant is limited to Scotland by the terms of the Act. It says, "for encouraging herring fisheries on the "coast of Scotland."

26,607. So far as I can gather the principle upon which grants are made is very much the same as that of the educational department?—Yes.

26,608. You aid those who help themselves?—Yes.

26,609. Then is there any fixed proportion?—The Act requires one-fourth, but we endeavour to get a third contributed by the places receiving assistance.

26,610. Does that principle work well?—Admirably.

26,611. Does it have the defect complained of by some in the working of the Education Department, the defect of leaving those who are most poverty-stricken and unable to help themselves out altogether?—I don't think so.

26,612. If a poor fishing place could not raise the third required would it not have to go without altogether?—It would have to go without a great work, but a poor village of that kind don't want a great work.

26,613. But if it wanted a breakwater, or anything of that kind, it would hardly be in a position to obtain it. To make a small harbour requires a good deal of money sometimes?—Yes, it does.

26,613*a*. In many cases it would be utterly impossible for a village of that kind to raise the third of the sum required, and in that case would the Board refuse any grant at all?—They must refuse it by the Act.

26,614. Then this vote seems open to the same objection as is raised to the education vote?—It may be so.

26,615. (*Mr. Caird.*) But the poor village might have some lord of the soil who would contribute?—Yes.

26,616. (*Professor Huxley.*) Would he be likely to advance money, because there would be no return made for it?—Undoubtedly that is a difficulty. Much more could be done, if there was not that restriction and if there were more means; but we adopt the excellent principle that each place should do something for itself.

26,617. Have you known cases in which that practical difficulty has arisen, and have such cases come under the notice of the Board?—For instance, I have no doubt that if the Treasury gave us permission to dispense with local contributions and accumulate our funds sufficiently we should have been able to have done something for Craigenroan.

26,618. You cannot set down a work where it is most required because you must get local funds?—That is the case sometimes.

26,619. You said you did not give money to Wick because it was a large fishing place; is Dunbar not a large fishing place also?—It could not raise locally as much money as Wick, nothing like it. It has no British fishery society, or any shareholding company of that sort.

The witness withdrew.

Captain Samuel Macdonald, R.N., called and examined.

26,620. (*Mr. Caird.*) You are commander of the Fishery cutter "Princess Royal"?—I am.

26,621. Have you been many years in that position?—Only for the last six years.

26,622. As commander of the Fishery cutter is it your duty to inspect the state of the fisheries all round the coast of Scotland?—Yes, wherever I may be sent on the coast of Scotland.

26,623. Have you been on the principal fishing stations on the coast of Scotland?—Yes; perhaps not on all of them; as the fishing is going on at the same time I can only be at one at a time.

26,624. But in consecutive years you have visited most of them, I presume?—Yes.

26,625. Have you a practical knowledge of the state of the fishing at those stations?—Yes, to a considerable extent.

26,626. With regard to the modes of fishing practised, is beam-trawling much practised on the east coast of Scotland?—No, it is not; it is very little practised on the east coast of Scotland.

26,627. On what part of the coast is it principally practised?—In St. Andrew's Bay, Largo Bay, and the Firth of Forth.

26,628. Is that all inshore beam-trawling?—Yes, it is all inshore beam-trawling.

26,629. Is there no deep-sea beam-trawling on the coast of Scotland?—None.

26,630. Do none of the English trawling vessels come down deep-sea trawling on this coast?—Occasionally to the mouth of the Firth of Forth.

26,631. That is inshore fishing?—Yes.

26,632. Then there is no deep-sea trawl-fishing?—No; it was once tried by a small vessel fitted out from Leith, but it was found that it did not succeed.

26,633. The English vessels do not come so far north?—A few have been here, but they fished only at the mouth of the Forth, and that was all inshore fishing

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26,634. Has that inshore trawling been increasing within recent years?—It only commenced within very recent years.

26,635. Since its commencement has it been found a profitable business?—I do not think it is a profitable business to the fishermen themselves, it is on such a small scale.

26,636. Is it principally carried on by local fishermen?—Yes, at Buckhaven and St. Monance.

26,637. Is the mode of fishing by the beam-trawl the same as that adopted by the deep-sea trawlers on the English coast?—It is the same principle, but a smaller trawl suitable only for boats.

26,638. Are they undecked boats?—Yes, undecked boats.

26,639. What kind of fish do they catch with these beam-trawls?—Plaice, principally; they get a few turbot sometimes.

26,640. Does it form a very large proportion of the whole catch on these fishing stations?—No, it forms only a very trifling proportion.

26,641. Are you aware whether it has injured the line-fishing along the coast?—I have not had sufficient experience to say whether it has injured the line-fishing or not.

26,642. Has it been complained of?—It is complained of, and must be injurious when carried on upon the same ground.

26,643. Is it carried on on the same ground?—It has been at Pittenweem.

26,644. Has there been any restriction placed over it?—Yes.

26,645. What has been done?—The fluke-hole at Pittenweem has been protected for the last two years.

26,646. By order of the Fishery Board?—Yes.

26,647. Do they act on any legislative authority which empowers them to do that?—They have made a byelaw of their own with regard to the fluke-hole.

26,648. Have they prohibited trawling altogether in regard to the fluke-hole?—Yes.

26,649. Has it been followed by any increase in the fishing of the long-line fishermen?—The time has been rather short to prove that by any experience as yet.

26,650. You were cognizant of Dr. Allman's experiments in that fluke-hole with regard to the spawn?—I was there, but not with Dr. Allman.

26,651. Did you see what experiments he carried on?—I think I saw the experiments to which he referred.

26,652. Have you any knowledge of the fact that the spawn is destroyed?—I have seen small quantities of spawn on the trawls at Pittenweem.

26,653. Is it injurious to the brood of fish; can you speak positively in regard to that?—I cannot say anything with regard to it, except from my own opinion; the experiment has only been initiated about two years.

26,654. There is no other beam-trawling practised on the coast of Scotland except that inshore trawling?—No; in some places on the west coast, for instance, off Greenock, and about Ayr, Whiting Bay, and Arran, it is practised in the bays where the fish come to spawn.

26,655. Has trawling inshore proved injurious to the supply of fish on the whole in those places?—For the time it would rather increase the supply by taking fish that would not have been taken by the hook and line, but its ultimate tendency is to destroy those fisheries because the ground is limited.

26,656. Have you found that to be the case?—It was very successful for the first few days when it was commenced, but it gradually fell off until it got down to nothing.

26,656*a*. Neither with the trawl, nor with the line?—No, because as the space is very limited the fish cannot accumulate from other grounds.

26,657. What are the different modes of line-fishing which are practised around the coast of Scotland?—Long-line and small-line fishing.

26,658. What parts of the coast are most productive of fish with the long-line?—Shetland and the Lewis islands.

26,659. Is that on banks some distance out at sea?—Generally on banks, but also along the shore.

26,660. Are there no long-line banks to the south of Shetland on the east coast?—Yes, both on the south and west sides of Shetland there are banks.

26,661. Yes, but I mean down on the east coast of Scotland?—Yes, there are a good many long-line banks off the Frith of Forth, here.

26,662. Are they line-fished?—Yes.

26,663. Extensively fished?—Yes.

26,664. Are those banks ever trawled?—Not to my knowledge.

26,665. Has the supply of fish on those banks by the use of the long-line been increasing, stationary, or diminishing within recent years?—I cannot say of my own knowledge, but the fishermen state that they have to go further seaward now for fish.

26,666. Are there more fishermen employed in that particular line of business now than there were formerly?—I think they are rather increasing than otherwise.

26,667. Has there been no marked change in the number?—I am not aware of any.

26,668. I think you mentioned small lines, are they used near the coast?—Yes, they are used for catching small fish, such as haddock and whiting.

26,669. Is a large quantity of the haddock caught on the east coast of Scotland chiefly caught by small lines?—Yes.

26,670. Are they not also caught by the beam-trawl when the trawl is used?—Very rarely; they can take a few off Pittenweem.

26,671. Do you know anything of the bait used by the line-fishermen, is there usually a good supply?—I believe that they are mussels chiefly.

26,672. Are there mussel beds on the coast?—Yes, but they have some difficulty in obtaining mussels.

26,673. Is that an increasing difficulty?—The mussels must be diminishing as they are taken from the bed.

26,674. Is there any complaint on the subject of bait of that kind?—I have heard no particular complaint.

26,675. Is there a large number of fishermen employed now in the small-line fishing on the coast of Scotland?—Yes, there is a large number of the poorer class of fishermen.

26,676. Is there a larger number than the number of those engaged in the long-line fishing?—I believe that most of the fishermen are employed in the long-line fishing.

26,677. Do you know whether the catch of fish by the small line is increasing or diminishing?—I should say it is not increasing.

26,678. Do you imagine that the action of the steamboats in going along the coast has any effect on the supply of fish in-shore?—I think it has a certain effect in such waters as the Firth of Forth or the Clyde; I think it has had a great effect there.

26,679. What effect has it had?—It has frightened and scared away the herrings.

26,680. Has it had any effect upon any other fish?—I think not; the herring and mackerel are more of a surface fish.

26,681. Is there any complaint among the small-line fishermen that the supply of fish they have been in the habit of obtaining is decreasing?—I believe their only complaint is that they have to go further seaward for them.

26,682. But I am speaking of the small-line fishermen?—The same thing applies to the small-line fishermen also.

26,683. Do they attribute that decrease to any particular circumstance?—No, unless it is trawling.

26,684. Is there anything else that you have heard of?—I am not aware.

26,685. They do not speak of having been injured by the traffic of the steamers?—Not the whiting or haddock fishery. I do not think that that has been injured by the traffic of the steamers.

29,686. Then to what do you attribute it that they have to go further to sea?—In estuaries like the

Firth of Forth the haddocks will get fished out in the course of time, or will get very greatly diminished in numbers.

26,687. What kind of nets do they use for catching skate, turbot, and halibut?—They use a net with a mesh sufficiently large to take those fish.

26,688. Is it a net made for the purpose specially?—Yes.

26,689. Is it anchored or set in any peculiar manner?—It must be anchored along the bottom like a trammel.

26,690. Is the catch by means of those nets increasing?—I think it is increasing. On the west coast there have been some considerable catches of all sorts of fish by nets of that kind.

26,691. Is there any complaint about those nets not having continued to be productive on the east coast?—It has been very little followed on the east coast.

26,692. Is there any good sole-fishing on the east coast here?—There is very little; there is only one spot in the Forth.

26,693. In the Firth of Forth?—Yes.

26,694. Is there a good mackerel-fishing?—The mackerel-fishing of Scotland may be said to be *nil;* it is very trifling indeed.

26,695. The herring-fishing is the great source of wealth to the fishermen of Scotland?—Yes, the herring fisheries are the great Scotch fisheries, and also the cod and ling in Shetland and the Hebrides.

26,696. Is there any regulation in regard to the drift-net fishing complained of by the fishermen as injurious to their trade?—I am not aware of any complaints of the fishermen on the east coast with regard to the legal nets; there are complaints in the winter of trawl nets.

26,697. What are they?—With regard to the operations of the trawlers in fishing for sprats, and coming continually among the drift fishermen.

26,698. Is that the only complaint they make?—Yes.

26,699. Is that limited to particular parts of the coast?—Yes, to the Firth of Forth.

96,700. To no other parts of the coast?—No, we have occasionally the French interfering with the fisheries on the other parts of the coast.

26,701. Is there any restriction which can be adopted which in your opinion would add to the supply of herrings on the east coast of Scotland?—I think that considerable quantities of young herrings are destroyed every year among the sprats, but that is inevitable so long as sprat-fishing is found necessary.

26,702. Are those young herrings which are destroyed sent to market with the sprats?—Yes.

26,703. Then they become food for the people to that extent?—Yes.

26,704. They are not entirely lost?—No.

26,705. With regard to sprat-fishing, have you observed or not whether the recent boundary line enacted by Act of Parliament has operated injuriously to the supply of sprats for the market?—I think it was the best compromise you could have had between the drift-net and the sprat-net fishermen.

26,706. Do you think that ought to be adhered to strictly; have no circumstances arisen since that Act was passed which in your opinion would justify Parliament in re-considering the question?—I think it might be liberated still more.

26,707. You speak of it as a compromise between the two interests?—It was a compromise; I looked upon it as a compromise.

26,708. A compromise with what?—A compromise between the drift-net fishermen and the sprat-net fishermen. The drift-net fishermen could fish above the ferries if they liked, whereas the sprat-net fishermen could only come to the ferries and no lower.

26,709. Do you think the boundary ought to be extended?—In such a case as last year when the sprats did not go up, it should be extended, or you would prohibit the sprat-fishing altogether, but you could not permit sprat-fishing on the same ground with drift-net fishing.

26,710. Are they two modes of fishing that cannot be carried on together?—Yes.

26,711. In a narrow estuary like the upper part of the Firth of Forth, in what way would the two modes of fishing be injurious the one to the other?—For instance, if a shoal of herrings is discovered in the Bay of Aberdour, the circle-net fishermen go with eight or 10 boats or more and the consequence is that the driftmen are obliged to be off.

26,712. Why?—The circle made with the sprat-net would take in part of their nets and everything within it.

26,713. Then would he not damage his own net as well as the net of the drift fishermen?—Probably he would, but he would destroy the drift-net fishing completely.

26,714. Yes, but it would be injurious to himself also?—Yes.

26,715. Then would he not endeavour to avoid that?—He would endeavour to avoid it as much as possible.

26,716. Then in such a case as last year where considerable loss was sustained from the fact that the sprats did not go within the legislative limits, how could you without altering the Act of Parliament provide against the recurrence of such an evil?—We cannot; it is almost certain to recur again this year.

26,717. Do you not think it desirable that some alteration should be made?—I think it would be necessary to have an alteration under such circumstances.

26,718. Do you think that the present limit ought to be extended?—I think it might fairly be extended, and protection be given to the drift-net fishermen from the operation of the trawlers at the same time.

26,719. Is there any limit within which, on an average number of years, you could ensure the sprats being found?—Last year was an exceptional year, but I think the original boundary that was fixed in the Firth of Forth seems to be ample for the sprat fishermen.

26,720. Would you recommend that the original boundary should be again resorted to?—I think that there should be a boundary somewhere.

26,721. Was the original boundary a good boundary?—It seemed a fair one for both parties.

26,722. Is there a good lobster fishery here on the coast of Scotland?—No, not on the east coast.

26,723. Is there on the west coast?—Yes.

26,724. On what part of the west coast?—On the whole of the west coast from the Mull of Cantire to Cape Wrath.

26,725. Is it much practised?—Yes.

26,726. Is it found to be profitable?—Yes.

26,727. Is it increasing in its yield?—I believe it is.

26,728. Has no injury been done by over-fishing the lobsters on that coast?—Lobsters may be over-fished.

26,728*a*. But practically has that occurred?—I do not know that it has, but they allow the fish to accumulate for two or three seasons.

26,729. Is the number of boats employed in the lobster fishery increasing on the west coast?—Yes, I believe it is.

26,730. How are the lobsters which are caught there sent to the market?—By steamers.

29,731. Are they fished throughout the year or only during certain seasons?—Only during certain seasons.

26,732. Is there any legislative prohibiton?—I believe there is an old Act.

26,733. Is it recognized or enforced by anybody?—I believe it is not.

26,734. Then why do the fishermen leave off at some seasons?—They find that the fish are not in good condition.

26,735. The lobsters are not in good condition?—No.

26,736. Is there a good crab-fishing on the west coast?—There is very little crab-fishing on the west coast. That is principally carried on on the east coast.

26,737. Is there much crab-fishing on the east coast?—Yes, a good deal.

26,738. Does it extend to Shetland and the Orkneys?—It does not.

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Capt. S. Macdonald, R.N.

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26,739. Where is the site of the best cod and ling fisheries in Scotland?—Shetland is the best.

26,740. Are they extensive there?—Yes, very extensive.

26,741. Is the fishery increasing and also the number of fishermen?—I have not been on the coast of Shetland for a number of years, but in Lewis it is steadily increasing.

26,742. Is that of cod and ling?—Yes.

26,743. Are those cod and ling salted or sent fresh to the market?—They are all salted.

26,744. Is there a large supply of cod and ling got from the Lewis?—Yes, a very large supply.

26,745. Have you any returns which will show us the quantity salted and sent to the market?—I have not, but there are hundreds of tons sent away.

26,746. With regard to the oyster fisheries on the Scotch coast, are they extensive?—The oyster beds are extensive, but the fishery is not practised. It is extraordinary how little is done in regard to catching oysters on the west coast.

26,747. Are there extensive beds known to exist which are not fished?—There is hardly a loch on the west coast that does not contain immense quantities.

26,748. And are they not fished?—No, they are not.

26,749. Would they be excellent oysters?—Yes.

26,750. Then to what do you attribute the fact that they are not fished?—I should say it is owing to want of enterprise on the part of the people.

26,751. Is there any difficulty in sending them to market?—Not in the Isle of Skye. Those who complain of having been starving might have sent them to market and have made a handsome living out of them.

26,752. There are known to be large oyster beds?—Yes, splendid beds.

26,753. Does anybody fish those beds?—Nobody. I have gone and filled a boat repeatedly from them.

26,754. Are they easily fished?—Quite easily.

26,755. And the oysters are of good quality when caught?—They are of very excellent quality.

26,756. Have the people there no dredges, or means of fishing them?—I believe that very few of them ever saw a dredge.

26,757. Is there no person who has sufficient enterprise to introduce the system of dredging?—All I can say is, that it has not been taken up.

26,758. And no fishermen from a distance have thought it worth while to prosecute the fishery?—No, they have not.

26,759. Then it appears that there is a large dormant fishery of oysters on the west coast of Scotland which might be called into play?—Yes.

26,760. Will you tell us of your own knowledge the locality in which those unfished oysters are to be found?—I have often dredged a boat load in Loch Snizort.

26,761. Is it chiefly in the lochs that they are to be found?—Yes, and they are superior oysters from the fact that they taste the fresh-water.

26,762. Is it the case that you might use a dredge in many of the lochs on the west coast and be pretty sure of finding oysters?—Yes.

26,763. In sufficient abundance to pay the fishermen for the expense of their tackle and labour?—The expense would be very trifling.

26,764. And you think that during the time when complaints were made that in consequence of a close time for herrings on the west coast the fishermen could get no fish from the sea they might have followed this oyster-fishing with advantage to themselves?—Decidedly.

26,765. Could they have done it with the boats they fish the herring with?—Yes.

26,766. All they want is the dredge?—Yes, and they want the energy.

26,767. With regard to close-time in the west, have you practically observed any advantage arising from the establishment of a close-time or any necessity for having established that system?—On the contrary, I think it is a disadvantage. North of Ardnamurchan it becomes a question with regard to the cod and ling fisheries.

26,768. Do you mean on account of the difficulty of getting bait for the cod and ling fisheries?—Yes, in fact you cannot get bait at all.

26,769. But looking at it as a question whether the observance of a close-time tends to diminish the supply of herrings, what is your opinion with regard to it?—It diminishes the supply decidedly.

26,770. Does it act differently on the west coast from the east coast?—They have no close-time at all on the east coast.

26,771. Then that very fact would make it appear that it does not diminish the supply on the east coast. Is there any difference in the nature of the two coasts that would account for the difference?—I think the close-time diminishes the supply wherever it is enforced.

26,772. But in what way; how do you account for it?—Because the people are prohibited from fishing in the winter when fishing would otherwise take place.

26,773. And fish might be taken without diminishing the supply?—Yes.

26,774. And it would not cause any diminution at other times of the year?—It would not cause any diminution in the open sea. Perhaps there might be a diminution in the Firth of Clyde.

26,775. And do you think it an absolute loss that any close-time should be established?—Yes.

26,776. (*Professor Huxley.*) With regard to the taking of oysters in the Isle of Skye, it is quite true that the dredge costs very little, but you are doubtless aware that the Skye fishermen are excessively poor. Might they not find it difficult to procure the means even to buy a dredge?—I do not think so.

26,777. They are not so poor as that?—No.

26,778. In Skye itself do you think there would be any market sufficient for the sale of these oysters?—I do, when they have regular steam communication with Glasgow and Greenock.

26,779. Is that sufficiently frequent, and the trade sufficient always to make it a paying concern?—They send large quantities of whelks by the same mode of conveyance.

26,780. Is that for bait?—No, for consumption.

26,781. Where are they obtained?—They are collected on the coast of Skye. All the steamers take away large quantities of them in sacks.

26,782. And you think that oysters might be carried in the same way and be more profitable?—Yes.

26,783. Is it generally known in Skye that they exist?—Yes, they get oysters in Skye almost every day in the year and they are very fine too.

26,784. Do the fishermen know anything about dredging; have they any notion of the use of a dredge?—No they have not.

25,785. Is there no one then sufficiently public spirited to teach them the use of a dredge?—The oysters are never disturbed at all except by a yacht or a cutter going in.

26,786. When the people there see you taking those things do they not seem inclined to bestir themselves and get some themselves?—If they were so disposed they would have done so long before this.

26,787. Then you ascribe it to sluggishness on the part of the people?—Yes, to want of energy; there is no limit to the fisheries on the coast of Skye itself, even for herrings.

26,788. As regards the injury done to the drift-net men by the seines as compared with that which the drift-net men can do to the seines, it arises very much I suppose from the fact that the seiners do not scruple to cut the buoys and destroy the nets of the drift-men, if they are in their way?—Yes.

26,789. Whereas the drift-net men have nothing to cut and cannot retaliate?—Yes.

26,790. So that even if they were disposed the drift-net men could not do the same amount of damage to the seine men as the seiners could do to the drifters?—No, the drift-men are a superior class of fishermen; there is only a poor class of men engaged in seining

in the Firth of Forth; they are not genuine fishermen in fact.

26,791. You were speaking of the fishing on the banks of the Forth, do you know what parts the fishermen come from?—From Newhaven, Fisherrow, Dunbar, Anstruther, St. Monance, and other places.

26,792. Have you heard any complaint of a falling off in the white fish?—I have not heard any complaint of an important character.

26,793. Between here and Berwick-on-Tweed have you heard any special complaint?—The only complaint I have heard is that they have to go further seaward for their fish.

26,794. What depth of water is on the oyster beds in Skye?—In many places they are dry at low water, so that any person who feels disposed could go and pick them. In Loch Snizort they are not dry; they are in four, five, or six fathoms of water.

26,795. Do not the people themselves eat oysters here?—They do not appear to care about them or to notice them.

26,796. What ports on the east coast will fairly represent the fishing interests on the east coast of Scotland?—Beginning southward there are Berwick, Burnmouth, Eyemouth, Dunbar and Fisherrow; there is also a large body of fishermen at Newhaven, although I see very few of them here to-day. Then there is Anstruther on the opposite coast, Buckhaven and Ferryden. Then Stonehaven is an important fishing place, but the fishermen all come from a distance to it. At Aberdeen there is a much smaller fishery. Then there are Peterhead, Frazerburgh, Banff, Buckie, Burghead, and Cromarty.

26,797. Is there much fishing there?—Occasionally, there are a number of boats that rendezvous there.

26,798. Well, what next?—Helmsdale, Lybster, and Wick.

26,799. Is Lybster separate from Wick?—Yes, it is.

26,800. But it is very close by?—It is no great distance away, but the whole of that coast is very important. You will find a large number of boats in each of those places. Wick is the principal.

26,801. (*Mr. Caird.*) But are not the interests of those places exactly alike; for instance, is not the information that we should get at Dunbar the same as we should get at Eyemouth, and at Fisherrow?—No; I think it might differ materially.

26,802. Are they not prosecuting the same kind of fishing, and getting the same kinds of fish?—Yes; generally.

26,803. And would not the experience of the fishermen of Dunbar be the same as that of the fishermen of Eyemouth?—No doubt the fishermen of Dunbar frequently fish at Eyemouth also.

26,804. Then why could we not get at the same facts by visiting one of those places only?—I think it is an important thing that you should visit the stations I have mentioned, but that will be for you to judge. It is an important question altogether, and you will find great differences of opinion as you go along.

26,805. (*Professor Huxley.*) Now we have got as far as the whole of the northern end of Scotland, how is it as regards the Orkneys, is there more than one place to visit there?—I think you should visit both the north and south islands. There is at least one important place in each, if not two. In the north there is South Ronaldsha and Burra; then at Stronsa and Westra, there are important cod-fishing stations.

26,806. What is the state of fishing in the Shetland Islands?—You would find the whole of the people in all the islands entirely engaged in it.

26,807. But what are a few of the principal stations?—There is Lerwick and Scalloway; Lerwick is the most important town. Then there is Valesham which is quite close to it.

26,808. (*Mr. Caird.*) On the north coast of Scotland is there any place until you come to Lewis?—There was a very extensive fishery at Thurso 20 years ago, between Thurso and Cape Wrath.

26,809, Is there any point between Thurso and Cape Wrath worth visiting?—No.

26,810. What fishery was there at Thurso?—Herring fishery, and there is no reason why it should not be carried on now. When I came from Lewis herrings were more abundant than at any part of the season. The fishermen dropped fishing them there, not because there was any want of herrings, but because they wanted to go to Wick.

26,811. Then I presume there is nothing in the Pentland Firth until you come to Stornoway in the Hebrides?—No.

26,812. And what next?—There is Gairloch and Portree in the Isle of Skye. Then if you thought of visiting the Hebrides further south, Barra would be the principal place. Perhaps you might also go to Oban.

26,813. Is there anything down the west coast of Ross-shire?—There is Loch Broom; that is a very important fishing station.

26,814. (*Professor Huxley.*) Is there anything there now?—There is no scarcity of herrings on the coast, but they do not take it in the lochs.

26,815. (*Mr. Caird.*) Is there much fishing carried on at Oban?—There is no great fishing carried on in Oban, but it is a central place at which you would derive great information. The fishing places are small and very far apart from Skye.

26,816. Is there anything between Oban and Campbeltown?—Nothing worth mentioning.

26,817. Is the fishing at Campbeltown important?—Yes, that is a tremendous fishing place.

26,818. That will bring us as far as Loch Fyne?—Yes, your natural course would be to go from Tarbert.

26,819. Is there any fishing on the Ayrshire coast?—You would go first from Tarbert and Inverary on the north of the Clyde. The next place will be Largs; that is rather unimportant. Then there are a few fishing boats at Saltcoats.

26,820. We only want to know where the principal fishing interest is situated?—Dunnare, on the Ayrshire coast is the next place; then Ballantrae. The boats are also increasing about Girvan; and in Loch Ryan there are a few oyster fishermen.

26,821. Is there anything else?—There are a few fishermen in the Bay of Luce.

26,822. Is there much fishing in the Solway?—I have never been further up than Whithorn.

26,823. Do you know anything about the coast of the Isle of Man?—Yes, a very important fishery is carried on there.

26,824. Where?—At Peel. They begin the season there, then go round by Port St. Mary, and towards the autumn finish at Douglas.

The witness withdrew.

JAMES METHUEN called and examined.

J. Methuen.

26,825. (*Mr. Caird.*) You are an extensive fish-curer in Leith?—Yes.

26,826. Have you had a large experience of the fishing trade on the coast of Scotland?—Chiefly of herrings.

26,827. Can you tell us of your own knowledge whether the quantity of herrings caught at the present time, as compared with the quantity caught in previous years, is increasing, stationary, or diminishing?—It is on the increase.

26,828. Has it been a steady and progressive increase?—Yes.

26,829. Has there been a considerable increase?—Yes, a very considerable increase; but the number of boats and the amount of netting has increased also.

26,830. Is it within your experience that the more the sea is fished for herrings the more it yields?—No; I think that the boats many years ago, even with fewer nets, caught more fish.

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26,831. You mean that they caught more fish individually?—Yes.

26,832. But the aggregate now is constantly on the increase?—Yes.

26,833. Is there any legislative restriction or otherwise as to the mode of fishing for herring within your knowledge which is injurious to the supply of fish?—There is nothing but the trawling.

26,834. What kind of trawling do you mean? There are two kinds. There is the beam-trawling and the circle-net trawling for sprats?—I mean both the circle-nets for sprats, and the beam-trawling.

26,835. Does the beam-trawling interfere with the herring fishery?—Yes, the beam-trawling destroys the spawn; they trawl it up in a heap.

26,836. But if the supply is constantly on the increase they do not appear to have done much damage?—Not much, but the shoals differ very much.

26,837. But on the whole there has been a steady and progressive increase?—Yes.

26,838. So that there cannot have been much injury done by the destruction of spawn?—Upon some places on the coast the supply of fish increases one year and then decreases another.

26,839. For the same reason that there is a steady and progressive increase in the yield of herrings, it would appear that there can be no serious injury done by the sprat-fishing to the supply of herrings?—There is a great number of young herrings taken with the sprats.

26,840. But these young herrings are of course sent to the market?—Yes. I have often seen more than half of the catch consisting of young herrings.

26,841. Is it not within a very limited area of the whole fishing boundary that sprats are fished with herrings?—It is only in the Firth of Forth and near Inverness.

26,842. That is a very limited portion of the whole fishing ground?—Yes.

26,843. Upon the other parts of the fishing ground is any injury done by any modes of fishing now practised?—I do not know that there is.

26,844. Have you any knowledge of the west coast fishery?—Yes.

26,845. Can you speak at all of the advantage or disadvantage of having a close-time for the herring-fishing on the west coast?—I believe that the close time interferes with the cod and ling fishery in the island of Lewis.

26,846. Do you mean as regards the supply of bait?—Yes.

26,847. Has there been any perceptible difference in the supply of cod and ling?—I do not think there has.

26,848. Then how does it interfere with it?—There has been a want of bait although the fishing has not decreased. In many places there have been great complaints in regard to the want of bait.

26,849. But you have not found that there has been a smaller supply of fish in consequence?—I think not, if I may judge from the statistics which I have seen.

26,850. Do you think it possible that there would have been an increase if there had been an easier mode of obtaining bait?—Yes; I do think so. The herring bait is the very best that can be got for catching cod and ling.

26,851. Does the enforcement of a close-time put the fishermen to greater trouble and expense than formerly to obtain bait?—Undoubtedly it does.

26,852. Is the cod and ling fishery an important one on the coast of Scotland?—Yes it is very important indeed in Shetland and Lewis.

26,853. Is there a large quantity of cod and ling caught there?—Yes, a very large quantity.

26,854. What is the quantity caught?—At least 400 or 500 tons at each island.

26,855. At each island?—Yes, Lewis and Shetland.

26,856. And that is something like 800 tons altogether?—Yes, fully that or more.

26,857. Is there any legislation that could be adopted that in your opinion would be beneficial to the fisheries?—In regard to the close-time I think that north of Ardnamurchan Point it would be better that the fishing was restricted.

26,858. Do you mean that there should be no close-time?—No, that there should be a close-time, but not so long as it is at present.

26,859. Why do you think there should be a close-time at all?—The herring-fishing on the Lewis islands commences now about the 20th of May, and at that time the herrings are immature.

26,860. But are they not equally immature at that time on the east coast?—They are not fished on the east coast then.

26,861. Do they not appear on the east coast then?—They do, but fishing for them is not prosecuted.

26,862. Would it be prosecuted at the Lewis?—Before a close-time was established the fishermen used to commence about the 1st of May or the last week in April, and then the herrings were found to be so immature that they were almost unfit for food. That was the original cause of the close-time being adopted, namely, to prevent herring-fishing before the 20th of May.

26,863. Are the herrings not in condition at the same time on the east and west coasts?—Not exactly, they seem to be a very different herring on the west coast. They are a much finer herring and a richer.

26,864. Is that the reason why you think there should be a close-time there and none on the east coast?—No, that is not the reason.

26,865. Then what is the reason?—Because they catch the fish when they are immature.

26,866. Can they not catch them when they are immature on the east coast?—They have never tried to do so. It has never been prosecuted on the east coast before the 1st of July.

26,867. Why is it tried on the west coast and not tried on the east coast?—The herrings come in earlier on the west coast.

26,868. The herrings are there?—Yes, they come in earlier.

26,869. Do you know anything about the oyster fisheries?—Only very little.

26,870. Are you acquainted with the lobster fisheries?—No.

26,871. Do you know anything about the catch of flat-fish, skate, turbot, and so on?—I know very little about it.

26,872. Is the fishing at present a flourishing trade on the coast of Scotland?—Yes, I think it is.

26,873. Both for the fish-curers and the fishermen?—Yes.

26,874. And is it an increasing trade?—Yes, but we want more markets on the Continent.

26,875. Would the operation of more markets on the Continent be to increase the price of fish to the people at home?—Yes, it would increase the price to the fishermen in the first place.

26,876. It would increase the profits of the fishermen?—Yes, in 1862, when we had a very large catch, we could not find a market for the whole of the fish we had.

26,877. Is there an increasing proportion of the whole fish caught including herring and the other fish now sent fresh to the market as compared with other years?—Undoubtedly there is a great deal more sent fresh to the market on account of the railways.

26,878. Is that proportion constantly altering through the opening out of new facilities by means of railways to more distant parts of the kingdom?—Yes.

26,879. Then if the returns of the Fishery Board show that there has been a constant and progressive increase in the quantity of cured fish, while we know that the facilities for the transmission of fresh fish are continually increasing, would not the obvious inference be that the total catch of fish of all kinds is greatly on the increase?—Yes, but there has also been an increase in the number of boats and quantity of netting used.

26,880. But that must be the obvious inference from the facts which come under our knowledge?—Yes.

26,881. Has the price of fish very much increased within recent years?—Yes, very much.

26,882. How much has the price increased?—It is now nearly double.

26,883. Is the price of cured herring greater than it was 10 years ago?—Yes.

26,884. What is the difference; I want the average price, not taking an exceptional year?—I think it is from about 6*s.* to 7*s.* a barrel.

26,885. How much per cent. may that be on the price of the fish?—About 40 or 50 per cent.

26,886. That is upon the cured fish?—Yes, upon the cured fish. The fresh fish of course bring more than double.

26,887. There is an increase of more than 100 per cent. upon the fresh fish?—Yes, and upon the cured fish of about 40 or 50 per cent.

26,888. And that increase has naturally drawn a larger number of people into the business?—Yes.

26,889. Are we to take it that the fishing trade now on the coast of Scotland is a flourishing trade?—Yes, it is a flourishing trade.

26,890. Does that apply to all kinds of fish that are caught on the coast?—I do not know anything about any other fish except herring, cod, and ling; the other fish all go away fresh.

26,891. You do not export fresh fish to foreign countries?—No.

26,892. Are there no fish sold direct out of our own boats to those foreign fishing boats which come along our coast?—Not now.

26,893. Was that ever the case?—Yes. I believe the fish have been sold in that way to the French and Belgian vessels.

26,894. (*Professor Huxley.*) Comparing the catch of herrings on the east and west coast, is there a larger proportion sent fresh to the market from the west or from the east coast?—I should say from the east coast.

26,895. There is a larger quantity of fish sent fresh to the market from the east coast?—Yes.

26,896. Is there a larger proportion cured on the west coast?—In proportion the catch on the east coast is much larger than the catch on the west coast.

26,897. But out of the total on each coast is there a larger proportion cured on the east coast or the west coast?—I think the larger proportion is cured on the east coast.

26,898. Then the larger proportion of fresh fish goes from the west coast?—Yes, in comparison with the quantity caught.

26,899. You were speaking just now of the difference between the east and west coast herrings?—Yes.

26,900. Does that arise from the fact that the east coast herrings are caught full, and that the west coast herrings are not full; the Loch Fyne herrings for instance are young fish?—Yes.

26,901. Does the difference arise from that?—No, they are a different quality of fish; they are much richer and not so large.

26,902. Do you mean that the fish have more fat in them when they are full and afterwards?—They have been catching maties half full lately.

26,903. Were they fat?—Not as fat as they are on the west coast.

26,904. Is the close-time of any advantage to the curers or to the buyers of fish?—It has proved so since the operation of a close-time.

26,905. How does it work?—Since the close-time the catch has increased very much in the Lewis. I do not know much about Loch Fyne, but in Lewis it has increased very much.

26,906. I do not speak of the catch, but is it of convenience to the curer to have a close-time when no herrings are caught on the west coast?—The consequence is that we do not get as many immature fish, —fish that ought to be thrown away.

26,907. If the immature fish that are caught, or were formerly caught in the close-time are not fit for food, how do they find any market?— They are simply caught because the fishermen are engaged from the beginning of the fishing season, namely, from the 1st of May until the 10th of July.

26,908. Why do curers engage them at a time when they cannot get good fish?—They depend upon the good fish that comes in afterwards to make up the difference; but the effect was to give them a less price in general for the whole catch.

26,909. What advantage can they obtain from getting men to catch bad fish?—The fishermen would begin at that time.

26,910. I suppose the demand for labour was in advance of the supply, and the curers were obliged to come to the terms dictated to them by the fishermen?—It was not that altogether; but if one fisherman commenced they all commenced, so that one should have no advantage over the other.

26,911. What advantage could one have over another in catching unsaleable fish, if the fish were really unsaleable?—There was a great loss upon the fish they caught then; but the fishermen would not engage unless they engaged from the beginning of the season.

26,912. Then the fishermen had command of the labour market and dictated their own terms?—That was so; but they got less for their fish over the whole catch. If they got any large quantity of fish during the first few weeks it was generally so small that it was thrown away.

26,913. The fishermen did in effect dictate their own terms?—Yes.

26,914. Then the curers came to the Government to ask for restrictions to prevent the fishermen dictating their own terms for their own labour?—We considered that the fish were lost and destroyed.

26,915. In point of fact, the working of this close-time operates as a regulation of industry as between curer and fisherman?—It does, looking at it in that light.

26,916. And it must be very convenient to have that?—It has proved very successful during the last three years.

26,917. (*Mr. Caird.*) What is your opinion as to the advantage or disadvantage of having a Government brand placed upon your herrings when they are cured?—It is a very great advantage in the continental market. The bill of lading of a cargo of full-Crown herrings is transferable, like a banker's draft, from one party to another, in the interior of Germany, and that helps to sell the fish.

26,918. Then you think it is an advantage quite worth paying for?—Undoubtedly.

26,919. And you have no desire to see it done away with?—No, certainly not.

26,920. But has it not the effect of making a uniform level of the capacity of the fish-curers?—Not altogether; every fish-curer has his own brand on the barrel besides the official brand.

26,921. But would not the full Crown brand be sufficient to sell the fish?—Yes; but there is a difference in the cure at times.

26,922. Would not the curer's name itself, if there were no brand, come to be a guarantee with regard to the quality of the fish?—It might; but the buyers would have no confidence in it. They cannot turn out the herrings in order to examine them.

26,923. Is there so close a surveillance kept by the inspectors here as to enable them to determine, with accuracy, whether the fish have been well cured or not?—Yes; at every fishing station the Fishery officer goes through the yards when they are curing the fish. He thus becomes acquainted with the quality of the fish, and he sees the cure.

26,924. Does he object to the fish if they are not in a proper state to be cured?—Yes.

26,925. Are the fish often rejected by the Fishery officer?—Yes, especially if they have been long in the boat before being brought ashore.

26,926. What becomes of them then?—They get the single Crown brand if they are properly cured although they are not full fish. If they have been

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too long in the boat, and are not in a fresh state when cured, they remain unbranded.

26,927. Are you aware whether there are any curers who object to the continuance of this system of branding herrings?—Yes, a good many of them do, but it is chiefly those who send their fish to Ireland and to other markets, and who do not send them to the continental markets.

26,928. Is the brand not held to be of much importance except on the continent?—No.

26,929. Then it is only of advantage with regard to the sale of fish on the Continent?—Chiefly so.

26,930. (*Professor Huxley.*) Supposing the brand were removed, of course you would like the name of your house to be a guarantee for the goods you turn out?—Yes.

26,931. Then would it not be to your interest to have a sufficient mode of inspection yourself; would it not be to your interest to reject the bad barrels of herrings, and not allow your name to be placed upon them?—That might be done, but the people who buy of me cannot depend upon that.

26,932. In other branches the buyer depends very much upon the name of the merchants who send him the goods. In wine, for example, the name of a particular merchant is as good as a Government brand; do you not think it would be worth while for the herring merchants to exercise a careful and proper supervision over the curing of the fish, and in that case do you not suppose that your name would be as good as a Government brand?—We take all the care we can, but after all there would be great difficulty in the matter.

26,933. Could not your servants take the same pains and care which the Government inspector takes?—But there is a great deal done by the officer in looking after the workpeople at the station.

26,934. Do you think that the inspection by the Government officer is more efficient than any inspection that could be exercised by your own people?—Yes, the workpeople are frightened when the Fishery officers come round, they are so very particular; and each packer has his own mark on the barrel, together with the date, and when the officer examines the herrings in order to brand them, if he finds that any of the packers have packed them wrong or intermixed the fish, then of course he can turn the whole of the herrings out of all the barrels bearing upon them that packer's number, and he gets no pay.

26,935. But however wrongly a packer may have done the work the inspector cannot punish him, the punishment falls upon you?—Yes; the fish are rejected.

26,936. And your remedy in the long run is exactly that which you would have if you had no Government inspector, namely, you would discharge your servant?—Yes.

26,937. So that the practical working of the thing comes in the long run to what it would be, supposing there was no Government inspection, that is to say, if the packer through carelessness sent bad goods abroad and the merchant complained, you would discharge the packer?—Yes.

26,938. Under the present system you have the same amount of responsibility, but the person to find out the fault is the Government officer instead of your own?—Yes; but the Government officer is neutral between the buyer and seller, and the Germans have more confidence in buying herrings branded by a neutral person than if they were under our own brand. We believe that it would hurt the trade very much to take away the brand, especially as the chief market is in Germany.

26,939. But do you think that the same practice is applicable to other branches of trade; for instance, should there be a Government brand in the case of a man who exports sugar abroad or any other article?—I do not think so. That would be sampled quite easily, but unless you turn out the herrings and examine the whole of them it would be impossible to ascertain whether they had been improperly cured or not.

26,940. We have sometimes heard of the "foots" of a cask of sugar, and I have been told that that is as hard to find out as bad herrings?—The herrings in the middle of a barrel might be mixed or injured, many things might occur to them, and you could not get at them without turning the whole barrel out.

26,941. You are probably aware that in many trades adulteration is practised?—Yes.

26,942. And that in the long run what gives a man a large sale for his goods is the veracity with which he does his work, and the value of his goods?—Yes.

26,943. Then why should herring-curers require a certain aid from the Government which no other trade has?—The fisheries have flourished exceedingly since they had the superintendence of the Board of Fisheries over the cure. The Dutch fishermen now have not one-tenth of the markets they used to have in Germany. They supplied nearly all the markets until we got the brand.

26,944. The only question with us is a matter of principle, namely, whether one branch of commerce should demand a Government guarantee rather than another, and I wished to ascertain whether there were any circumstances with regard to the fish trade which made it proper for Government to guarantee the goods of fish merchants, whereas they do not guarantee those coming from other merchants?—I think the great point for consideration is the difficulty of detecting badly cured fish.

26,945. Do you think that whenever there is much difficulty in detecting a fraud that Government should step in and give a guarantee?—No, no doubt the object with regard to fish was to encourage the fishing on the coast.

26,946. In fact the brand partakes of the nature of a bounty?—Yes, something of that sort.

The witness withdrew.

T. Wilson.

THOMAS WILSON called and examined.

26,947. (*Mr. Caird.*) You have been for a long time a fisherman at Newhaven, and have held the office of box-master to the fishermen's society there?—Yes.

26,948. And therefore you know pretty well the sentiments of the fishermen in Newhaven generally?—Yes.

26,949. What kind of fishing is principally followed in Newhaven?—The herring and haddock-fishing.

26,950. Is the supply of herring increasing or diminishing?—I think the supply is diminishing.

26,951. Are the number of people employed and the number of boats increasing or diminishing?—Increasing.

26,952. Do you think the whole quantity of fish obtained by the increased number of men and boats is less than it used to be with a smaller number of boats and men?—Yes, according to the fleet of nets and number of men employed.

26,953. Is it not paying them as well?—Yes, because the price is much better. In former years the price was much lower, but the quantity of fish caught was much larger.

26,954. A smaller quantity brings as much profit as was derived from the larger quantity taken formerly?—Yes.

26,955. Upon what part of the coast do the Newhaven fishermen principally fish?—Off Dunbar and Eyemouth.

26,956. Do they go to fish outside?—Yes.

26,957. Do they not fish in the Firth?—Yes, in the winter season.

26,958. Is there any particular kind of fishing which has more diminished than another?—In the winter season there are not so many haddocks caught. I believe that cod and herring are not so large in quantity.

26,959. Are you positive of that?—I am quite sure.

26,960. Then what do you attribute the falling off to?—It is owing to the weather; sometimes the weather is more boisterous than at others, and the boats cannot get out to sea in order to catch fish.

26,961. The weather is not more boisterous on the average than it was formerly?—It is not so much more boisterous, but of course when the boats cannot get out to sea they cannot get near the fishing ground.

26,962. But that is not more the case than it was in former years?—No.

26,963. Have you not larger and better boats now?—Yes.

26,964. Boats that are more fit to go out to sea?—Yes.

26,965. Then that will be rather to your advantage than to your disadvantage?—Yes; we prosecute the fishing more down the Firth now than we did formerly. We go until the end of May. From the 1st of September until the month of October we go down for the haddock-fishing.

26,966. Is the supply of haddocks increasing or diminishing?—It is increasing.

26,967. Are they as good in quality as they were?—I think so.

26,968. Are more men employed in catching them than there were formerly?—Yes.

26,969. Are they caught in the same mode as they were formerly?—Yes.

26,970. Is the total supply of fish brought into Newhaven on the increase or otherwise?—By the number of boats employed in catching fish, I should say the supply is on the increase.

26,971. You refer now to the haddock-fishing?—Yes.

26,972. There are more boats employed in catching them than there were formerly, and in consequence the supply to the public is larger?—Yes.

26,973. In regard to the herring-fishing, is that so also?—Yes, just in the same way, owing to the larger number of boats and the increased quantity of netting employed.

26,974. Is there any mode of fishing at present practised which is destructive of the spawn or injurious to the fishing generally?—I think beam-trawls are injurious to the fishing generally.

26,975. Is the practice of beam-trawling followed where you are in the habit of resorting for the purpose of fishing?—Yes, as far east as Bass Rock.

26,976. Is it followed there?—Yes.

26,977. What kind of fish has diminished?—The haddocks particularly.

26,978. The haddocks have been driven more out to sea you suppose?—Yes, I think that in consequence of taking up the spawn the fish have gone away off the ground.

26,979. Do the beam-trawlers continue to follow their trade there?—There was only one there this season, but last year there were six from the month of May until the end of September.

26,980. Do your boats go further to sea in consequence?—Yes.

26,981. Is that the cause of it?—They say so.

26,982. Have you anything to do with the oyster fisheries?—Yes.

26,983. Is there an extensive oyster bed in the Firth of Forth?—Yes.

26,984. Is there only one bed in the Firth?—There are beds of oysters extending from the north of Cramond down as far as Inchkeith belonging to the Duke of Buccleuch.

26,985. Are there beds on a great part of the Firth of Forth?—Not that I know of.

26,986. Where do you say the beds extend; from Cramond to where?—From Cramond to Inchkeith.

26,987. That extends over several miles?—Yes.

26,988. Is that the principal ground for oysters?—Yes.

26,989. Is it fished under certain restrictions?—Yes.

26,990. What are they?—They are kept off from fishing at certain periods, stones or clay are not allowed to be put on the ground, and the fishermen are not allowed to take up the brood.

26,991. Do the owners of the beds maintain a police for the purpose of enforcing these regulations?—No.

26,992. Then in which way are they enforced?——We protect the bed ourselves.

26,993. Do you pay so much for the privilege of fishing?—Yes.

26,994. Does every boat pay so much?—Yes.

26,995. Has that payment been a constant and regular payment for some years, or has it increased of late years?—I believe the payment has been made more than 200 years back.

26,996. Has it been the same for that time?—It has been more and less. Some years it has been as high as 1*l.* a man, and now it is down to 4*s.* a man.

26,997. Then it is reduced now compared with what it was formerly?—Yes.

26,998. Has that reduction taken place in consequence of the beds having been less productive?—No, I think not.

26,999. Then what was the cause?—Because we would not sell the oyster scarps to the English people. The English people went to law with us and lost, and then the oyster beds returned again to us and we have protected them ever since.

27,000. Then do you get them at a lower rent?—Yes.

27,001. You are left entirely to protect them according to the regulations that you yourselves establish?—Yes.

27,002. Is there a certain body of fishermen who are alone allowed to fish there?—Yes.

27,003. Are they a guild or privileged body?—Yes.

27,004. Who are they?—They are a society of fishermen belonging to Newhaven.

27,005. They have established regulations to protect the fishing on their own account?—Yes.

27,006. Do these regulations include any particular season of the year when there is a close-time?—Yes, from the end of April till the month of September.

27,007. During the warm months of the year?—Yes.

27,008. You have found from long experience that those are the months which it is best to maintain as close-months?—I think if the beds remained close until the 20th of September it would be better for us. I think that the spawn then is very young, and that it would be a great improvement if the beds were not touched so soon.

27,009. Would you continue the open season longer than the month of May?—If the oysters were required for the English market I would allow them to go on fishing for a fortnight or so into the month of May.

27,010. Has the number of people fishing on these beds increased of late years?—Yes.

27,011. Then have the beds been more closely fished?—Yes.

27,012. And a larger number of oysters taken from them?—Yes.

27,013. Without there being any apparent diminution in the supply?—The supply varies a little.

27,014. The only restrictions are the establishment of a close-time and the prevention of throwing mud or stuff of that sort upon the beds?—Yes.

27,015. Have you any mode of cleaning the beds?—Yes.

27,016. What do you do?—When we take up any dirt or weeds we never throw it back again.

27,017. You don't adopt any means for putting spat on the ground?—No, we never did; we never required to do so.

27,018. Do not the seasons vary somewhat in the production of oysters?—Sometimes they are more

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plentiful than at others. If there is a cold season the spawn is not so plentiful, but if we have a warm season the spawn is a great deal better.

27,019. But on the whole is it an increasing supply?—Yes.

27,020. Have you any lobster-fishing in the Firth of Forth?—Yes.

27,021. Is it a valuable fishing?—It has fallen off a great deal.

27,022. Is there any crab-fishing?—Yes, there is an extensive crab-fishing all through the month of May.

27,023. Do you follow the sprat-fishing?—I have been at it, but not for a number of years.

27,024. Are there many people in Newhaven who are interested in it?—Yes.

27,025. Do they complain of the limits within which it can be prosecuted according to law?—The proper limit is Queensferry; they hold that to be the proper place. They don't complain of any falling off in the sprat-fishing, but the limits might be extended both for the benefit of the fishermen and the public.

27,026. Is it the case sometimes that in consequence of the state of the weather they don't get beyond the Ferry?—Yes.

27,027. And if the limit is enforced there would be no sprats caught?—No.

27,028. Would that be a great loss to the community?—Yes, and to the public at large.

27,029. (*Professor Huxley.*) Do you catch herrings in the month of February?—Yes.

27,030. In what condition are they in the month of February?—They are full but not fat.

27,031. They are full fish?—Yes.

27,032–3. In what condition are the herrings you are catching now, when will they be full?—About the month of August.

27,034. So that you regularly get full fish in the months of August and February?—Yes.

27,034*a*. Is there any difference between the two kinds of fish?—Yes.

27,035. What is the difference?—The one is fatter and the other is drier.

27,036. Could you tell the one from the other by looking at them?—I think I could.

27,037. Do you catch them in the same places?—No.

27,038. Where do you catch the February fish?—In the Firth of Forth above Inchkeith.

27,039. Do you not catch them outside?—No.

27,040. Is that because you don't go or because they are not there?—It is because we have no time to go.

27,041. Are they large herrings or small herrings?—At some seasons they are large and some seasons they are very small.

27,042. Are they as big as the herrings you catch outside at this time?—Yes, generally.

27,043. Do the herrings now come up into the Firth or do they lie outside?—The fishermen have to go far out to sea for them, down to Mar Bank and the Cove, which is a good distance off.

27,044. Do they commonly come into the Firth in August?—They generally come up towards the shore then.

27,045. Do they come as high as Inchkeith?—Yes, about there.

27,046. Do you practise the long-line fishing?—Yes.

27,047. Is it practised in the winter time?—Yes.

27,048. Are you able to get plenty of bait?—Yes. We have a most beautiful ground here, on the south bank towards the west. There is nothing but a solid bed of bait; the ground is covered with it.

27,049. Do you send that bait southward to the Northumberland coast?—No.

27,050. Do not vessels come and fetch it from the north-east coast of England?—No, none of the boats get it except boats belonging to Newhaven.

27,051. Is there a right of fishing for mussels?—Yes.

The witness withdrew.

W. Bisset.

WILLIAM BISSET called and examined.

27,052. (*Mr. Caird.*) You are a fisherman at Newhaven?—Yes.

27,053. Have you had long experience there as a fisherman?—Yes, I have had 30 or 40 years experience.

27,054. Chiefly in the herring and haddock fishery?—Chiefly in the herring fishery.

27,055. Do you agree with the previous witnesses that the general supply of herrings is increasing?—Well, the number of boats engaged in fishing is increasing, but the number of fish to each boat has not been as good as it was some years back; taking the average of six years back, there has been a falling off.

27,056. But does not the quantity vary from year to year?—Yes, very greatly.

27,057. With regard to the haddock-fishing, is the catch of haddock generally increasing or diminishing?—Taking the winter and summer it has been very good.

27,058. Is the number of people employed at it increasing?—Yes; the winter fishing is very good, but now the spring boats go further off seaward.

27,059. Is there any mode of fishing practised which in your opinion in any way interferes with or is injurious to the supply of haddocks?—We complain greatly about trawling because we consider that it disturbs the ground.

27,060. Do you mean the beam-trawling in the bays?—Yes.

27,061. Have you yourself found that that has really diminished the supply of haddock?—Yes, ever since they have been working at it. In some pieces of water where the depth is shallow they have swept up all the fish in the trawl. Lobsters and cod-fish have been falling off, and I consider that it is owing to the constant trawling taking away the supply of food for those fish. In the fall we used to have a good deal of ground-fish, and in the winter a good deal of winter herrings. We have often to depend upon that for bait, and if we cannot get a supply at that time of the year it is a serious matter for us.

27,062. Do you consider that the supply of food for these fish is injured by beam-trawling?—Yes.

27,063. Do you think that the spawn is injured also?—Yes, we have observed that ourselves. The herrings used to spawn at Inchkeith, when the trawlers went there and destroyed the young herrings; we saw that ourselves.

27,064. In what way did you observe it?—We have been going over the ground when the spawn was red.

27,065. Is that when you were engaged dredging for oysters?—Yes.

27,066. Did you take any of it out?—Yes.

27,067. What did you do with it?—Threw it overboard immediately.

27,068. Do you think it was killed?—Yes, no doubt it would die.

27,069. Would the spawn die?—Yes, I think it would die, but if taken up from the outside, from a quantity gathered together, it might live and bring forth.

27,070. Are you ever interfered with by the French fishermen?—They keep a distance off us here; there is more spread of ground here than at Eyemouth.

27,071. Practically, they don't do you much harm?—Not here, but down at Berwick they come and destroy the nets very much.

27,072. Would you desire to have any legislative restrictions for regulating your mode of fishing;

would you like a law passed to say how you should fish, or would you prefer to follow the mode which you at present adopt?—There was an early fishing this last year or two in the Firth of Forth which has not existed before, and it is increasing every year, and very likely it will bring on some change sooner or later. We are now taking a great number of fish which if they were allowed to remain in the sea would come in again much improved at another season of the year, and then be caught by the boats.

27,073. Are they caught now and sent to the market?—Yes.

27,074. Are they good marketable fish?—They are mixed fish, and very young.

27,074*a*. Still they are sold?—Yes.

27,075. They are not thrown away?—No.

27,075*a*. Is there a large fishing of that kind?—The encouragement the boats have had during the last two years has occasioned an increase in the number of the boats, and every year they are going out earlier.

27,076. Do you think that the early fishing has been injurious to the subsequent fishing?—Last year this fishing entirely failed, and we blame the spring fishing for it. There is another injury we have to lament, and that is putting nets down before sunset.

27,076*a*. Is there no regulation with regard to that?—No; none whatever.

27,077. Does anybody enforce the regulations to prevent the shooting of nets before sunset?—No; no one at all.

27,078. There is such a regulation but nobody enforces it?—There used to be such a regulation and I believe it is carried out on the west coast. We have heard of it here but we never saw it enforced.

27,079. Nobody takes any notice of the time at which you shoot your nets?—No.

27,080. You may shoot them in the middle of the day if you choose?—Yes; we shoot them 20 minutes before sunset often.

27,081. Do the fish sink when they find the water disturbed by the nets?—It stops the fish from rising.

27,082. From rising up to the surface?—Yes; from the number of boats with nets set in the water, and the clearness of the water, the fish will not rise.

27,083. Do you think it would be important to enforce the regulation that nets should not be shot until after sunset?—Yes.

27,084. It is the practice to shoot them before sunset?—Yes; when the herring boats come home filled with herrings they are anxious to get near the same place again the next night, and sometimes they succeed on the same ground in finding fish.

27,085. Do you think it would be of much advantage to have a man-of-war or something of that kind to prevent you from shooting your nets before sunset?—Yes; a signal gun should be fired.

27,086. Would that not have the effect of making the fish sink and prevent them from rising?—I don't think that one gun would have much effect, but there is a grievance of that kind at Dunbar. They complain very much of the exercising of large guns by the volunteers; they say it disturbs the herring-fishing.

27,087. Has it been put a stop to?—They are trying to do so.

27,088. They think it injures the herring?—Yes, the fish are easily disturbed; even the men speaking together in a boat will disturb them.

27,089. Are you aware that there is a regulation to this effect contained in the Convention "It is for-"bidden to herring drift-net fishing boats to shoot "their nets earlier in the day than half-an-hour before "sunset except in places where it is customary to "carry on drift-net fishing by daylight"? Do you think if that regulation were strictly enforced it would be for the benefit of the herring-fishery?—Decidedly so.

27,090. (*Professor Huxley.*) Do you fish with ground herring-nets at any season of the year?—Yes.

27,091. Is that much done?—No; only for a short time of the year. It would not do but in the month of September.

27,092. That is when the fish are full of spawn—when, in point of fact, they go down to the bottom to spawn?—Yes.

27,093. You sink your nets by weighting them?—Yes, and when the tide turns the net turns with it.

27,094. That brings up the herring when they are actually spawning?—Yes.

27,095. Do you get much spawn with them?—No; we don't get much spawn.

27,096. It does not fasten to the nets so much then?—No.

27,097. Do you use trammel nets?—No, they are not used at all by the Newhaven men, nor in any case except by the Loch Fyne men, and in the winter time by the Aberdour men.

27,098. Don't you use trammel nets for skate and turbot?—No.

27,099. Do you use them at all for crabs?—They have small nets on the ground for that; the trammels cross each other.

27,100. With what kind of net do you catch crabs?—It is a net made for the purpose.

27,101. What is the size of the mesh of the crab-nets?—It is about two and half to three inches.

27,102. Is it hung quite loose?—Yes.

27,103. Do the crabs get entangled in it?—Yes.

27,104. Do the fishermen catch many in that way?—Yes.

27,105. Is there any mackerel-fishing here?—None except with hooks.

27,106. They don't use nets for catching mackerel?—No.

27,107. (*Mr. Caird.*) Are you likely to be deprived of the beach upon which you were formerly in the habit of hauling your boats up?—No, not entirely, but we are anxious to have the convenience of getting a better road in conjunction with the road prepared for the public. There is a branch line now formed, and it is desirable to have a good road.

27,108. Does the branch recently constructed to Leith by the Caledonian Railway Company limit the accommodation given to the boats?—No, it does not infringe upon us at all.

27,109. (*Professor Huxley.*) When you go out drift-net fishing for herrings do you have lights in your boats?—Yes.

27,110. What sort of lights?—One of those red, green, and white lights. We use the white light when we are riding with our nets, and another description of light when we are sailing.

27,111. Do you have one light or two in each boat; did you ever hear of this regulation: "In order "that boats fishing with drift-nets may be easily "recognised at night, the masters of these boats shall "hoist on one of their masts two lights, one over the "other, three feet apart. These lights shall be kept "up during all the time their nets shall be in the sea "between sunset and sunrise?"—No.

27,112. You don't do that?—No.

27,113. Nobody ever told you to do it?—No.

27,114. Did anybody ever come into your boats and tell you to do it?—No. Sometimes in the case of a snow-storm, in order to save both life and property, we may hoist two lights, but not under any regulation of that kind. The lights are small, and in a case of difficulty they may perhaps put up another one for the sake of safety.

27,115. The Fishery Board cruiser has never told you to carry lights of that kind?—No. I believe there are notices to that effect, but we never see them here. It is, however, very rarely that an accident occurs. The men here are much engaged on deck in working the boats, and the fishing-nets are never out of their hands.

27,116. But, as a matter of fact, you don't light your boats in that way?—No.

27,117. What is the size of the mesh you use for the herring nets?—Generally 32, 33, or 34 meshes to the yard. We have three sizes just now, and we use them according to the size of the fish and the stock of nets we have on hand.

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27,118. Are your nets ever examined ?—Yes, the winter nets are examined more particularly.

27,119. Do you set brat-nets here ?—No.

27,120. You don't use them here ?—No.

27,121. Do you set trammel nets at all ?—No, except herring-nets in the bays.

27,122. Are you not allowed to do so ?—It is not so much that, but we have different occupations.

27,123. Have you a vane at the mast-head of your boats ?—No.

27,124. You have none at all ?—No.

27,125. Did you ever hear of this regulation : "For "the purpose of distinguishing by day drift-net fishing boats from trawl-boats both shall carry at the "mast head vanes which shall be at least eight inches "in height and two feet in length"?—No.

27,126. You have not got vanes eight inches in height and two feet in length ?—No.

27,127. Do you know anybody who has ?—No.

27,128. Are you aware that you may be fined for not carrying them?—No.

27,129. When do you go dredging for oysters ?—In the month of September.

27,130. What time of day ; is it during the day or always at night ?—In the morning. Sometimes a man will go out early in the morning in order to get some for the market.

27,131. Do you ever dredge at night ?—No, it is all done in the morning.

27,132. Have you an oyster-gauge ?—Yes.

27,133. What is the size of it?—It is not so much used with regard to the size of oysters, but it is an agreed gauge to insure the oysters being taken about the same size. It is a piece of brass so that a man can tell by a look at the oyster in his hand if it is the proper size.

27,134. Does anybody examine your boats ?—Yes.

27,135. If you have small oysters, what is done with them ?—They are taken out.

27,136. Is the person who has taken them fined ?—They tried that, but it did not seem to be an effectual cure either. We were rather put about in that way. The fishermen had an idea that paying a certain rent for the ground they had liberty to take what they liked. They took their own liberty with the oysters on the scarps and sold large or small. It would require great strength to enforce any regulations as to the size at which they should be sold.

27,137. (*Mr. Caird.*) Is there any matter with regard to the interests of the Newhaven fishermen that you desire to bring before us ?—Yes.

27,138. What is it ?—We want a harbour.

27,139. What do you wish a harbour for ?—We think it would increase the accommodation and give safety to the larger boats here.

27,140. Are you willing to pay a proportion of the expense yourselves ?—Yes.

27,141. What expense would be necessary for the purpose of making a harbour for the fishermen here ?—It is the cheapest yet we have had by way of estimate.

27,142. How much would it cost ?—About 5000*l.*

27,143. How much would you be ready to contribute yourselves ?—We have not given it a name yet, but we should be ready to do something.

27,144. Would it be by subscription among the fishermen ?—Yes, and elsewhere.

27,145. It would not be raised by tolls you would levy for the use of the harbour ?—No, we could not get tolls levied on a harbour of that kind.

27,146. Would you raise one-fourth of the sum you require ?—I think so.

27,147. You would be ready to do that ?—Yes, along with the assistance we should receive.

27,148. Have you long wanted a harbour ?—Yes, we have never had one.

27,149. Have you ever applied for one ?—Yes, we have been very anxious to have one that we may share the comfort that boats belonging to Eyemouth and the large boats possess. In the winter season in the fall of the year there is special want here of harbour accommodation. In the conduct of the fishing for three months from September they go up by the turn of the Firth round Stromberness, and when it is blowing very hard they are often obliged to refit the damage done to the boats. There is also a loss of life sometimes. The boats of a better quality and larger size can go down there, and we are anxious to receive the same advantages.

27,150. Is it within your power to take advantage of the harbour of Granton ?—Yes, but in the winter season we have to go away to Leith, and if the wind is north-west we are placed in a position that we cannot get in.

27,151. You are speaking of Leith Harbour ?—Yes.

27,151*a*. But I am speaking of Granton ?—We cannot get liberty at Granton. We are confined too much to one particular spot, we have no access to the spots we would require there. Looking at the matter in every sense, what we want is a harbour of our own. The greatest blessing we could have ever since we have been fishermen is a fishing harbour.

27,152. Have you ever made an application to the Fishery Board on that subject ?—We did in former years, but we have never been able to meet with any readiness on the part of the Fishery Board to accede to our wishes. There was a difference of opinion as to the spot, some wanted it on one side and some on another.

27,153. Would the Fishery Board have been ready to meet you if you had been agreed ?—Yes, I think they would. This year we made an application but we were too late, they told us that all the money was appropriated.

The witness withdrew.

J. Anderson.

JOHN ANDERSON called and examined.

27,154. (*Mr. Caird.*) You are a fishmonger in Edinburgh ?—Yes.

27,155. Have you been long engaged in that trade here ?—Yes, for 35 years.

27,156. Then you have a good knowledge of the general supply of fish in Edinburgh ?—Yes.

27,157. And with regard to any other part of the coast, have you a good knowledge of the supply of fish ?—Yes, we get them from various places, from Hull, Scarborough, Whitehaven, Aberdeen, and elsewhere.

27,158. Has the quantity of fish consumed in Edinburgh been much on the increase in recent years ?—I have seen very little difference.

27,159. Do you supply fish to the interior towns of the country from Edinburgh ?—Yes, a great deal goes away by train to various towns.

27,160. That does not pass through your hands at all ?—Yes, it does.

27,161. You see what goes probably ?—Yes, there is a great quantity sent away.

27,162. Is it increasing in quantity ?—Yes, to all parts of Scotland.

27,163. Is the supply of fish altogether from Scotland increasing ?—Yes, it is increasing every day.

27,164. Does that answer relate to all sorts of fish ?—Yes.

27,165. Then that indicates an increased catch of fish all over Scotland ?—There is not an increased catch of fish.

27,166. Where do they come from then ?—They are taken from the Edinburgh and Glasgow markets. What were formerly cured are now going away fresh.

27,167. But from the returns of the Fishery Board there is an increased quantity of cured fish ?—There was a good catch last year, but a great quantity is now going away fresh.

27,168. Has there been a constantly increasing quantity going fresh into the interior of the country?—Yes, and the increase will continue daily.

27,169. Is there any particular kind of fish that has increased or diminished in its supply in recent years?—It fluctuates very much. In good weather they can get plenty, only they have to go a little further for them. All kinds of fish are going out of the Firth, and garvies, herrings, and white fish altogether.

27,170. What is the reason of that?—It has been going on decreasing for the last 25 years. In consequence of the immense quantities of moss coming down, places that were dry some years ago have now some five feet of sludge covering them. This year the banks where the fish used to spawn down towards Queensferry are covered; and I believe that is the cause of the garvies having set in for Granton.

27,171. If the garvies go up above the Ferry would not that indicate that the moss has disappeared?—You will find very few where the moss is; if it is blowing very hard you get plenty.

27,172. Where does the moss come from?—From Blair Drummond and Cardross. There are two or three acres of moss to go away yet. About six or eight miles beyond Stirling it has entirely destroyed the salmon-fishing.

27,173. It has destroyed the salmon-fishing?—Yes.

27,174. Is there as good a rental from it as formerly?—The rental is good, but the price in the market is higher.

27,175. There is not the same quantity of fish caught?—Not by a long way.

27,176. Have you heard any others attribute the decreased supply to the moss that has been coming down?—Yes, many hundreds. It destroys all kind of brood up the river. When it comes into the river it is in large lumps, but they get smaller and smaller, and spread all over. Some of the banks are 8 or 9 feet deep in solid sludge, and that covers the banks where the garvies and herrings used to spawn.

27,176*a*. Is it not a fact that the catch of garvies and herrings is some years better and some years worse?—That depends upon the elements.

27,177. But it is a fact?—Yes.

27,178. Does the moss not disappear altogether?—No, it lies in the river.

27,179. And remains there?—Yes.

27,180. But if there are gales of wind it is driven further off?—Yes.

27,181. Then it does not remain there; not constantly?—It may go backwards and forwards, but it will not disappear altogether.

27,182. Still it has been found to go away to the extent of three feet in one gale of wind?—Yes.

27,183. Does that apply to any part of the coast except Queensferry?—All up the Forth.

27,184. Has it not affected the oyster-beds?—There are no oyster-beds above Queensferry to speak of; I believe it has destroyed an oyster-bed that used to belong to Lord Auckland. There is nothing there now and shoals of fish have been destroyed entirely.

27,185. (*Professor Huxley.*) Has not the moss been coming down there for centuries?—No; it has only been for the last five or six years. There are steam engines used now for the purpose of getting it away.

27,186. Has this resulted from clearing the ground?—Yes; from clearing the ground. They have cleared about 2,000 acres. They are throwing the moss into the river and are destroying it entirely with it.

27,187. How long will it be before it comes to an end?—I think they intend to carry it on for some 70 or 80 years yet.

27,188. For how many years has it been going on?—I believe for 60 years. The heaviest works began 25 years ago, and they have been very extensive within the last four or five years. They have had two large engines going at Blair Drummond. They started with a water-wheel, but now they have got two large steam-engines.

27,189. You think the water is continually poisoned with it?—At times even an animal could not drink it.

27,190. Does it discolour it?—Yes; it makes it just like ink. We cannot fish in the water and have been obliged to give it up. Our meshes although they are from three and-a-half to four inches are entirely closed up with it, there is so much of it.

27,191. (*Mr. Caird.*) Is the influence of that moss being felt further and further down the Firth?—I have no doubt that it will be felt.

27,192. But it has not yet passed the Ferry?—No.

27,193. It is all above the Ferry?—Yes, as yet.

27,194. You said that all the fish were disappearing out of the Firth by degrees?—My opinion is, that long ago they would go beyond Queensferry to spawn on the ground where the moss now is, but now the moss sends them more down the Firth. That is the cause of the garvies not stopping where they were in the habit of stopping in former years. Last year we failed to catch any of them because we could not get near them. They went away past our nets altogether for several miles down. We commenced to fish them from September till March, and for three months we got nothing owing to the moss.

27,195. (*Professor Huxley.*) Can you suggest any remedy for that?—Nothing but stopping the moss. They got an Act in 1856 to stop it but they did not put it in force. You see it is the higher powers who are carrying it on. The Fishery Board are really the parties who are carrying it on, and so we can't get any redress. I threatened last year to interdict them. There was a great hue and cry raised, and they got me to quash it.

27,196. (*Mr. Caird.*) Does anybody but yourself believe in this?—All the fishermen connected with the salmon fisheries do.

27,197. Has it been agitated in the public papers?—Yes, several times.

27,198. Has it ever been mentioned in Parliament?—I think not; I have written to the Lord-Advocate and other members of Parliament, but it has had very little effect.

27,199. There are very few gentlemen connected with the Blair Drummond moss in Parliament?—There is Mr. Gibson of Galbraith and eight or 10 gentlemen all influential persons.

27,200. (*Professor Huxley.*) Have you brought the matter formally under the notice of the Fishery Board?—No; the Fishery Board don't incline in that way, they don't interfere with salmon or sparlings. The effect of this moss will be to cause the garvies to come down more among the rocks than before.

27,201. Do you get any large supply of soles in the Edinburgh market?—There are not a great number in the Firth. They engaged a steamer last year for six months, and I think if it had been properly managed there would have been a steady supply. There are great quantities of plaice and soles in the Firth.

27,202. How did they get them?—By trawling.

27,203. Is there any other mode except by trawling?—A few are caught by the line but that is an insignificant supply.

27,204. Is there any great demand for them here?—Yes.

27,205. Do you import them from Hull?—From Whitehaven and Scarborough. There are a few from Hull but they are not so good.

27,206. How is the market supplied with oysters?—We have had Skye oysters. The gentleman who gave his evidence just now is altogether wrong as to the supply to be got there, but I have had the experience of parties who have been there. There are oysters to be got all round Scotland, but they are in small quantities, black in colour, and are strong tasted.

27,207. They are not oysters that will take the market?—They have been tried in Glasgow often; they have been tried in England, but English people will not take them.

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27,208. Then there will not be any market for them?—There would be a small market for them. They have been often tried in the Glasgow, Liverpool, Manchester, and London markets.

27,209. Have you examined the Skye oysters?—Yes.

27,210. But you don't find them answer?—No, they don't take.

27,211. (*Mr. Caird.*) Where was it that the steamer you spoke of trawled, was it in the deep sea or the bays?—Close in-shore, off Aberdour Bay, off Berwick and Dunbar.

27,212. Did she never try trawling in the deep sea?—I believe they have tried it off St. Andrew's bay.

27,213. Is that close in-shore?—Yes.

27,214. They have not tried trawling outside?—There are plenty of fine banks on which they could trawl.

27,215. But it has not been practised?—No. There were 13 trawls off St. Monance one year; but they were stopped by the Board of Fisheries. They did not try the deep-sea fishing because they could not go out and be in in time for the fresh market.

27,216. But they manage to do that in Yorkshire?—They lie off very close there.

27,217. They go out for 30, 40, or 50 miles?—Not in the summer; they keep in then. They take ice with them now, I believe.

27,218. Why don't you do that in the winter?—The boats we have would not do; we have no decked vessels; they are all open boats.

27,219. And you have not thought it worth while to get larger boats?—No.

27,220. The 13 vessels that were trawling off St. Monance were engaged in trawling the Fluke-hole?—Yes.

27,221. Were they trawling there at the time the herring spawn was being deposited?—They fished there immediately afterwards.

27,222. And yet quantities of flat-fish were found there afterwards?—Yes.

27,223. Are you aware whether the flat-fish were full of herring spawn?—Yes.

27,224. Was it a common thing?—I have seen them quite full.

27,225. Have you seen herring spawn in the turbot?—Yes.

27,226. And in soles?—Not so much in soles.

27,227. In plaice?—Yes, a tolerable quantity in plaice, and also in brill; when we cleaned them out we saw it.

27,228. Did you get much spawn in your trawl?—Sometimes a good deal, but it was quite dead.

27,229. If you took away so much fish there, the fish you took away would be of great advantage to the spawning grounds?—The greatest enemies to the spawn, no doubt, are the fish themselves. The more we take away the less spawn they can eat.

27,230. Is the quantity of spawn scraped up by the trawl at all considerable compared to that destroyed by the fish?—The quantity of fish left would eat double the quantity in a day.

27,231. Some of the spawn brought up was tried to be brought to life again but it did not succeed?—No.

27,232. Professor Allman had some hatched, had he not?—We got it from the deep sea, and not from the trawlers.

27,233. Was it because it was damaged by the trawls that it did not come to life?—I think so. When they are fishing for herrings at the time the fish are in the act of spawning they do great injury; the fish are quite weak then, and as they draw them up over the gunwale of the boat, immense quantities of spawn fall over in a solid lump; I don't look upon that as live spawn at all. I don't think that the fish spawn upon the soft ground, but upon hard ground, and the trawl will not trawl upon hard ground, but only upon soft.

The witness withdrew.

LAURENCE LAMB called and examined.

L. Lamb.

27,234. (*Professor Huxley.*) You are an inspector of fisheries?—Yes.

27,235. You have been for a great many years acquainted with the fishing on the coast?—Yes.

27,236. In your opinion is it practicable to obtain sound statistics with regard to the fisheries?—I believe there are such at present as regards the herring fishery, and that they are got with almost the greatest accuracy possible.

27,237. Do you think that the value of these returns is very great?—I do as regards giving an approximation to the total quantity caught.

27,238. Do you think that you can depend upon these returns as representing the total catch?—They cannot be held to be mathematically correct.

27,239. But for practical purposes they are?—Yes.

27,240. The mode of collecting them is so far sound and correct that you can depend upon it for showing whether the fisheries are stationary, increasing, or diminishing?—Yes.

27,241. Do you think that that system could be extended to the long-line fishing?—It would require some consideration; I think it could be done, but it would require additional men.

27,242. Suppose it were thought desirable to organize a system of collecting fishery statistics all over the country, could it be done from your knowledge of the way in which the fisheries are carried on?—It could be done if the expense were not a consideration.

27,243. Do you think it would be a very costly process?—The way to do it with the greatest economy would be to get the returns from the boats.

27,244. But you heard one of the witnesses state the difficulties which were in the way of doing that?—No doubt there are difficulties, but in any way that could be adopted there are difficulties. That would be the most accurate way, and in that case there would require to be officers stationed within reach of all the boats fishing upon certain parts of the coast.

27,245. You know the organization of the Customs and Revenue, could it be done by that means, or through the officers of the Coastguard?—I am not thoroughly acquainted with that organization, but I don't think they are much acquainted with fishery matters. I believe there would be a necessity for enforcing a penalty of some sort in order to entitle the officer to demand the returns.

27,246. You don't think the returns would be given willingly?—There would not always be unwillingness; there might be in some cases, and it would be to overcome that unwillingness that it would be necessary to have a penalty.

The witness withdrew, and the inquiry was adjourned until the 26th July, at Dunbar.

Dunbar, Haddingtonshire, Tuesday, 26th July 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

DUNBAR.

J. Murray.

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JOHN MURRAY called and examined.

27,247. (*Mr. Caird.*) You are a fisherman here?—I belong to North Berwick.

27,248. Do you know the fishery interest upon this coast?—I know a good deal about it.

27,249. Have you been all your life a fisherman and engaged in the trade?—I have been for 26 years a fisherman.

27,250. What are the principal kinds of fish that are caught off this coast?—There is the white-fishing and the herring-fishing. It is haddocks, cod, and herrings chiefly.

27,251. Within the number of years over which your experience extends, can you tell us whether the catch of the different kinds of fish has gone on increasing, has remained stationary, or has decreased?—It has been diminishing very much in the Firth of Forth.

27,252. Within the Firth?—Yes, within the bounds of the Firth of Forth.

27,253. Has it along the whole of the coast?—On the northern and southern sides from St. Abbs Head to Montrose, which constitutes the Firth of Forth, they have been diminishing for a great number of years back.

27,254. Will you specify the kinds of fish which have been diminishing?—Herrings and haddocks. Codfish also has diminished greatly for a number of years back.

27,255. Do you mean that the quantity taken by each boat has diminished or the total quantity taken by all the boats put together?—The take on the whole has diminished greatly.

27,256. Has there been any increase in the number of boats and men engaged in the fisheries within recent years?—Yes, there has been a great increase.

27,257. And is that increase still going on?—Yes, it is going on still. There has not been as much increase this year as there was some years previously, on account of the continuation of the bad fishings which we have had for the last three or four years past.

27,258. In consequence of bad fishing?—Yes.

27,259. In consequence of that, for three or four years past there have been fewer boats?—Yes, they have come to a head apparently.

27,260. But still there are some new boats this year?—I see very few of them.

27,261. And the opinion you have expressed applies to all the different kinds of fish caught off this coast?—Yes, to all the different kinds.

27,262. Can you attribute the diminution in the catch of fish to any reason within your knowledge?—I think that trawling has been one great means of causing the decrease in the fish.

27,263. Where is the trawling you refer to practised?—Both on the northern side and along the shores and down the middle of the Firth.

27,264. In the Firth and along the shore?—Yes, everywhere where there is smooth ground, so that they can get the trawls to go.

27,265. Has the practice of trawling increased of recent years?—No. This year I think it has decreased. We have had no English vessels down trawling this year.

27,266. Were the English vessels in the habit of coming here to trawl?—We have had as many as six for the last five years back.

27,267. Were they all of them decked vessels?—Yes.

27,268. Of what size?—Perhaps from 50 to 60 tons.

27,269. Did they trawl inshore?—They trawled within a mile and a quarter of the shore sometimes.

27,270. During what season of the year did they come?—They generally came down about the end of April or the 1st of June, and continued here until August or the end of September.

27,271. They came in the summer season, in the warm weather?—Yes.

27,272. They did not come here in the winter time at all?—There was one to the westward trawling for the 12 months round, but that was a steam trawler.

27,273. Did she come from England?—I do not know. She belonged to Leith, but before the skipper got the steam trawler he had a sailing vessel which went the whole 12 months round.

27,274. Is the steam trawler still employed?—No, she has knocked off.

27,275. Was it not found to be remunerative?—No, it did not pay.

27,276. Is trawling not so paying as it was?—I do not think it is paying so well, or they would not have dropped it. There was a vessel that came down from England this season, and we told the people who were with her the great injuries we had sustained by the trawling system along the coast. We said that we would not submit to it, and we would not allow him to persist in trawling where our herring nets and long-lines were. After we had made that statement to him he went away and he never came back again.

27,277. Have you had no other English visitor this year?—No, none but him.

27,278. Is there any deep-sea trawling off your shore?—They go down right through the middle of the Firth.

27,279. But is there any trawling in the offing?—Yes, they go as far off as the Mar Bank.

27,280. How far is that off?—About 25 miles.

27,281. Does it do you an injury?—Yes, it does.

27,282. Have you any facts by which you can show that it injures you?—I can speak of the injury done by trawling inshore.

27,283. I fully understand that you believe the inshore trawling has injured you?—Yes.

27,284. But what proof have you that the trawling 25 miles off injures you?—The herring goes down and deposits her spawn at places in the deep sea. We do not exactly know where they are but we have no doubt that they do it. It is very likely that they do it on those banks where the trawlers go, because there it is as shallow water as in any part of the Firth of Forth, and to destroy the spawn as they do in the Firth of Forth must be injurious to the fishing.

27,285. Then it is from suspicion alone and not from any definite knowledge that you speak?—I have no doubt that in the Firth they take up the spawn.

57,286. Did you ever see the trawlers take up the spawn?—There are witnesses here who can prove it. There is a man in the room who has seen it done.

27,287. There is a man here who can prove it?—Yes, I have heard the statement made by an individual who said he had seen it trawled up in great quantities.

27,288. Is there anybody here now who has seen it?—I cannot say.

27,289. There is at any rate no proof that you know of, of spawn being dragged up in the offing 25 miles off, on the fishing grounds to which you referred?—I have no evidence of the kind.

27,290. You say that it is the herring spawn that is destroyed?—Yes.

27,291. Have the herring fisheries off Dunbar decreased within recent years?—Yes, very much.

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27,292. Has it been a progressive decrease?—They have greatly decreased for some three or four years back.

27,293. Are you aware that there is a regular record kept by the Fishery Board of all the herrings cured?—Perfectly.

27,294. And if that record shows that an increased quantity of herrings have been cured how will you reconcile that with the opinion you express that the quantity has fallen off?—Here there have been 300 boats engaged in the fisheries for a number of years back, and it could be testified by the whole of the skippers here that they have not caught for the last four or five years past one half as much as they did for the four or five years previously.

27,295. How many boats are there engaged in the herring fishery between North Berwick and the Tweed?—I cannot exactly say.

27,296. I thought you said there were 300 boats?—That is in Dunbar Harbour.

27,297. Do they belong to Dunbar?—No, they come from the whole of the Firth of Forth, from Bowness down.

27,298. They resort to Dunbar Harbour?—Yes, this is their head quarters.

27,299. And south of the Firth as far as Berwick how many will there be?—There will be nothing short of 500, taking in Berwick and Eyemouth.

27,300. From St. Abb's head?—Yes, from Dunbar west.

27,301. How many men are there to each boat?—Five.

27,302. Then there are considerably more than 2,000 men engaged in the fishing business along this coast?—Yes, including Buckhaven; but not the Pittenween people.

27,303. Their boats come here?—They are all intermixed.

27,304. They come into Dunbar Harbour?—Yes, as soon as the fish come upon the ground.

27,305. Do you speak the opinion of all the fishermen who come to Dunbar Harbour when you tell us that the quantity of fish has been diminishing regularly?—I think I do.

27,306. Is this a great curing place for fish?—We cure a great quantity here.

27,307. What proportion of the herrings that are caught and brought into Dunbar are cured, and what proportion is sent fresh to the market; is there one-half?—No, not one-third is cured. More than one-half goes fresh.

27,308. Is the proportion every year of those sent fresh to the market increasing compared to the proportion of those that are cured?—I cannot say that.

27,309. Do you think you sell more fish now every year than you used to do?—Yes, more than three years back.

27,310. The price has been good has it not?—Yes, very good.

27,311. If the steam trawler has been withdrawn from trawling in the Firth that will in some degree have removed the objection you entertained to trawling?—Very much. That was a very great grievance to the whole of the fishermen.

27,312. Was she the most destructive of them all?—Yes, we considered so, because she went day and night up and down.

27,313. Did she get a great quantity of fish?—Yes; but there is a certain place off North Berwick where the herrings have come annually for a number of years and deposited their spawn. The vessels engaged in trawling have come every day and thrown overboard as much as a ton and a half of dead fish over the very ground where the herrings deposit their spawn, and the consequence has been that there has been no herring-fishing there since 1860 on that ground.

27,314. Has the steam trawler been employed on this coast since 1860?—It was employed before that I think. There were trawlers before then who came every day and brought to an anchor inside the rock.

27,315. Was the steam trawler in the habit of passing through the shoals of herrings?—Yes.

27,316. She paid no regard to that?—She paid no regard to it whatever. She destroyed some of the fishermen's nets. Several times she injured the fishermen's nets.

27,317. Was there no fishery police; did not the cutter or a gun-boat interfere to prevent that vessel disturbing the herring shoals or injuring the herring nets?—No one ever interfered with her that we knew of.

27,318. Did you never complain to the Fishery Board?—No, but we complained to the skipper himself sometimes, and he gave us the worst of usage. He said he had as good a right to go on fishing there as we had to prosecute our fishing.

27,319. But here is an article contained in the Convention Act between this country and France, which is the law of the country: "Trawl-boats shall always "keep at a distance of at least three miles from all "boats fishing for herrings or mackerel with drift-nets." Were you aware of that being the law?—Yes.

27,320. And are you quite sure that the vessel to which you referred did not keep at a distance of three miles from the boats fishing for herrings?—I am quite sure of it; she was not a quarter of a mile off sometimes.

27,321. Then why, knowing the law, did you not endeavour to enforce it against the men who were infringing it?—I went down several times to Mr. Woodrow and we sent a deputation to Mr. Primrose.

27,322. What was the result of the deputation?—He gave us no satisfaction. He did not think that the Act referred to inlets or bays, or something of that sort.

27,323. Wherever they may be they must keep three miles off. In the preceding article the Convention says: "Trawl-fishing is forbidden in all places where there are boats engaged in herring or mackerel drift-net fishing. There are two distinct enactments referring to that very point, and you were entitled to complain of the infringement of the law and to have obtained a remedy?—We went twice up to the Board of Fisheries upon that very point.

27,324. The vessel has now ceased to come, not in consequence of your complaints, but because she ceased to make a profit?—It was not paying; the shareholders have not got one shilling in the pound from it.

27,325. And the trawling by other vessels has not been practised with the same injury this year as usual? No, there have been none here but the one I spoke of, and he went away.

27,326. Are there no local trawlers at all?—On the Fifeshire side there are some, but not on the southern side.

27,327. Then if there has been no trawling this season, have you noticed any advantage resulting to your fishing from the absence of the trawling?—We have been engaged in the white-fishing for the last three months, and since the trawlers came we never had white-fishing until this season.

27,328. Have you had a better white-fishing this season than usual?—It has been very good and when they were on the ground, if the fish came on the ground to-day and they trawled to-night we should get no fish to-morrow. We have now been working on the same ground for the last five or six weeks and there has been no decrease in the quantity of fish we can catch.

27,329. Is it long-line fishing to which you refer?—Yes, long-line fishing.

27,330. Do you fish on the smooth or on the rough ground?—We fish according as the fish is on the ground, but chiefly on the smooth ground.

27,331. The trawlers do not trawl on rough ground?—No.

27,332. When they were trawling on the smooth ground, did you fish on the rough ground?—No, on the smooth ground.

27,333. Did they do you any injury?—Yes.

27,334. What injury did they do?—They went over our lines and several lost them entirely.

27,335. Do you go far off the shore to your long-line fishing?—Three or four miles off and sometimes further. We go a great deal further when we go with the large boats. Some of them have gone 60 or 70 miles this season.

27,336. Has there been a better result from fishing 60 or 70 miles off this season than usual?—There are some at present at the deep-sea fishing. They have not been in the habit of going that distance regularly. They have only gone this season.

27,337. Is this the first season they have gone?—Yes, to that great distance.

27,338. You are making a good season now then?—Yes, the white-fishing has been good.

27,339. Has the quality of the fish been as good as usual—the haddocks and so on?—Yes, they have been very good.

27,340. Is the quality you are getting just now as good as it used to be in your best seasons?—We have dropped the white-fishing now and are prosecuting the herring-fishing.

27,341. But during the time you did follow it was it as good on the whole as it had been formerly when you had a good fishing?—Yes, it was equally as good.

27,342. Then trawling has done no permanent injury to your fishing, because it has immediately recovered itself?—I do not know what the permanent result may be, but at the time it was practised it was injurious.

27,343. But now that it has been withdrawn you find that the fish have returned to you?—Yes, and we want to have it abolished if possible from the Firth of Forth entirely.

27,344. Your herring-fishing here is all drift-net fishing?—Yes, but we have ground-fishing too at the latter end of the year, when the herrings take to the ground?—We generally ground our nets then.

27,345. Have you more than one herring-fishing season here?—Yes.

27,346. How many?—Two.

27,347. What are they?—From the latter end of December.

27,348. When is the first season?—We commence now.

27,349. In the middle of July?—Yes. The 1st or 7th or 8th, some of them commence and they continue until the middle of September.

27,350. Is that your best fishing?—Yes.

27,351. And in the winter, at the latter end of September, you commence herring-fishing again and continue up to the 1st of April?—Yes.

27,352. In what condition are the fish respectively? Is the best quality got in July or in the December and January fishing?—The best fish are got about the middle of August.

27,353. Is the quality of the winter fishing very good?—It is very good about the month of January.

27,354. And is the quantity considerable then?—No, it has not been very much for these last two years. There have been very little got for the last two years.

27,355. Have you any reason by which you can account for that?—The weather has been strong and we could not prosecute the fishing to the same extent; and I do not think that the fish were as plentiful as they were previously.

27,356. Has the winter fishing been long in existence here?—Yes, for a long time.

27,357. Both of these seasons are the usual seasons you have had for many years for fishing herrings?—Yes.

27,358. Is there a much larger proportion of all the herrings caught here caught in the summer?—Yes, the proportion is much greater then than in the winter. There are more boats that can prosecute it.

27,359. Are you disturbed at all by the French fishing boats coming among your nets?—Not this way.

27,360. You have no complaints of the kind to make?—No, they have not been here for some years back, perhaps for the last 15 years.

27,361. Are there any restrictions on your fishing which you think injurious to the fishing; does anybody interfere with you?—No, except the Irish boats from the west coast.

27,362. No authority interferes with you to make you do this or that?—No.

27,363. Does anybody regulate the time at which you are to shoot your nets?—No.

27,364. Is it advisable that there should be some restriction of that kind?—We think it would be very beneficial.

27,365. And when do you shoot your nets?—It is sometimes three-quarters of an hour before sunset and sometimes an hour.

27,366. The law is this: "It is forbidden to herring "drift-net fishing-boats to shoot their nets earlier in "the day than half-an-hour before sunset, except in "places where it is customary to carry on the drift-"net fishing by daylight." You see it says you are not to shoot your nets till half-an-hour before sunset?—Yes.

27,367. Except in places where it is customary to carry on the drift-net fishing by daylight?—Yes.

27,368. I believe it is not customary here to carry on drift-net fishing by daylight?—No.

27,369. Yet you do not strictly observe this law?—No, it is not observed.

27,370. Do you think it would be of advantage to the fishing interest here if it was observed?—Very much so I think. Often some of the men have gone out to shoot their nets before sunset, and the consequence has been that they have seen no fish that night. When the herrings come inshore we are all anxious to get out and get a good berth.

27,371. Is there no Fishery cutter to cruise off here and see that you observe these regulations?—I have seen him come down here, but he never interferes with anything of the kind.

27,372. Have you been anxious to have any interference?—I think it would be very advisable for the protection of the fishing, but I do not think it has been asked for.

27,373. Nobody has asked him to interfere?—I do not think so.

27,374. What is the injurious effect of your fishing too long before sunset?—We think it darkens the water for so many boats to be setting down their nets on the spot, and we generally think that the herrings do not rise from the ground when the nets are too soon set, especially in shallow water.

27,375. And if they had been set a little later, do you think the herrings would have risen without your disturbing or preventing them?—Yes.

27,376. You spoke just now of fishing with ground-nets?—Yes.

27,377. When do you do that?—Towards the end of the summer fishing.

27,378. How do you practise it?—We drop anchors at each end of the net.

27,379. And you sink the nets?—Yes; we let the nets go the ground.

27,380. Do you expect to catch the fish then before they rise?—Yes. They will not rise sometimes, and we get 60, 70, or 80 crans, where we should not have got 100 fish if we had gone over them.

27,381. In what condition are they at that time?—They are in very good condition.

27,382. Are they spawning?—No doubt. They are lying on the ground to deposit their spawn at that time of the year.

27,383-4. (*Professor Huxley.*) What time of the year do you get spawning herrings in the way you mention?—Most of them in September; I have seen them in the middle of August.

27,385. Do you get any spawning herrings at the early part of the year?—There are very few about this time.

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27,386. But do you get them in February?—Yes, at the latter end of February.

27,387. Do they spawn in abundance then?—Yes.

27,388. Is it the same kind of herring that spawns at both times of the year?—That becomes a question. It is one I cannot give an answer to.

27,389. Have you observed any difference between them?—There is not a great deal. We cannot distinguish a great deal of difference.

27,390. (*Mr. Caird.*) Do you fish at the same period of the evening with the ground-net as with the drift-net?—No, in the daytime.

27,391. In the daytime?—Day and night sometimes.

27,392. Do you think that the fact of your fishing during the day may not have some effect on the fishing at night?—I have no doubt of it.

27,393. What is the description of long-lines which you use on this coast; have you more than one kind of long line?—We have the cod-line and the haddock-line.

27,394. What is the difference between the cod-line and the haddock-line?—On the haddock-line we have 48 score of hooks a man, and on the cod-line we have only something like 10 score of hooks a man. The one is much heavier than the other.

27,395. The cod-hooks are the heaviest?—Yes.

27,396. Do you use the same kind of bait on both lines?—No.

27,397. What kind of bait do you use?—We use mussels for the small lines and herrings or fish of any kind for the cod-lines.

27,398. Do you catch herrings for bait at certain times?—Yes.

27,399. Is there a plentiful supply of mussels for bait to be found on this coast?—It is not very plentiful.

27,400. Where do you get it?—It comes from Leith sometimes; we have also got it from Glasgow and Greenock.

27,401. Is there an immense bank between Leith and Cramond?—Yes.

27,402. It is almost inexhaustible we were told yesterday?—Yes, and we get the bait sent down.

27,403. Have you noticed any difference in the quality of the trawled haddock and the line haddock?—Yes.

27,404. Which is the best?—The line haddock; the trawled haddocks are scarcely fit for use. The scales are all off them as if they had been in a fish's mouth and dissolved.

27,405. Are the cod of as fine quality and as large size as they were here formerly?—They have diminished both in quantity and quality, because the trawlers took up the whole of their food, and they had nothing to live upon on these shores; they took up with the trawl all the shell-fish that the cod came to feed upon.

27,406. What did they do with the shell-fish?—They turned them overboard, and sometimes sent them to the Edinburgh market.

27,407. They would go to the bottom again if they were thrown overboard?—But they turn them overboard inshore.

27,408. Do you get any turbot here?—Turbot is very scarce.

27,409. Do you get any soles?—There are no soles caught by the line.

27,410. Then how do they catch soles?—By the trawl.

27,411. Then your fishermen do not catch them?—No.

27,412. Is there no sole-fishing here at all?—No.

27,413. Are there plenty of soles to be caught?—No, they are very scarce.

27,414. Are there any mackerel?—Yes.

27,415. Is there a good mackerel-fishing here?—We never use the net for mackerel, we generally use the line. They are very plentiful about the month of September.

27,416. Are there any shell-fish caught here—crabs and lobsters?—Yes, they are very plentiful.

27,417. Which is most plentiful?—The crab.

27,418. Is the crab-fishing a profitable fishing for the fishermen?—Yes, they get a good livelihood out of it.

27,419. Is there a large fishing carried on?—Yes, it is somewhat extensive.

27,420. Do you know whether it is increasing or diminishing in quantity?—I should say that it is increasing, but I am told that it is diminishing.

27,421. Perhaps you do not know much about it personally?—I can only speak for our own place, North Berwick; but I am told that it is decreasing here.

27,422. Is the crab fishery increasing in North Berwick?—Yes; the quantity they catch is increasing, but there are more men and more boats engaged in it.

27,423. Is there a large number of men engaged in it?—There are about 60 men in the place, and every one is engaged in it.

27,424. In what season is it followed?—After we drop this fishing we commence immediately and continue till we go to the winter herring-fishing; then we commence again in April, and continue till we come to this fishing again.

27,425. Do you not consider the proper season for the fish to be in condition when you are fishing for crabs; is there not a season?—Sometimes the spawn is in the crab, but we never take any of them when they are in that condition. When they cast their shell we put them overboard, but we take none but the black ones.

27,426. Is there a good lobster fishery?—It is only very moderate. It has not been very large.

27,427. Is it improving or diminishing?—It is diminishing I think about North Berwick on account of there being more men employed in taking them.

27,428. Are there any oyster-beds here?—None.

27,429. Is there nothing along the outside coast at all?—No.

27,430. Is there nothing in the Firth below Inchkeith?—At Cockairney and Prestonpans there are some.

27,431. Are they a good deal fished?—I think they are towards that direction.

27,432. I think you said you use herrings for bait on your cod-lines?—Yes.

27,433. Do you use any means in particular for catching the herrings you employ for bait, or do you catch them by means of the drift-nets?—Only by the drift-nets.

27,434. You have no particular kind of line for catching herrings for bait?—No, we never use the line for herrings.

27,435. Have you ever heard of a line called the "dandy" line—where is it used?—The people about Dunbar use the dandy line.

The witness withdrew.

T. Eason.

THOMAS EASON called and examined.

27,436. (*Mr. Caird.*) You have heard the evidence of the last witness?—Yes.

27,437. Is it your opinion that the quantity of fish caught off this coast is increasing or diminishing?—It has diminished for these three or four years past—both the herrings and the haddocks along our coast. They have diminished along North Berwick and even down to Dunbar up to this season.

27,438. Are there more men and boats engaged in the fisheries this season than there used to be?—There are not many more boats in North Berwick. There are 10 or 11 here, but not many more.

27,439. Does the number keep pretty stationary?—Yes. There may be a few more, but the boats have not increased very much.

27,440. Have the men been making as good a living of it as usual?—For the last three or four years it has been very moderate indeed.

27,441. Is there any particular kind of fishing that is less productive than others have been in that time?—Both the haddock and herring, and the cod-fishing, have been less productive.

27,442. Has the price continued good?—Yes.

27,443. Has it improved?—It rises and falls just much about the same.

27,444. And what do you think has been the cause of the diminution of the fish; is it because there are more people engaged in it than can find a profitable employment?—I have not heard any complaints among ourselves about the number of people employed in it. With regard to the cod-fishing, we were generally employed in the cod-fishing about the months of November and December before we commenced the herring-fishing. We generally went up to Newhaven for herrings for bait, and we got from three to five score cod on an average. Sometimes we got as high as 9 and 10 score, and they were good-sized cod. That was previous to the last four years back.

27,445. What happened then?—The trawlers came then, and since the trawlers came we have got none.

27,446. Did the trawlers begin to come about four years ago?—Yes; a good many of them. There were six or eight trawling occasionally. There was a regular stationed trawler about two years previous to that. He carried on trawling all the year round.

27,447. Was that the steam-trawler?—No, it was a smack. It was about two or three years before they got the steam-trawler.

27,448. Then you got a steam-trawler?—Yes; then the steam-trawler came, and he along with the Hull trawlers carried on trawling all the summer season. They generally came throughout the year, and they went down along the grounds which were the feeding beds where the cod fed.

27,449. That is in the night?—Yes; where they got great quantities of craw-fish. That is the name we generally give them. They get them in the cod of the trawl, and I have seen them bring in many hundredweights of them and throw them on to the beach.

27,450. Many hundredweights of the craw-fish?—Yes. Since these trawlers came the cod-fishing has been so unremunerative that it has not been tried. We seldom try it now.

27,451. Did the trawlers go on the same ground which you have been in the habit of fishing with your lines?—Yes, they generally went out and in. Sometimes they went out for two or three miles, and sometimes to a longer distance from the shore.

27,452. They went, upon the grounds which you were in the habit of fishing?—Yes, on the same grounds.

27,453. But they have discontinued this year?—Yes, they have not come back this year.

27,454. What has been the reason of that?—Our good fishing time has to come on yet.

27,455. How has the haddock-fishing been?—It has been very good this year. It has been not nearly so good for the last four years past.

27,456. Then this has been the best fishing for four years?—Yes.

27,457. Do you think that is in consequence of the trawl-vessels having removed?—Yes, we do think so indeed.

27,458. With regard to the herring-fishing, have you the same complaint to make, that the shoals are not as strong as they used to be?—Yes.

27,459. What is the cause of that?—We do not know of a more effectual plan that could be adopted to keep the herrings off the coast than for these trawlers to go along the coast.

27,460. Do you agree with the last witness that the trawlers come on the same ground among the herring-fishing boats?—Yes.

27,461. They have paid no regard to the herring-fishing being going on there?—No.

27,462. You have never thought it necessary to complain, or you have made very little complaint?—Yes, we were always making complaints, and a deputation was sent up to Edinburgh.

27,463. But I understood that you got no redress?—No.

27,464. Have you been herring-fishing this year?—Yes.

27,465. Have you had any trawlers among you since you began?—No. We generally come down in Dunbar Bay towards the first of the season, but we get the herrings further up in the month of August.

27,466. Do you find that the harbour of Dunbar has been much improved by the expenditure which has been made upon it for the convenience of the fishermen?—Yes, very much so.

27,467. Are you allowed to resort to the harbour without paying dues?—We pay a licence duty.

27,468. To whom do you pay it?—To the town of Dunbar.

27,469. Do you pay it for each boat?—Yes, for each boat.

27,470. For the whole season?—Yes, for ten crans.

27,471. What is the duty?—Ten shillings for the licence, one and sixpence for the lights, and one and threepence for anchorage.

27,472. These sums are paid for each boat?—Yes.

27,473. How many boats pay it?—300, I should suppose, or more.

27,474. Do the Newhaven boats and the Buckhaven boats pay it?—Yes.

27,475. Has it enabled you, coming from some distance, to practise your fishery with greater success from the fact that you can come here with ease?—Yes, that is a great advantage to us.

27,476. Is it of great advantage to all the fishermen on the coast?—Yes, it gives us a much greater advantage than we had formerly.

27,477. Then is this made the head-quarters of the fishing during the season?—Yes, for the mackerel-fishing, but if the herrings are to be got more up the Firth then they generally resort to North Berwick, but they come to Dunbar for better prices.

27,478. Is the harbour easily run to in case of a gale or anything that obliges you to leave the sea?—Yes, now it is.

27,479. Can you get into it at low tide?—No, I think not.

27,480. Is it finished yet?—No, it is not finished.

27,481. Do you ever run into Anstruther Harbour?—Occasionally; but very seldom.

27,482. There is not so good a market there I suppose?—Yes, the market is very good. If the herrings are got on the Fifeshire side we generally go there.

27,483. Would it be of advantage to the fishermen to have an easily accessible harbour at Anstruther?—It would be of great advantage to the fishermen in the winter fishing.

27,484. It would be of great advantage if you could have a harbour on each side of the Firth, which you could take to when the wind suited?—Very much so.

27,485. (*Professor Huxley.*) What is the tonnage of the boats you use in your fishery?—They average about 15 tons here.

27,486. Are they decked boats or only half-decked?—Half-decked.

27,487. What does a boat of that sort, with all her fittings, cost?—From 100*l.* to 150*l.*

27,488. With her sails and gear?—Yes, from 100*l.* to 150*l.*; but it depends, of course, upon the size. They run from 36 feet to 45 feet. A boat of 45 feet will cost about 175*l.*

27,489. Do you use the same boats for the herring and for the line-fishing?—Yes; but we generally approve of the larger boats for going to the deep-sea fishing.

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27,490. What is the length of your fleet of nets?—About 600 fathoms.

27,491. For each boat?—Yes; less or more.

27,492. What is the size of the mesh?—About 22 to the yard generally; but some of the fleets will be about 800 fathoms long.

27,493. The mesh of your net is 22 to the yard?—Yes, generally.

27,494. Does anybody look after the size of the mesh?—No, not here.

27,495. Nobody at all?—No.

27,496. There is no Fishery officer here?—Yes; but the size of the mesh is never called in question here.

27,497. I suppose that you never care to use a smaller mesh?—When there are smaller fish we generally use the smallest mesh we have.

27,498. What is the smallest mesh you have?—36 to the yard.

27,499. Do you make no nets smaller than that?—No, we have none smaller than that.

27,500. Why do you not make your nets smaller than that?—That is as small as a herring is to be got.

27,501. Do you know of any law against your making your nets smaller than that?—There formerly was a law, but I do not know whether it be in force now or not.

27,502. Do you light your boats in any particular way at night?—Yes; we generally have a light up at night.

27,503. Have you one light or two?—Only one; but we generally carry a torch.

27,504. You light that when you see a vessel or a steamer approaching?—Yes.

27,505. Did you ever hear of this regulation: "In "order that boats fishing with drifting-nets may be "easily recognized at night the masters of those boats "shall hoist on one of their masts two lights, one "over the other, three feet apart; these lights shall "be kept up during all time their nets shall be in the "sea between sunset and sunrise?" Did you ever hear of that?—I never heard of that regulation.

27,506. Do you carry any vane at all?—No, none.

27,507. You have no vane?—No.

27,508. Did you never hear of any regulation that you should carry a particular kind of vane?—No.

27,509. Did you ever hear of this regulation: "For "the purpose of distinguishing by day drift-net fishing "boats from trawl-boats, both shall carry at the mast-"head vanes which shall be at least eight inches in "height and two feet in length." Did you ever hear of that?—No.

27,510. You heard what the previous witness said about shooting nets before sunrise?—Yes.

27,511. Did you ever hear of the regulation that was read about that?—No, I never heard of that regulation.

27,512. The cruiser has never called your attention to it?—No, never.

27,513. How is it about shooting your nets on a Sunday, do you ever do that?—No. There are a few boats that prosecute the fishing on a Sunday evening.

27,514. There are some that do?—Yes.

27,515. Does anybody ever meddle with them?—No, I think not.

27,516. Do the trawlers do you any harm by getting foul of you?—They have done harm to some boats, but not to mine.

27,517. Is it within your own knowledge that they have done injury to some boats?—Yes; there is one man here whose nets they cut.

27,518. Is he here now?—Yes.

27,519. Did you ever hear of this regulation: "Trawl-boats shall always be at a distance of at least "three miles from all boats fishing for herrings or "mackerel with drift-nets?"—Never, until I went to Mr. Woodrow, and he showed a small book with a few regulations in it, and there was in that book a regulation similar to the one you have read. He was quite surprised that it was not attended to, and that no notice was taken of it.

27,520. Did you point that out to the Fishery Board when your deputation went to Edinburgh?—Yes.

27,521. What did they say?—It is just two years ago now, and we have got no positive answer.

27,522. The Fishery Board would not act?—No.

27,523. When they were called upon?—No. I think it was about the month of November or December, because the steam trawler was still carrying on the trawling at the time. It was before the winter fishing commenced that we went to Mr. Woodrow to see what could be done.

27,524. How long is that ago?—I think it was in the year 1862.

27,525. Did you go with the deputation?—Yes.

27,526. You went yourself?—Yes, I think it was in the month of November.

27,527. Whom did you see there?—We saw Mr. Primrose, and we were before the Lord Advocate at one time.

27,528. Do you recollect what reply you had—you were one of the deputation yourself?—Yes.

27,529. What did you state to the Lord Advocate?—We told him the principal cause of our complaint was the trawling of the small fry up the Firth.

27,530. Up the Firth?—We complain against the large trawlers, but our principal objection was to the small trawlers which were the foundation of the entire destruction.

27,531. But you did also complain of the large trawlers as well?—Yes.

27,532. Did you complain of their interfering with the working of your drift-nets?—Yes.

27,533. What reply did you receive?—His lordship said that he could not make us any statement until the Commission had completed their inquiry and made their report. At that time he had not seen it, but he said that when it was handed in he would send it, and tell us what it was that those gentlemen said.

27,534. What Commission do you refer to?—Colonel Maxwell's Commission.

27,535. That is the Commission of which I was a member?—Yes.

27,536. By the trawling you are talking about now, you mean beam-trawling?—No, I refer to the circle-trawling.

27,537. Has there been none on the coast here?—No, it is up the Firth.

27,538. The steam-trawling you complain of is not circle-trawling?—No.

27,539. Did you go to the Lord Advocate to complain of the steam-trawling?—Yes, partly, and also of the circle-trawling.

27,540. It is circle-trawling you are talking about, and not beam-trawling?—Yes, that does us the greatest injury.

27,541. You complained of that too?—Yes.

27,542. What kind of fishing is it—will you state; is it by means of a small seine?—Yes, they shoot the net in a sort of half circle; they haul in both ends, and they haul in with the fish tons of small fry; it makes an extraordinary destruction.

27,543. Was that fishing for sprats or garvies?—Yes.

27,544. They were fishing for garvies?—Yes, but it was almost all herrings that they got.

27,545. And you consider that destruction of herrings injures your fishing out here?—Yes, particularly the winter fishing. It does not injure the summer fishing, but it does the winter fishing very much.

27,546. You are quite clear that with respect to the trawling outside, the Lord Advocate said he could do nothing at present?—Not at that time.

27,547. Do you agree with the other witness as to the harm done by the beam-trawling outside?—I agree in everything he has stated as almost every man here does, I believe.

27,548. What remedy would you propose?—Altogether suppression of the circle-trawling.

27,549. You would put down circle-trawling altogether?—Yes.

27,550. Is that inside the Firth?—Yes, and we shall never get a good fishing again, such as we had, unless it be suppressed.

27,551. Would you also suppress the beam-trawl?—Yes, in the Firth of Forth.

27,552. You would not allow it to go on at all?—No.

27,553. Not in the open sea?—No; one of the witnesses spoke of the haddock-fishing; now I do not see that we have anything else to blame for having to go such long distances for haddocks every year than trawling. We have gone from 20, 30, and 40 and up to 70 miles for haddocks upon no other account than that the food has been taken off. In a few years it will be beyond where we can bring them to market that we shall be able to obtain them.

27,554. Do you think that that is the fault of the beam-trawlers?—Yes, I do think so.

27,555. Would you have beam-trawling put down altogether then?—Yes.

27,556. (*Mr. Caird.*) You say the use of the circle-nets is very injurious to you in your fishing down here and that has been within recent years. It has been carried on within the last 20 or 30 years to a great extent. When did you begin to find that it was seriously injuring your fishing here?—As soon as it commenced, and we petitioned against it.

27,557. That is 20 or 30 years ago?—Yes.

27,558. Then these serious injuries are not of recent date at all?—It has destroyed the herrings in the Firth of Forth. We used to have the best of fishings up at Burntisland and Queensferry; now they only come to the Isle of May.

27,559. Were there as many people engaged in the fishing 30 or 40 years ago as now?—No.

27,560. Were there the half of them?—There were fully more than half in the winter time, and they made much better fishings.

27,561. For each boat?—Yes.

27,562. Was the whole quantity of fish caught then as much as it is now?—I do not think it.

27,563. Then it would appear that the circle-net fishing has not destroyed the fish in the Firth of Forth?—There are many more boats engaged now.

27,564. But still there are more fish caught now?—There has not been so much these last three or four years.

27,565. This circle-net fishing for garvies has been in existence quite as long as you remember?—Yes.

27,566. It was in existence when you became a fisherman at first?—Yes.

27,567. And it has been continued ever since?—Yes, more or less.

27,568. It has been rather restricted of late, has it not?—I do not think it has; last winter the fishing was as bad as ever it was.

27,569. But was it not restricted by law?—It was restricted and they drew a boundary line. They were not to fish within certain points, but it was ridiculous to draw a boundary line above the water when they could not draw one below the water to prevent the herrings mixing with the sprats.

27,570. But if there were a boundary line would not there be a large extent of the Firth left untouched by the circle-nets? Would not that be so?—I do not know.

27,571. When that law was in force did the quantity of fish in the Firth increase?—No.

27,572. That would rather be against your statement then?—There were really no restrictions; although the steamers were there, they never restricted the trawlers. In point of fact they trawled in most of these parts, and the small herrings got where the steamer was riding in Granton Harbour.

27,573. Your complaint is principally against the circle-nets?—Yes.

27,574. You do not think that so much damage is done by the beam-trawlers?—Yes, I think they do damage, but the root and foundation of the matter is circle-trawling.

27,575. Has not damage been done to the haddocks as well as the herrings?—Yes.

27,576. Are any haddocks caught with the circle-nets?—No.

27,577. On the whole, taking your experience over so many years, can you say whether the quality of the haddocks and of the other fish is as good now as it used to be?—I do not see any difference in the quality.

27,578. Do they come at the same seasons?—Yes, but we do not get the same quantity of haddocks in the Firth of Forth that we were in the habit of getting formerly.

27,579. But I understand that now the beam-trawlers have removed, the haddocks have returned again in as great abundance as before?—That may be so on the Berwick shore, but it has not been the case along the Fifeshire shores.

27,580. Do you fish on the Fifeshire coast?—I come from Buckhaven.

27,581. Do you yourself ever go far out to sea to fish?—I have not been far out for some years.

27,582. Have you any complaint to make of interference by any Fishery officer, or any man-of-war, which in any way prevents you from fishing in the way you consider best?—No, I only think that the law should be more stringent than it is in regard to putting down the circle-trawling.

27,583. That seems to be your great complaint?—Yes.

27,584. Is there any other matter you complain of?—Only the beam-trawl.

The witness withdrew.

ROBERT SMITH called and examined. *R. Smith.*

27,585. (*Mr. Caird.*) You are a fisherman here?—Yes.

27,586. You have been long familiar with the different kinds of fishing carried on off the coast of Dunbar?—Yes.

27,587. What is the most valuable fishing?—Generally the haddock-fishing is the most constant.

27,588. Is there more got out of the herring-fishing?—I cannot say. The haddock-fishing is carried on for a greater length of time.

27,589. For a greater number of months in the year?—Yes.

27,590. Are the same boats employed in the herring-fishing as in the haddock-fishing?—Yes.

27,591. The same boats and the same men?—Yes, except when we come inshore, and then we use small boats called yawls.

27,592. What time do you practise fishing?—In the summer time, from the month of April up to this time.

27,593. Do you find that in the warm months the fish come inshore?—Yes.

27,594. And in the cold months they go into deeper water?—Yes, you will scarcely find a haddock in the winter season in this bay.

27,595. Is that the case in the Firth of Forth?—I believe it is.

27,596. Do they change according to the temperature?—Yes, according to the season.

27,597. Have you found in your experience that the quantity of cod taken here is increasing or diminishing?—It has greatly diminished.

27,598. To what do you attribute that?—Why they have taken up and gone off the coast. We can-

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not see them, and they appear to me to have gone out of our reach.

27,599. What has occasioned that?—It is partly owing to want of food, I think.

27,600. Have you any idea what is the cause of the want of food?—If it is taken up in the trawls that must be the reason, I think.

27,601. Do you think the trawlers fish the bottom so very closely that they take up all the food?—I have no doubt that they take up a good quantity of it.

27,602. Do they bring it ashore?—They have done so. There have been no trawlers along the shore here, only at North Berwick.

27,603. Then you speak of what you have heard, and not of what you have seen?—We see nothing of the kind here, but we see trawlers in the offing on the grounds.

27,604. How far off are they here?—About six miles.

27,605. Do you call that inshore?—No.

27,606. In what depth of water do they fish?—From 52 to 30 fathoms.

27,607. Is that on the same ground you fish with your long-lines?—Yes, off the Bass Rock.

27,608. Is rough ground or smooth ground the best for the long-line fishing?—Smooth ground.

27,609. Then when the trawlers come upon that ground they are more injurious to you?—Yes.

27,610. Do they come much upon that ground?—Yes; they have not done so this season so much as they used to do.

27,611. Have you had a good fishing this year?—It has been very moderate.

27,612. Did you hear the evidence of the previous witnesses who said that they have had a much better season this year?—I believe the North Berwick fishermen are getting as many fish again as we are getting in our bay.

27,613. You don't find the fish in your bay?—No.

27,614. With regard to the cod-fishing, have you any good cod-fishing here?—It is very moderate.

27,615. Is it increasing or diminishing?—It is diminishing greatly.

27,616. Is that further out still?—Yes, it is further out. I remember one winter season 15 years ago when we got eight or 10 score on our small hooks, and now we will not get five in the winter season on all the length of lines we have, and yet we are going 20 miles distance from here after them.

27,617. You have further to go to sea and you get fewer when you do go?—Yes, in the winter season.

27,617*a*. Are there more boats engaged in the fishery than there were in former years?—There are not more that go to the haddock or to the deep-sea fishing. There are rather too few at Dunbar. They are engaged in crab-fishing in the winter and in the spring.

27,618. Is there a large crab-fishing here?—Yes, it is largeish along the south side.

27,619. Are there many boats engaged in it?—About 32 at Dunbar.

27,620. Is the catch of crabs decreasing or increasing?—From my own experience I should say that they have diminished within the last five years. We have scarcely been able to make a living by them, in point of fact we have had to drop it altogether.

27,621. Was that because it was unremunerative? Yes.

27,622. Are the prices good?—The prices are about the same.

27,623. But the quantity you can get has diminished?—Yes.

27,624. Have the boats which are employed in that fishing much increased?—Not for the last five years.

27,625. Have you any lobster fishery?—No, except that we catch one or two sometimes in our crab creels.

27,626. The crab creels are chiefly planted for lobsters?—The lobsters will scarcely come in upon fresh bait. Within the last 20 years we have scarcely had any lobsters on this coast at all.

27,627. Was there formerly a good lobster-fishing?—Yes, very good. Some of the boats got five or six score a day. They sent them to the London market. Smacks were in the habit of coming here 15 or 20 years ago and taking them away from the fishermen to the London market.

27,628. Is there any oyster-fishing here?—No.

27,629. Has the herring-fishing at Dunbar been improving?—Not within the last three years back.

27,630. The proportion of herrings sent away fresh to the market is increasing every year?—More go away fresh than have been salted for these three years back.

27,631. Do they pay better fresh?—Undoubtedly; but sometimes they have not paid the merchants; they have been sent too fresh.

27,632. Do you strictly observe the regulations as to the time at which you should shoot your nets for herring?—The nets should not be shot until the sun is just taking the water.

27,633. Does anybody fish them in the daytime?—Yes, at times they go to the ground towards the end of the summer season in the daytime.

27,634. Towards the end of the summer season?—Yes; from September. That is the time allowed by the town here. It is under an old Act.

27,635. Does the town give regulations as to the mode in which the herring shall be fished?—No, it just states the time.

27,636. Who states it?—The council I think.

27,637. Does the council issue any law or byelaw or regulations as to the mode in which the fishing is to be followed on this coast?—No.

27,638. Then how does it state a time?—It is just an Act they have among themselves.

37,639. Do they put the bell through the town to state the time at which the fishermen are to put out their nets?—I have scarcely seen a notice with regard to the matter.

27,640. Then how do you know there is a time stated at all?—I know they have it in some of their old Acts, but they never carry them out.

27,641. Is it a necessary thing that at the end of the summer season you should fish with ground-nets instead of drift-nets?—I think so when we cannot get them to float upon the water, and therefore cannot obtain them by driving with our nets.

27,642. At such times you sink your nets and anchor them?—Yes.

27,643. Are the fish you find there in a different condition from those you catch in the drift-nets?—They generally go there and spawn.

27,644. Do you think that you cause great destruction when they are in that spawning state?—I cannot say.

27,645. May you not cause more destruction by that mode of fishing than by most of the other modes of which you complain?—I can scarcely answer that question.

27,646. You consider that a mode of fishing beneficial to yourselves?—Yes.

27,647. You never anchor your nets until the herrings are on the ground for the purpose of spawning?—Sometimes they are not spawning when we shoot our nets. Sometimes we may fish among them for a couple of weeks together and get good fish before they move away. One season about five or six years ago they just rose up to the surface of the water as the sun was going down, and they made a perfect fool of us by going down again directly we put our nets out. It was not until we got our nets upon the ground that we got any from them.

27,648. Did they come to the surface when you set your nets upon the ground?—When we put them on the surface they came up and the nets floated among them, but they would not take them. Then they went down again to the ground and the boats would be chasing them to make them go into the nets. Yet they would get none until they put their nets to the bottom and set them there.

27,649. When you did that you were enabled to catch the fish?—Yes.

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27,650. If there had been any regulation to prevent you from grounding your nets you would not have been able to get them ?—No ; there would have been great scarcity.

27,651. If you were told that it destroys the future brood of the fish when you take them in that state in spawn would that prevent you from fishing them ?—I have no doubt that to take anything when it is going to cast its young is an injury.

27,652. But you don't stop upon that account ?—No ; but we are not sure when they are going to spawn. We can only fish for the herrings where they are. We could not take you if you were out of the room, and so it is with the herrings.

27,653. What you mean is, that the herrings may leave and that if you don't catch them when they are upon the ground you can't catch them at all ?—Just so.

27,653*a*. Then you catch them whether they are in condition or not ?—We take them when they are spent, and in that state we do not do much harm to the brood.

27,654. But you do catch them at the very moment you believe that you do great injury to the brood ?—If you are going to argue that point why you may as well stop fishing altogether.

27,655. I put the question for this reason—you complain that other people injure the brood in other places. Now it is necessary to find out if you are careful of the brood yourselves ; that is the point. Do you regard that question at all in prosecuting your fishing operations ?—No doubt of it.

27,656. You do not ?—Yes, we do.

27,657. You would not fish if you knew the fish were about to spawn ?—But we have got fish three weeks before they spawned.

27,658. (*Professor Huxley.*) Are they all full fish then ?—They are full now.

27,658*a*. (*Mr. Caird.*) If you were prevented by law from catching fish when they are full and when the brood is likely to be injured, would it not put a stop very much to your profitable fishing? Would not that be so ?—Yes ; undoubtedly.

27,659. The fish are then in very good condition for consumption by man ?—Yes ; at least the merchants all along the coast are keener to get them just before they spawn. They like them better then than at any other period for curing.

27,659*a*. Is there anybody who ever interferes with you at all in order to see that the mesh of your net is of the proper legal size ?—No, I have had no nets examined since I became a fisherman, 23 years ago.

27,660. Does nobody come to see at what time you shoot your nets, or whether you adhere to the law in that respect ?—No.

27,661. No fishing-vessel or man-of-war comes in to see whether you obey the requisitions of the law on those points ?—No, we have had no restrictions of that kind enforced.

27,662. You have nothing of that kind to complain of ?—No.

27,662*a*. The Fishery Board in no way interferes with you ?—No.

27,663. Are there curing establishments here for the curing of herrings ?—Yes.

27,664. Is the Fishery brand put upon the barrels here ?—Yes ; the Fishery officer stationed at Eyemouth comes here occasionally.

27,665. Does he brand the herrings ?—Yes.

27,666. Have you no Fishery officer stationed here altogether ?—No.

27,667. Are the herrings which are put in barrels branded under the inspection of the Fishery officer all the time they are being cured ?—He examines a barrel here and there belonging to every merchant.

27,668. How many barrels have you cured here in the course of the season ?—I can hardly tell you that.

27,669. Have you cured some thousands of barrels ?—Yes.

27,670. Is the Fishery officer not here all the time that is going on ?—No.

27,671. Then are the barrels made up, the herrings salted, headed up and finished off before the Fishery officer comes near them ?—No ; he comes here in his rounds and examines them. There may be so many hundred packed up before he comes, and he examines one or two of them.

27,672. If he finds those sufficient does he pass the whole ?—Yes.

27,673. Does he generally open the barrel ?—Yes, in order to ascertain if the herrings are properly cured.

27,674. He examines a few sample barrels out of the lot ?—Yes.

27,675. Being satisfied with that he puts the full Crown brand upon them ?—Yes.

27,676. Then there is no real inspection of every barrel ?—No, that would cause a great deal of trouble.

27,677. Does that inspection as far as it goes insure that the cure is carefully done ?—They just take the merchants' word for it. It is the merchant or his foreman who looks after such things.

27,678. (*Professor Huxley.*) Do you set trammel-nets here ?—No.

27,679. Do you know what they are ?—Yes.

27,680-1. Do you catch any turbot here in brat-nets ?—Yes.

27,682. Are they much caught ?—No, we generally put the nets out at this season when the herrings are on the coast ; they generally follow the herrings.

27,683. Is there any considerable fishery for turbot here ?—Not much ; about five or six boats.

27,684. Do you get more cod or haddock with one particular net than another ?—If we had north, north-east, or easterly winds there would be more fishing.

27,685. There would be then more of cod and everything else ?—Yes.

27,686. You do not notice any difference outside ?—No, not in the offing.

27,687-8. Is there any oyster-fishing about here ?—No.

27,689. You heard those regulations which I read to the last witness ?—Yes.

27,690. Did you ever hear of them before ?—No.

27,691. Nobody takes the trouble to look if your lights are right ?—No.

27,692. Have you got any vanes ?—No.

27,693. Have you ever had any damage done to your drift-nets by the trawlers ?—No.

27,694. Do you think that damage is often done by them ?—Yes.

27,695. Have you known people whose nets have been damaged by the trawlers ?—Yes, there are men that I know who have suffered.

The witness withdrew.

JOHN THOMSON called and examined.

J. Thomson.

27,696. (*Mr. Caird.*) You are a fisherman at Buckhaven ?—Yes.

27,697. You have heard the evidence given to-day ?—Yes.

27,698. Do you agree with it ?—Yes.

27,699. Have you nothing to add to it ?—No.

The witness withdrew.

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DAVID THOMSON called and examined.

27,700. (*Mr. Caird.*) You are a fish-curer, Mr. Thomson?—Yes.

27,701. Is there a large proportion of the herring caught here cured?—No, it is very small.

27,702. Can you give us any idea what proportion of the herrings caught here are cured?—In former years when the fishing was good about two-thirds were cured, but for the last three years there has scarcely been any. I don't think any have been branded for the last three years.

27,703. Is there very little cured now?—There has not been much since the falling off in the fishing.

27,704. Is not that partly caused by the fact that there is a ready demand for fresh fish?—Yes, the quantity being small, it is scarcely adequate to supply the fresh market.

27,705. Is it not more profitable to send fish to the fresh market?—I am not so sure of that.

27,706. Would not that naturally be the case?—It was supposed to be so, but in many cases it did not turn out to be so.

27,707. Then you have had very little curing lately?—Yes, for the last three years.

27,708. How many were cured here last year?—Perhaps about 200 or 300 barrels.

27,709. The Fishery officer does not reside here?—No. This is in his district as well as Berwick-upon-Tweed. I believe he resides at Eyemouth.

27,710. Does he inspect the cure at these different stations?—Yes.

27,711. Then he cannot be present when the barrels of fish are being cured and packed?—Occasionally he may, accidentally.

27,712. But there may be large quantities put up without his inspecting them?—Yes, large quantities without his immediate inspection.

27,713. Might some of them be in an unfit state for curing?—Yes.

27,714. And he would not be able to detect them?—Very possibly he might.

27,715. How?—He has liberty to open 10 barrels out of every 100, and if the fish are imperfectly cured it would be impossible for him not to detect it in opening 50 out of 500 barrels.

27,716. If he got one bad barrel, would he condemn the lot?—Yes, he has it in his power to do so.

27,717. Do you know any instance in which that has been done?—I cannot refer to any particular instance which has been brought under my notice, but I know he has the power.

27,718. Does he often condemn fish?—I have seen him condemn several when he found two or three barrels cured in an improper manner.

27,719. His inspection is such as to insure that the herrings which receive the brand are really worthy of it?—Yes, I think it is.

27,720. Do you think that the effect of that inspection is such that it insures that a better quality of herrings is prepared and sent to the foreign markets?—Yes.

27,721. Would not the self interest of the curer be a sufficient motive to induce him to prepare a good article?—It might after a few years if the brand were taken away, but it would cause a revolution in the trade if the brand were abolished.

27,722. Is that because foreigners are in the habit of relying upon the brand?—Yes; it is a guarantee to them.

27,723. Would they not equally rely on the name of a good curer?—They might after a few years.

27,724. Then as a curer you prefer to have the brand and to pay for it?—Yes.

27,725. Do you think that it gives you an advantage in the foreign market worth the cost of it?—Yes, I have no trouble with my herrings. The Crown brand testifies as to their character.

27,726. It in no way misleads the foreigner?—No.

27,727. If by accident out of 500 barrels one barrel should be bad, and the Fishery officer should not discover it and it should receive the full brand, would not the foreigner in that case suffer?—Yes; and the curer would be a sufferer in the end, because he would not be trusted any more.

27,728. But would the curer be known?—The curer's name is on the barrel and the place of cure as well.

27,729. As well as the brand?—Yes, and the Fishery officer's initials.

27,730. Then every barrel must have upon it the curer's name?—Yes, and the date when the fish are cured must be put upon the barrel. It is dated on the bottom. Before they are put down to be exported the date is put upon them with a scarving iron on the bilge, something in this way:- "T. G. B., T. F., gutted, full."

27,731. The curer's name being on the barrel if one turns out bad is he not a sufferer in consequence?—Yes.

27,732. So that notwithstanding the brand he is not covered from injury?—The broker guarantees the article he presents.

27,733. Do you buy other kinds of fish as well as herrings?—Not much. Of sprats I buy a large quantity.

27,734. Up the Firth?—Yes.

27,735. Is it at Queensferry you buy them?—No, at Newhaven.

27,736. Have the late alteration in the law at all affected the catch of sprats?—I should think so.

27,737. Have the limits within which the law fixes the right of fishing for sprats caused a diminution in the quantity caught?—Yes.

27,738. If the limits had been strictly adhered to would there have been any sprats caught at all last year?—Not any that would have been of use.

27,739. Have you ever observed a large proportion of young herrings mixed up with the sprats?—Occasionally there is a mixture, but if we have a good sprat-fishing there are no herrings. In point of fact, we won't take them if we can avoid it.

27,740. You prefer all sprats?—Yes, sprats being a superior fish while the herrings are in that state.

27,741. In following that business you have frequent opportunities of speaking with the sprat fishers?—Yes.

27,742. Do they complain of being limited within a certain boundary?—Yes, they do complain very much. Last year there was a deal of sprats off Burntisland, but the fishermen were strictly watched and driven away, and the consequence was that they were compelled to take young herring.

27,743. In consequence of the present state of the law they were obliged to leave ground where there was good fish, and come upon ground where there was inferior fish?—Yes, where there was fish that would not realize a good price anywhere.

27,744. Is that sprat fishery an important interest?—Yes, a very large quantity are caught in the Firth.

27,745. Can you tell us what the quantity is?—I think the Fishery officer told me somewhere about three years ago that the value of the quantity of fish caught at Newhaven, Queensferry, and Burntisland, amounted to somewhere about 25,800*l.*

27,746. 25,800*l.*?—Yes, about 15,000*l.* to the fishermen, and 10,000*l.* to railways.

27,747. Has that decreased?—Oh yes, considerably.

27,748. Entirely by the operation of that restrictive law?—I cannot say entirely, because some years we have had more than others, but that has had a great deal to do with it.

27,749. Do you think that the two kinds of fishing, namely, herring-fishing and sprat-fishing, might be followed without injury to each other by regulations preventing the boats from mixing?—I think the best regulation for sprat-fishing would be for the fishermen to be conscientious and not take herrings.

27,750. But you cannot trust the consciences of men when their interest is deeply engaged. It is

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necessary for the protection of their neighbours that you should have some regulations established?——Yes.

27,751. Could not regulations of a police character be established so as to prevent one fishing from injuring the other, and enable both to be carried on at the same time?—I don't know. The only way is not to allow young herrings and herring fry to be sold, and if you stop the sale of them the fishermen would not care about catching them.

27,752. Are they all caught mixed occasionally?—They are; that cannot be avoided.

27,753. Then you could not separate them when you were going to sell them?—In many cases the sprats are in one place and the herrings in another, one on one side of the Firth and the other on the other.

27,754. (*Professor Huxley.*) You are altogether in favour of the branding system?—I am.

The witness withdrew.

J. Murray.

JOHN MURRAY recalled and examined.

27,755. (*Mr. Caird.*) I believe you are anxious to make some observations with regard to the sprat-fishing?—Yes. It is seldom that there has been any sprat-fishing beneath that boundary line to which Mr. Thomson refers and in which they were prohibited from prosecuting the fishing. There has been very little fishing there ever since I knew the fishing.

27,756. But they did fish there this year, or rather last winter?—I believe they did, but that is ground on which the sprat-fishing is seldom prosecuted. It is generally carried on up the Firth.

27,757. Are you engaged in the sprat-fishing?—No.

27,758. Have you fished upon the grounds where the sprats are caught?—I have been upon them.

27,759. Then are you as competent to give an opinion as the men who have followed it for a livelihood?—I have not been so long at it but I can tell quite as much about it as they can.

The witness withdrew, and the inquiry was adjourned until July the 27th, at Eyemouth.

Eyemouth, Berwickshire, Wednesday, 27th July 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

EYEMOUTH.

P. Wilson.

27 July 1864.

PETER WILSON called and examined.

27,760. (*Mr. Caird.*) You are the Fishery officer here?—Yes.

27,761. Have you been stationed here for some time?—Since February last.

27,762. Had you any previous experience of the fisheries on this coast?—Not on this coast.

27,763. Upon what part of the coast?—On the north-east coast, down as far as Dungness, and on the west coast.

27,764. How far does your superintendence now extend?—From North Berwick to Holy Island.

27,765. Is that the southern point to which the Fishery Board extend their jurisdiction?—It is.

27,766. How many different fishing stations have you under your superintendence?—13.

27,767. And what is the nature of your duties?—My principal duty is a general superintendence over the fisheries, taking in the returns of the fishing and branding the herrings when they are cured.

27,768. At each of those 13 fishing stations are there curing establishments?—Yes, there are curing establishments at each of them.

27,769. Are the curing establishments chiefly or wholly for the curing of herrings?—They are, I may say, wholly for the curing of herrings, but most of them cure haddocks as well.

27,770. You do not exercise a superintendence over the cure of haddocks?—No.

27,771. There is no brand for the haddocks?—No.

27,772. It is exclusively for herrings?—Entirely.

27,773. Does the process of curing go on at different seasons of the year, both in regard to the summer and winter fishing?—Yes, in the Firth of Forth, but it is not much practised down here.

27,774. It is only for the summer fishing that the curing goes on?—Yes; all the other fish are smoked for bloaters or sent fresh to the market.

27,775. Do you think there is much advantage in the use of the brand?—I am of that opinion.

27,776. Are you able, as Inspecting officer, to gain such an experience of the process of curing as enables you with confidence to affix the full Crown brand to certain barrels as being of that quality?—Yes.

27,777. You do not see the whole of the curing process effected?—No, not the whole; we have a sample of the whole parcel of herrings, perhaps 10 barrels out of 100, which we take as a sample of the rest. We take them wherever we choose from the parcel. We begin at either end, and can go for any distance down the lot. If we find those we examine all right, we take it for granted that the whole of the barrels submitted to us are correct. We seldom fail in discovering anything that is wrong.

27,778. You make an examination before you brand the whole lot?—Yes, we make a rigid examination.

27,779. Do you open any of the barrels?—Yes, and we press the barrel to see if it is sufficiently filled. We then examine the quality of the fish to see that they are all full. Then if we are fully satisfied on those points we brand the herrings. There are a number of things directed to be done by the Fishery Board which assist us in our duties. The curers have to put the name of each packer at the bottom of the barrel and the number. A curer having 10 packers, we should take number one, and if that number was all right we should probably not examine any one of number one's barrels again, but brand all the others as being right.

27,780. So that there is a personal check, as it were, upon the packers?—Certainly. The name and the number are put on the bottom of the barrel, and every individual packer can be discovered in that way, as well as the quality of the work.

27,781. During the time the herring-fishery is going on does it not keep you very much engaged to undertake the whole business of 13 stations?—Yes, but there is not a great deal of branding in this district.

27,782. Is there not a great curing of herrings here?—No, a large portion of the fish is sent fresh to the market and red.

27,783. The red herrings are not branded?—No.

27,784. The brand is used chiefly for the export trade?—Entirely.

27,785. Can you give us any statistics with regard to the quantity of herrings cured within any recent number of years along the different stations?—The whole stations are embraced in one district.

27,786. Does the return for Eyemouth include returns for the whole?—There is no separate return for the different stations.

27,787. Does your return for Eyemouth include the whole of the 13 stations?—No, they give you what is cured.

27,788. You can give us the whole cure?—Yes, for instance in 1855 there were 51,853 barrels cured and 52,690 crans were sold fresh in bulk.

27,789. Then there are returns of the fresh as well as of the cured fish?—Yes, we get it from the railway station.

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27,790. How much is a cran?—It contains rather more than a barrel; it is the standard measure.

27,791. Do you think that these two quantities include the whole bulk of the herrings that are caught?—I believe they do.

27,792. May there not be a good deal sold for consumption in the neighbourhood that does not pass over the railway?—An approximation of that is added to the quantity.

27,793. And you include the whole catch of fish?—Yes.

27,794. Can you give us a succession of years?—Yes.

—	Barrels cured.	Crans sent fresh.
1855	51,853	52,690
1856	47,235	44,882
1857	53,346	31,649
1858	58,708	23,783
1859	41,707	24,883
1860	44,948	30,514
1861	64,873	33,096
1862	51,729	22,888
1863	36,647	22,078
Total	451,046	286,463

That is the return for the whole district.

27,795. Then the proportion sent fresh to market would seem to be rather on the decrease than on the increase?—It has been so since railways have been opened out in the north.

27,796. Do you think it is because greater railway facilities have been opened further north in Scotland and larger quantities are sent greater distances into the fresh markets from those places?—That has chiefly been the cause. The curers are very reluctant now to send fresh herrings to market; they have not the same chance of getting rid of them as they had.

27,797. It does not pay them as well as it did formerly?—No.

27,798. That is because there is a larger competition from everywhere?—Yes, there is now a competition from Peterhead, Stonehaven, and Montrose. I saw it mentioned last week that herrings had been to the markets of the south fresh from those places. A few years ago there was no such thing.

27,799. The total quantity seems to be very much the same on an average; taking one year with another there seems to be no great increase or decline?—The last two years have been considered a short fishing.

27,800. The last year was a short fishing but the fishing for 1861 and 1862 seems to have been very fair; the fishing for 1861 was the best?—Yes.

27,801. Has the price of herrings within recent years altered much?—Yes, it has altered a good deal but it has been on the increase, I think.

27,802. It has been increasing?—Yes.

27,803. Have you got a return of the prices?—From Eyemouth alone the average price I find in 1855 was 14*s.* per cran.

27,804. Is that for cured herrings?—In 1856 it was 19*s.*; in 1857, 21*s.* 3*d.*; in 1858, 22*s.*; in 1859 20*s.*; in 1860, 22*s.* 8*d.*; in 1861, 22*s.* 8*d.*; in 1862, 21*s.* 7*d.*; for last year I cannot find any record of the average price.

27,805. That is an increase of 33 per cent. since 1855?—Yes.

27,806. That is per cran?—Yes, for the fish sent fresh that is the average price, but sometimes the actual price may be as high as 40*s.*

27,807. Can you give us a return of the prices obtained by the curers?—We cannot give you any idea of the returns of the curers; they keep those returns to themselves.

27,808. You do not know whether the price of cured herrings has progressed in the same ratio?—No, it depends on the catch in the North. The Wick herring-fishing seems to regulate the market. A cran of fresh fish makes a barrel of herrings cured, and the returns which I can give you refer alone to the Eyemouth fishing.

27,809. Is there any observation you desire to make with regard to the present state of the herring fishery on this coast?—I have not been sufficiently long at this station to know anything in particular with regard to it. The fishermen and the curers will be able to give you better information than I can.

27,810. With regard to the quantity of red herrings that are cured, they are not included in the returns at all?—They are not included as cured in the returns.

27,811. I think those branded only were included?—We do not brand any of that quality, but the returns included the whole, both gutted and ungutted, and the crans together, containing those which go away fresh and which merely have a sprinkling of salt over them.

27,812. Can you give us any facts with regard to the catch of haddocks on the same stations?—There are no records by which I can give any account of it.

27,813. Are there no means by which you can arrive at a conclusion with regard to the catch of any other kinds of fish except herrings?—No.

27,814. Is there a valuable haddock-fishing here?—Yes, very; there is a very valuable haddock-fishing practised. It is carried on to a great extent and with more success than in any place to which I have been, both as to the number of boats and the fishing materials. They are very industrious here.

27,815. Are the men and boats on the increase?—Yes, greatly.

27,816. Is the catch on the increase also?—This year I believe there has been a very large catch.

27,817. Has any complaint been made to you by the fishermen as inspector of fish here with regard to any injury they have sustained from any mode of fishing practised?—No, I have not heard any complaint; this coast is not suited for trawling and the trawlers do not come here. The fishermen are very apprehensive of trawling here and are afraid of it, but I have had no complaint that it has actually occurred upon this coast.

27,818. What important fishing is there besides the haddock-fishing?—There is the cod-fishing, but it is not of very great extent.

27,819. Is there any turbot-fishing?—Not much.

27,820. Is there a lobster fishery?—Yes.

27,821. Is it valuable?—It is principally fished by the old men who are not able to go to the deep-sea fishing. I believe it is not of much importance.

27,822. Is there a good crab-fishing?—It is not very good, it seems better along this coast.

27,823. Are there any salmon caught along this coast?—Not here, there are a good many caught five miles south of this.

27,824. Is there any difficulty with regard to getting bait here for the line fishermen?—There is no difficulty at present at all; it comes from Boston Deeps. A great quantity of mussels is used here for bait.

27,825. They do not get them from the Firth of Forth?—No, I do not know that there is any large quantity there. I think from 1,600 to 1,800 or 2,000 tons of mussels are used here. There are 34 boats, and each boat will use about 40 tons of mussels every year.

27,826. There are 34 boats engaged in the haddock-fishing?—Yes.

27,827. And they have about seven men in each?—Yes.

27,828. They all belong to Eyemouth?—Yes.

27,829. How many boats are there altogether in the 13 fishing stations which you have under your superintendence?—I cannot tell you without referring to the fishery returns.

27,830. There are returns which will show that?—Yes, in the office.

27,831. Do you know what markets are chiefly supplied with fish from this place?—The Glasgow

market with smoked haddocks, and the English and Edinburgh markets with fresh herrings.

27,832. (*Prof. Huxley.*) Do you consider it part of your duty to enforce the Convention? Does the Fishery Board of Edinburgh call upon you to do that?—No; but we report to the Fishery Board any encroachment by the French vessels, and the secretary immediately dispatches a vessel to inquire into the matter. We have no power to do that ourselves.

27,833. Is it your duty to report to the Fishery Board?—Yes. Mr. Primrose gives me strict orders to report to him the moment any French vessel appears upon the coast, and every morning to inquire of the fishermen.

27,834. Then action is taken under the Convention?—Yes.

27,835. Are your instructions to call the attention of the Fishery Board to any other breach of the Convention?—No other breach of the Convention has occurred.

27,836. If one of the herring people were to shoot his nets more than half an hour before sunset, would you feel bound to take notice of that?—No, we should not.

27,837. But that is a breach of the Convention?—Yes; but we believe that the Act does not so completely apply to Scotland as all that.

27,838. Surely, if the Fishery Board has power to enforce one portion of the Convention Act, it is empowered to enforce it all?—Perhaps so.

27,839. Have you any instructions on this point?—My instructions are simply to report any encroachment or departure from the Act by the French fishermen to the secretary.

27,840. Have you observed the herring men shooting their nets half an hour before sunset?—Yes; I report everything to the Board.

27,841. Then you would report that?—Yes.

27,842. Are you aware whether any of the fishing boats here carry any particular kind of vane at their masthead?—No; they have no vane at all.

27,843. Have you ever felt it your duty to report that to the Fishery Board?—No.

27,844. Perhaps you are not aware that it is a breach of the Convention?—No.

27,845. Do they light their boats in any particular way?—Yes.

27,846. In what way do they light them?—I only know that they do light them. We have to report what comes under our observation, but we have no cutter or means of going to sea.

27,847. Sometimes the fishing takes place near the land, and then you could observe how the boats were lighted?—Not at night; and these things occur at night.

27,848. You could see, surely, if a boat carried one light or two?—Yes.

27,849. If the boats were only lighted with one light, would you report it to the Fishery Board?—I think not. All along the north coast the boats act more under the Fishery Board than under the Convention Act.

27,850. It is quite clear that you are instructed to report to the Fishery Board certain breaches of the Convention?—Yes.

27,851. Then we desire to learn what kind of breaches it is that you report?—Only if the French vessels interfere with the fishery or destroy the fishermen's nets, then we send a report to Mr. Primrose, and he sends his cruisers down.

27,852. If the men went out to fish on the Sunday, would you report it to the Fishery Board?—No; the Fishery Board take no cognizance of men's consciences, they leave them to act in that matter as they please.

27,853. But here is an article of the Convention: "Herring fishermen being within the fishery limits of either country shall comply with the laws and regulations of the said country respecting the prohibition of fishing on the Sabbath day." That is a definite statement, is it not?—Yes.

27,854. Have you been instructed to act upon it?—No, it is rather otherwise; I imagine the Board have no desire to stir on that question.

27,855. Do you examine the meshes of the nets?—Yes.

27,856. Would you report to the Fishery Board if you found the mesh too small in size?—Yes.

27,857. You would report to the Board if you found it under 36 to the yard?—Yes, but the meshes in a great measure in some of the stations here are under that size.

27,858. Is it not your business to inspect them?—Yes, but I only came here recently; the instruction is under the old Act; and it has been very much in disuse.

27,859. I understood you to say that you suspected the fishermen of being in great fear of the trawlers, although none of them have made their appearance?—None of them have been here that I am aware of.

27,860. If they were to come among the herring boats, would you consider that you were empowered to report it to the Board?—Yes; for the benefit of the fisheries I should report to the Board everything bearing upon that subject.

27,861. Are you aware that it is contrary to the Convention that trawlers should come among the boats fishing here?—Yes, I am aware of that, and we have the Convention Act in the office.

27,862. And you would call the attention of the Board to it?—Yes.

27,863. Have you any special instructions?—We have no instructions specially; but Mr. Primrose says he cannot be too well informed upon the subject, and we are to write about everything and report to the Board what takes place in every form, leaving the Board themselves to discriminate in regard to what they are to do.

27,864. Have you had any complaint of the trawl-boats getting foul of the herring nets?—I have had none here; this is my first season.

27,865. Are we to understand that you do not feel it your business to take cognizance here of anything that occurs at sea?—No; I should report anything that came to my knowledge, and then the cruisers themselves at sea would settle the matter.

27,866. Are there any cruisers off this coast?—Yes, there are two gunboats at Berwick. I have been put in communication with them, and Mr. Primrose has instructed me to communicate with one of them.

27,867. Does she cruise off the coast here?—Yes.

27,868. Does she send boats up and down?—Yes.

27,869. Or does she go up and down herself?—She goes up and down herself. The commander comes on shore here and asks for information whether any damage has been done. Mr. Primrose is very particular in getting all the information he can, but after supplying the information, we, his officers, leave the proper authorities to deal with the matter.

27,870. Your special instruction with regard to the Convention is to inform him if any breach is committed by French vessels?—Yes.

27,871. You are not specially instructed to report with regard to any other breach of the Convention?—No, that is the particular thing.

27,872. Are all the barrels that are branded necessarily exported?—They may not be exported, but there are very few herrings sent out from the east coast that are not branded.

27,873. Is it in any way possible for barrels containing full Crown-branded herrings to be emptied and filled again with herrings of another quality?—It is quite possible.

27,874. Is there no means of checking that?—No, but we keep our eyes open, and being constantly moving about we see what is doing. I have seen barrels sent from Edinburgh and returned again with that year's brand upon them. Moving about the stations we see pretty nearly everything that occurs.

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27,875. But it is possible for a barrel to be filled with genuine full-branded herrings, and to be emptied and filled up again with herrings of an inferior description?—Yes, the curer's stations are quite enclosed and barred off, but there are very few curers who would do such a thing.

27,876. That is another matter?—Yes.

27,877. It is quite possible to do it?—Yes.

The witness withdrew.

R. Cormack.

ROBERT CORMACK called and examined.

27,878. (*Mr. Caird.*) Your are a fish-curer here?—Yes.

27,879. Have you been long engaged in that business?—For 48 years; I was a fisherman for 20 years.

27,880. Has the quantity of herrings cured here been increasing or diminishing in the course of your experience?—It has been rather increasing in some years.

27,881. It has fluctuated, I suppose?—Yes.

27,882. Has the number of people employed here in the fishing been on the increase?—Yes.

27,883. And has that increased number not obtained upon the average an increased quantity of fish?—In some seasons there has been a considerable increase.

27,884. On the whole do you think that a greater quantity of fish comes into Eyemouth than in former years?—Yes.

27,885. It has become a more important fishing station?—Yes.

27,886. And you send a greater quantity of fish to the market?—Yes.

27,887. Does that apply to all the different kinds of fish caught here?—Yes.

27,888. Are you a buyer of other kinds of fish as well as herring?—Yes.

27,889. Do you cure herrings also?—Yes.

27,890. Has there been an increase in the quantity of haddock caught within recent years?—During this last season there has been the heaviest catch of haddock since ever they made their market here.

27,891-2. In all your long acquaintance with this place that has been the heaviest catch?—Yes, along the coast on both sides between Anstruther and Berwick there has never been such a weighty catch as was caught from the month of July to September.

27,893. Is there a large proportion of those haddocks cured?—Yes, the greatest proportion.

27,894. Is it made into Finnan haddock?—Yes.

27,895. And where is it chiefly sent to?—Only to Glasgow.

27,897. Can you give us an idea of the quantity cured this last season?—No, I cannot.

27,898. Have you no idea at all?—No.

27,899. You have no notion how much money has been spent in the purchase of these fish and given to the fishermen?—No, I cannot tell you that.

27,900. Will it amount to many thousand pounds?—Yes.

27,901. Then you cannot tell approximately how much money is gained by the fishermen from the haddock fishery here?—No, I cannot give that.

27,902. Has this, which has been so successful a year of haddock-fishing, induced any increased number of people to engage in the fishing?—There are several who have gone to it, but all the fishermen follow the different fishings in their seasons. Perhaps there may come a season of haddock-fishing, then of herring-fishing. The herring-fishing boats are increasing every year.

27,903. Are they increasing more than the haddock-fishing boats?—Yes.

27,904. But are we to understand that this is the first year for some years that you have had a very good haddock-fishing?—Yes, it has been very good, but this is the weightiest haddock-fishing we ever had.

27,905. Had there been any falling off in the haddock fishery before?—There has been in some seasons.

27,906. But there has been no progressive or marked falling off?—No, sometimes there has been a bad season in consequence of extraordinary weather; that has caused the catch of fish to be less.

27,907. Were there so many fish this year off the coast that if there had been a greatly increased number of boats there would have been a greatly increased take of fish?—Yes.

27,908. Then there is no sign of the sea having been fished out?—No, there is no appearance of that, not if the fishermen go to the right place.

27,909. You have no complaints to make here with regard to trawling?—They cannot come here on our banks, but if they did commence to trawl, the whole of the fishermen would have to lay their lines ashore; the trawling and the white-fishing could not go on together.

27,910. You think that is what they would do?—Yes.

27,911. But they have had no occasion to do that?—No, they never tried trawling here.

27,912. Is the bottom here suitable for trawling?—I believe that part of it is.

27,913. Is it a soft bottom?—Yes, even part of that ground where they catch the haddocks.

27,914. But the English trawl-vessels never came down here?—No.

27,915. What distance from the shore does the best fishing take place?—Some seasons it is nearer at hand than at others. Sometimes the boats may have to go ten miles off, at others 15 miles, and perhaps, 20 miles. They lie some seasons much nearer the shore than at others.

27,916. They are not gradually going further and further from the shore?—No, they come in and go away again and then return.

27,917. There has been no marked change of that description?—Not that I am aware of.

27,918. Then if you were told that year after year the fish go further and further from the shore, you would say that is not according to your experience?—I have heard such remarks made, but so far as my experience goes, the fact is to the contrary. I have seen the fish never come in-shore at all, and since that time I have seen them come in as close as ever they did before, and there appears to be plenty of them.

27,919. Is there any extensive cod fishery here?—For some years the fishery has been very thin.

27,920. Is the cod fishery followed by the same fishermen who go for the haddock?—Yes.

27,921. Are they caught by the same lines?—Yes.

27,922. Are there no special cod-lines?—Yes they make cod-lines.

27,923. Are there many turbot caught here?—No, there are very few turbot caught here.

27,924. Are any soles caught?—They get soles occasionally, but they are very scarce here.

27,925. Are they fished for at all here?—No, there is no regular fishery for them.

27,926. They are not caught by the line?—No, it is very rarely that we see any caught in that way.

27,927. Do you in your business consider that the system of branding is advantageous to you?—Yes.

27,928. You consider that it is well worth paying for?—Yes.

27,929. What advantage do you think it gives you?—When we get our article made ready, we sell it abroad, and we could not sell it abroad unless it had the brand.

27,930. Is your own name on the barrel as well?—Yes.

27,931. If you had a good reputation as a curer, would the fish not sell just as well without as with the brand?—I think it might sell a great deal better after a year or two's trial.

27,932. Then you think the brand might be done away with after a year or two's trial?—Yes; there might be some difficulty for the first year or two.

27,933. But after that, as soon as your name became known, you think you would have no difficulty in disposing of your fish without the brand?—No; the buyers abroad would then look every year after the name that pleased them best.

27,934. Is not the fact of the brand being put upon every curer's herring, and that it is the same brand, likely to produce an uniformity of quality?—I think so.

27,935. In point of fact one man's skill does not help him against another man's want of skill?—That is so to a certain extent, but still the herrings must be cured sufficiently well to pass the inspection of the Fishery officer.

27,935*a*. Is no great skill required in curing herrings well?—There is no very great skill required.

27,936. Is it not an advantage to get the herrings as fresh as they can be got into the cure?—I think that is the great secret.

27,937. Do not many curers differ in that respect?—I always look to those which I cure myself.

27,938. But is it not the fact that there is a difference in a man's character for pushing the thing forward and getting it done as well as he can?—Perhaps so.

27,939. Some may not be as active as others, and yet the brand when once attached to the herrings would make the result of his inactivity exactly equal to that of the activity of other curers?—If his herrings do not please the Fishery officer they are laid on one side.

27,940. Is there a great difference in the quality of the herrings cured according to the activity displayed in curing them?—One lot of fish may be all cleared up within 12 hours of the time they are brought ashore, while another lot may not be got rid of under such favourable circumstances.

27,941. Is no scale necessary to point out the quality of the cure?—I cannot point out any.

27,942. Then there is nothing in a man's name at all as a curer?—Not if he makes an article to please the purchaser. If a curer were to allow his herrings to go to the same market as his neighbour, and were to put upon it four times the amount of salt it required, while his neighbour only put on just enough, then the one would please and the other would not.

27,943. But if all had got the full Crown brand they would be of the same value in the market?—I am speaking now of herrings wanting the brand. The curer would not get the brand if the herrings were spoiled by having too much salt upon them. I am speaking now of men sending herrings to the market wanting the brand.

27,944. Suppose that you have a careful curer and a careless curer. I suppose that is a thing quite possible?—Yes.

27,945. Is it not likely the careful curer's herrings will be in a better condition for the market than those of the careless curer?—Yes.

27,946. But if they fulfil certain conditions the Fishery officer puts the same brand upon the product of each?—They must come very near the best. The herrings cured by the careless curer must come very near up to the standard of those cured by the careful curer.

27,947. Still there may be a difference, and yet the effect of the brand being placed upon each barrel makes them of equal value?—Yes, it does.

27,948. And do you think that is a good thing?—They must be something very near what they ought to be or the Fishery officer would not pass the fish. If there were only half a stone of salt more than enough they would be condemned. Every barrel would be condemned in that case.

27,949. Can the Fishery officer easily detect if there is half a stone too much of salt?—He can come very near in his judgment with regard to what it ought to be. He begins at the bottom of one barrel, perhaps, and then he will go to another and probably begin at the top, and before he has completed his investigation he will form a good idea as to whether there is too much salt or not.

27,950. Do you think that his inspection makes you more particular in your cure?—Yes.

27,951. Would the interest you yourself have as a curer in making an article that would command the best price, not make you equally careful?—Yes, I should be as careful if there were no brand as if I were making the fish ready for the brand.

27,952. Because in that case if your fish were cured in an inferior manner, the herrings would find no market at all?—No, it would be just the same as with anything else; our haddies would be in precisely the same position.

27,953. (*Prof. Huxley.*) How many years have you been a fisherman?—For the last 50 years.

27,954. And as I judge from what you have stated just now you do not consider that there has been any falling off in the quantity of haddocks caught upon this coast?—Not on the average of seasons.

27,955. And this last year there has been an unusually fine catch?—Yes.

27,956. Do you catch them in the ordinary way with long-lines?—We always catch them in one way.

27,957. Is the ground soft or is it rocky ground?—The largest whiting we take off the smooth ground.

27,958. Is it ground that trawlers could work over?—Yes, where the greatest bulk of the fish is got.

27,959. If they came here would they be working over the very same ground that you are working over now?—Yes.

27,960. Then in that case would they not damage your lines?—They would take them all away, I believe.

27,961. Is that your objection to trawling, or do you think that trawling would injure the fish?—They would take away all the lines with them.

27,962. They would interfere with them?—They would break them all to pieces.

27,963. Have you any knowledge of the fish caught by the trawlers?—Yes, I have seen them at work.

27,964. Are they as good as the fish caught with the hook and line?—No, they are cut to pieces by the nets.

27,965. Would they be as good to cure?—No, one half of them would not take the salt, but they cure plenty of them notwithstanding.

27,966. They are not nearly so good or so valuable as the fish caught with the hook and line?—No, they would not be able to sell one half of them.

27,967. (*Mr. Caird.*) How do you pack your haddocks when they are cured for the market?—We pack them much in the same way as other fish, and send them all over the country; we pack them by the bulk.

27,968. Do you put them in barrels?—Yes, in barrels.

27,969. And do you place your names on the barrels?—Yes.

27,970. Do the haddocks bring a different price according to the quality when they go to the market?—Yes.

27,971. Has the name of each curer a certain value in the market—has it a recognized standing in the market?—There is not much difference.

27,972. Are the haddocks of one curer sometimes better than those of another?—Yes.

27,973. Are they judged by the quality or by the name on the barrel?—They are judged by the quality first, and then by the name afterwards, in order to ascertain who sends them.

27,974. You sell the haddocks by your own name, and not by the assistance of any brand?—No, only with our own name.

27,975. Is there a great variety in the price of haddocks sent some days to the market from the same

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place?—No, all are very much alike; every one tries to make as much out of them as he can.

27,976. Then the result is a considerable uniformity?—Yes, very near.

27,977. In what way are the haddocks cured?—They are dressed; they then lie for a quarter of an hour or twenty minutes in a pickle; they are then hung up and dried.

27,978. Are they smoked?—They are just the least bit dried now.

27,979. Dried in the air?—No, with wood.

27,980. They are dried with wood smoke?—Yes.

27,981. How long does the process occupy?—From 12 o'clock at night for three, four, or five hours.

27,982. They are then fit to send to the market at once?—Yes.

27,983. Then they must be very fresh when they are sent away?—They are fresh when they are sent to Glasgow; they get them there next morning.

27,984. How long will they keep?—Three, four, or five days, or longer in the winter season.

27,985. There is not much salt put upon them?—Not much, and it is a very sweet salt.

27,986. Do they bring a better price than if they were sold fresh?—Yes, we send very few away fresh, scarcely any.

27,987. You cannot tell us the quantity of the cured haddock altogether that is sent to the market?—No.

27,988. How many haddock boats are there?—Thirty-four, I think.

27,989. Have you a certain number of those boats?—I have had three this last season.

27,990. What do you pay to each boat?—It varies. I pay weekly, sometimes 10*l.* a week a boat, and some of them may make 20*l.* in a week.

27,991. You cannot tell us what you pay altogether in a season for a boat?—No, I cannot.

27,992. Perhaps you would rather not choose to tell?—I should have no objection to do so; it would not interfere with our business in any way. I believe there is one man here who got 63*l.* for his share; there would be six men in the boat, and that would be six times 63*l.*

27,993. Each man in one boat got 63*l.*?—Yes.

27,994. For the season's fishing?—Yes.

27,995. Of how many months would that consist?—From September until the end of May.

27,996. And then he has the herring-fishing besides?—Yes, the herring-fishing commences after that.

27,997. Would that be about the fair average for the whole of the fishermen in this place?—Well, it would be very near it.

27,998. And there are six men in a boat?—Yes; there are seven in some, and six in others.

27,999. Have you any idea how much you give to each boat engaged in the herring fishery?—No; we do not engage here; we purchase every day.

28,000. How many boats are there engaged in the fishing?—Somewhere over a hundred; I believe there are 112 altogether.

28,001. Are they the same boats that engage in the haddock-fishing?—No.

28,002. Are they a different kind of boat?—Yes, they are smaller boats.

28,003. Do they carry as many men?—No, they have fewer men.

28,004. How many?—There are from four to five men in the herring boats.

28,005. And have you no idea how much, on the average, each herring boat will make in the course of a season?—No, I cannot say. Some seasons it would be quite little—20*l.* a man, perhaps, and at other seasons 30*l.* a man.

28,006. Is there a winter herring-fishing?—No, there is very little then; it is a mere trifle. Some go a little in the spring, but very rarely.

The witness withdrew.

J. Johnson.

JOHN JOHNSON called and examined.

28,007. (*Mr. Caird.*) Are you a fish-curer here?—Yes.

28,008. Do you cure both herrings and haddocks?—Yes.

28,009. Which of the two fisheries yields the most to the fishermen here?—I cannot exactly say. I suppose the haddock-fishing will yield as much as the herring-fishing. I think, on the whole, that the haddock-fishing will be the most valuable.

28,010. It extends over a greater period of time?—Yes.

28,011. Do you agree with the previous witness that the haddock-fishing for the last year has been unusually good?—Yes.

28,012. Has it been one of the best fishings you have ever experienced?—Yes, it has been the best of all my time.

28,013. The best?—Yes.

28,014. And with regard to the herring fishery, you heard the evidence of the Fishery Inspector?—Yes.

28,015. Do you agree with him that it fluctuates, but that, on the whole, it keeps pretty steadily at an average amount?—Yes, that is very much about it.

28,016. Do you find the brand a useful thing?—Yes, it is very useful as far as regards the foreign merchants. That is the principal thing which, I think, it is good for; it enables foreigners to purchase without coming to examine the fish on the spot.

28,017. The proportion of the herrings cured here seems to be on the increase as compared with that sent fresh to the market?—Yes, it is, seemingly.

28,018. Why is that? Can you give any account of it?—Cured herrings have been bringing a very good price for some years back.

28.019. Is that cured herrings for export?—Yes.

28,020. Does it pay better, on the aggregate, to cure them and export them than to send them fresh to the market?—That is the only reason that can be given for it, I think.

28,021. Do you desire that this system of branding should be continued?—I am quite willing that it should be continued.

28,022. Do you prefer that it should be continued?—Well, as far as regards the foreign merchants, I think we can do our business quicker when the herrings are branded than if there were no brand.

28,023. Suppose it were decided that there should be no longer a brand, but that the merchants should sell their goods as other merchants do, namely, according to the character and reputation of the curers, would it be any injury permanently to your business?—There would be no permanent injury, but it would require a short time to elapse in order that the names of the different curers might get established and known to the merchants.

25,024. If they were once established, would they not carry a weight with them which would give to one curer a better price than to another?—I have no doubt of that. I think we have had a proof of that in the haddock market in Glasgow.

28,025. You have found that to be the case in Glasgow?—Yes.

28,026. Namely, that one curer, from the superior skill and care which he exercises in the cure of his fish, can obtain a higher price for his fish than another?—There is no doubt of that; and if at any time one curer has not got them in as good order as another, he cannot get a price. There is not a great deal of difference. Most fishermen know very well how to cure fish, and on the average there is not much difference in price.

28,027. Still, if it were left to yourselves without a brand, there would be a constantly impelling motive

to every curer to do his best?—There is no doubt of that.

28,028. Would not the name of the curer be as valuable to the merchant with regard to the state of the cure as the information given by the use of the brand?—We require to be very particular now for the brand.

28,029. That is in order to escape the detection which would follow carelessness on the part of the Fishery officer?—Yes, but the Fishery officers themselves are very particular. They seem very well up to their business.

28,030. Can you give us any idea of the quantity or value of the haddocks which go to Glasgow market from here?—No.

28,031. Speaking of the last year as being the best fishery which you remember, can you say that there was a third more fish caught than in any other year that you recollect?—There might be.

28,032. Would there be one half more caught?—No, I think you may take it at about one third.

28,033. Did it affect the price in the Glasgow market?—Yes.

28,034. Did it lower the price?—Yes, considerably.

28,035. Do you get a much better price by curing the haddock in that way, than by sending them fresh to the market?—The market could not take them all fresh.

28,036. Do you mean that they would not be fresh, that they would become stale before they would be sold?—There are too many for the market. The English market takes very few haddock, and if they are rather small they do not care for them at all. It is principally Glasgow that we send to. The only portion we send fresh is when we are in good time for the railway. The great bulk is smoked.

28,037. Has the Glasgow market long been the best market for smoked haddock?—Yes, for a good many years.

28,038. Has the price remained stationary for a good many years, or is it increasing or diminishing?—Of late years it has been very steady.

28,039. But last year, on account of the large supply, was there any decrease?—The price depends very greatly upon the quantity sent in. If a large quantity goes in of course it brings less money.

28,040. Have you been in Glasgow market to see the fish sold?—I have been there.

28,041. Does a large quantity come from other quarters to compete with yours?—Yes.

29,042. Has there been a general increase from other quarters as well as from this place?—Yes, I think there has.

28,043–4. (*Professor Huxley.*) Do you send many of your haddocks abroad?—None.

28,045. So that your haddocks, as it were, go to a more familiar market than the herrings do?—Yes.

28,046. The people know more about you in your haddock market?—Yes.

28,047. Is there any spring herring fishery here?—There have been some herrings caught here in the spring, but not very often.

28,048. There is no regular fishing for herrings in the spring?—No.

The witness withdrew.

William Spears called and examined.

28,049. (*Mr. Caird.*) Have you long been a fisherman?—Yes.

28,050. Have you been engaged in all the different kinds of fishing followed on this shore?—Yes.

28,051. Do you agree with the previous witnesses that there has never been a better season for haddocks than the late one?—Yes.

28,052. Within all your experience?—Yes.

28,053. You never saw so many haddocks at any other season?—No, not so many as there have been this year.

28,054. And if there had been a great number more boats there would have been a great number more fish taken?—Yes.

28,055. Has there been any noticeable change in the size of the haddocks of recent years?—They differ very greatly; some run large and some small. Some years all are large altogether, and in other years they are mixed, the small with the large.

28,056. What was their character this last year?—They were pretty large.

28,057. As large as they have been on the average in previous years?—Some days they were very large. It depends on how you fall in with them.

28,058. How far off the shore did you get your best fishing?—We found the best fishing about 30 miles off the shore.

28,059. Thirty miles off?—Yes, but the best fish we get from 15 to 20 miles off.

28,060. You mean the best quality of fish?—Yes.

28,061. Is there a great difference in the quality according to the place in which they are caught?—Yes.

28,062. Is the best quality got off a soft bottom?—In some seasons of the year, but we generally get the best haddocks from the hard bottom.

28,063. Are the greatest number found on the soft bottom?—Yes, generally.

28,064. There is no trawling off this shore?—Very little; it was tried for a few days.

28,065. Have the English trawlers come as far as this?—Yes.

28,066. But you have nothing to complain of with regard to their operations?—Not in regard to the English trawlers.

28,067. Have you anything else to complain of?—There has been no trawling off the Firth lately. I believe they have turned over a great deal of ground there, but they have dropped it now.

28,068. None of the trawlers come here?—No.

28,069. You have no complaint to make at the present time?—No.

28,070. Do you know whether any complaint is made on the opposite shore?—No, but if they were to go over the grounds they would do a great deal of harm.

28,071. You mean by destroying your lines?—Yes.

28,072. Did you find the haddock-fishing a paying thing last year?—Yes, if the weather was good. Sometimes it is very stormy and the boats are prevented from going out for many days. It so happened that we had a good winter and that made a good fishing.

28,073. Are your boats open boats?—No, they are all decked boats.

28,074. Can they keep the sea pretty well?—Yes, first rate.

28,075. What is the tonnage and size of each boat?—They average from 40 to 55 feet.

28,076. In length?—Yes.

28,077. And what tonnage will they be?—From 20 to 30 tons, or rather from 15 to 30 tons.

28,078. What rig are they?—Just fore-and-aft sails.

28,079. Are they smack rigged?—No, lug rigged.

28,080. Are they entirely decked or half decked vessels?—They are all decked over.

28,081. How long will they keep the sea sometimes?—Generally, in the way in which they fish here, if they have any bad weather at all they are back again that night.

28,082. Do they set their lines and bring them in again within the same 12 hours?—Yes, but it depends on the weather. It may be 12 hours, and sometimes it may be 20; it depends altogether on contrary winds.

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28,083. But it is seldom longer than that?—It is seldom longer, without they carry away their mast or get damaged.

28,084. Is the harbour here a harbour they can run for at low water?—No, it is a very poor harbour at low water, there is no water then at all.

28,085. For how many hours can you enter the harbour?—At half tide, three hours' flood for the large boats, especially if there is any surf.

28,086. Is there much loss of life amongst the fishermen here?—No, we have been very fortunate for a good many years; there have been very few boats lost in my time.

28,087. Have you a lifeboat here?—No.

28,088. Is the herring-fishing a paying business for the fishermen?—It is very fluctuating. Some seasons some of the boats get a good fishing and it pays well, while at other seasons some of the boats' crews get very little, and it pays scarcely anything. It is awfully fluctuating.

28,089. There is nothing to interfere with your fishing?—No.

28,090. The Frenchmen do not interfere with you?—Not much, but at Berwick Bay they go into the very rocks and shoot their nets.

28,091. Does nobody interfere with them?—I am sorry to say that the gunboats look very little after them.

28,092. Are there gunboats there?—Yes, there were two last year.

28,093. Did they not go out when they saw the French boats?—Only very little.

28,094. Were the French boats fishing within three miles of the shore?—They were within half a mile of the shore.

28,095. Is the lobster fishery valuable?—No, it is not.

28,096. Is the crab fishery?—There are a good many crabs, but there are not many people who prosecute it here. It is the haddock-fishing that is the main fishing in the winter time.

28,097. Is there any oyster fishery followed off here?—No.

28,098. Do you ever fish soles?—No, we never fish soles; we may get a chance one, but very seldom.

28,099. Have you any difficulty here in regard to getting bait for your haddock fishery?—Yes, we have great difficulty sometimes. The bait is all wearing out on this coast.

28,100. Where do you get it from?—All from Boston.

28,101. Does it cost you much?—It is very expensive.

28,102. Is it brought here by rail or by vessel?—Generally by vessel in the winter time when it will keep. In the summer time we cannot bring it by vessel, and then it comes all round by rail.

28,103. When you bring down a cargo, do you put it somewhere in the water where you can lift it again?—Yes, we divide it amongst the boats, and each man has a spot of ground upon which he can put it down.

28,104. Has the price of your bait increased of late years?—It has not increased so much when we get it by vessel, but it is very expensive to obtain it by train.

28,105. It has not become a source of greater expense in the prosecution of your fishing than it was formerly?—Yes, we used to get plenty of bait round about our own shore at one time.

28,106. Have you used it all up?—Yes, it is all done now. There is not as much about the rocks as would serve for a boat to go out for two weeks in the season.

28,107. And in former times there was plenty?—Yes, there was plenty. We were in the habit of getting it from Holy Island a few years ago.

28,108. Was the bait you got there mussels?—Yes, but the ground was so small that the boats which came there soon carried it away altogether.

28,109. Do you never get any from the Firth of Forth?—Some years we did, but it has all run out. It is so small now that we cannot use it.

28,110. Have you tried it?—Yes.

28,111. We were told that the upper part of the Firth abounded in mussels?—That may be so, but they are of so small a character that they are not sufficient for us to use.

28,112. They are not so good as the mussels you get from Boston?—No; one of the Boston mussels will do for a hook and sometimes for two or three; those in the Firth are very small and when they are thin they will not easily grow large.

28,113. Did you get your mussels from Argyleshire formerly?—Yes.

28,114. From the Clyde?—Yes, a great many came from the Clyde, but the dredges in deepening the Clyde covered the mussel banks, and now they are wearing out.

28,115. They are not getting many there now?—No.

28,116. But practically you get as many as you want from Boston?—Yes.

28,117. The want of bait has not injured your fishing?—No. Sometimes it comes very irregularly and keeps people from working.

28,118. How much a ton do you pay for it?—35*s.* when it is brought by the train.

28,119. How much do you pay for it when it is brought by vessels?—We generally pay 25*s.* when it is brought by vessel.

28,120. Then, of course, it is to your interest to get as much by vessel as possible?—Yes.

28,121. Can you tell us any mode by which you would be able to get a better supply than by the present system?—I think there are a good many mussels on Boston scarps now, but they are using them up awfully for manure. If that place runs short we shall be in a very bad state.

28,122. Do you fish mackerel here?—Not regularly; sometimes we get a few with our lines, but not many.

28,123. It is not an important fishery here?—No.

28,124. Do you get any fine cod here?—Sometimes, but they are falling off. I have seen very fine cod here.

28,125. Do you find the haddock a very valuable fishery?—Yes.

28,126. You do not prosecute the cod fishery for itself?—No, through the season the haddock fishery pays best.

28,127. But if there were a demand for cod, they are to be had here if you went to look for them?—They are very scarce.

28,128. Are they scarcer than they were in former times?—Yes, there is not now one half or one fourth on the ground that there was formerly.

28,129. What is the cause of that?—I cannot say. Perhaps they have taken another turn, or they do not frequent us so much. I think that a great number of the young take the bait, and the consequence is that the fishermen are killing all the young. There are so many of them that take the hook that there are very few left to grow large now.

28,130. Are many taken immature?—Yes, an awful lot.

28,131. On the haddock lines?—Yes.

28,132. Is a large proportion of your catch when you are fishing for haddock immature cod?—Yes, a very great many; we get scores and hundreds some days.

28,133. There is no help for that, I suppose?—No; there is no help for it.

28,134. What do you do with them?—If they are large enough they go with the large haddock, and if they are small they are sold for a small price.

28,135. Do the curers cure them in the same way?—Yes.

28,136. Then they become like haddocks?—Yes, but they sell for one half of the value. I should wish to make a statement about the garvies which they

have been catching in the Firth of Forth. I entertain an objection to it altogether; the garvies are nearly all herrings.

28,137. Have you ever been engaged in garvie-fishing?—I have been where they have been caught, but I have never killed them.

28,138. Then what opportunity have you had for ascertaining that they are nearly all herrings?—I know them quite well.

28,139. Are you in a position to know what is going on there?—I was fishing at the herring-fishing up the Firth of Forth for two or three years, and I saw a good deal of it going on.

28,140. Do you think that garvie-fishing is destructive of the herrings?—Yes, I think it is ruining the coast altogether.

28,141. How can that be when the quantity keeps upon a uniform average?—Yes, but look at the quantity they catch of those young herrings.

28,142. Do you not fish the herrings themselves when they are full of spawn?—Yes.

28,143. Do you not think that you destroy the brood to a great extent in that way?—Yes, a great deal.

28,144. Would not one full herring produce in brood a large quantity of those young herrings which are taken along with the garvies?—Yes.

28,145. What would one boat's catch of full herrings in one night yield of young brood?—I cannot say; a good many.

28,146. Then you destroy them yourselves?—Yes but it is different when they get to a certain size.

28,147. Do you not destroy a much greater number before the fish spawn than are destroyed afterwards?—Yes, that is quite true; but we could not get herrings without. But there are as many small ones brought on shore in this garvie-fishing some days as would make a fishing altogether.

28,148. (*Professor Huxley.*) What length of lines have you to each boat; I mean your long-lines?—Generally we have 800 hooks to each man.

28,149. That will be 4,800 altogether?—Yes.

28,150. You have six men in a boat?—Yes, from six to seven men.

28,151. The hooks are about a fathom apart?—Not quite a fathom.

28,152. You have something like 4,000 fathoms in a line, I suppose?—Yes.

28,153. Do you use longer lines now to a boat than you did formerly?—Yes; when we went first we never had more than 600 hooks to each man.

28,154. How many years ago is that?—Perhaps 12 or 14 years ago.

28,155. Did you go out further then than you do now?—We had small boats then, but sometimes we went out nearly as far as we do now; we had, however, to watch the weather.

28,156. The boats were not as well built as they are now?—They were very good boats for their size. They were boats of about 32 feet.

28,157. The small ones?—Yes.

28,158. What will a long-line cost now with its fittings and boat?—The boats which go regularly now to the haddock-fishing will cost from 200*l.* to 300*l.*

28,159. A boat will cost that with its lines?—No, that is just the boat ready for the sea.

28,160. How much would the cost be if you add the lines to it?—The lines are not such a very great expense; perhaps they would cost 20*l.* the line.

28,161. What did the boats you used 14 or 15 years ago cost?—40*l.* to 50*l.*, perhaps 60*l.*

28,162. Then you have got six times as much capital invested now in your boats as you had then?—No.

28,163. If they cost 200*l.* or 300*l.* now, and only 40*l.* or 50*l.* then, that must be so?—Yes, but look at the fine boats they have now; they have cutters to go in now instead of boats.

28,164. The value of your boats altogether must be six or seven times as great as it was?—Yes, but these boats do not keep themselves up.

28,165. But that is the fact, is it not?—Yes.

28,166. It is a fact that you have got all that amount more money in your boats than you had?—Yes, that is quite right.

28,167. Is it the same thing with the herrings, or do you fish herrings in the same way as you did in former years?—Just the same. The boats are about the same, but the nets cost a great deal of money.

28,168. Were the fleets of nets as long 20 or 30 years ago as they are now?—At that time they were about half as long as they are now.

28,169. So that you have twice as much more in your herring boats as you formerly had?—Yes.

28,170. Then all that has come out of the fishing?—It must all have come out of the sea.

28,171. Then you have not done so badly for the last 20 years?—No.

28,172. (*Mr. Caird.*) Have you as many of those large boats as you have of the small?—No. When we go after the herrings two or three fishermen go together, and they take in landsmen to fill up their boats. In the winter time the landsmen will not do; they must be all fishermen then.

28,173. (*Prof. Huxley.*) Do you see herrings here in the spring time?—Not many; but a few years ago we saw plenty.

28,174. Did you fish them then?—Yes.

28,175. Was it about February?—Yes, February and March.

28,176. What condition were they in then?—They were mateys, just about spawning.

The witness withdrew.

William Dougall called and examined.

28,177. (*Mr. Caird.*) I believe you have been a fisherman here for a good many years?—Yes, for 35 years.

28,178. Then you have full knowledge and experience with regard to the different kinds of fishing practised on this coast?—Yes.

28,179. Do you agree with the evidence of the previous witnesses?—Yes, I agree very much in what has been stated.

28,180. Do you agree in the statement that the haddock-fishing this season has been unprecedently good?—Yes, it has been very good indeed. I don't know if ever there was such a fishing as there has been this year.

28,181. Have you any complaint which you wish to bring before us in regard to anything which you consider injurious to your fishing here?—Nothing in regard to the haddock-fishing, except that I think it is injurious to carry away the mussels for manure.

28,182. That is in Boston Deeps?—Yes. If that is done, we shall have to give up the haddock-fishing altogether.

28,183. That would be the case if it were carried on to such an extent as to put an end to the mussel beds; but you have not found mussels increasing very much in price?—No.

28,184. It is only the apprehension you have that such a thing might occur?—Yes; there are a great number of ships taking them away.

28,185. How do you know that?—The men who come from there tell us so. They got up a petition to the Fishery Board stating that something must be done, or else all the mussels would soon be taken away.

28,186. Did you do that?—There was something done about it.

28,187. Did you make a representation to the Fishery Board on the matter?—I don't know that it was regularly carried out; there was some mistake

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about it, but the men who came here with ships said the beds were being rapidly destroyed.

28,188. Lots of craft come here with mussels?—Yes; they told us that, and said unless we made out something of that kind the beds would soon be destroyed.

28,189. Is there anything else you would like to bring before us?—Sometimes we are very much annoyed by the trammel nets. They have buoys which extend half a mile out into the sea. Sometimes the herrings come close inshore within half a mile, and these buoys tear away our nets.

28,190. What are those nets used for?—For salmon.

28,191. Are they used along this shore between this and Berwick?—Yes.

28,192. Have they been long in use?—Yes, for some years—for a good while now.

28,193. Do they do more injury than they did formerly?—They are extending them further out into the sea.

28,194. When did they begin to put them further out into the sea?—Last year or the year before.

28,195. How do they destroy the nets?—They have buoys in order to keep the nets right out, and our nets come right against those buoys.

28,196. When they are drifting?—Yes; it tears the nets, and sometimes we lose them altogether.

28,197. Is there a serious loss experienced in that way?—Yes, we have had some very serious losses.

28,198. How do you propose to remedy it?—There is no other remedy than to keep their nets closer to the shore.

28,199. Do they catch a good many more salmon further out in the sea?—Yes.

28,200. Then you could only improve the one fishing by putting down the other?—That is the only way. It is very hurtful to our fishing.

28,201. Does it really do you much damage?—Yes; we are afraid to go inshore, although the herrings may be there. We cannot shoot our nets for the buoys.

28,202. (*Professor Huxley.*) Did you ever hear of this regulation, to which you could have appealed:—"It is forbidden to set or anchor nets or any other "fishing implement in any place where mackerel or "drift-net fishing is going on"? Did you know of that? It is part of the Convention Act. Did you make a complaint to the Board of Fisheries on the subject?—I think there was a complaint made, but I don't know how it ended.

28,203. (*Mr. Caird.*) You ought to be more particular in the complaints you make. You cannot expect the Fishery Board to remedy evils they never heard of.—The Fishery officer should look after these matters.

28,204. Is there anything else which you desire to mention to us?—These are the chief things I know anything about.

28,205. (*Professor Huxley.*) Do you ever use cobles here?—Yes, they use them in piloting ships.

28,206. Do you use them for fishing?—Not often; they use them for fishing on the rocks sometimes.

28,207. Do you not go out to sea with them?—No.

The witness withdrew.

R. Renton.

ROBERT RENTON called and examined.

28,208. (*Mr. Caird.*) You are a fisherman here?—Yes.

28,209. What is it that you wish to say to us?—I wish to make a remark about Frenchmen putting down their anchors at the time the boats are drifting with their nets inshore.

28,210. What do they do?—They break the nets. A good many of our men have had their nets broken in the middle.

28,211. Was that within the three mile limit?—Yes, about half a mile from the shore.

28,212. They come to anchor?—Yes.

28,213. Do they put out their nets?—No; they first drop their anchors, and when we are drifting along they will often take out a knife and cut the nets and let them go.

28,214. Does that happen often?—It is not so often, nor is it desirable that it should be. It would be very hurtful to us.

28,215. Did you mention it to any of the gunboats?—No, I never did; they never came across me.

28,216. Unless you take the trouble to speak about these things other persons will not be in a position to look after them.—The men who suffered would most likely mention it to the gunboats.

28,217. Is there any other point you wish to mention?—No, that was the only thing I had to tell.

28,218. Do you agree generally with the evidence that has been given to us to-day?—Yes; I think they have given you a very fair account.

The witness withdrew.

G. Dixon.

GEORGE DIXON called and examined.

28,219. (*Mr. Caird.*) Are you a fisherman here?—No.

28,220. Then what are you?—A fish-curer.

28,221. You wish to make a statement to us?—Yes.

28,222. What is it you wish to say?—There are some of the boats which are in the habit of going on the Sabbath night setting their nets. I believe that according to the Act that ought to be put a stop to.

28,223. (*Professor Huxley.*) The article of the Convention is this: "Herring fishermen being within the "fishery limits of either country, shall comply with "the laws and regulations of the said country re-"specting the prohibition of fishing on the Sabbath "day." You see that if there be any law prohibiting fishing on the Sabbath day, that article would be effective so far as the Convention operates?—Just so.

The witness withdrew.

P. Wilson.

PETER WILSON recalled and examined.

28,224. (*Mr. Caird.*) In 1856 what number of boats were there engaged in the different kinds of fishing on the 13 different stations over which your inspection extends?—There were in 1856, 518 boats, of 6,194 tons, the total value of which was 16,556*l.* There were 811 men resident, and 651 hired for the fishing, the total number being 1,462.

28,225. Would you give us the corresponding figures for 1860?—In 1860 there were 611 boats, of 7,043 tons, the total value of which was 21,987*l.* There were 846 resident men, and 716 men hired, making a total of 1,562.

28,226. Can you give us the corresponding figures for 1863?—Yes. In 1863 there were 699 boats, of 8,119 tons, the estimated value of which was 26,464*l.* There were 909 resident fishermen, and 924 hired men, making a total of 1,833.

28,227. That is a considerable progress?—Yes; the fishing has been progressing very much in value and in the size of the boats.

28,228. The people are anxious to obtain a better harbour here?—Yes; it is considered that nearly double the number of boats would fish from this harbour if it were improved. There is no point of land so accessible from the north, and there would certainly be a great increase of boats coming to the harbour if it were improved so as to be capable of receiving them.

The witness withdrew.

EYEMOUTH.

D. M. Home.

27 July 1864.

DAVID MILNE HOME, of Wedderburn, called and examined.

28,229. (*Mr. Caird.*) You are a proprietor of land in the neighbourhood of Eyemouth?—Yes, and Superior also of the town.

28,230. Is the harbour a good fishery harbour?—It is very insufficient for the number of boats that belong to and frequent it. There are about 200 boats at this moment in the harbour. There is no room for many of them, so that they have to lie outside of the harbour.

28,231. Is it not the principal haddock fishery station on this coast?—Yes, south of the Firth of Forth.

28,232. Have you received no assistance for improving your harbour from the funds of the Fishery Board?—Not a shilling.

28,233. Have you ever made application for assistance?—No, and I think that one reason is this: there is a Harbour Trust here, and one condition of the Fishery Board is that all harbour dues shall be given up in the event of any assistance being given by the Fishery Board in repairing the harbour.

28,234. Then if assistance had been granted the Fishery Board would have superseded the Harbour Trust?—Yes.

28,234*a*. And they do not desire to comply with such a condition as that?—I don't know that it has been formally thought of. It has twice been given to Burnmouth and Coldingham in the immediate neighbourhood, but there are no harbour dues there. I think that the condition upon which assistance has been given to Dunbar is that the harbour dues should all be given up.

28,235. Are the harbour dues paid by the fishermen there—are they charged upon the fishermen?—No, that is a peculiarity here.

28,236. The fishing boats do not pay harbour dues?—No; boats belonging to or frequenting this place do not.

28,237. Then if you made an application to the Fishery Board, as far as fishing boats are concerned you might comply with that condition?—Yes, but there are ships that frequent this harbour.

28,238. Do they insist on dues levied upon ships being given up too?—I speak from vague information, but I understand that they require all dues to be given up.

28,239. Do you think the people here would be willing to comply as far as the fishing boats are concerned?—Yes.

28,240. Do you think it would be desirable for the interests of the fishermen and of the fisheries that some expenditure should be undertaken for harbour purposes?—Yes, we are most anxious that something should be done. They want by excavating to get three feet more water than they have now; and they wish also to take the pier 100 yards further out. There is an old pier which was built by Smeaton in 1780 or 1790, which they would like to take further out, and they are of opinion that that would afford immense accommodation to the whole of the coast.

28,241. Would it increase the accommodation without a very large outlay of money?—I don't know that.

28,241*a*. Has any estimate been formed of the cost?—No, none that I know of.

28,242. Then you have no idea of the cost of providing the additional accommodation which you say is required?—I suppose 10,000*l*.; they don't wish such a harbour as at Dunbar, where they can run to at all times of the tide, but merely a pier to protect them from easterly gales.

28,243. Have you felt it a hardship that the public funds which are devoted for the improvement of the fishery harbours should have been mortgaged altogether for the harbours at Dunbar and Anstruther?—We are not jealous of our neighbours, but we should like to have a share of the public money for the improvement of this harbour, being the most important harbour on this fishing coast. Such a feeling has often been expressed by the fishermen here. The government and the Fishery Board have already laid out large sums at Dunbar, but nothing has been expended upon the harbour here.

28,244. They are now about to lay out large sums at Anstruther which will prevent them having any money at their disposal for many years to come?—Yes.

28,245. Do you intend to make any improvement yourselves?—The Harbour Trust unfortunately is in very embarrassed circumstances. They are owing a large debt of 2,000*l*., and they have quite enough to do to pay the interest upon their debt. This used to be a very important harbour before the railway was constructed. There was then a corn market here, and a great deal of traffic in other respects, but since the North British Railway was completed the trade has almost entirely deserted us.

28,246. Was it a harbour for the export of the produce of the country as well as a fishery harbour?—Yes.

28,247. It is now chiefly, if not altogether, a fishery harbour?—It is altogether a fishery harbour.

The witness withdrew, and the inquiry was adjourned until July the 28th at Anstruther.

Anstruther, Fifeshire, Thursday, 28th July 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

ANSTRUTHER.

T. Fowler.

28 July 1864.

THOMAS FOWLER called and examined.

28,248. (*Mr. Caird.*) You are a fisherman here?—Yes.

28,249. How long have you been engaged in that business?—I have been a fisherman very nearly 30 years.

28,250. Are you well acquainted with all the different modes of fishing practised on this coast?—Yes, at least I have been for more than 25 years at the fishing.

28,251. From your experience as a fisherman over so long a period, is it your opinion that the supply of fish in Anstruther is increasing, stationary, or diminishing?—It has been diminishing during the last three years, and for the last two years back it has been diminishing a great deal.

28,252. Is there any particular kind of fish that has diminished more than another?—The herrings have diminished for the last two years, the white-fishing has increased a good deal.

28,253. By white-fishing do you mean specially the haddock-fishing?—Yes.

28,254. Do you refer to anything else besides haddock?—Yes, large fish have increased during the last two years.

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28,255. Cod and ling ?—Yes.

28,255*a*. They have increased within the last two years ?—Yes.

28,256. When did that increase begin ?—It is now three or four years since they commenced the fishing with great lines.

28,257. Do you mean the long-lines ?—Yes, great lines with large hooks.

28,258. Do you think that it was the introduction of those great lines that caused the fish to increase ?—Yes, the fishermen went further to sea to get the fish.

28,259. Then do you attribute the increase to an improved mode of fishing ?—Yes.

28,259*a*. You find that by improved modes of fishing you can get more fish ?—Yes.

28,260. In your opinion, with the exception of herrings, is there any kind of fish that has diminished in the total supply ?—I do not think so.

28,261. Has there been a great increase in the haddocks ?—There has been this last season, but to some extent I attribute that also to the further distance we have to go out.

28,262. Do you go out further than you did before ?—Yes.

28,263. Have you done so this year ?—Yes.

28,264. Were haddocks not found as near the coast as usual this year ?—No.

28,265. But still you have found them in great abundance ?—Yes.

28,266. Was the quality as good as it was at any other time ?—Yes, quite as good as ever it was, and there were more in numbers caught in this quarter than I ever remember.

28,267. Has the number of fishermen increased ?—Yes, they have doubled in number in the course of the last 20 years.

28,268. Is the price of fish increasing or diminishing ?—It is increasing a great deal.

28,269. Then it must be a prosperous trade at present ?—Yes, as far as the white-fishing is concerned.

28,269*a*. At this moment the haddock-fishing is in a flourishing condition ?—Yes.

28,270. That exhausts the question of the haddock fishery. With regard to the cod and ling fishery, is it improving ?—It has not improved greatly, but it has been better for the last two years.

28,271. Is there any special class of fishermen who turn their attention particularly to cod and ling ?—No. At certain seasons of the year the fishermen go with the great lines I have mentioned for six weeks or so.

28,272. Are they different lines from those which are used for catching the haddock ?—Yes.

28,273. And they practise that fishery only for six weeks in the season ?—Yes.

28,274. When is it that they follow it ?—They begin in the month of March and it lasts until about the middle of April.

28,275. Where do they take these fish; on what banks are the cod and ling found in the greatest abundance ?—They get the herring bait at that season, and it is then that they catch the largest fish.

28,276. It is worth their while at that time to follow that fishing ?—Yes.

28,277. Is the haddock fishery pursued with the same exertion at that time ?—They are always trying it more or less, but the large fish they go after generally at that particular time.

28,278. Over how many months in the year does the haddock-fishing extend ?—It extends for three months in the fall of the year, then from the middle of April up to the end of June. That is the whole of the haddock-fishing.

28,279. Will you tell us in what months it is practised ?—In October, November, and December.

28,279*a*. That is in the fall ?—Yes.

28,280. And what other months ?—From the middle of April, the month of May, up to the end of June.

28,281. That would be six months altogether ?—Yes.

28,282. Then, between the end of December and the middle of April what do you do ?—We are then engaged in catching herrings.

28,283. Is that the winter herring-fishing ?—Yes.

28,284. Then towards the last six weeks of that time you seem to catch cod and ling ?—Yes.

28,285. Do the same fishermen who follow the herring and haddock-fishing also turn themselves to the cod and ling ?—Yes, the same men.

28,285*a*. Do they then give up the herring-fishing ?—Yes.

28,286. Perhaps it has ceased at that time to yield as profitably ?—Yes, we follow the fish all their different seasons. We follow the herring-fishing up to about the end of February, and we are again engaged for nearly two months in the winter herring-fishing.

28,287. Do you catch any turbot here ?—We get a good deal from the month of March till the middle of April.

28,288. In what way are they caught ?—They are caught with the great lines.

28,289. Are they the same lines as those with which you catch white fish ?—Do you mean the same lines as those we use for catching cod and ling ?

28,289*a*. Yes ?—No, they are not the same.

28,290. Do you catch any soles ?—No; none in our quarter.

28,291. Are they not fished for at all ?—No.

28,292. Do you know whether they are to be found at all ?—I cannot tell whether there are any such things to be got here or not. If they are caught, they are caught by the trawl.

28,293. They are not otherwise caught ?—No.

28,294. Do you catch any halibut ?—Yes.

28,295. At what time ?—The same time as the cod and ling, for about six weeks.

28,296. Is there a large quantity of cod and ling caught in the season here ?—There is a good deal caught, but I cannot say exactly what the quantity is. For some years there has been a great deal caught.

28,297. Is the quantity of cod and ling increasing or otherwise ?—It is increasing; the price is far better than it was 20 years ago.

28,298. Is a large proportion of the cod and ling caught here cured ?—Yes.

28,298*a*. Are they mostly cured ?—Yes.

28,299. They are not sent fresh to market ?—Some of them are, but not any great quantity.

28,300. With regard to the herring fishery, I suppose your summer fishery is a more profitable one to the fishermen than the winter fishery ?—Yes.

28,301. When does the summer fishery begin ?—About the 20th of July they all go to the herring fishery, but that is rather too early for this place. They are now all fishing at Montrose, Stonehaven, and Arbroath.

28,302. Then as the season comes on do they work further south ?—Yes.

28,303. Do the shoals of fish come further south ?—I cannot say, but this is not an early place for beginning the herring-fishing.

28,304. Has the herring fishery been rather on the decline ?—Yes, it has been rather on the decline for the last two years.

28,305. How is it likely to be this year, from what you have already experienced ?—We have better hopes this season, but it is hard to say; these things are rather a hidden mystery.

28,306. Is there any cause to which you can attribute the decline ?—No.

28,307. There is no cause to which you imagine you can attribute it ?—No, unless it be to the killing of the young herring at the head of the Firth. That is the only cause of the injury done to the fishing that I know of.

28,307*a*. Do you think that that has had any serious effect upon the fishing ?—Yes, there is no question

about it. They have been killing large quantities of young herring at the head of the Firth.

28,308. They kill them along with the sprats—with the garvies?—Yes, but some years they are all small herrings together.

28,309. Have they done it for some years?—They got it stopped some time ago, but they have begun it again since.

28,310. The decline of the herring-fishing here seems to have been coincident with the stopping of the garvie-fishing?—The herrings go up into the Firth in the winter season for shelter, and as the spring and summer advances then they come down.

28,311. Do you think the loss sustained by you in the destruction of the young in the upper part of the Firth has had any serious effect upon your fishing?—Yes.

28,312. Have you not been in the habit of taking herrings that are full of spawn?—We cannot get them until they are full of milt and roe.

28,313. You are quite aware that you destroy a great quantity of the future brood when you take them up in that condition?—Yes, there is no doubt of it.

28,313*a*. You do not find any fault with yourself for doing that?—We cannot get them at all until they are in that condition.

28,314. Have you any interference to complain of on the part of the French fishermen?—They find fault, I believe, down towards the north.

28,315. But not here?—No, not here.

28,316. They do not disturb you within the three-mile limit?—No, we very seldom see them here at all.

28,317. When you are fishing among yourselves do you find that any injury is done by shooting your nets before sunset in clear weather?—No.

28,318. Do the fishermen themselves not complain of each other for damaging the fishing in that way?—Such a complaint may be made sometimes but the herrings here swim with the sun at twelve o'clock in the day if they are full.

28,319. Would they not be disturbed by shooting among them before sunset?—No.

28,320. You are not of opinion then that it is necessary to observe the regulation which prevents nets from being shot until after sunset?—No; if they are full fish nothing disturbs them. When the fish are thin they might be startled, but when they are close inshore in great quantities the shooting of the nets does not disturb them.

28,321. Practically, you do not observe any rule or regulation with regard to the time at which you should shoot your nets?—Not in this quarter.

28,322. Every man shoots his nets just as he likes?—Yes.

28,322*a*. Nobody ever interferes with you?—No.

28,323. Does the Fishery cutter come down and look after you?—Yes, but she never interferes with any of the fishermen as to the shooting of the nets. I never heard that she interfered with their shooting either sooner or later.

28,324. Are you aware that it is against the law to shoot your nets earlier than half an hour before sunset?—I never heard that in this quarter.

28,325. It is one of the articles of the Convention. The article in question is this: "It is forbidden to herring drift-net fishing boats to shoot their nets earlier in the day than half an hour before sunset, except in places where it is customary to carry on drift-net fishing by daylight." It is not customary to carry on drift-net fishing here by daylight?—There are times when they carry it on in the middle of the day in certain places.

28,326. You do not find that that damages your fishing?—No.

28,327. Is that towards the end of the season?—It is about the beginning of August.

28,328. It is the common opinion among the fishermen that no damage is done by shooting nets in broad daylight?—When the herrings are thin it does damage.

28,329. But if they are plentiful it does none?—No.

28,330. Is there any interference at all by the fishery officers, or the gun-boats, or anybody else, which in anyway injures you as fishermen, or of which you have to complain at all?—The gun-boats look after us and see if the boats are numbered and the other regulations in that respect complied with. That is their duty, but it is not necessary for anybody to interfere with the fishing in any way whatsoever.

28,331. At any rate whether necessary or not, nobody does interfere with it?—No, not here.

28,332. And you do not desire that there should be any interference?—I think it is quite right that they should be looking about in order to see if there is anything carried on that ought not to be.

28,333. In what respect ought they to interfere?—The French fishing boats might come in, and we might be run down by them while we were sleeping.

28,334. Do you think there is anything except the French fishing boats that would justify the interference of the authorities?—I cannot say that there is.

28,335. Would you as a fisherman desire to have any interference with your business?—No further than I should like to see it all in very good order.

28,336. Is there any disorder among you?—No, but it might occur.

28,337. But practically there is no police at sea?—No. A good many of those things which ought to be prevented are done in the dark when we cannot tell what is done or who does it.

28,338. Are such things as those generally done by accident?—Sometimes they are done by accident, and at other times there is no doubt that they are done wilfully.

28,339. But that might arise from some feeling of a personal character in which it would be difficult to interfere and against which the people must protect themselves?—Yes, there are three towns which have fishing boats all fishing along with each other.

28,340. Sometimes one town may not have a good feeling towards another?—Yes; that may be so, but I think it would not be very easy to put all these small things right.

28,341. Where do you get your bait for your line-fishing?—It all comes from the Clyde and Port Glasgow.

28,341*a*. Is it all brought here by railway?—Yes, and by steamer from Leith.

28,342. Has the price increased?—No.

28,343. Is it a moderate price?—Yes.

28,344. And you can get as much as you require?—Yes.

28,344*a*. Is there no supply of bait to be had nearer than Port Glasgow?—We get a good deal from Leith and Newhaven.

28,345. Is that of as good a quality as the bait you get from Port Glasgow?—Yes, but it is not often that we can get it there.

28,346. Then you have not suffered for the want of bait?—No, not for a good many years, but we suffered from it some twenty years ago.

28,347. Is there a better supply now than there was 20 years ago?—Yes, we can get plenty now.

28,348. Then you have no complaint to make on that head at all?—No.

28,348*a*. Have you any oyster beds here?—No.

28,349. Have you any lobster-fishing?—Yes, but there are not many got hereabouts.

28,350. It is not a fishery of much importance?—No.

28,351. Is there any crab-fishing?—Yes, a good deal in the middle of the summer.

28,352. Is it a valuable fishing?—There is a good deal got out of it for a month or so; but take it in a general way it is not a valuable fishing.

28,353. Where do you find a market for your crabs and lobsters?—I believe they are all sent to London. They all go to England.

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28,354. Are they sent by railway ?—Yes.

28,355. Has the opening of the railway here been very advantageous to the interests of the fishermen ?—It must have been.

28,356. It has improved your market everywhere ?—Yes.

28,357. (*Professor Huxley.*) I understood you to say that you catch herrings in February?—Yes, in the months of January and February we catch them off here.

28,358. In what condition are they then ?—They are full of milt and spawn.

28,359. At what time do they become spent fish ?—Towards the end of February.

28,360. Are they the same kind of herrings that you get in the autumn ?—Yes, I think they are.

28,361. Do you ever notice any difference ?—They are of a smaller size if anything.

28,362. Do you light your herring boats at night ?—Yes.

28,363. How do you light them ?—They have a lantern, and they put it up with a stick.

28,364. Have you two lights ?—Yes.

28,365. Does anybody interfere with you with regard to the lighting of your boats ?—No.

28,366. Does anybody interfere with you in any other respect ?—No.

28,367. Have you any complaint to make of the trawlers here ?—I have heard them complained of, but whether they do any damage or not I cannot say.

28,368. Are there many trawlers working off this part of the coast ?—No.

28,369. Are there any now ?—No, I do not think there are many now. It is prohibited.

28,370. I do not mean circle-net fishing, I mean beam-trawling ?—There have been plenty of beam-trawlers here.

28,371. Are there any beam-trawlers working off this coast now ?—It is all stopped except in St. Andrew's Bay.

28,372. The Fluke hole is off here, is it not?—Yes, a mile and a half to the westward of this.

28,373. The herrings are supposed to spawn there ? Yes, in great quantities.

28,374. Do you sometimes sink your nets there ?—Yes.

28,375. In order to catch them on the ground when they are spawning ?—Yes.

28,376. Trawling has been prohibited there on account of some complaints that were made by the fishermen ?—Yes.

28,377. Was it not the complaint that the trawlers got up the spawn ?—Yes.

28,378. Did the fishermen here complain of that ?—Yes.

28,379. How long is that ago ?—About four years ago ; there have been very great complaints here.

28,380. Are there any persons here who ever saw spawn brought up by the trawlers ?—Yes, I believe so.

28,381. Have you ever had any difficulty with the trawlers in consequence of their getting foul of your nets ?—No, they do not trawl on the nets inshore.

28,382. Is there any mackerel-fishing here ?—No.

28,383. Is there any oyster-fishing ?—No.

28,384. I understood you to say just now that you have taken to fishing with your long-lines further out at sea than you were in the habit of fishing formerly ?—Yes, we have done that for the last three years.

28,385. Was that because you could not catch as many haddocks as before with the old mode of fishing ?—Those are questions I can hardly answer. They got plenty two years ago, and now we go further for them than we used to go.

28,386. Do you get plenty inshore now ?—No.

28,386*a*. There are not as many inshore as there were formerly ?—No.

28,387. (*Mr. Caird.*) Have you had any trawlers off this shore—beam-trawlers ?—Not for a few years.

28,388. Has beam-trawling been stopped ?—Yes.

28,389. Did the steam trawler that came out from Leith ever come off this shore ?—I never saw her trawling here.

28,390. You do not complain of any injury done to you by trawling ?—No, except eight or ten years ago.

28,391. (*Professor Huxley.*) By whose authority was trawling stopped off here ?—I cannot answer that question.

The witness withdrew.

D. Corstophine.

David Corstophine called and examined.

28,392. (*Mr. Caird*). Are you a fisherman here ?—Yes.

28,393. And you are acquainted with all the modes of fishing practised on this coast ?—Yes.

28,394. Is there any kind of fish that in your opinion within late years has decreased in number on this shore ?—I think the haddocks have decreased greatly.

28,394*a*. Decreased ?—Yes inshore.

28,395. But have they decreased within the limits of your fishery ?—No, there have been plenty out at sea when we went there, but they have decreased very much along shore where we used to fish.

28,396. Have you found it necessary to go further to sea within recent years than you did formerly in order to catch haddocks ?—Yes.

28,397. You follow them further out ?—Yes.

28,398. What do you imagine is the cause of that ?—I do not know ; I cannot tell. We think they are shutting up inshore.

28,399. Have you larger boats to enable you to go further out to sea than you were in the habit of going out formerly ?—Yes.

28,400. With those larger boats do you find that you can make a better business by going further to sea ?—Yes.

28,401. When did you begin to introduce these larger boats ?—Five or six years ago, perhaps six.

28,401*a*. Was it just at the time you began to find the haddocks were thinning along the shore ?—Yes.

28,402. You found it necessary to follow them further out to sea ?—Yes.

28,403. And you got a better description of boat in order to do it with ?—Yes.

28,404. Is there any difference in the lines you use ?—We use as much length of line again.

28,405. Are there more men in the boats ?—No, the same number of men.

28,406. Then with larger boats, the same number of men, and better lines, are you making a better fishing now than you were in the habit of making years ago ?—Yes.

28,407. And outside in the places where you now fish do you find a great abundance of haddocks still ?—Yes, there are plenty of haddocks.

28,408. There is no signs of decrease there ?—No, I never saw any.

28,409. Do none of the south country trawlers come so far north as this ?—I never saw any.

28,410. Are there any particular banks that you go to ?—When we are fishing for big fish we try to fall in with the banks.

28,410*a*. You mean when you are fishing for cod and ling ?—Yes.

28,411. But how is it when you are fishing for haddock ?—When we are fishing for haddock we like deep water best.

28,412. How deep is the water ?—From 35 up to 40 fathoms.

28,413. And how far off the shore?—Sometimes between 60 and 70 miles.

28,414. Do you succeed best upon a soft or upon a hard bottom?—Upon a soft bottom.

28,415. Do you get a better quality of fish from a soft bottom?—Yes. We get finer codfish on the hard ground, but not so many of them.

28,416. Do you agree with the previous witness, that there is plenty of bait to be had at a moderate price?—Yes, there is plenty of bait.

28,417. Then you have no complaint to make of any hardship with regard to bait?—Sometimes we have a difficulty in getting it from Glasgow.

28,418. You get it sent to you from the Clyde?—Yes.

28,419. Do you never get any bait from Boston?—No.

28,420. With regard to fishing for cod and ling, has that been an improving or a declining business?—It has improved for some years.

28,421. Is the quality of the fish caught now as good as it was in former times?—Yes, I think so.

28,422. Are the cod as large and fine as they were in former years?—They are very good cod now, but I have seen as good cod when I first went to sea.

28,423. Over how many years does your experience as a fisherman extend?—About 30 years.

28,424. Have you been constantly at it during all that time?—Yes.

28,425. Is there a large proportion of ling caught here?—Yes, there are sometimes good takes.

28,426. And the ling and cod caught here are chiefly cured?—No, most of them go away fresh.

28,426*a*. Of both kinds?—Yes.

28,427. To what markets do they go?—They are principally sent away to the markets in England.

28,428. Then you do not try to keep them alive in your vessels?—No.

28,429. Have you no wells in your fishing boats?—No.

28,430. Then you do not follow that mode of fishing which is sometimes adopted further south?—No, we do not.

28,431. Do you catch any turbot?—Yes, we get plenty of turbot or rather halibut. We have very few turbot.

28,432. Do you catch them all upon the lines?—Yes.

28,433. With regard to the herring-fishing, do you regard the white-fishing or the herring-fishing as the most profitable source of income in your business as a fisherman?—I do not know.

28,434. What brings you in the most money in the course of the season?—I think the white-fishing brings in more some seasons than the herring-fishing.

28,435. Did that fishing formerly pay you better?—Yes, sometimes.

28,436. The herring-fishing fluctuates a good deal from year to year, does it not?—Yes, it fluctuates very much.

28,437. Does it fluctuate much more than the white-fishing?—Yes.

28,438. Are you enabled to say from your experience that the herring-fishing has been rather on the decline here?—Yes, it has been rather on the decline for some years.

28,438*a*. On the whole, is there rather a decline in the quantity of herrings cured here?—I do not know.

28,439. Have the boats increased?—Yes, the boats have increased every year.

28,440. Do you get strangers to come here now to fish along with the people of this coast?—Yes, a good many of them come in the season of the year.

28,441. Do the families of your fishermen generally become fishermen?—Yes, most of them.

28,442. Most of the young men go in the fishing boats?—Yes.

28,443. Then, on the whole, I suppose, it is a prosperous business?—Some are doing very well, and some very little.

28,444. It varies according to the means exercised, and there is also something in good luck?—Yes.

28,445. Have you a larger class of herring boat than you used to have?—Yes, the boats are larger now.

28,446. Do you use the same boats for herrings?—Yes.

28,447. Are they half-decked boats?—They are about two thirds decked.

28,448. Are there no decked boats out from here?—No.

28,449. Is there any great change in your mode of fishing within recent years?—I cannot say that there has been much change. There are a good deal more lines used now than were used formerly. There was not nearly as much gear in a boat when I first went to sea.

28,450. Is there any method of fishing employed by you which involves a wilful destruction of fish?—I cannot see that there is.

28,451. I suppose that all the fish you catch you take ashore and sell for food?—Yes, except what we take for bait.

28,451*a*. That is equally necessary for your business as a fisherman?—Yes.

28,452. Is there any interference with you of any kind that restricts your mode of fishing?—No, I cannot say that there is.

28,453. Nobody meddles with you or prevents you from using your own exertions in the best way you think you are capable of doing?—No, except on the north coast; the Frenchmen hurt us a good deal there. We have been a great deal annoyed by their coming among us.

28,454. Is that for the herring-fishing?—Yes.

28,455. Do they come within the three-mile limit?—They come among our boats.

28,456. And do they not mind what distance they are from the shore?—No.

28,457. Do you complain of that?—Yes.

28,458. Does nobody attend to your complaints?—They hurt our boats and nets sometimes very much.

28,459. Whom do you complain to?—To the Fishery Board.

28,460. Has any action been taken by them?—We have not got any recompense.

28,461. Have you had the gunboats among you looking after the fishermen's interests?—No, not here; but they have been about Stonehaven and Gordon, and thereabouts.

28,462. Do the French fishermen go in there?—Yes, there were many hundred sail of them there last year.

28,463. Do they buy any of the fish from the British fishermen?—No, I do not think they buy much.

28,464. Is there anything you desire to bring before the Commission which, in your opinion, might cause an improvement in the mode of fishing or in the result of the fishing here?—I do not know that there is.

28,464*a*. There is nothing you have to say on that subject?—No.

28,465. What sort of a harbour have you here?—It is a very good harbour, but very shallow water.

28,466. Has it not been proposed to make a large expenditure on it in order to increase the accommodation?—Yes, I believe so.

28,467. Would that be of great advantage to you as fishermen?—Yes, it would be of great advantage to this place.

28,467*a*. And to the whole coast around here?—I believe it would.

28,468. Is the situation such that it will be a central point for all fishermen to run to in case of necessity?—Yes, it will be of very great advantage to many of them. Sometimes they have to lay off for three or four hours, and cannot get in owing to the want of water. It is only at half tide that we can get in.

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28,469. Will the proposed expense enable you to get access to the harbour at low water?—I suppose it will. Some of the boats, at any rate, will have access at low water.

28,470. (*Professor Huxley.*) Did the fishermen here make any application to have the harbour enlarged?—Yes.

28,471. How long is that ago?—Five or six years.

28,472. Did they apply to the Fishery Board?—Yes.

28,473. Were they prepared to raise money themselves for the expenses in the proportion required by the Fishery Board?—Yes.

28,474. What is likely to be the total cost of the improvement here?—35,000*l.*

28,475. Do the fishermen themselves raise any money towards it?—No, but we have been always paying a little.

28,476. You mean that you pay harbour dues?—Yes.

28,477. But do you raise among yourselves any specific sum towards the expense of the new harbour?—No.

28,478. That is obtained by other means?—Yes.

The witness withdrew.

A. Welch.

ALEXANDER WELCH called and examined.

28,479. (*Mr. Caird.*) You are a fish-curer here?—Not here, but at Pittenweem.

28,480. Are there many boats belonging to Pittenweem?—There are about 50 now.

28,481. Is there a large quantity of herrings caught at Pittenweem?—I could not say exactly—sometimes 1,200 or 1,400 barrels in good years, and sometimes only 600 or 700 barrels.

28,482. Is there any quantity of cod and ling cured there?—Yes.

28,483. Are there any haddocks cured also?—Yes.

28,484. Can you tell us whether the quantity of herrings and white fish cured has been increasing or diminishing within recent years?—The herring-fishing within the last three years has greatly fallen off.

28,485. How has it been with the other fishing?—The boats go further to sea. The fishing in-shore for white fish has fallen off the same as the herring-fishing.

28,486. Would the same result follow if the fishermen went further out to sea for the herrings?—That has not been established yet.

28,487. Has it been tried?—Two years since our boats left the Firth in the early part of the season, and went further north, but it is only an experiment yet.

28,488. What is the reason the fish have changed their habits and gone further out to sea?—Nothing but trawling.

28,489. If there any trawling here?—Yes, in the Fluke hole here.

28,489*a*. Off Pittenweem?—Yes.

28,490. Has not that trawling been put a stop to?—Yes, for the last 12 months.

28,491. Has there been any increase in the fishing in consequence?—No.

28,492. Has it made no difference?—It has made no difference this year. The spawn has been spoilt there for the last eight or 10 years.

28,493. Had that system of trawling continued for so long a period in the Fluke hole?—Yes, our fishermen tried to put a stop to it for six or seven years.

28,494. Who followed it?—A few of the St. Monance fishermen.

28,494*a*. And not your own people?—No.

28,495. Was that the small beam-trawl?—Yes, a beam about twenty feet long.

28,496. That is only half the length of those used by the English trawlers?—Yes, perhaps it might be from 20 to 25 feet.

28,497. Do they get many fish with it?—They did for a few of the first days they carried on the trawling when the fish were spawning on the ground, but as soon as they had spawned they went away.

28,498. They gave it up then?—Yes.

28,499. Have you seen them bringing up spawn in their beam-trawl?—Not in the beam-trawl.

28,500. Then how did they bring it up?—We have trawled for the purpose of getting spawn to show it to the Fishery Board at Edinburgh.

28,501. But you did not see the men who were working the beam-trawl get it?—No.

28,502. When you saw the spawn brought up it was obtained by people who went specially for the purpose of getting it?—Yes.

28,503. Did you get much of it up?—Yes.

28,504. What did you do with it?—We took it and showed it to the Board of Fisheries.

28,505. (*Professor Huxley.*) Did you use a dredge to bring it up?—Yes.

28,506. And not the common net?—No.

28,507. Did you ever try to get any up with the trawl?—No.

28,508. What made you to take to a dredge if you thought the trawl was enough to get it up?—The trawl is not enough to get it up. It only spoils it.

28,509. Did you ever try the trawl?—No, I never was trawling.

28,509*a*. You got the spawn you speak of up with the dredge?—Yes.

28,510. Did it come up in large masses?—No, it was perhaps five inches thick. It came up in small pieces; it came up broken.

28,511. Was it fixed to the bottom?—It seems the herrings deposit it some inches thick themselves, and then they put shells on the top of the spawn to keep it from floating away. Towards the bottom it is mud, gravel, and small stones.

28,512. Do you think the herrings put the shells on the top of the spawn as a protection?—I have no doubt of it.

28,513. What sort of shells were they—were they whelk shells?—They were small broken shells.

28,514. Was there anything sticking in the spawn?—Small stones.

28,514*a*. And nothing else?—No,

28,515. Then how did you know which was the top, and which was the bottom when it came up?—We found it was covered with mud below, the other side having been swept clean by the tide going over it,

28,516. Then it was only a judgment on your own part as to which was the bottom and which was the top. Did any of that spawn come to life afterwards?—No, it could not come to life.

28,517. Some of it was taken to Professor Allman?—I went over with it. Professor Allman was in Ireland when I went. I have seen the statement recently made to this Commission by Mr. Primrose, that some of it was taken to Professor Allman from Pittenweem, and that if it had been taken in water it would have lived.

28,518. Can you tell me how long it was out of the water?—No.

28,519. Can you give us no information about it at all but that it was taken and was not likely to come to life again?—I know what took place in regard to it. It was in a state of decomposition the next day and had a strong rushy smell.

28,520. (*Mr. Caird.*) Are there any observations you wish to make to us with regard to the objects of our inquiry?—At Pittenweem they complain very much of the taking of spawn by the trawlers. They take away the shells too and the wood and other things to which the spawn might adhere, and the consequence is that all the beds have been spoilt, and and will remain so for a few years to come.

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28,521. Don't they throw the shells over again?—No, they trawl away and take the spawn, and shells, and everything.

28,522. But are they not all tumbled into the sea again?—Yes.

28,523. Then what is the nature of the complaint the fishermen make about the shells being removed; what harm do they imagine arises from it?—Because if they take all the shells away it leaves the fish no place to spawn upon. They have often to spawn in mud, and the consequence is that the spawn does not come to life.

28,524. They imagine that the spawning ground is injured in that way?—Yes.

28,525. Is there anything further in regard to the fishing at Pittenweem that you desire to bring before us?—No, nothing in particular.

28,526. Is there no interference on the part of the authorities which disturbs or injures the fishing here?—No.

(The witness withdrew.)

JOHN TODD called and examined.

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28,527. (*Mr. Caird.*) You are a fish-curer at Anstruther?—Yes.

28,528. Have you been long acquainted with the fishery business here?—Yes, for 25 years and more.

28,529. Has the quantity of fish cured—speaking in the first place of herrings—been on the increase or decrease of recent years?—It has decreased within the last two or three years.

28,530. Has there been a larger proportion sent fresh to the market?—Yes.

28,531. Does that account for the decrease?—No, the decrease is independent of all that.

28,531*a*. There has been a decrease independent of that for the last two years?—Yes.

28,532. But the decrease which would be shown by the returns of the fish cured would not be an accurate representation of the actual decrease, inasmuch as a larger proportion is sent to the market?—No, it would not.

28,533. Has the price increased?—Yes, considerably.

28,534. Has the number of people employed in the herring-fishing increased?—Do you mean the people on shore or the fishermen?

28,535. I mean everybody connected with it?—It has decreased for the last year or two because the fishing has fallen off and they have not been so much wanted.

28,536. With regard to the other kinds of fish, have they increased or decreased? You are a buyer of other kinds of fish as well as of the herring, are you not?—Yes.

28,537. Do you cure cod?—Yes.

28,538. Cod, ling, and haddock?—Yes.

28,539. Do you make Finnon haddocks of them?—Yes.

28,539*a*. They are smoked haddocks?—Yes.

28,540. Is a large proportion of the haddocks cured in that way?—Almost all of them; very few are sent away fresh.

28,541. Is the curing the most profitable?—Yes; an occasional box may go away fresh but the greater part of them are smoked.

28,542. Has the quantity increased of recent years?—The fisheries have been more productive this summer than for many years past.

28,543. You heard what the fishermen stated about their being obliged to go further out to sea than they were in the habit of going in former years?—Yes.

28,544. Are you aware that that is the fact?—Yes.

28,545. Does that arise from the fact that they have better boats and lines, and that they find it now more advantageous to go further to sea?—I believe they can make it more profitable.

28,546. Do they get a larger quantity of fish?—Yes.

28,547. Is the quality better?—The quality is not better.

28,548. Is it much about the same?—The fish are not so large. The fish get out on the soft ground, and they are caught in greater numbers. They are sold by number, but the best fish are found on the hard ground.

28,549. The fishermen like to get into the deep water?—Yes.

28,550. That is because they can get more fish there?—Yes.

28,551. Does your experience extend over more than 20 years?—Yes.

28,552. Is there a larger quantity brought into this place for cure than there was 20 years ago?—I can answer better with regard to 10 years ago.

28,553. Is there more than there was 10 ago?—Yes.

28,554. In fact, there has been a progressive increase?—The quantity this year has been unusually large. It has varied for some years, but this year it has been unusually large. I think years ago they got more fish on the same quantity of line than they do now; you must bear in mind that they go now with double the amount of line, but they don't get double the amount of fish.

28,555. Can you give us any reason for the fish having changed their ground?—No, I cannot state what the reason of that is.

28,556. But you believe it is the case that they have changed their ground?—I don't think there are so many inshore as there were formerly.

28,557. With regard to the cod and ling fishery here, has it been improving?—I think it has rather decreased the last year or two, but the fishermen at Anstruther don't prosecute the cod and ling fishing as much as the St. Monance fishermen.

28,558. Is there any reason for that?—No.

28,559. Is there a large quantity of cod and ling cured here?—Not a large quantity. There were more fish cured four, five, or six years ago than there are now.

28,560. More cod and ling?—Yes.

28,561. You are referring now specially to those fish?—Yes.

28,562. Does that arise partly from sending cod and ling away fresh to the market?—Yes, a good deal is sent away fresh now.

28,563. More than formerly?—Yes, since the railways were established.

28,564. Has the price of cod and ling increased?—Yes, very much. I have paid only 3*d*. for what I have since paid as much as 1*s*. 6*d*.

28,565. Do the fishermen get a large share of that increase?—They get it all.

28,566. Then do the fish-curers make a bad business of it?—They go up to the last halfpenny.

28,567. Which are the principal markets?—Glasgow for smoked fish, London for pickled cod, and England generally for other fish.

28,568. What is pickled cod?—It is cured in barrels and sent to London.

28,569. Has the fact that there has been a larger demand for fish during Lent had anything to do with your increased energy in fishing for them?—Yes; the fish are in the best condition at that time.

28,570. Do you purchase shellfish?—No, I do nothing in the way of purchasing shellfish.

28,571. Is there any point you would like to bring before us which within your knowledge affects the fishing business here?—I don't know that there is.

28,572. Do you think that the improvement in the harbour which has been suggested will be of advantage to the interests of the fishermen?—I think it will.

28,573. Will it increase the quantity of fish coming here?—Yes.

28,574. It will make it a more central point?—Yes. We have sometimes very bad weather here,

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and the consequence has frequently been that the boats could not get away. They will now have deeper water.

28,575. It would be much better for them if they could get out or in at any time?—Yes.

28,576. Perhaps the expenditure will effect that?—Yes.

28,577. That is the principal object of the expenditure?—Yes, to accommodate the fishing boats.

28,578. Will the result of such an expenditure be to bring a good many of the boats to this port from neighbouring fishing towns?—Yes, I think it will.

28,579. Will it be likely to damage the interests of the other ports?—It will draw a few of the fishing boats away from them.

28,580. (*Prof. Huxley.*) Do you cure for the brand?—Yes.

28,581. Do you cure a considerable quantity of herrings?—Yes, a few thousand barrels of fish.

28,582. Where do they go?—Chiefly to Stettin, Hamburgh, and the German markets.

28,583. Do you like the branding system?—No; I think if every man stood on his own brand he would pay more attention to the cure.

28,583*a*. You think if you were left to yourselves you would get on just as well?—Yes.

28,584. Does the brand tend to diminish the price of herrings to the careful and industrious curer?—It brings every one to the same level, and if the herrings come up to the mark at all, they get just as high a price for third-class as for first-class herrings.

28,585. Whereas if every man were left to his own exertions to establish his name he would get paid according to his merits?—Yes.

28,586. The practical effect of the brand is to equalize prices beyond a certain limit?—Yes.

28,587. Do you think that a hardship upon a careful man?—Yes.

28,588. Do you think it would cause any particular disturbance in the market if the brand were done away with?—It would make a little disturbance, no doubt, for a time.

28,589. Would the market soon recover itself?—Yes.

28,590. Are the greater part of the curers here of that opinion?—Yes; but there is a difference of opinion among them.

28,591. There is no brand for the haddocks?—No, nor for the herrings that are sent to London.

28,592. The best article brings the best price, and the buyers there, being good judges of the quality of the fish, a man's name goes for something?—Yes; but the fish that are branded are sold without being looked at, while ours would not be sold without being scrutinized pretty closely.

28,593. You are of opinion that the system which works so well in the case of the haddock would do as well in the foreign as in the home market?—Yes.

28,594. But it may be that the difference is occasioned in the case of one being the home market and the other the foreign?—The foreigners are pretty "kittle" to deal with. I have known as many disputes about branded fish as if they were unbranded.

28,595. You have known disputes?—Yes, I have been involved in them more than once myself.

28,596. Has not the name of the curer some effect notwithstanding the brand?—Yes, it has a certain effect.

28,597. But not as much as it would otherwise have?—No.

28,598. Is there not some practical convenience felt on the Continent from the fact that the warrants issued for branded herrings pass almost as money?—Yes, that does make a difference. A man will sell any amount of branded herrings, whereas if they had not the brand they would not be sold without the purchaser seeing the article.

28,599. You have certain documents certifying that a man possesses a certain amount of full Crown-branded herrings?—When he ships the herrings it is specified whether they are full Crown-branded or unbranded. A foreign merchant if they have the full Crown brand will take them, and they will pass from hand to hand.

28,600. Will the bill of lading serve the purpose of a dock warrant?—Yes.

28,601. It will pass from hand to hand?—Yes.

28,602. As if so much money?—Yes; a bill of lading for 300 barrels will pass from one to another for its value.

28,603. That is a convenience which might cease if there was no brand?—It would be more the individual that would regulate the thing after that.

28,604. Do you think if a man had a bill of lading for a certain number of barrels of herring with a particular man's brand, that that would answer the purpose?—Where the curer was well known it might.

28,605. Would it afford the same convenience in the course of time?—Not for a time, until the brand established a merchant's name. After that, I think there would be no difference in regard to fish as compared with butter or any other article of trade.

28,606. (*Mr. Caird.*) If there was no brand, would not the necessities of the foreign buyer compel him to take fish upon some character or another?—Yes.

28,607. At the very first, when your fish were sent over without the brand, the foreign merchants must necessarily take them without it?—We would not get money so readily upon them.

28,608. Even for one year there would not be any great difficulty in the matter?—No, I think not. They would go all unbranded, and would be sold in some way.

28,609. Those which go now unbranded are in that difficulty?—Yes.

28,610. Some go unbranded?—In some places they don't care for the brand.

28,611. All the fish caught on the west coast of Scotland go unbranded?—Yes.

28,612. Do they go abroad?—Yes, to the Russian and German markets.

28,613. Do they command the market without difficulty?—They are sold in those markets according to their quality.

28,614. Do they sell as good as branded fish in the same markets?—There may be a difference of 1*s.* or 1*s.* 6*d.* per barrel sometimes, but they generally sell quite as good.

28,615. (*Prof. Huxley.*) They pay 4*d.* a barrel for the brand?—Yes. The foreigner sometimes comes here, and wants branded herrings; and unless you can show him that they are branded he does not know the quality, and will not buy them.

28,616–7. Then the fact is, that the Government brand operates, to a certain extent, in deterring foreigners from buying herrings of any other description?—Yes.

28,618. Do you think that the readiness to pay the sum charged for the brand is to be ascribed to that cause?—Yes.

28,619. The fact that the Government puts the brand upon herrings gives an artificial stimulus to the desire for the brand?—It makes the article of a certain value, and people can count to a certain extent upon it.

28,620. (*Mr. Caird.*) You said there was a difference of opinion among the curers with regard to the brand?—Yes.

28,621. Are the majority of curers upon this coast of your opinion?—Some of them think that the brand saves a great deal of trouble, and that if there were no brand the fish would have to be examined here, whereas they can get the money for them at once so long as they have the Crown brand.

28,622. Is that the only reason for which they advocate the Crown brand?—Yes.

28,623. Is there a Fishery officer here?—Yes.

28,623*a*. Is there any other place under his inspection?—Yes, the stations extend from Buckhaven round to St. Andrew's.

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28,624. Are herrings cured there?—Yes, herrings are cured at all those stations. At Pittenweem, St. Monance, Anstruther, and other places, he goes to inspect the fish, and puts the brand on them if he thinks them worthy; one day at Anstruther, another at St. Monance, and another at Pittenweem.

28,625. Does he make a strict examination of them?—Yes; he may open 8 or 10 out of every 100 barrels, and if he finds them all right then he brands the lot, but if he finds one or two of them faulty he may probably reject the whole.

28,626. Would you, as a curer, bestow the same care upon your cure if there was no such inspection, having to rely upon your character instead of the Government brand?—If it was in our hands we should look sharper. We do the best we can now, because the Fishery officer is rather particular.

28,627. But do you not think that your own interest would be quite as strong a motive as the fact that the herrings have to undergo the inspection of the Fishery officer?—Yes, the merchants would be quite as good judges as the Fishery officer, although he may be a good judge too.

28,628. (*Prof. Huxley.*) What other branch of exportation is there here?—There is no other export trade here except fish.

28,628*a*. None except fish?—No.

28,629. (*Mr. Caird.*) Where do you get your salt from?—From Liverpool chiefly, and there is a little Spanish also.

28,630. (*Prof. Huxley.*) You are pretty well acquainted with all the fishermen here?—Yes.

28,631. Did you ever hear whether any of them volunteered into the navy?—Yes, a good many of them have.

28,632. Is that commonly the case?—Yes. Do you mean in the standing navy?

28,633. I mean do they go on board ship, not into the coast volunteers?—No.

28,633*a*. Do they go on board men-of-war?—No.

28,634. They join the coast volunteers?—Yes, that is a common thing, very few of them volunteer into the regular navy.

28,635. Do many of them join the merchant service?—No; they generally stick by the fishing.

28,636. The population must have increased a good deal of late years?—Yes.

28,637. And they all contrive to get a living?—Yes; the fish sell better now than when there was a small number of fishermen.

28,638. Is there anything so peculiar about the fishing trade that it should receive a support from Government which other trades do not get?—I think myself that it ought to stand on its own legs like all other trades.

28,639. In point of fact it is only the least valuable portion of the fishing trade here that does get support. The long-line fishing gets no sort of encouragement?—No.

28,640. Nor the haddock-fishing?—It is just the herrings. The winter fishing gets no encouragement; it is only the summer fishing.

28,641. (*Mr. Caird.*). Are any herrings cured in the winter time?—All of them are made bloaters for the London market at that time.

28,642. There are none of them cured for foreign export?—No.

28,643. (*Prof. Huxley.*) Which do the fishermen get most from, the herrings or the white fish?—The white fish they get every day; the herrings are only a chance thing. The white fish is what they generally pretty much look to. It is the more general thing. They can depend upon it more.

28,644. After all it would seem that the encouragement afforded by the brand system is not to the fishermen, but only to the curer?—Yes, to the curers; it has nothing to do with the fishermen.

28,645-6. It is, in point of fact, an interference between the curer and the man he sells his fish to?—Yes.

The witness withdrew.

H. Macintosh.

HUGH MACINTOSH called and examined.

28,647. (*Mr. Caird.*) You hold some official station in connexion with the harbour works here?—I am clerk to the Harbour Commissioners.

28,648. What is the object of that Commission?—They are incorporated by an Act of Parliament passed in 1850.

28,649. For what purpose?—For the purpose of extending and improving the present harbour.

28,650. As a fishery harbour?—Yes, chiefly as a fishery harbour; but it would accommodate the coasting trade if the projected plans were carried out.

28,651. Do you contemplate a large expenditure upon the harbour?—Yes, 35,000*l*. is the estimated cost.

28,652. Have you had plans made?—Yes, they are all ready for advertising.

28,653. Do you propose to commence shortly?—Yes, as soon as we have the funds.

28,654. How do you raise them?—From the Fishery Board and by means of a loan from the Public Loan Commissioners.

28,655. Is that upon security of any kind?—The harbour belongs to the burgh of East Anstruther, and their revenue, which amounts to between 800*l*. and 1,000*l*., they have handed over to the Commissioners. The sums which have to be borrowed will be borrowed upon the security of the revenues of the harbour.

28,656. Upon the credit of that 800*l*. or 1,000*l*.?—Yes, but we expect the revenue will increase.

28,657. Are these dues levied from vessels carrying on the export or import trade, independent altogether of the fishery interests?—They are levied upon vessels frequenting the port as well as upon our own boats.

28,658. Do the fishing boats pay dues?—The fishing boats pay 6*d*. every time they come in, and there is also a tax upon the fishing boats themselves.

28,659. Is that a common thing?—It is a common thing according to the Burgh Act.

28,660. It is a common thing here?—Yes.

28,661. Is it a common thing in connexion with other harbours?—The same thing, I believe, is done at Pittenweem.

28,662. Is it under an old Act?—Yes, the Harbours Act of 1853.

28,663. Were there any dues levied upon the fishermen previous to that time?—No, they had the use of the harbour perfectly free before that Act passed.

28,664. What, upon the average, does it amount to upon each boat in the course of the year?—I am not sure at present what the average amount of dues upon each boat is.

28,665. You don't know what is paid by each boat?—Sixpence each time they come in, each time they enter the harbour; and there is also a penny upon each cran of herrings landed.

28,666. The whole revenue collected amounts to between 800*l*. and 1,000*l*. a year?—Yes.

28,667. Is that all paid by the fishermen?—No; that is the whole revenue of the harbour.

28,658. It is chiefly paid by the fishermen—No; there are certain other sums which come into the column.

28,669. What proportion do the fishermen pay?—From 300*l*. to 400*l*.

28,670. They pay about one half of the whole sum?—Yes. I think one witness stated that his class did not contribute to the revenue.

28,671. He was not aware of the fact that they really did?—No, he was not aware of it.

28,672. Perhaps he forgot the fact at the time?—It is so nevertheless.

ANSTRUTHER.

H. Macintosh.

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28,673. They do contribute?—Yes.

28,674. Then it is a tax upon the fishermen?—Yes. to the extent of 300*l.* to 400*l.* a year. I may say however that they volunteered to pay it themselves.

28,675. In what way did they volunteer?—The fishermen volunteered that they would pay 6*d.* every time they came into the harbour for a new harbour.

28,675*a*. Did they not pay it before?—They volunteered to pay it when we were discussing the question and we got it put into our new Act of Parliament.

28,676. What is the date of your new Act?—1860.

28,677. Is the mortgage upon that revenue held to be sufficient security by the Public Loan Commissioners for making that advance?—There is other security they look to. The sum to be advanced by the Loan Commissioners is 16,500*l.* The rest we get in the shape of a grant from the Fishery Board.

28,677*a*. The sum advanced by the Loan Commissioners you would pay in annual instalments to be spread over a number of years?—Yes.

28,678. Do you pay any part of the sum which the Fishery Board is to advance?—Yes, we pay 4,500*l.*, which we raise by loan at four per cent.

28,678*a*. Then 12,000*l.* is a grant?—Yes.

28,679. Do you expect to have your revenue much increased when you have your harbour constructed, by bringing fishermen from other quarters?—Not only by that, but by increasing the coasting trade. I may mention that when we were discussing this point several years ago the fishermen then had an impression that the class of boats would grow much larger if they had this deep-water harbour accommodation. They were of opinion that in that case they would get decked boats and go further out to sea.

28,679*a*. Then they look at it as a future advantage to themselves?—Yes, they look at it as necessary to be done.

28,680. But if the expenditure is made solely at Anstruther, would it not limit the advantages entirely to the people of Anstruther; if there is no expenditure except at Anstruther to insure deep water for heavy boats, that would be an advantage solely to those boats which frequent Anstruther?—We expect that boats will come from other places to take advantage of the harbour here.

28,681. Is it a good point in the Firth for the fishermen?—The curers are chiefly resident here.

28,682. What will be the depth of water in the new harbour at low water?—Mr. Primrose in his examination mentioned seven feet, but the engineer told me that it would be nine feet at the lowest spring tides.

28,682*a*. Would seven feet at low water admit the large class of fishing boats at any time of the tide?—Yes, it is all deepened up to a certain point, so that it will take them in.

28,683. (*Prof. Huxley.*) The regulation of the Fishery Board under which the Harbour Trustees apply the money is that the local body shall supply one third of the expenditure; how is that managed here? You say the cost of the works will be 35,000*l.*?—Yes, that is the estimate we have.

28,684. Then you borrow a certain sum from the Public Loan Commissioners?—Yes, 16,500*l.*

28,685. How is the interest of that to be paid?—It is to be paid from the revenues of the harbour.

28,686. So that, in fact, all the town finds here is the revenue of the harbour; that is the entire local contribution towards the works?—Yes.

28,686*a*. You speak of a revenue of about 1,000*l.*?—That is what it is at present, but we expect that it will increase very much.

28,687. Then at the present moment the contribution of the town does not amount to the interest of the total expenditure at three per cent.?—The interest of the loan is to be three and a quarter per cent.

28,687*a*. But in point of fact, what you contribute does not amount to the interest of the whole sum?—Not of the total expenditure; the town council have given up their harbour, which is so much a year.

28,688. Will the sum raised by loan have to be paid up completely?—Yes. There is a provision in the Act for a sinking fund, and we have not the slightest doubt it will be paid.

28,688*a*. Still it will come out of the harbour dues?—Yes, we have not the slightest doubt of its being paid. There is an absolute necessity for the thing being done, and done soon. The Act I referred to was the Pier and Harbour Act of 1863. The fishermen paid on their fishing boats 182*l.* in 1863, and 328*l.* of fish rates.

28,689. That was in 1863?—Yes, the return is August 1863.

28,690. How much is that altogether?—Upwards of 500*l.*

28,690*a*. That is fully half of the revenue?—Yes. I find that Pittenweem is under the Anstruther Act.

28,691. Pittenweem will be included in the advantages conferred by the construction of the harbour?—Yes, and the whole of the fishermen in the Firth will be also included.

The witness withdrew.

W. Gillis.

William Gillis called and examined.

28,711. (*Mr. Caird.*) You are the Fishery officer here?—Yes.

28,712. Have you been long stationed here?—For two years.

28,713. Have you under your inspection a considerable length of coast?—From Buckhaven to St. Andrew's inclusive.

28,714. How many stations have you?—About five.

28,715. Have you in your possession any statistics which would show us the progress which has been made at these five stations?—Yes.

28,716. Can you give us a comparative statement of the number of boats, the number of men, the value of the boats, and the quantity of fish cured, from 1855 to to the present year?—Yes; I can only give you what is cured altogether, I cannot distinguish the different stations.

28,717. All we require is the total amount. You are about to read the figures at all the different stations over which your superintendence extends?—Yes. The return is as follows:

Year.	Number of Boats.	Value.	Number of Men.
		£	
1855	519	21,599	1,993
1856	560	23,216	2,189
1857	588	24,182	2,306
1858	607	23,969	2,349
1859	688	26,014	2,536
1860	717	26,017	2,579
1861	733	27,574	2,710
1862	725	28,957	2,814
1863	727	29,277	2,845

28,718. That is your last return?—Yes.

28,719. What returns of fish can you give us during those years?—I can give you statistics with regard

to the herring, the cod, and the ling, from the year 1855. In the first place I will give you the cod and the ling:—

Year.	Number of Fish cured.
1855	98,392
1856	125,595
1857	65,421
1858	84,351
1859	85,321
1860	91,823
1861	39,739
1862	67,989
1863	69,152

28,720. In addition to that there is a large quantity that goes away fresh which is not estimated among the cured fish; you cannot give us any correct estimate of that?—No.

28,721. What else can you give us?—I can give you an estimate of the quantity that goes away fresh.

28,722. Is that an estimate merely?—Yes.

28,723. Has it been progressive?—Yes, of late years.

28,724. Have you any record of the quantity of Finnon haddock sent away?—No.

28,725. Have you no record of that at all?—No record has been kept.

28,726. Then will you now give us a statement of the cured herrings?—It is as follows:—

Year.	Number of Barrels.
1855	22,907
1856	22,344½
1857	35,640
1858	15,472
1859	37,831
1860	94,965¾
1861	64,760
1862	44,293
1863	23,006

The witness withdrew, and the inquiry was adjourned to Broughty Ferry on the same day.

Broughty Ferry, Forfarshire, Thursday, 28th July 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

DAVID COBB called and examined.

28,692*a*. (*Mr. Caird.*) You are very well acquainted with the fishing interest in the mouth of the Tay?—Well, I cannot say I know much about the practical part of it, but I know what they generally carry on in the fishing way.

28,693. Are there many men employed here in sea fishing?—I made up a list lately for the lifeboat people, and there were then about 108 men and sea-going boys who went during the winter time.

28,694. What different kinds of fishing do they practise here?—Haddock-fishing and herring-fishing, and fishing in the river occasionally for flounders, codlings, and small fish.

28,694*a*. Do they get any garvies here in the river?—They get what they call small herrings.

28,695. Do they get any large quantity of them?—Only occasionally. I have heard them state that they only come once in seven years, or about that time, to any amount.

28,696. Is there any sparling fishery here?—No, there is no sparling fishery.

28,697. Are no sparlings caught here?—There are some up the water among the reeds, but none at Broughty Ferry.

28,698. Is the flounder fishery a very valuable one here?—They sometimes catch a good many, but then they do not get a large price for them.

28,698*a*. What way do they catch them?—With lines.

28,698*b*. Do you know whether the haddock fishery has been a productive one of late years here?—I have heard the fishermen complain much that it has fallen off.

28,699. Has it fallen off during this year; do you know whether it has been in that condition this season?—Yes it has been so, at all events inshore.

28,700. Do the boats not go far to sea here?—They have to go far out to sea before they can catch them in any quantity.

28,701. Then they do go far to sea?—Yes, sometimes 80 or 90 miles from the Ferry.

28,701*a*. Have they had a good fishing here this last season?—Really I cannot state that.

28,702. Are the fishermen generally in prosperous circumstances?—As far as the haddock-fishing is concerned I imagine that they merely make a living.

28,703. Is the herring fishery more valuable to them?—Of course it is.

28,704. Has it been progressing in yield, or is it falling off?—It varies very much. There is always a difference according to the season. Last year they had very little fishing. There was a very small drift.

28,704*a*. How has it been this year?—As yet they have not been complaining this year, but this is only the second week of the fishery.

28,705. Is it promising fairly?—I have heard no complaint. I think they say there is a good appearance of herrings, but I am simply speaking from hearsay.

28,706. Do you know whether the number of men and boats engaged in the fishery here is increasing?—I think it is; there are more boats, and they are larger boats.

28,707. The boats have increased in size?—Yes.

28,708. Are there many fish cured here?—None now.

28,708*a*. They are all sent fresh to market?—They are sent fresh to market. Formerly, until last year, they sold their cod to a fish curer here, and this year they have sold them to cadgers; but whether those cadgers partly cure them or not I do not know.

28,709. Do you smoke the haddocks here?—No.

28,710. Do you send them all fresh to the market?—Yes.

28,711. Are there any soles caught here?—No, there may be a sole caught occasionally, but that is all.

28,712. Is there any complaint with regard to trawling off this coast?—Yes, there are great complaints of that.

28,713. Who trawls here?—The people from the Firth, I believe. The fishermen complain greatly of their trawling in St. Andrew's Bay. They used to fish for half the year here, but did not find it necessary to go

BROUGHTY FERRY.

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far out before the trawlers came, and they blame them for frightening away the fish.

28,714. Are these trawl-vessels employed at the present time?—Just now they are employed at the herring fishery I believe.

28,715. Did they trawl during last season?—Yes; some years ago our fishermen got a living by fishing in St. Andrew's Bay, but they cannot do that now.

28,716. You are speaking of the line-fishermen?—Yes.

28,717. Are they now obliged to go far out?—Yes, there is nothing to be found in St. Andrew's Bay.

28,718. And they attribute that to the trawl fishermen having frightened away the fish?—Yes, and to their having disturbed the food.

28,719. And also to their having destroyed the spawn?—Yes, they think they have destroyed the spawn of the herrings too. I remember Mr. Primrose being here on one occasion, and he did not think that that was very likely.

28,720. He did not think that they had destroyed the spawn?—No.

28,721. But the fishermen think that they destroyed the food by trawling?—Yes, to use their own words, it is just like sending cattle into a ploughed field, where they would not remain continually turning up the soil and finding nothing for them to eat. I have heard them make that remark.

28,722. Do you know whether the fishermen have been procuring a better class of boats of late years?—I think they have.

28,723. Larger and finer boats?—Larger and better boats, and half-decked.

28,724. That enables them to go further out to sea?—Yes, it is more profitable for them.

28,725. Do they get a better fishing now by going further to sea than they were in the habit of getting nearer inshore?—I cannot answer that question. It is not long since I came to this place. I have only been here 13 years. I know nothing of their ways previous to that time. I know that they have not fished constantly in St. Andrew's Bay since I have been here.

28,726. (*Professor Huxley.*) Is there any circle-net fishing here in the Firth, I mean seining?—I do not know what seining is.

28,727. Have you never heard of any circle-net fishing?—No.

28,728. Do they use any small trammels in the Firth?—I never saw any.

28,729. Is your business connected with the fishing?—No.

28,730. But you take an interest in the fishermen?—Yes sometimes they take my advice in matters not ; o ted with the fishing.

28,731. Are there any oysters at this part of the mouth of the Tay?—None that I ever heard of.

28,732. (*Mr. Caird.*) Are there no oyster beds?—No.

28,733. (*Professor Huxley.*) Is there any crab-fishing or lobster-fishing?—The fishermen do not fish for them here.

28,734. They do not set pots?—No. There is a small place down here at Westhaven where the fishermen fish for crabs.

28,735. Is that any considerable fishery?—No, not much.

28,736. (*Mr. Caird.*) Is there any difficulty in getting bait here?—Sometimes there is, I believe.

28,737. Where do they get it?—They get mussels in the river. The fishermen have been annoyed by people trying to prevent them from hauling up their boats in front of the beach; they charge them for doing so and the men object.

28,738. Who charges them?—The proprietors of the property facing the sea.

28,739. Have they not been in the habit of hauling up their boats there from time immemorial?—Yes.

28,740. Has any one a right to prevent it?—I hardly think so; but I think there has been some encroachment on the rights of the Woods and Forests.

28,741. Is the foreshore claimed by the Woods and Forests?—I rather think it belongs to them, but I do not know whether they claim it.

28,742. The Woods and Forests have not interfered with them?—No; but the proprietors of the houses in a street running up adjacent to the river have done so, and they have charged the fishermen for hauling up their boats in front of those houses. They say they obstruct the view, and the fishermen are very much annoyed in consequence.

28,743. (*Professor Huxley.*) Have you heard any complaints with regard to catching young herrings in the winter time here in the Tay?—The Fishery officer sometimes tries to prevent them from fishing with small nets.

28,744. Do they attempt to fish with nets of a small mesh?—I do not know anything about the nets, but I have heard that stated.

The witness withdrew.

G. Ross.

GEORGE ROSS called and examined.

28,745. (*Mr. Caird.*) Have you long been a fisherman here?—I have been all my lifetime a fisherman.

28,746. What kind of fish is it that you chiefly catch?—Haddocks, cod, and flounders.

28,747. The haddocks and cod you catch out at sea?—Yes.

28,748. The flounders you get in the river?—In St. Andrew's Bay.

28,749. Do you know if there has been any increase in the number of men and boats employed in the fishery of late years?—Yes, there has been a great deal of increase.

28,750. Can you tell us how much?—I should say one-third since this time eight years ago.

28,751. They have increased one-third?—Yes.

28,752. Are the boats larger?—Yes.

28,753. And they have longer lines and more of them, and so on?—Yes.

28,754. What has been your experience in regard to the quantity of fish caught here; has it been increasing or diminishing of recent years?—It has diminished inshore in the bays for a number of years. There is not much fishing in St. Andrew's Bay now.

28,755. For what kind of fish?—Haddock, cod, and flounders.

28,756. All sorts of fish?—They cannot get the same fishing now that they were in the habit of getting in former years.

28,757. What is the cause of that?—I do not know.

28,758. Have you no idea at all in your own mind?—I think the fish have been disturbed. I think the fishing would be the same if the ground was the same as it was in former times.

28,759. What has been the reason of that; have you got larger boats and do you go further out to sea for the fish?—Yes, we follow them up.

28,760. Do you get more fish further at sea than you were in the habit of getting inshore?—No, we could get more fish inshore 30 years ago than we can get out at sea now.

28,761. Has this last season been a good season for haddocks?—Yes, but we have to go far out to sea for them.

28,762. It has been a good deal more trouble and cost to you in obtaining them?—Yes, and more risk as well.

28,763. If the boats and men have increased one-third in eight years, that looks as though it was a business that was paying?—I think it is safe to say that, but the fish do not come in as they did in my

younger days; for many years we had no occasion to go the length of the Bell Rock after them.

28,764. Then now must you go a long way outside of the Bell Rock?—Yes.

28,765. Do you go into deeper water than that you were in the habit of frequenting years ago?—Yes, it is deeper of course the further out you go.

28,766. Is there much difference in the depth of water where the haddocks are found now compared with what it was where you used to find them?—Sometimes in St. Andrew's Bay we could catch fish along the shore in what we call the Pool, in two or three fathoms of water. There is not such a thing to be seen there now, and I believe the boats have not been there for a number of years.

28,767. But are you not able to give any reason for the change that has taken place in that way?—No, I could not say for certain what the cause of the change has been.

28,768. Have you been engaged in fishing for cod and ling also?—Yes, all sorts.

28,769. Is the quantity of the cod and ling you can catch increasing or diminishing?—There are none at all to be got now in St. Andrew's Bay, summer or winter.

28,770. In former times were there cod and ling in St. Andrew's Bay?—Yes, there was plenty of all sorts.

28,771. Did you get soles there?—Yes.

28,772. Did you take them with a hook?—Yes.

28,773. Do you get any soles at all now?—We never had a line shot for them.

28,774. Outside do you get them?—No, there are none outside, and they have been fishing on the banks on the sandy ground.

28,775. Do you get any turbot or hallibut?—We may get one occasionally, but they are very [illegible]—We

28,776. Has the fishing for herrings [illegible] rare fish. or decreasing?—The herring-fishing [illegible] been improving ing very much this last year or [illegible] has been improving two.

28,777. Do you get the herrings close inshore?—Yes, we get them inshore now instead of going to the Bell Rock.

28,778. Is there any lobster fishery here?—No.

28,779. Is there any crab fishery?—No, nothing of the kind.

28,780. Are there any oysters?—No.

28,781. Do you get sparlings?—Yes, there are plenty of sparlings but they are not here, they are down by the Spit water.

28,782. Is that not an object which you follow as a fisherman?—No, we use only the line and the net—the herring net and the long-line.

28,783. Is your business as a fisherman as profitable as it was 20 years ago?—It is because the fish are more valuable than they were 20 years ago. They are not as plentiful, however.

28,784. You do not get as many fish, but they are more valuable and bring a higher price?—There are a good many fish taken out at sea when you go the length. But where we were in the habit of using 800 hooks the fishermen now use 1,600. They have what we call a double branch; instead of one line they have two.

28,785-6. What you were in the habit of using 800 hooks for you now find it necessary to use 1,600?—Yes, taking it in a general way that is so.

28,787. Speaking as a fisherman knowing what the quantity of fish is that comes on shore, do you think it is greater than it was in former years—I mean the whole quantity?—I do not think it is nor "nigh hand" to it.

28,788. Have you any difficulty in getting bait here?—No, there is plenty in Loch Gare. There are plenty of mussels in the river here. If it was not for the bait there would be no fishing at all. The banks along the river are somewhat dangerous.

28,789. What banks?—The banks of the Tay. You have to go some miles down the river before you can get fishing at all.

28,790. Then is the advantage of having bait here the inducement to come here?—Yes, and Dundee being so "nigh hand" or it would never have been a fishing ground.

28,791. (*Professor Huxley.*) What time do you catch your herrings here?—In the winter season, but only in small quantities.

28,792. What boats have you engaged?—Every man here is engaged and they have two or three herring-nets each. There are no boats engaged here by the merchants.

28,793. What time of the year do you catch the herrings?—The herring-fishing begins in September and October.

28,794. When are they full?—The herrings do you mean?

28,795. Yes; when do you get full fish?—Before Christmas.

28,796. And when are they spent?—They are spent again in February.

28,797. Do you get any autumn fishing about this time?—No, the water is too clear for them at this season.

28,798. Do not you get any herrings here at all now?—No.

28,799. There are none in the river?—No.

28,800. Is it a large herring or a small herring that you get in the river?—It was a large herring that we got last winter.

28,801. Is it of the same size as the other herrings?—Yes, but rather larger if anything.

28,802. You do not get any at all about this time?—No, a person never thinks of looking for any at this season of the year.

28,803. Is that because you are engaged in other kinds of fishing?—If we could see them or find them we should take them at any time.

28,804. Do you get no sign of them—have you no birds?—I have seen times when we could have skippered them up easily, lots of them.

28,805. At what time of the year?—Just now, but they are only like needles.

28,806. Do you think they spawn in July?—No, they spawn in the winter season.

28,807. Only in the winter season?—In the dead of winter. They spawn in the month of February.

28,808. You do not think they ever spawn here in August or September?—No, it is very rarely that that is the case. I do not think I ever saw it. I never saw a spent herring until the winter season of the year.

28,809. All your herrings are caught in the river?—Yes.

28,810. You do not go outside to catch them?—No.

28,811. (*Mr. Caird.*) Is there anything you would like to add to the evidence you have already given?—We think that the herrings here are peculiar to this part, and that they never go out of it. They live in the fresh water.

28,812. Do you think they are a different quality of herring to those which are caught out at sea?—I believe they are.

28,813. Do they taste differently from the sea herrings?—They have a little different flavour. They are more agreeable for eating and they are white also in the flesh. We think they are bred and fed in the river, and that they do not go to sea at all.

28,814. Have you any complaints to make with regard to the place where you are in the habit of hauling up your boats; does anybody oppose your using the shore for the purpose of hauling up your boats?—If they like to quarrel with us they can. No doubt if they could get the fishermen put out altogether they would.

28,815. Do you haul your boats up now in the same place that you have always been in the habit of hauling them up?—Yes.

28,816. The same place that you have been in the habit of hauling them up ever since you can remember?—Yes.

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G. Ross.

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28,817. And your fathers before you ?—Yes.

28,818. Was any objection ever made to it ?—No, never before lately. The yawls used to be hauled up on the brae.

28,819. Has anybody told you that they would prosecute you if you hauled up your boats there ?—Yes, every time we haul them up they say they will, and they have obliged us to haul up our boats the breadth of a street from their doors.

28,820. Is that in the place where you have been in the habit of hauling up your boats ?—Yes.

28,821. Have you assented to their objection and foreborne from hauling up your boats there?—No.

28,822. Then you still haul them up there ?—Yes.

28,823. Then they have not prevented you, or taken the law of you ?—No.

28,824. They have only threatened it ?—Yes, and they are always threatening.

28,825. They have not taken out a summons ?—No ; they have threatened to take out summonses if we dared to haul them up before their doors.

28,826. Have you given up so hauling them in consequence ?—Yes, we were forced to do that.

28,827. Where did you go then ?—Only a little further off.

28,828. Have you ever made any representations to the Fishery Board upon the matter ?—No more [illegible] that they have threatened to prosecute us ; but [illegible] have always been threatening us in that way. I [illegible] to the trawling boats which may say with regard [illegible] allowed to continue the come here, that if they are [illegible]

men will not be able to get their bread, and they cannot go far out to sea at the time these trawlers are at work.

28,829. (*Professor Huxley.*) You are talking now of St. Andrews' Bay ?—Yes. The trawlers carry away the long-lines ; we cannot get a line shot for them.

28,830. What trawlers are they ?—From the Firth of Forth. From St. Andrews and Pittenweem.

28,831. Are there many of them ?—There are about a score of them, and the men cannot go now to get fish in the winter time and obtain a living by it. I have seen the fish coming inshore as natural as life. The haddocks used to come in the bay of St. Andrews in the winter. Now there is no such thing to be seen. There used to be very good cod, and ling, and skate. Now there is no such thing.

28,832. Has trawling been going on all the time ?—Yes.

28,833. Has trawling been going on for the last eight or ten years ?—Yes.

28,834. Do you think this has been occasioned by the trawling ?—I could not say that it has ; but the boats have now to go ten miles this side of the Bell Rock ; they consider that they cannot catch fish nearer inshore. The trawlers also break the shoal of the fish if they do come in.

28,835. Do you think the boats going far to sea prevent the fish from coming in then ?—Yes.

28,836. Both the white fish and the herring ?—Yes ; but the trawl-boats are the greatest annoyance to the fishermen at Broughty Ferry.

The witness withdrew, and the inquiry was adjourned until July 29, at Stonehaven.

Stonehaven, Kincardineshire, Friday, 29th July 1864.

PRESENT :

J. CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

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ALEXANDER LEPPER called and examined.

28,837. (*Mr. Caird.*) Have you long been engaged in the fishing here ?—I have been long engaged in the herring-fishing.

28,838. Is there no white-fishing here ?—We go white-fishing 5 miles to the northward of this.

28,839. You understand all about white-fishing here ?—Yes, we make a practice of it all the year through.

28,840. And you have done so for many years?—Yes.

28,841. With regard to the herring-fishing, is the yield of herrings as good as it used to be ?—Some years it is, but it is not a regular thing. A year or two ago there was as good a fishing here as ever I saw, but last year it went very deficient again.

28,842. Have the herring shoals in any way changed their position along the coast ?—They do not come as close inshore as they did in former times, say 30 or 40 years back. At that time they came close in, but they have not done so lately.

28,843. Can you assign any reason for that?—I think it is because there is such a large number of boats at work now, and such fleets of Frenchmen and Dutchmen. They catch the shoals in the offing and break them up.

28,844. Does that prevent the shoals coming in near the shore as they were in the habit of doing formerly ?—Yes.

28,845. Is there any other reason that you can assign for the fact that the fish do not come as close inshore except that which you have just mentioned ?—No, none.

28,846. By going out further to sea do you find as good shoals as you used to find inshore ?—No, I think not.

28,847. Has the number of people engaged in the herring fishery increased much of late years ?—Yes, they have increased for some years back.

28,848. Are they going on increasing ?—Yes, they are at this moment more numerous than ever they were.

28,849. Have you two seasons for herring-fishing here, or only one ?—Two.

28,850. A summer and winter fishing ?—Yes ; we prosecuted the winter fishing very successfully this last year.

28,851. Which yields the most ?—The [illegible] fishing carried on at this time.

28,852. Is there a great difference between the two ?—Yes.

28,853. Are they fishing now ?—Yes.

28,854. This is your best fishing ?—Yes.

28,855. Are they mostly full fish that are caught at this time ?—Yes.

28,856. Are they cured ?—Yes.

28,857. Are the fish caught in the winter fishing sent fresh to the market ?—Yes, I suppose so.

28,858. With an increase of boats has there also been an increase in the size of the boats compared with what the size was formerly ?—Yes, they are much larger boats now; they are as large again as they used to be.

28,859. Have they a larger fleet of nets ?—We have double the quantity of boats; they are double the size, and they carry double the number of nets.

28,860. Then are the fishermen making more money than ever they were ?—I suppose it is just about such like. They get more money at times but they are put to a greater expenditure.

28,861. Is there any complaint of your being interfered with in any way, whilst engaged in the herring fishery, by Frenchmen or other foreigners ?—Two years ago we were very much annoyed by them and last year also.

28,862. Have they come here in any number?—Not yet. Two have only been in the bay yet.

28,863. Do they fish on the same ground that you fish?—Yes, alongside of us.

28,864. Within the three-mile limit?—Two years ago they did.

28,865. Does anybody come here to see that they keep beyond the limit?—No. Their own ships come alongside occasionally, but perhaps they will not catch them at the time they are there. It is all night-work.

28,866. They come here among you and fish in the same place?—Yes, they come alongside of us; but if our gear gets mixed in with theirs we having a smaller vessel and lighter material are sure to go to the wall. Our gear will break all to pieces.

28,867. Is much injury done in that way?—Yes.

28,868. Have you made a complaint of that to the Fishery Board?—No, not I.

28,869. Have any of the fishermen here complained?—I heard that they did, but I cannot say if it is true or not.

28,870. Have you sustained any serious damage from them?—Some have lost a good deal of nets by them.

28,871. Is there any other thing that you have reason to complain of with regard to the prosecution of your herring fishery?—No, I know of nothing more.

28,872. Do you make any rule among yourselves or does anybody see that there is a rule enforced with regard to the time at which you shoot your nets?—There is no fixed time for shooting them.

28,873. Do you shoot them at your own pleasure?—Yes, either at 12 o'clock in the day or 12 o'clock at night.

28,874. Do you think it is injurious to the interests of the fishermen to shoot them in broad daylight?—I cannot say. I have not found out the secret yet.

28,875. Have you not found out that the herrings will not rise if you shoot your nets in broad daylight?—I do not think it makes any odds.

28,876. It makes no difference?—No.

28,877. Then if there is a law that restricts you from shooting your nets till half-an-hour before sunset do you think that that is injurious to you?—No, I am certain it would be of advantage. Last night we shot about seven o'clock and were hauling away until nine, when we got foul of an anchor and jammed up. Some six or eight boats had to haul up their nets in consequence. If the nets had not been shot before sunset we might have been regularly drifting on without getting jammed at all.

28,878. How was it that the nets got jammed?—They were too long swimming before the herrings rose.

28,879. I thought you said just now that there was no advantage in shooting at any particular time and that you might shoot at broad daylight if you chose?—I thought you meant with regard to the rising of the fish.

28,880. No, I asked if it was to your interest as a fisherman?—It makes all the odds if we can get clear of our neighbours. If we get foul of each other of course we are injured.

28,881. But that has nothing to do with shooting them at sunset. Your objection is to having the nets a certain time in the water?—We shall never get any good herring-fishing until the nets are prevented from being in the water an hour before sunset.

28,882. Would you think it for your interest as fishermen, the law being that you should not shoot your nets until half an hour before sunset, that that law should be strictly enforced?—I think it would do much good.

28,883. What is the reason you come to that conclusion?—I think it would keep every man clear of his neighbour for about two hours at the first part of the night.

28,884. They would not then have shot their nets until two hours before the herrings began to rise?—Last night they were shot three or four hours before the herrings rose, and by that time they had all become jammed. If they had only been shot about 20 minutes before the herrings rose, so as to get clear, they would have been all right.

28,885. Towards the end of the summer fishing, do you fish by means of ground-nets?—No; they are all drift-nets.

28,886. Do you never alter your mode of fishing?—No; some may alter them a little, but they are all left swinging. When once they come close inshore, such as 20 or 50 yards from the land, we get them to an anchor, because the nets would get foul of the bottom.

28,887. Do you sink your nets?—They all go down. Our nets are about 9 fathoms themselves.

28,888. (*Professor Huxley.*) You never sink your nets to the bottom?—No.

28,889. (*Mr. Caird.*) With regard to the haddock-fishing has it been improving or declining of recent years?—I cannot say very much about that. It is just about as it was I think. It is the same as the herring-fishing. They do not come as close inshore as they did 40 years back, and very strongly they used to come then.

28,890. Are there more boats engaged in the haddock-fishing now than there were formerly?—Yes, double the number.

28,891. And are they larger boats?—Yes.

28,892. And longer lines?—Yes.

28,893. And you go further to sea for the fish?—Yes.

28,894. Do you get as large a quantity of haddock as ever you got?—Yes.

28,895. And is there a larger quantity of haddocks brought on shore by all the fishermen engaged than there was 20 years ago when the boats were smaller?—The more the fish are brought ashore the more appear to succeed them, and there are as many brought on shore by these men as there were 30 years ago.

28,896. Then there is no sign of the fish being fished out?—No.

28,897. There are plenty of fish in the sea?—Plenty; we can get great numbers 30 miles off.

28,898. Is there any particular bank that you fish upon here?—We fish upon the Mar Bank.

28,899. How far off is that?—About 30 miles to the nearest part of it.

28,900. Is it a soft bottom?—Yes, it is a bank of sand.

28,901. Do you get haddocks in the best condition there?—Yes, in very good condition.

28,902. Do you get many cod and ling?—No, we have no gear that is strong enough for hauling in cod and ling.

28,903. Then you do not practise that kind of fishing?—No.

28,904. Has it ever been done along the shore?—Yes.

28,905. Is it done less than formerly?—Yes.

28,906. Is that because the haddock-fishing has been found more profitable?—Yes.

28,907. Are there any turbot and halibut caught here?—Yes.

28,908. Is that fishing still followed?—Well, not very much.

28,909. Do you get any soles?—No.

28,910. Is there any trawling off this shore anywhere?—No.

28,911. Nothing of the kind?—No.

28,912. Have you any shell-fish, lobsters, or crabs?—Yes.

28,913. Is there a lobster fishery here?—No, we get a chance one sometimes.

28,914. Do you get any crabs?—Yes, they are very numerous occasionally.

28,915. Are they followed regularly as an object of fishing by a certain class of fishermen?—Yes.

28,916. Does it yield a good deal of money?—Sometimes; but it is not the same every year. Some years they are plentiful and some years they are scarce.

28,917. It is not falling off on the whole?—Yes, it is.

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28,918. Is it not as good as it used to be?—There is not one caught now for six that used to be caught.

28,919. Have you rather over-fished them?—Yes, I think so.

28,920. Are there any oysters here?—No.

28,921. Are there any salmon caught along the coast?—Yes, a great number.

28,922. Do the fishermen get them?—No, the white-fishers do not seek for them.

28,923. They do not get them by any of the modes which have been mentioned?—No.

28,924. (*Professor Huxley.*) Your boats are all decked?—No.

28,925. Are some of them half-decked?—Yes, some of them are half-decked.

28,926. Are a good many of them open?—Yes.

28,927–8. The Frenchmen's boats are all decked?—Yes.

28,929. What is the greatest number of Frenchmen you have had among you?—I counted 71 one Sunday morning last season; but there are upwards of 100 sometimes.

28,930. Do they all come fishing among you?—Yes, [illegible] of them alongside of us.

28,931. Do they come inside the three-mile limit? [illegible] cannot exactly say that, but they came as nigh to [illegible] fishing as we were. I am not able to judge [illegible]hether they came within the three-mile limit or [illegible]ot.

28,932. Does their heavy tackle interfere with yours?—Yes, it cuts ours up all to pieces. When we get jammed in with them we are sure to be lost.

28,933. Is there any cruiser to look after your interest?—Yes, there was last year.

28,934. Does he not oblige these heavy decked boats to keep outside of you?—I believe that is the regulation but they do not follow it up.

28,935. Cannot you apply to the cruiser?—No doubt we could; but we try to keep clear of them as far as possible. That is all the shift we try.

28,936. Does not the cruiser look after them without your asking him?—He comes into the bay, but I never saw one there while they were shooting their nets.

28,937. You mean you never saw one there at the time you wanted him?—Yes.

28,938. What do they do?—All I have seen them trying to do is to smuggle tobacco and brandy.

28,939. Did you know that it was at all against the law for decked vessels to be among you?—Yes, perfectly.

28,940. You have heard of the Convention between this country and France?—Yes.

28,941. Then was it not worth your while to apply to the cruisers to put that Convention in force?—Some of them applied last year who got their nets cut up. They applied to the Custom House.

28,942. What did the Custom House do?—A man-of-war's boats went among them and compelled them to keep off, but as soon as they had gone, the very next night, they were as thick as ever again.

28,943. Does anybody look after the size of your mesh here?—Yes.

28,944. Who?—The Fishery officer.

28,945. What size do you have your mesh here?—About 30 rows to the yard.

28,946. Do you never have them 38 or 40?—No, they would be of no use to us that size.

28,947. Would you not catch fish if you had them that size?—No.

28,948. You do not use them yourself as small as that?—No.

28,949. Do you know of this regulation: "Whenever "decked herring-boats and undecked herring-boats, "shall commence shooting their nets at the same time, "the undecked boats shall shoot their nets to windward of the decked boats, except they should prefer "going to leeward to a distance of at least half-a-mile to "shoot their nets." Supposing the Frenchmen have shot their nets, if you go out you are not to shoot your nets within half-a-mile to the windward or leeward. That is the regulation, would you like to have it carried out?—It cannot be done I think; if I think I have a good place to shoot my nets, and they think that I have a good place, then they are sure to come near me.

28,950. Do you fish from an undecked boat?—Yes.

28,951–2. Would you wish to see that regulation carried out?—Yes.

28,953. Then on the other hand there is this regulation: "The decked boats on their part shall shoot their "nets to leeward of the undecked boats, unless they "prefer going to windward to a distance of at least half "a mile to shoot their nets." So that if you were on the ground first, and they came up, they would have to go to windward or leeward of you?—They always go to leeward, because they drift faster than we do.

28,954. If they went to windward, which they could do according to this law, they would drift down upon you?—Yes.

28,955. And that would be positive destruction to you?—Yes.

28,956. Then you would not like to see that regulation carried out?—No; they would be sure to come down upon us.

28,957. Do you carry any vanes at your mast-head?—No.

28,958. None at all?—No.

28,959. Do the Frenchmen carry any?—Yes.

28,960. Do you light your boats at night?—Yes.

28,961. How do you light them?—We just string a lanthorn up on the mast.

28,962. Do you put up one or two?—One.

28,963. Does the cruiser never interfere with you for lighting your boats in that way?—No.

28,964. Did you ever hear of this regulation: "In "order that boats fishing with drift-nets may be easily "recognized at night, the masters of these boats shall "hoist on one of their masts two lights, one over the "other, three feet apart?"—Yes.

28,965. You have heard of that regulation?—Yes.

28,966. But you have never paid attention to it?—Not a bit of it.

28,967. Nobody has ever called you to account for not paying attention to it?—No.

28,968. Do you ever fish on the Sunday here?—No, it is not done as a regular thing.

28,969. Does anybody do it?—No.

28,970. None of the fishermen here fish on the Sunday?—No.

28,971. (*Mr. Caird.*) Do the French boats fish on the Sunday?—They go out on the Sunday night.

28,972. Do your boats go out on the Sunday night?—They may leave at 11 or 12 o'clock on Sunday night if they are going to fish close inshore.

28,973. Then the French boats do not go out on the Sunday more than you do?—No.

28,974. Do the Yarmouth or Lowestoft boats come down as far as this?—No.

28,975. Do none of the large English boats come among you?—No.

28,976. (*Professor Huxley.*) What time are the herrings full?—They are full about this time.

28,977. And what time in the winter?—In the winter time they are full too.

28,978. Do you get as good a fishing in the winter as you do in the summer?—Yes, if the weather is good. This last winter we had as good a fishing as we had at Lammas.

28,979. You do not seem to think that the haddocks are falling off?—No, I do not think that. There are always fish in the sea if you go to the offing after them.

28,980. Have you any complaint to make here of herring-nets being used with too small a mesh?—I have heard several complaints made in the harbour about it, but I never saw any regulation put in force.

28,981–2. Is there any circle-net fishing carried on here?—Not that I am aware of.

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28,983. Do you ever catch garvies about here?—No.

28,984. Are the boats which come in here from the Forth complained of as having too small nets?—Yes.

28,985. What size are the nets they use?—I cannot say.

28,986. Are they smaller than yours?—Yes, they take smaller herrings than we could take in any way.

28,987. Are you able to get plenty of bait for your long-lines?—Yes.

28,988. What bait do you use?—Mussels.

28,989. Have you any here?—No.

28,990. Where do you get them?—From Montrose, Dundee, and the Clyde.

28,991. Are they all brought by train?—Yes.

28,992. Do you pay dearly for them?—At a cost of a shilling or one-and-sixpence one can bait one's lines.

28,993. (*Mr. Caird.*) Are they dearer than they were some time ago. They are dearer than they were three or four years ago. In the winter time they are a great deal used.

The witness withdrew.

James Main called and examined.

J. Main.

28,994. (*Mr. Caird.*) Are you a fisherman?—Yes.

28,995. Have you heard the evidence of the previous witness?—Yes.

28,996. Do you agree with the statement he has made?—Yes, there is nothing he said that I consider wrong.

28,997. Is there anything you desire to add to what he has stated?—No.

28,998. Do you agree with him that there is a very good haddock fishery here still along the coast?—Yes, they fail sometimes inshore, but if we have good weather we have nothing to do but to go to the offing and we find plenty.

28,999. Are there plenty even for a greater number of boats than go now?—Yes.

29,000. Then you have never arrived at that point which would incline you to believe that the sea had ceased to give you fish?—No; there are always plenty of fish to be had if we only go for them.

29,001. (*Professor Huxley.*) You heard the regulations which were read just now?—Yes.

29,002. Did you ever hear of them before?—The Coastguard men have sometimes explained a little of them to us, but not so much as you have done.

29,003. Did you ever know them put in force?—No, I never knew any of them put in force.

The witness withdrew.

William Lepper called and examined.

W. Lepper.

29,004. (*Mr. Caird.*) Are you a fisherman here?—Yes.

29,005. You wish to make some statement to us?—Yes.

29,006. You have seen a good many French boats among your herring-fishing boats?—Yes.

29,007. Have they been increasing in number of late years?—There were more last year than ever I saw before.

29,008. Was there a good herring-fishing last year?—No, a very bad fishing last year.

29,009. Had they more success than you had on the average?—I do not know.

29,010. Did they stay long here?—I cannot say how long they remained.

29,011. How many have you seen here at a time?—I have seen 70 in this bay on a Sunday morning.

29,012. Is that the largest number you ever saw?—Yes, I think that is the most I ever saw.

29,013. Would the whole of those 70 be out fishing amongst your nets?—Yes, they would remain fishing just outside of us.

29,014. Were they within the three-mile limit?—I cannot state the distance at which they were.

29,015. Were you fishing more than three miles from the shore?—I think we were.

29,016. Then you do not think they were within the three-mile limit?—No.

29,017. How many fishing-boats would you have fishing at that time?—We should average, with chance boats, about 150. Some days there might be a difference of 30 or 40 boats, but taking one day with another we should have about 150.

29,018. Then there would be nearly as many French boats as there would be of yourselves?—Yes, almost.

29,019. There would be nearly as many nets at any rate?—Yes, they shoot about twice as many nets as we do.

29,020. Did you find they did you any damage when they were fishing amongst you?—All the damage they did was that they always went to the fishing ground before us. They left before the fishing time, and they were always on the ground shooting their nets before we could get there. In consequence of their being there before us we were afraid of their heavy tackle, and were obliged to go either outside or inside their boats.

29,021. In that way did they manage to occupy the best fishing ground?—Yes.

29,022. Did they get a better fishing than you did?—I do not think they did. Our nets are better than theirs. If our nets got the same fishing as theirs we could take about one-third more fish than they can.

29,023. Are your nets better constructed for catching fish than theirs are?—They are smaller to the yard, and they catch more than theirs.

29,024. Are they much smaller in the mesh than their nets?—Not a great deal.

29,025. Do the fish mesh more easily in them?—Yes, but they are always on the fishing ground before us.

29,026. Did they shoot their nets half an hour before sunset?—I cannot say that.

29,027. Did they pay any regard to that regulation? I do not think they did pay any regard to it any more than we did.

29,028. Neither one nor the other paid any regard to it?—No.

29,029. You regarded your own convenience altogether?—Yes, when we get on the fishing ground we shoot our nets.

29,030. Do you think it would be advantageous if you were prevented from shooting them until half an hour before sunset; do you think that it would be quite convenient for all parties, and that it would be of advantage to your interest generally to have that regulation enforced?—Yes.

29,031. It would be an advantage if you were prevented shooting them until half an hour before sunset?—Yes.

29,032. For what reason do you think so?—Because we always get entangled one with another before the fish rise. The nets all get into a mess.

29,033. Have you observed when the fish rise?—They rise about an hour or half an hour after sunset.

29,034. They do not rise until then?—I never saw any rise until then.

29,035. Then what is your anxiety to shoot before then if your nets are in the habit of getting entangled?—I believe it is just to deprive our neighbours of the ground.

29,036. Is there any Fishery vessel or gunboat on your station here to regulate matters?—There was one here last year; that is the only one I saw.

29,037. Did she just look in and then pass on?—She came out some days with her boat when the weather was bad, but our boats were not at sea when it was convenient for her to go, and she put ashore

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again. I never saw her among the boats on the fishing ground.

29,038. Are you a haddock fisherman also?—Yes.

29,039. Do you fish for them on this coast?—Five miles to the north of this.

29,040. Do you agree with the previous witnesses that there are plenty of haddock to be got?—Yes, and they are much larger this season than ever I saw them before.

29,041. They are finer in quality as well as larger in quantity?—Yes, for a few weeks we left off to go to the Lammas-fishing.

29,042. Could you have gone on fishing haddock if you had not to go for the herring-fishing?—Yes, we could have gone on, but we were obliged by our merchants to go out on a certain date to fish for herrings.

29,043. Then for a certain time the haddock fishery is discontinued altogether?—Yes.

29,044. When the herring-fishing is over do you go back to the haddock-fishing?—Partly to that and partly to crab-fishing.

29,045. When does it begin again?—About two months after the herring-fishing closes.

29,046. And it continues on until your winter fishing begins?—Yes; in fact it is only a few years since the winter fishing commenced. In bad weather we are liable to be disappointed and cannot go after the herrings at all.

29,047. Have you found the winter herring-fishing more profitable to you than to continue at the haddock-fishing?—Yes, a great deal more profitable.

29,048. If there were no winter fishing would you go on with the haddock-fishing?—Yes.

29,049. Would you find them plentiful?—We should find a few.

29,050. Are they more plentiful at one season than another?—Yes.

29,051. When are they most plentiful?—In April and May they are most plentiful.

29,052. Are they in best condition then?—No, they are in the worst condition then.

29,053. But you get them in greater numbers?—Yes.

29,054. What is done with them?—They are all cured with us; every man cures his own fish.

29,055. Are they sold to the curers?—No, not in our place; every man cures his own fish.

29,056. Do you send none of your haddock fresh to the market?—No.

29,057. Are they made into Finnon haddock?—Yes.

29,058. Where is the place from which that name originated?—Our haddocks go under the name of Finnon haddocks, but we are three or four miles to the southward of Finnon.

29,059. Are they all exactly the same thing?—Yes, they are cured in the same way, and all go under the name of Finnon haddies.

29,060-61. Is it the name of a place from which they take that name?—Yes.

29,062. Is it near Aberdeen?—It is six or seven miles from Aberdeen.

29,063. On this side of Aberdeen?—Yes, to the southward.

29,064. But that particular kind of cure called "Finnon haddock" is practised on this coast?—Not at the next fishing village, but it is from Cowie to Aberdeen they all go under the name of Finnon haddocks.

29,065. Do you imagine that those you cure are better than are cured by other persons?—Yes, our gentlemen say so.

29,066. Do you get a better price for them?—Yes.

29,067. Where do you send them to market?—To Aberdeen.

29,068. Do you not send them to Glasgow?—No; I have been in the habit of sending them to those who send them away again.

29,069. Are they sent away from Aberdeen?—There is a man in our own place who buys them and sends them away both to Glasgow and Aberdeen. He is not a fish curer, but a fish dealer; he deals in fish and sends them away to the large towns.

29,070. Is it the families of the fishermen who cure the fish in this way?—Yes, every individual family cures its own fish.

29,071. But when the fishermen are out at sea is the curing being carried on on shore by the women?—Yes.

29,072. So that it is a sort of business conducted by means of your own families?—Yes.

29,073. And you have all the profits to yourselves?—Yes.

29,074. Has that gone on for a long series of years?—Ever since I can remember, and in the time of my father before my days.

29,075. Do the families of the fishermen all become fishermen?—Yes.

29,076. All the sons?—Yes; there may be one individual who leaves, but generally they all take to fishing.

29,077. Then the number of the fishermen all along this shore must be increasing rapidly?—Yes, there has been a great deal of difference since I can recollect.

29,078. Are there any strange fishermen who come among you and settle?—No, not in our place.

29,079. Do you get any cod, turbot, or halibut?—We may get a few occasionally, but we do not fish for them.

29,080. Do you fish for soles?—No.

29,081. There is no trawling along this coast?—No, I have never seen any.

29,082. Do you fish for crabs?—Yes.

29,083. Do you agree with the previous witness that the crab-fishing is somewhat declining?—Yes.

29,084. What is the reason that it is declining?—I think it is overdone.

29,085. Do you mean that the crabs are over-fished?—Yes.

29,086. Then they show signs which the haddocks have never shown yet, that too many of them are taken from the sea?—Yes, or else the fishermen have not yet found out the ground they are in.

29,087. You do not change the ground on which you fish?—No.

29,088. (*Professor Huxley.*) Do you make engagements with the curers to fish from a given day?—Yes.

29,089. Are there days when you fish every year, or are there different days fixed every year?—It varies every year. Perhaps we may go for two years about the same time, and then, perhaps, it will differ for a few years.

29,090. What is generally about the time?—From the 8th to the 10th and 12th of July.

29,091. And you go on as long as the fishing lasts?—Yes, for eight weeks.

29,092. During that time do the curers give you so much per thousand for the fish you catch?—They do not pay us by the thousand, but so much per cran.

29,093. Whether you catch much or little?—Yes.

29,094. You make a bargain and are bound to fish during that time?—Yes, whether we catch fish or not.

29,095. And what do you consider to be the signs of herring here?—Generally the particular signs are sea-mews and blow-fish.

The witness withdrew.

J. Jack.

JAMES JACK called and examined.

29,096. (*Mr. Caird.*) You are a fish-curer?—Yes.

29,097. Do you cure both herrings and haddocks?—I cure herrings, but I only cure very few haddocks.

29,098. Do you cure cod or ling?—Not many.

29,099. What you cure is chiefly herring?—Yes.

29,100. Is the proportion of herrings that are cured

now, compared with what is sent fresh to the market, increasing or diminishing?—There are a great deal more now sent fresh to the market than there used to be.

29,101. Is that chiefly in consequence of the opening of railways?—Yes.

29,102. Is that proportion increasing from year to year?—Yes.

29,103. Is there a smaller proportion being cured every year?—Of late years there have been a great many more herrings landed here than there were formerly, but there are a great deal more sent away to the market fresh.

29,104. Then from your experience as a curer do you think the herring fishery here has rather improved than diminished?—Yes.

29,105. Taking a series of years?—Yes.

29,106. Of course it fluctuates?—Yes.

29,107. Is there much of the winter herring cured?—No.

29,108. It all goes fresh to the market?—Yes; it is all made into bloaters, but we have only had them for one or two seasons.

29,109. Do you make bloaters here?—Yes, a great many.

29,110. In the same way that the Yarmouth bloaters are made?—Yes, we put them in smoke boxes.

29,111. Are they slightly smoked?—Yes.

29,112. And salted?—Yes, a little.

29,113. Is it a mode of curing herring very similar to that adopted in curing haddock?—Yes, it is something very similar.

29,114. Has the price of fish increased much here of recent years?—No, not much.

29,115. Does it keep pretty steady?—Yes, occasionally they are very high at the first part of the season.

29,116. Do you use the Government brand here upon your herrings?—Yes.

29,117. Do you think it is a great advantage to you as a curer to have it?—Yes, I do.

29,118. Are there many curers here besides yourself?—There are a good number, perhaps five or six.

29,119. Do you speak the views of most of the curers when you express that opinion?—They all use it.

29,120. They use it necessarily, because if it is not used it casts a suspicion upon the herrings which want it?—The herrings are not generally of as much value without it as with it.

29,121. Therefore, the curers must almost of necessity use the brand in order to be on a par with their neighbours?—Yes, but my opinion is, it is of advantage to the trade.

29,122. In what way is it of advantage?—If a customer wants supplying with herrings, and sends for Crown-branded herrings of equal quality, he has them guaranteed to him; there is no door left open for a dispute.

29,123. Is there any such brand in regard to bloaters or haddocks?—No.

29,124. Do you find that any loss results from the fact that there is no such brand on haddocks or bloaters?—I do not know that; but they are sold on a different principle altogether. The bloaters and haddocks are sent to the market and sold at the day's price, whatever it may be; we cannot keep them for more than a day.

29,125. Is not the sale of bloaters and haddocks influenced by the care with which they are cured?—Yes.

29,126. And does that not depend very much upon the skill and perseverance of the curer?—No doubt it does.

29,127. Would not for that reason one cure of haddocks bring a better price in the market, because the curer's name was known?—It will sometimes, but not always.

29,128. Is that not as good a guarantee for the quality of the fish as any Government brand can be?—Ido not think so, speaking generally. It would require a neutral person to examine them. For my part I prefer to have branded herrings to send abroad.

29,129. Have you a Fishery officer resident here?—No, not resident.

29,130. Then you must have a great many herrings cured and packed without their undergoing the superintendence of the Fishery officer?—He is seldom here until he comes to brand them.

29,131. Then the packing is done before he comes?—Yes, before he examines them officially.

29,132. So that the official examination is not so close and narrow as the examination of the owner of the fish would be, supposing that his interests entirely depended on their having been carefully cured?—The Fishery officer usually opens one barrel in ten; that is quite sufficient to test the quality of the fish and the mode of cure.

29,133. Would you take more care in curing to perform the operation carefully and well because one in ten is to be inspected by the Fishery officer than if none were to be inspected, but were to go year by year to market and be sold upon the character of the person who cured them?—I do not think they would be much better cured than they are now.

29,134. Would they be equally well cured?—Yes, if necessity required it.

29,135. Then in your opinion there is really no advantage in having the brand?—There might be careless curers, and we are now required to cure them up to a certain standard before we receive the brand.

29,136. Does not the advantage of the brand rather depend upon the facility with which the herrings can be made the subject of a bill of lading and transferred to the foreign market?—Partly; but there is this also, that it does not leave the foreign merchant open to raise so many disputes as he might otherwise feel inclined to raise when they entered the foreign market. No branded herrings that are sent out are objected to. They are open to some extent to objection even when branded, but they are not so open as they would be if they were not branded.

29,137. But if they are branded, can they not object to them equally as well as to the others?—Not as well; the foreign merchant buys Crown-branded herrings, and he must take them when they are sent to him.

29,138. Must he take them if they are in good condition or not?—They must be good.

29,139. Now, if the Fishery officer in opening 10 out of 100 barrels takes the 10 best and the other 90 happen to be bad, must the foreign merchant take them?—Yes, I should say so.

29,140. Is the brand sufficient to mark that they were the thing he bought?—Yes, I should say so.

29,141. (*Professor Huxley.*) Are there many curers here?—Five or six.

29,142. No more than that?—No.

29,143. Have you any notion of the quantity of cured herrings that are sent from here?—No.

29,144. Do you think that the fishing is as well as ever it was within your knowledge of this place?—It varies from year to year.

29,145. But how is it on the whole?—I do not think it has decreased.

The witness withdrew, and the inquiry was adjourned to Peterhead.

Peterhead, Aberdeenshire, Friday, 29th July 1864.

PRESENT:

J. CAIRD, Esq. M.P. (Chairman). | Professor HUXLEY, F.R.S.

PETERHEAD.

J. H. Will.

29 July 1864.

JOHN HENDERSON WILL called and examined.

29,146. (*Mr. Caird.*) You are a fish-curer here?—Yes.

29,147. Have you been long engaged in that business?—I have been for nearly 30 years in the trade, and for nearly 20 on my own account.

29,148. Do you cure haddocks as well as herrings?—I have cured haddocks for a considerable time—haddocks, and cod, and ling.

29,149. Besides herrings?—Yes.

29,150. Cod and ling?—The ling we cure principally for the market. Pickled ling does not sell in London; pickled cod does but not ling.

29,151. What do you do with the ling?—They are not sent much to the London market; we keep them and send them away to Glasgow, but not to London.

29,152. Do you send them away fresh?—Yes, when we can get them away, and we can manage that now railways have been introduced. We can get the cod and ling carried inland fresh, when formerly we should have had to cure them.

29,153. Is the great bulk of all the fish caught here, both herrings and haddocks, cured?—Yes, the bulk of them.

29,154. Is there no large quantity sent fresh to the market?—We have not had very much facility for sending them fresh to market until within the last 18 months. There are now more sent to the north than there were formerly.

29,155. Then is the railway likely to lead to a change in the destination of the fish?—Yes, to a considerable extent.

29,156. Is there a better price got for the fish that are sent fresh to the market?—When they are scarce they realize a good price, but when it comes to be a general fishing the price recedes, and we are obliged to cure for exportation; that is the case particularly with herrings.

29,157. Has the catch of herrings within recent years increased or diminished in the total?—I do not think they have diminished. In some seasons there may be a shortcoming, but the weather has a great deal to do with the catch of herrings. Some years it is unfavorable when the fish are on the coast. I have frequently seen fish on the coast when there has been a wind prevailing from the south-east which has caused such a sea that the boats could not get out to take them. There would have been a great deal more caught in some seasons if the weather had been favorable. I do not think myself that there has been any want of fish, but there has been a want of good weather occasionally.

29,158. You have noticed no sign of the fish becoming scarcer?—I am not under that impression. When we have a short fishing the weather has a great deal to do with the catch.

29,159. Does the same answer apply to all the other fish caught off the coast?—I could not say so much for the haddocks; there are not as many haddocks caught now on the ground where we used to catch them; perhaps they have taken further off into deeper water.

29,160. Are there as many haddocks caught now as in former years?—Not for the last two or three years.

29,161. Have you not had a good fishing this last year for haddocks?—There has not been a good haddock-fishing, but the weather has had a great deal to do with it. We have had gales of wind, and the boats could not get out.

29,162. Then the bad fishing has not been because the haddocks were scarce?—No, not so much on that account.

29,163. Has the number of boats fishing here for haddocks and herrings increased?—Yes, it has.

29,164. Are there many curers here?—There are a considerable number. There are a considerable number of small curers; there are some 20 or upwards, you may say from 20 to 30.

29,165. How do you regard the question of the necessity of branding the herrings?—Well, I think that was exhausted at the last examination here, when there was great excitement on the subject. I was in favour of the brand then, and my opinion has not altered since, because it is the foreign merchants who insist upon the brand. If they send an order here for a thousand barrels of Crown brands they would not take them unless they were branded.

29,166. But if none were branded at all they could get none branded?—Of course they could get none in that case, but as long as they insist upon having the Crown brand we feel it necessary to have the fish branded.

29,167. But suppose the system of the Government brand were put a stop to entirely, what would be the result upon the cure—upon the fisheries?—They would work under a disadvantage for some years, until confidence was restored and the foreign merchants had faith in the curer's own brand.

29,168. Would not confidence gradually grow up upon the curer's own brand?—If the Government brand were done away with altogether no doubt that would be the result.

29,169. I can understand that if it were partially allowed and some persons were to use it while others did not that it would be of great advantage to those who used it, but suppose that it was entirely put a stop to, then the foreign merchants, as they must have the herrings, would buy them without the brand?—Everyone would then have to send on his own guarantee.

29,170. Do you think it would stop the trade for some time if that were done?—I have no doubt that for a few years there would be a disarrangement of trade; the merchants would not have the same confidence in the article.

29,171. Are you aware that some of the herrings which are sent out of the country are never branded?—Yes, those which are sent out in the first of the year are not branded.

29,172. But are you aware that there are some places which send all their herrings without a brand?—Yes, there are none branded from Stornoway.

29,173. Does that prevent them from finding a market?—No.

29,174. Then why should it prevent you?—The Stornoway herrings will not keep; if they are not consumed within a certain period they are useless; ours will keep until next season. The only objection I have with regard to the brand is that they charge too much for it; I think fourpence is too much.

29,175. How much do they charge?—Fourpence a barrel; I consider that twopence would be quite enough.

29,176. Do you think that the effect of the brand is to insure the careful curing of the herrings?—Yes. There is one thing in regard to that; there is an officer appointed here who sees that the cask is of the proper size; he examines the fish, and as the buyer has the advantage of that examination he has no trouble himself. He buys them after they have the Crown brand attached to them because he knows they have been examined by the regular officer.

29,177. Then it seems that the brand is chiefly for the advantage of the foreign buyer?—Yes, that is the principal advantage that it affords.

29,178. But you do not brand your haddocks which go away?—No, nor the cod. The cod were once branded, but that has been done away with.

29,179. Did it do any harm doing away with it?—The cod are better now than when they were branded. If they were sent in the same condition as when they were branded, they would not buy them without a great reduction.

29,180. Has the quality of the cure improved since you have given up the brand?—Yes, the quality of the cure of cod has much improved. The people like a soft, light cure now; the softer it is the better.

29,181. If the brand had not been changed, would it have been worse for you?—We had to cure up to the brand. The firmness of the fish was a test, and we had to use a certain quantity of salt.

29,182. If that had continued up to the present time, might it not have interrupted the sale of your fish?—The fish that we cured when we had the brand did not suit the taste of the London people, because the softer they are the better they like them.

29,183. You have no brand on your haddocks?—No.

29,184. Then you manage to get your haddocks sold without a brand?—Yes.

29,185. Do they not sell according to the name of the curer?—They are marked with the initials of the curer's name.

29,186. Does that sell your fish?—Yes, that is a guarantee.

29,187. Do you make red herrings here?—Occasionally; there are a good number made at Peterhead principally for the London market.

29,188. Have you much altered the mode of curing of late years?—Yes.

29,189. What kind of alteration have you made?—We do not salt them as much.

29,190. Are all kinds of fish used more fresh?—We think the fish weigh far lighter when they are salted thin. At one time we had an impression that if they were not heavily salted they would not keep, but by salting them light the herrings have been found to be much sweeter and are better flavoured for the consumer.

29,191. Do you salt your herrings for foreign export in a lighter manner than you did formerly?—Yes.

29,192. Then you have altered the mode of cure even for the brand?—Yes, a great deal; we do not salt them nearly so heavily as we did 20 years ago.

29,193. Can you tell us whether the condition of the fishermen here is improving; are they in better circumstances than they were 20 years ago?—Yes, they are improving in their worldly circumstances, and they are improving in their learning too.

29,194. They are become more educated?—Yes, there has been a great change during the last 20 years.

29,195. Are they a very respectable class of men?—They are so generally.

29,196. And are they pretty well off?—Yes, they are, generally speaking.

29,197. Do they make money at the fishing?—Yes, there are some of them who have been making money by fishing.

29,198. Have they a larger class of boats now than they had in former years?—Yes, the boats have been very much better which they have had within the last 15 and 20 years. Within that time I might almost say that a new race of boats has sprung up altogether.

29,199. Are they on a much larger scale?—Yes.

29,200. And have they a more expensive set of nets and fishing tackle, and everything else necessary for carrying on the fishing?—Yes, the twine they make the nets of now they would not have used at that time. At that time they all used No. 10 twine; they would not have used a finer twine than No. 10. Now the twine they use is principally No. 7 and No. 8. Occasionally they use No. 9.

29,201. Generally speaking they use much finer twine in the manufacture of their nets?—Yes, very much finer twine.

29,202. Is that found to be better adapted for the meshing of the fish?—Yes, it holds them better after they are meshed.

29,203. But it will not wear as long, will it?—No, it will not wear so long. I may also say there is a considerable quantity of cotton used now in the making of the nets.

29,204. Is that used for the same purpose?—Yes.

29,204*a*. In order to make it better for the meshing of the fish?—Yes, the twine is sharper, and when the fish go in it holds them better; they are not so apt to get out again. A number of the fish got out and were lost when the old twine was used; it was not so sharp, and did not hold them so well in the mesh.

29,205. Have you heard any complaints made by the fishermen here in regard to any interruption of their fishing by foreign boats?—They have occasionally complained of the French and sometimes of the Dutch, but they have not complained of the Dutch as much as they have of the French.

29,206. Have you ever been at the fishing yourself?—Yes.

29,207. Did you observe the Frenchmen coming in to fish?—I went out principally to see the mode of fishing; the Frenchmen were not on the ground then, but we often see them near the shore here without the necessity of going outside.

29,208. Do they come here very often?—They do not come here so often as they do towards the south.

29,209. (*Professor Huxley.*) Were you curing herrings here before the brand was established?—No.

29,210. How long is it since the brand came in operation here?—The brand has been in operation ever since I have been connected with the trade, and that is now upwards of 30 years.

29,211. When the brand first came into existence was it not on account of the bounty that was then given?—Yes, it was, and if you will give us a bounty now we shall have no objection to take it. At that time they had 4*s*. a barrel in the shape of bounty, and they must have made a very good business by it.

29,212. What are the Frenchmen doing inshore when they are close in?—I consider that they come in in order to see whether the fishermen here fall in with the fish, and when they see they have fallen in with a body of fish they take the sea with them and shoot their nets along with them.

29,213. Are any of their own cruisers here?—There was one here last year.

29,214. Do they never interfere with them?—They have never interfered with them to my knowledge. Some time ago a considerable number of them were in the habit of coming here and purchasing herrings, but since the present Emperor of the French came to the throne he has been more strict, and he does not allow them to come and purchase herrings here; they are obliged to catch all they take away.

29,215. But if there is no cruiser here how could they prevent that?—They consider it smuggling, and would put a stop to it. The French fishermen get a bounty for catching herrings, and as I have just stated they were in the habit of coming here and buying them from us. They then went home and received a bounty upon them just as if they had caught them themselves. They do not come as often now as they were in the habit of doing.

29,216. (*Mr. Caird.*) Is there any regulation which in your opinion could be adopted here which would add to the supply of fish?—I do not consider that there is a great deficiency in the supply of fish. The supply of fish generally depends upon the weather during the season that the fish is on the coast. All the fishing depends more or less upon the weather.

29,217. It is not within your experience that there has really been any diminution in the supply of fish

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in the sea?—There is no diminution. With regard to haddocks I do not believe that at all.

29,218. How has the price of fish been within the last 20 years?—It has gone on increasing.

29,219. Has it been increasing every year?—I gave up haddock and cod-curing in consequence of the price increasing, because there was no chance of obtaining a fair remuneration.

29,220. You had to pay so much to the fishermen?—Yes, I would rather want them than run the risk of paying so much for curing them.

29,221. Who takes them now?—The principal parties who have them now are people residing in London, who sell them in Billingsgate themselves.

29,222. How is it that they can make more out of them than you did?—They have all the profit themselves, whereas I had to pay them a commission.

29,223. Do you mean the Billingsgate salesmen?—Yes.

29,224. Have they stations here?—Yes.

29,225. Do they buy the fish direct and send them to London?—Yes.

29,226. They send them to London direct?—Yes, they go direct to Billingsgate.

29,227. You are speaking now of the haddocks?—Of the haddocks and of the cod also.

29,228. Do they all go up cured to London?—Yes.

29,229. Just the same as the Finnon haddocks?—Yes, and the cod will keep until Lent; they are not of much value before or after Lent.

29,230. Just during Lent they command a good price, and there is a good demand for cod and ling?—The cod we catch during the winter we keep until Lent comes in; they are then sent up for consumption during Lent.

29,231. All the cod caught during the winter?—Yes.

29,232. Do you retain them at home until Ash Wednesday?—Yes, and then the price goes up 10*s.* or 15*s.* a barrel.

29,233. (*Professor Huxley.*) Have you any winter fishery here?—There was a little last year.

29,234. But it is not followed generally?—It is a new thing.

29,235. But there was a little last year?—Yes, it was not to a great extent, but we think it may be followed to a great extent hereafter.

29,236. What condition were the fish in in the winter, were they full fish?—It was astonishing to see them; they were of very good quality.

29,237. Were they very full fish?—Yes.

The witness withdrew.

A. Jamieson.

ALEXANDER JAMIESON called and examined.

29,238. (*Mr. Caird.*) You are a fish-curer here?—Yes.

29,239. Do you cure herrings, haddock, and cod?—No, nothing but herrings.

29,240. You do not deal in haddock at all?—No, nothing but herrings.

29,241. Have you found the quantity of herrings increasing or diminishing within recent years?—They have been decreasing.

29,242. Has that arisen from a large quantity being sent to the market fresh, or has there been a decrease in the quantity of fish altogether?—I think the decrease would appear to be more in consequence of over-fishing. The ground has been over-fished as it were. There are a great many more boats now engaged in fishing than there were 35 years ago. I have been for 35 years connected with the fishing interest here.

29,243. Do you think that the larger number of boats that are here now do not get altogether as large a quantity of fish as the smaller number were in the habit of getting in former times?—There are more fish caught, but still there is a greater quantity of netting used in catching the larger number of fish. Under these circumstances I consider that there are fewer fish obtained in proportion to the number of people employed. Had the same number of boats been employed and the same quantity of netting 35 years ago, the take of fish would have been far greater, in my opinion, than it is now.

29,244. Has the price of fish increased since that time?—Yes, it has risen very considerably.

29,245. Do you find that the Government brand is a useful thing to you in your business?—Yes, it is very useful to me. I am a great advocate for continuing the brand, but not the fee. If we could do away with that part of it I should not have the slightest objection.

29,246. You would like to have the advantage of the brand without any of the disadvantages?—Yes, we do not like the fee at all.

29,247. What is the fee charged upon you for the Government brand?—Fourpence.

29,248. Is that fourpence for each barrel branded?—Yes.

29,249. What is the advantage to you of the brand?—It enables us to cure with great regularity. It is a sort of check over every individual, from the catcher up to the curer; and then, after the fish fall into the hands of the merchants, it is of great advantage to them, as they are enabled to exchange the barrels from one merchant to another without question. That is to say, when they have a number of barrels of full Crown brand herrings sent over to them, they can buy and sell upon the bill of lading, and transact their business with as much facility as if it were merely the passing of a bank note; whereas, if there were no brand there would be a want of confidence on the part of the merchants in the curers.

29,250. There is no brand, is there, upon any other description of fish sent from this place except herrings?—There are very few fish sent from this place except herrings.

29,251. Are there not a great number of haddocks got here?—No, the catch of haddocks is very trifling. I do not believe there are 500*l.* worth of haddocks sent away.

29,252. What do the fishermen do during the time there is no herring fishery here?—They prosecute the haddock and cod-fishing, but there is very little done here in that way.

29,253. Are any of the haddocks and cod sent fresh to the market?—Yes, both haddocks and cod are sent fresh to the market, but then it is only the home market that is supplied. There is no portion of it sent abroad and changing hands from merchant to merchant as is the case with the herrings. Perhaps, after the time a barrel of herrings is shipped here until it comes into the hands of the consumer, it may be exchanged three times, and the operation is performed without the slightest difficulty; whereas, if there were no branding, there would be no confidence, and it would be impossible to exchange the cargo of herrings so often.

29,254. Would there be no confidence in the curer's own name if it were well established?—That is a question which has not been tested yet. There have been several attempts to do that, but so far it has never succeeded.

29,255. If the brand were put a stop to entirely, and there were no brand in future, I presume that the foreigners must get their herrings somewhere?—Yes.

29,256. They would then be obliged to buy them without the brand?—No doubt.

29,257. Would they not then look to the name of the curer?—In Norway, where there is no brand, they have no confidence. The merchants there go to the market, and when they buy their fish they see and examine them for themselves, whereas our fish which have the Government brand may be sold three times over without being examined at all. They

very frequently pass through the hands of three different classes of merchants from the time we have shipped them until they reach the consumer.

29,258. Then in that way there are three profits upon them?—Yes.

29,259. And I presume that the consumer has to pay all these profits?—I should say so.

29,260. (*Professor Huxley.*) Do you recollect the period before the brand existed?—Do you mean before the Crown brand was established?

29,261. Yes?—No. There was at one time a bounty, but that was taken off altogether. I think in the year 1829 or 1830.

29,262. Do you know whether the brand originated with the bounty?—I think so.

29,263. Was the brand first affixed to the herring on account of a bounty being given?—Yes; the brand was affixed to the herring in consequence of the bounty.

29,264. You are not in a position to state at present what might be the effect of withdrawing the brand?—No.

29,265. What do you think would happen if the brand were withdrawn?—It would shake the confidence of the dealers. They could not buy and sell upon the barrels. They would have nothing to go by.

29,266. How long do you think that such a state of things would last?—I can form no idea of that.

29,267. Do you think that the trade would recover itself after the lapse of a few years?—Possibly it might, but I cannot form any idea of what the consequence would be, so far as my experience has gone.

29,268. Do you know of any other branch of trade in reference to which the Government affixes a stamp to indicate the quality of the goods disposed of?—No, I do not.

29,269. You say that the haddock fishery here is a very small matter?—Yes, very small.

29,270. Are you able to say what amount of haddocks and cod are caught here?—I am not prepared to say what is the amount of haddocks and cod cured here in the course of the year, but I think it is quite trifling.

The witness withdrew.

James Bell called and examined.

29,271. (*Mr. Caird.*) You are a fish-curer here?—Yes.

29,272. Do you cure any other kind of fish except herrings?—Yes.

29,273. What other kind?—Cod, in the winter time.

29,274. Do you cure any haddocks?—Not any.

29,275. Did you at any other time?—Yes, but I have given it up for the last few years.

29,276. Do you know whether the quantity of herrings cured here has been increasing, stationary, or diminishing?—It has been increasing during the last two or three years. Before then we had a short fishing.

29,277. Have you any idea whether any reason is assigned by the fishermen or by the trade as to the cause of the fluctuation?—No, I have no idea what the cause is. I have heard some people attribute it to the employment of too many boats, and to the larger fleet of nets now used. They say that they break up the shoals of fish.

29,278. Have the boats increased considerably in number?—Yes, within the last few years.

29,279. Has the total quantity of fish brought ashore here increased?—That is a question I am not prepared to answer.

29,280. With regard to the herring brand, do you approve of that system?—Yes.

29,281. Do you wish it to be continued?—Yes, I should like to have it continued, I have certainly one objection to it.

29,282. What is the objection you entertain to it?—I object to the payment of fourpence as a fee for the brand of each barrel.

29,283. Do you think that is too high a payment?—Yes, I do.

29,284. But is not the advantage which you receive from the brand worth that to you?—Yes, I suppose it is worth the fourpence. It is worth that most decidedly.

29,285. In what way do you think it benefits you?—It affords a kind of guarantee to the foreign merchant. If we brand our herrings here we are perfectly sure that when they go to the other side and are disposed of among foreign merchants we shall hear no complaint with regard to them, whereas if we were to pack them and send them away without having undergone and passed the Government Inspector we should be sure to hear complaints.

29,286. If they are branded the foreign merchants say nothing?—No.

29,287. I suppose that if the barrel have the full Crown brand, and the foreign merchants opened them and found the herrings in a bad state, they would have a right to reject them?—They would appeal to the Board and reject them too.

29,288. Would the loss ultimately fall upon you?—I rather think it would.

29,289. Would you have no redress?—I think not.

28,290. Then if that is the case, and you sent really good herrings to market without any brand, they would not be more liable to be rejected than those which are branded?—No, but the herrings would be much more liable to be rejected on the other side, if the markets happened to have fallen after the herrings had been shipped. I think some years ago they sent over an officer from the Fishery Board to inspect some of the herrings which had been sent there.

29,291. Was that in order that an officer of the Fishery Board might examine them for the second time on the other side?—Yes.

29,292. Was that in order to test their own brand?—Yes.

29,293. Did the Fishery Board do that?—Yes, I believe they did.

29,294. Upon what grounds did the foreign merchants desire to have a person sent over there to test the brand; was it because they thought the brand had been given without due inspection here?—I suppose that was the reason.

29,295. Practically, is it possible for the Fishery officer to inspect every barrel?—It could be done.

29,296. But that is not generally done?—No.

29,297. He inspects a few barrels in every hundred?—Generally one barrel in ten. He examines that, and if it does not happen to suit him and he rejects it he will examine a few more. Of course we don't know which barrel he intends to open, and therefore we have an inducement to have all the herrings well cured.

29,298. Would it not be equally an inducement to have them well cured when you knew that the whole of your cure depended for its character upon its being in a good state in the foreign market?—We should be compelled to rely upon our own merits entirely.

29,299. Would not that insure proper attention being paid to the cure?—Yes; I should not object to that if I had persons to deal with in whom I had full confidence.

29,300. You would not be in a worse position than other persons who have foreign markets to supply?—No.

29,301. Suppose that the brand was put a stop to entirely, and no foreigner could purchase herrings in this country with any Government brand upon them, would it not be the case that foreigners, if they wanted the herrings, would have to buy them from you whether they were branded or not?—Yes.

29,302. In that case would they not go to those curers in whom they had the greatest confidence?—I believe they would; but as a general rule they would

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not buy any herrings without sending over a competent person to inspect them here in the first instance.

29,303. Would that be any hardship to you?—No, none at all, provided they were satisfied with the herrings on the other side.

29,304. I want clearly to understand from you what is the advantage which you think arises from having a Government brand?—I think that the Fishery officer is an important judge between the buyer and the seller, and the brand affixed to the herrings by that officer is a guarantee that the herrings are what they are represented to be.

29,305. (*Professor Huxley.*) If the foreign merchant sent an agent over here to inspect the herrings before he bought them would not that in effect produce a reduction in the price he would give you, because the expense of doing that must somehow or other come out of the herrings?—It might or it might not.

29,306. Or it might increase the price of the herrings on the other side?—Yes, it might do that.

29,307. You cannot say what would happen?—No. It was generally supposed when the fee for branding the herrings was levied by the Government that herrings which were sold at 27*s.* would subsequently be sold at 27*s.* 4*d.*, but that has been very seldom done.

29,308. Then the cost of branding the herrings comes out of the curers' pockets?—Yes, in all cases.

29,309. Might you not just as well pay the expense by appointing persons to examine the herrings on your own account as require the Government to do it for you?—Yes; but the official person appointed to inspect the herrings on the part of the Government is a disinterested person and has no object in representing the herrings to be better or worse than they really are.

29,310. If the foreign buyers have a good demand for herrings in their own country would they not be as glad to get them from you if they were good herrings whether they had the brand or not?—But suppose the markets to be full, then we have only the honour of the foreign buyer to rely upon.

29,311. Would not the agents of the foreign merchants over here examine the herrings as they were packed, and buy them according to the condition they were in when he then saw them?—Perhaps so.

29,312. The foreign merchants would have agents over here to buy them on the spot?—That might be the case.

29,313. Would not that be the natural mode of trade under the circumstances?—I think it would ultimately result in that.

29,314. The fish merchant would have his own brand instead of trusting to the Government brand?—Yes, and I think they would come over to inspect the herrings themselves.

29,315. That is very much what other merchants do now?—Yes; it does seem rather curious that we should wish the brand to remain; but I believe that if it were abolished it would result in considerable loss to the trade. If the markets should happen to fall after a cargo of herrings was shipped the foreign buyers would reject them, and would say that the herrings sent to them were not what they were represented to be.

29,316. But would that be the case if the herrings were bought by their agent here?—That would be a different question altogether.

29,317. If they wanted the herrings abroad, would they not take means to get them and adopt methods for securing the best possible article?—Yes, I think they would.

29,318. Then you would not be worse off than you are now, because at present you pay the Government for doing it?—Yes, exactly.

29,319. Might you not take some portion of the price off from the buyer if he had to do so?—I don't see how we could do that; we should not be able to get any more from the buyer whatever expenses we were put to.

29,320. It would come out of somebody's pocket?—Yes, and in all probability it would come out of ours.

29,321. You would not be worse off than you are now?—No.

The witness withdrew.

A. Sutherland.

ALEXANDER SUTHERLAND called and examined.

29,322. (*Mr. Caird.*) You are the Fishery officer here?—Yes.

29,323. You have been here for some time?—This is the second year I have been stationed here, but I have been doing duty here frequently in former years.

29,324. And know all about the fishery interest along this coast?—Yes, I was brought up in Fraserburgh.

29,325. What are the different stations included in your superintendence?—Beginning southward, they are Colliston, Old Castle, Whinnefold, Ward of Cruden, Bullers of Buchan, Boddom, Burnhaven, Peterhead, and Buchan Haven. That is all in this district. But at one time, in previous years, the district here extended as far as Dundee. It has been divided since into two districts, and Dundee is now in the district of Montrose.

29,326. Can you give us the number of boats, their value, and the number of fishermen in this district since the year 1855?—Yes.

29,327. Then will you give them to us in a tabular form, beginning with the year 1855?—The following is the return:

Year.	Number of Boats.	Tonnage.	Value.	Number of Men.
			£	
1855	320	2,538	8,333	1,070
1856	344	2,778	9,180	1,129
1857	348	2,820	9,344	1,150
1858	353	2,877	9,561	1,162
1859	353	2,988	9,962	1,006
1860	348	2,934	9,783	986
1861	344	2,895	9,657	1,010
1862	354	2,970	9,912	1,002
1863	363	3,439	11,656	1,026

29,328. You say that you have had a long experience in connexion with the fishery business along the coast?—Yes, ever since I was a boy.

29,329. In the course of it have you found that the total take of fish has been increasing, stationary, or diminishing?—It has varied in different years.

29,330. Are you speaking of all the kinds of fish taken, or speaking only of particular kinds of fish; does your answer apply to the herring; have they varied in different years?—Yes, they have varied in the quantity taken in different years.

29,331. But has there been a gradually increasing quantity taken?—Yes, since I first knew the fishing there has been a very decided increase, and I knew the fishing on this coast in the year 1817.

29,332. Has that decided increase been gradually progressive?—The increase has not been very great, but the fishing has increased of late years as it did when I first knew it.

29,333. You are speaking of the herring fishery now?—Yes.

29,334. Have there been a larger number of men, better boats, and better nets engaged in the fishery than there were formerly?—The nets, and the gear of the boats, and the boats themselves, have improved very considerably in comparison with what they were when I first knew the fishery.

29,335. Has the result of that been to get a larger number of fish on the whole?—I should require to refer to statistics in order to show that.

29,336. Has the condition of the fishermen themselves, in your opinion, improved during the time in which you have been acquainted with the fishing?—Yes.

29,337. They are in much better circumstances now than they were in former years?—Yes.

29,338. Are they generally in comfortable circumstances?—Yes, the majority of them are.

29,339. Do they make a very good livelihood?—Yes, they do, and they are becoming more careful of their money than they were when I first knew them.

29,340. With regard to the haddock fishery, has it been progressive also?—No, I do not think it has been progressive.

29,341. Are there not as many men and boats engaged in it now as there were formerly?—There may be as many boats and men, but I question if they get as many haddocks.

29,342. You do not think they get as many haddocks on the whole?—Yes.

29,343. You have no means of testing that with accuracy?—No, we do not take any statistics of the haddock-fishing.

29,344. Can you give us any information with regard to the cod and ling-fishing; has that been progressive or stationary?—I think the cod and ling-fishing has been rather decreasing, if anything.

29,345. Is that in consequence of the fishermen applying themselves to other modes of fishing?—In the season of the year when it goes on they have no other source of fishing.

29,346. Do they not fish for haddocks in that season?—Yes, they are combined with the cod and ling-fishing.

29,347. Do they fish them both in one fishing?—Yes.

29,348. Do they catch them on the same lines?—Sometimes they do.

29,349. Do they fish specially for cod and ling?—At times they do, in the spring of the year.

29,350. Do they use larger hooks for that purpose?—Upon their hand lines they use large hooks, but on the long-lines the small hook will hold a cod. When they go specially for halibut and skate they use the large hook.

29,351. Is there a bank off here celebrated for skate and halibut?—Yes, there is a bank which they frequent for those fish.

29,352. How far off is it?—It is a considerable distance, but I cannot say how far.

29,353. Is there any trawling off this coast?—There is no deep-sea trawling.

29,354. Have there been any complaints made with regard to the haddocks not coming as close inshore as they were in the habit of doing in former years?—There have been great complaints of that.

29,355. Have you ever heard any reason assigned for it?—I have heard no reason assigned that I can rely upon.

29,356. Is there any mode of fishing practised off this coast, within your knowledge, that is destructive of the young of the fish or the spawn?—No, not on this part of the coast that I am aware of.

29,357. Is there any difficulty in getting bait here?—At times there may be a little difficulty, and I may remark that unless they are able to obtain herrings for cod-bait here they never succeed in catching cod. The cod appears to feed in the winter time upon herrings, and when the fishermen bait their lines with mussels the cod will not take them; but immediately they get a few herrings they succeed. Accordingly, they always wish to obtain a few herrings in the winter time, in order to bait their lines. There has been a very good fishing this season, and the success was very marked. Immediately they obtained herrings they had an abundant supply of cod, skate, and halibut.

29,358. Then the catch of cod, skate, and halibut depends very much on the bait?—Yes, very much. They prefer herrings to feed upon in the winter rather than any other bait.

29,359. (*Professor Huxley.*) If there were any close time for herrings on this coast would not that interfere seriously with the catch of cod?—Unquestionably it would.

29,360. Would it put a stop to the fishery?—No, it would not put a stop to the fishery altogether. They would adopt other bait, but they would not succeed in catching so many fish.

29,361. Are there plenty of herrings here in the winter time?—Yes, I believe there is an abundance. They are scattered, however, and do not get into shoals in the winter time.

29,362. The winter fishing for herrings is rather a new thing here, is it not?—Yes.

29,363. It has been practised only for the last year or two?—Last winter I should hardly say it was practised. Nets have been taken out and set in the creeks and bays along the coast, and they have caught herrings and a few crabs, but there has been no regular trial. They have not attempted a regular herring drift-net fishery.

39,364. Was that because the badness of the weather at that season of the year prevented them from carrying on the fishery?—It was never thought of until the last year or two.

29,365. It was never thought of at all?—No.

29,366. There has been a regular winter fishing at the mouth of the Forth?—Yes.

29,367. And yet it never occurred to the people here to try the same thing?—No.

29,368. Is the weather such in the winter time as to enable you to fish with safety?—It is very wild here, and the weather is very uncertain. It is almost impossible for the men to calculate on what days they will be able to go out to the fishing. They would run a very great risk of losing nets of considerable value. For that reason they are very timid in shooting their nets in the winter season.

29,369. They are liable to sacrifice a much greater amount of property in the winter than in the summer season?—Yes, if the bad weather comes on when they are out at sea.

29,370. Do they catch herrings in the winter with dandy lines?—No, not in the winter. They have not attempted it this year, because the fishermen have been more successful in the cod-fishing; but in previous years, in the months of May and June, they have practised dandy-line fishing for herrings.

29,371. For the market?—No, for bait, and for their own consumption.

29,372. In what condition are the herrings here about the months of January and February?—The quality of the fish they got this winter was very fair.

29,373. Were they full fish?—They were pretty full; they were getting full. Towards the end of January there were many spent.

29,374. Do you recollect the time of the bounty here?—Yes, my father was a Fishery officer before me, and I attended him at the period of the bounty.

29,375. The herring fishery has increased very much since the bounty has been given up?—Yes, there has been a very great increase. I don't think at that time there were more than 15 or 16 boats.

29,376. Notwithstanding the cessation of the bounty, the ordinary engagements which have been entered into by the fishermen have been sufficient to create this great increase?—Yes.

29,377. Speaking from your knowledge of the fish curers, does there seem to be a great wish on their part to have the brand continued?—There is a great desire that the Government superintendence should be continued, but there are exceptions.

29,378. Are there any herrings exported unbranded?—At the beginning of the season the herrings are exported unbranded. They do not keep them a sufficient length of time in the salt to entitle them to the brand. They want them to get an early market. Herrings were sent away this year which had only been from one to five days in cure; whereas, they require to be 10 days in salt to entitle them to the brand.

29,379. Were those herrings exported to the foreign market, or to England?—When I speak of exporting, I mean exporting to the Continent.

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29,380. Were they taken on the Continent freely and without difficulty?—They were sent away to see what markets they could catch.

29,381. Is there a considerable demand for them?—They are on their way now. I understand that the market is clear of herrings just now, and they will not wait.

29,382. They take them, brand or no brand?—Yes. I do not know what the reason is, but they want herrings, and the curers are so anxious to catch the markets that they are sending them off at once.

29,383. Do you as Fishery officer find a great variety of quality among the branded herrings?—There is a certain level which of course they must all come up to.

29,384. Do you ever find any great variety?—At Peterhead, under my particular charge, there is not a great variety. They bring them up a uniform good article.

29,385. And above the level you require there is not much variety?—No.

29,386. In order to obtain the Crown brand the herrings must be cured up to a certain pitch of excellence?—Yes.

29,387. The curer, besides that, does not make any difference or variety in his cure?—There is not a great variety of excellence of cure here; but they bring them up to as much perfection as circumstances will possibly allow. In the first instance it is necessary that the fish, when caught, should be of a certain quality; then there is something in the way in which they are handled, selected, put into salt, and afterwards cured. The care paid to all these matters is generally uniform.

29,388. Is it or is it not possible that a man should be able to make his herrings very much better than what is required for the Crown brand?—He cannot well do that. As it is he has to come up to a great degree of perfection.

29,389. Would you refuse the Crown brand to herrings that had not attained that highest degree of perfection?—It is very difficult to say what you are to call the highest degree of perfection. So much depends on the quality of the fish when they are actually caught; that is an ingredient which must be attended to in regard to the excellence which the fish attain, and their value as an article of food. For instance, young full fish make a much better article of food than herrings which are almost spawning.

29,390-2. But you give the full Crown brand to fish perfectly cured that are almost spawning?—Yes, if they are full herrings.

29,393. If you had two barrels, one cured while they were full fish, but young, and the other cured when they were fish ready to spawn, you would give them both the full Crown brand?—Yes.

29,394. Nevertheless the barrels which consisted of herrings that were full young fish would contain the better fish?—Yes, they would form a better article of food.

29,395. Then there is a considerable difference between one kind of full Crown-branded fish and another?—Yes, that depends on the stage of the fish's existence.

29,396. There is that difference?—Yes.

29,397. There is a certain range of full Crown-brand excellence?—Yes.

29,398. That depends to some extent on the condition of the fish?—Yes.

29,399. Does it not depend also on the mode in which the cure is effected?—Unquestionably. They must, before they are entitled to the brand at all, be gutted and salted before 24 hours have elapsed.

29,400. Is not the quality of the salt also an ingredient?—Yes, and the way in which they are handled from the time they are taken out of the sea.

29,401. Is there a good deal of range among the full Crown-branded herrings?—There must be a certain extent of range among them.

The witness withdrew, and the inquiry was adjourned until Saturday, July 30.

Peterhead, Aberdeenshire, Saturday, 30th July 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

ALEXANDER KING called and examined.

A. King.

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29,402. (*Mr. Caird.*) Have you long been engaged on the fisheries on this coast?—Yes; for a long time.

29,403. Do you practise all the kinds of fishing that are practised here?—I practise the haddock-fishing, the herring-fishing, and the cod-fishing, in the winter time.

29,404. In your experience and in your knowledge, has the quantity of herring caught year by year increased or diminished?—In some years they are always light. The herring-fishing was very plentiful when I came to it first; but it seems to have altered its character. Some years there are a great deal, and in other years they are not very plentiful.

29,405. Are there more boats engaged now than when you begun?—A great many more.

29,406. Are they larger boats?—Yes.

29,406*a*. Are the fleets of nets larger?—Yes.

29,407. Do you find with those larger boats and the greater number that go, and the larger fleets of nets, that you make a larger catch of herrings than the small boats and nets were in the habit of making formerly?—Yes.

29,408. Have you at any time observed that the shoals of herrings which come in upon the coast are becoming smaller, or that the herrings themselves are less numerous?—I think there is no difference in that respect.

29,409. Is it only the irregularity of the seasons and the weather that you complain of?—Yes, just that.

29,410. Have you to complain of any interference with your fishing by Frenchmen coming among your nets?—Yes, when they come here they heave the garbage over for the dog-fish. That has the effect of raising a terrible quantity of dog-fish, which destroy our nets.

29,411. Is that inshore, or at some distance out at sea?—It is just wherever they haul up the fish to gut them.

29,412. Is that the chief complaint you have against them?—I know of no other.

29,413. Is that a very serious matter?—I don't believe there are a great number of Frenchmen who come upon this coast now. I don't think we sustain very much hurt from Frenchmen now.

29,414. They don't do you much harm by drifting among your nets?—No, they keep quite clear of that.

29,415. Do they fish now in the same place that you do?—Yes.

29,416. Do they fish more than three miles from the shore?—Yes, I never saw them fishing within three miles from the shore.

29,417. You don't complain of an infringement of the Convention Act in that respect?—No, we have

no complaint with regard to their coming too near the shore, so far as I have seen yet.

29,418. Do the shoals of herring come as near the coast as they did, or have they altered their course?—No, they don't come as near the shore as they did in former times.

29,419. Is there any reason that you can assign for their keeping further out now?—No, unless it is the number of boats that go out in the offing. We are of opinion that they have a tendency to break the shoals.

29,420. Are there a great number of steamers plying upon the coast?—Yes, there are a great number.

29,421. Could they have had any influence in preventing the shoals from coming closer in shore?—I cannot say.

29,422. Is the herring a fish that is easily frightened?—Yes, very easily frightened.

29,423. Have you any remark to make with regard to the time at which the fishermen shoot their nets; do they shoot them at irregular times in the evening?—No.

29,424. Do they mostly shoot them at one time?—They cannot all of them shoot at one time, because there are a great number of boats, and each has to get clear of his neighbour before they can shoot.

29,425. Is there any advantage in your opinion in observing the regulation that herring nets shall not be shot earlier than half an hour before sunset?—In my opinion it is quite time enough.

29,426. Is that regulation at all observed by the fishermen here?—The fishermen say that that is the earliest they can go the fishing with advantage to themselves.

29,427. Are many of the nets shot earlier than that?—Sometimes they are shot earlier.

29,428. Does anybody enforce any regulation with regard to the time at which you are to shoot your nets?—No, I never saw any one attempt to enforce a regulation upon the subject.

29,429. Would you desire to have some regulation enforced, or would you rather leave the fishermen to follow their own wishes, and carry out what they think best for themselves?—There are a great number of boats hanging about each other, and they would hardly get clear; I believe that is the reason which induces them to shoot earlier than they would otherwise do.

29,430. Do you think it is a matter of necessity that they should be allowed to shoot their nets as early as they can?—Yes.

29,431. Then you would not desire to have a regulation which would call upon them all to shoot their nets at one particular time?—No, that would hardly suit the fishing here.

29,432. Is that because a portion of the fishing boats do not get as early on the ground as others, and if all of them were prevented shooting, except at one particular time, it would be inconvenient?—Yes, because they would be all in one lump.

29,433. Do you know whether there is any loss sustained by the fishermen in consequence of their shooting much before sunset, and thereby disturbing the fish?—The fishermen tell us that it does a great deal of ill.

29,434. You have been long a fisherman yourself?—Yes.

29,435. What is the result of your experience?—I can say very little about it.

29,436. Have you not seen much injury done in that way?—No, I don't think I have.

29,437. Do you fish with ground-nets at any part of the season?—No.

29,438. Always with nets floating on the surface?—Yes.

29,439. Have you a winter fishing as well as a summer fishing?—We catch haddocks.

29,440. But I mean a winter herring-fishing as well as a summer herring-fishing?—We took herrings here last winter.

29,441. Was that the first time you tried them?—Yes.

29,442. Was the fishing successful?—Yes; but it was very bad weather.

29,443. There were plenty of fish if the weather had been suitable?—Yes.

29,444. With regard to the haddock fishery, is it within your experience that the quantity of haddocks caught on the coast has increased or diminished?—It has greatly diminished.

29,445. The total quantity has diminished?—Yes; it has diminished a great deal. They were at one time very plentiful off here, but now they have left the coast altogether.

29,446. But are there not more boats engaged in the haddock fishery than there were in former times?—There are a few more upon our coast.

29,447. For how many months in the year do you follow the haddock fishery?—All through the year, except for the two months when we are out after the herrings.

29,448. Have the haddocks changed the ground they were in the habit of coming to formerly?—Yes; they were in the habit of coming close in in our bay; now they have left us, and it is impossible to get any without going out a great distance.

29,449. How far do you go out to sea for them now?—Perhaps we will have to go 10 or 12 miles before we can find them.

29,450. But when you do go far out, do you find them?—Yes; we find them at times, but they are not nearly so plentiful.

29,451. Is the quality of the fish as good as it was formerly?—Yes, in quality I think it is just the same.

29,452. Then what is the reason they do not come to the same ground, and are less plentiful?—I cannot say very much about that. We sometimes blame the guns that are fired at Aberdeen.

29,453. Do you think they have any effect?—Yes; they do startle the fish greatly.

29,454. You are speaking of the haddocks now?—Yes; but it is the same with other fish. Supposing we get a good shot of herrings to-night, if there is any firing of cannon the next day we should see none of them the next night.

29,455. None of the haddocks?—No, nor of the herrings either; they start off directly into other water.

29,456. Do you think it is the firing of cannon at Aberdeen that has disturbed the ground which the fish frequented formerly?—Yes; that has been the effect in the shoal water.

29,457. When did this change take place in the ground the fish frequented—ever since the firing began?—I think that is the cause, because there have been no fish on our coast ever since the artillery began to practice.

29,458. Is it the volunteer cannon you refer to?—Yes, I suppose it is.

29,459. Do they fire a great many guns at Aberdeen?—Yes, a great many. They often fire once or twice a week.

29,460. Is it only at Aberdeen that this is done?—No; they fire at Peterhead also.

29,461. Will they not disturb the fish as well?—We don't hear the Peterhead guns. They are not so loud.

29,462. You mean that you do not hear them when you are out at sea?—Yes.

29,463. Do you get many cod and ling here?—Yes.

29,464. Is it a good cod and ling fishery?—Very good cod are got here.

29,465. Do you follow that as a particular branch of your business?—We go haddock and cod-fishing.

29,466. Are they caught on the same lines?—No; we have big lines for cod and ling.

29,467. Have you in your boats both cod lines and haddock lines?—We make no difference; but at Buchanhaven they have boats for the cod-fishing.

29,468. But you have not specially?—No.

PETERHEAD.

A. King.

30 July 1864.

29,469. Do you use cod lines at the same time you are using haddock lines, and fish both at the same time?—No; we use haddock lines for both; big stout lines.

29,470. Are cod caught with your haddock lines?—Yes.

29,471. Do you use the same bait?—Yes.

29,472. What is the bait you use; not mussels?—No, herrings. They are the best bait we can get for any kind of fish.

29,473. Do you get large quantities of cod here?—At times we get a good quantity here; but they are like the haddocks; they have been decreasing in quantity. They are not as plentiful as they were some time since.

29,474. What is done with them; are they sent away fresh to market, or are they cured?—They are cured.

29,475. Where do you send them to?—They are cured and sent to London.

29,476. Where do you get your bait from?—From Newburgh.

29,477. Do you get plenty there?—Yes, plenty.

29,478. Then you have no difficulty with regard to bait?—No, except the fact that it is very dear, and we are put to a great deal of trouble and expense in getting it.

29,479. Is the bait dearer now than it was in former times?—Yes, it is very dear.

29,480. Still you are not in any way hampered in your fishing from want of bait?—Not at present; but we have been hampered some time back, in the winter.

29,481. (*Professor Huxley.*) Does the Fishery cruiser here ever interfere with you—I mean the boat sent here by the Fishery Board?—No.

29,482. What size of mesh do you use for your herring nets?—What sized mesh?

29,483. Yes; how many to the yard?—I think there are about 30 to the yard.

29,484. Does anybody ever look after that?—No, I never saw anybody looking after it.

29,485. Have you any below that size?—No, none below that size.

29,486. Are your boats lighted when you go out at night?—Yes; on dark nights we hoist a light.

29,487. What light do you hoist?—We put up a white light.

29,488. Do you put up one or two lights?—It is just a lantern.

29,489. Do you put up one or two lights?—Sometimes three or four, I think.

29,490. Where do you put them?—We just put them in the middle of the boat.

29,491. One above the other?—No, there is only one light.

29,492. But sometimes there are two or three lights?—They are just little lights. Every boat carries one light.

29,493. You said two or three?—No, every boat carries one light.

29,494. Did you ever hear of any regulation that you should have two lights one above the other?—No, I never heard of that.

29,495. Has the Fishery cruiser never enforced that?—No. I don't think it is necessary to have two lights to one boat.

29,496. You never heard of a regulation to that effect?—No.

29,497. You were asked just now whether you ever got into any trouble with the Frenchmen?—No, we never get into any trouble with them, unless it is that they sometimes damage our grounds and our nets by heaving their garbage into the sea and raising the dog-fish.

29,498. Do you have a great deal of dog-fish on your fishing grounds?—Yes.

29,499. Do they destroy the herrings and the nets?—Yes; they destroy the herrings and nets too.

29,500. In what sort of condition are the herrings in the winter time? Are they full fish?—They are very good fish then.

29,501. Are they full fish?—Yes, they are very full.

29,502. What time of the year are they spent?—About the middle of February.

29,503. You seem to get on pretty well by yourselves; you don't seem to have anybody to trouble you?—No.

29,504. Is there anything you would like to have done?—I can't see anything that we require.

29,505. (*Mr. Caird.*) You think you can manage your own business best if you are left to yourselves?—Yes, I think so.

29,506. You don't want anybody to help you?—No. Some kind of help would do us good.

29,507. What help would do you any good?—It would do us good if we were able to get things cheaper.

The witness withdrew.

W. Buthley.

WILLIAM BUTHLEY called and examined.

29,508. (*Mr. Caird.*) You are a fisherman at Colliston?—Yes.

29,509. Have you been engaged in fishing there during the best part of your life?—Yes, ever since I was able to work.

29,510. Do you generally agree with the witness who has just been giving his evidence with regard to the supply of fish on this coast?—I could not say anything more about it than Alexander King has told you.

29,511. Do you find that the haddocks are diminishing in quantity?—Yes, greatly since I began to go to sea.

29,512. Is that for each boat or is the whole quantity smaller than it was formerly?—Is the whole quantity smaller?

29,513. Do you think the whole quantity caught on this coast is less than it used to be even when there were fewer boats?—Yes, I have seen two or three boats bringing in more than 40 or 50 will do now.

29,514. Have you any reason in your own mind that you can assign as the cause of that?—I have no reason except the firing of the cannon at Aberdeen across the shoal water of the bay.

29,515. When you go out to sea do you not find plenty of haddocks?—They are not so plentiful as they were at one time.

29,516. How far is the fishing ground from the shore at Aberdeen where the guns are fired?—Perhaps seven or eight miles,

29,517. Can you hear the guns quite well when you are fishing upon that ground?—Yes, we can even hear them when we are sitting in our houses at home.

29,518. How many miles is that from the place where they are being fired?—16 miles.

29,519. Have you noticed that after they have been fired the fish leave the ground?—Yes.

29,520. Do they go further to sea?—They go away altogether.

29,521. Do you get them again the next day, or in a day or two, or when do they come back again?—We caught a good shot this season in April. I remember very well that we caught them on the Saturday, and on the Tuesday following when we went after them again we got none.

29,522. When did you get any again?—We got none at all.

29,523. Did they go away altogether?—Yes.

29,524. Did you give up fishing in consequence?—No, we just tried in another place.

29,525. Did you find them in another place?—We tried a place away east; they were very plentiful when we caught them first, but we never got them again in such quantity.

29,526. Do you think the steamboats plying on the coast have any effect with regard to changing the course of the fish?—I cannot say.

29,527. Is there any trawling on this coast?—There has not been for a long time.

29,528. Has there ever been trawling here?—There was some trawling carried on 10 years ago in Aberdeen Bay; but there has been none at all for the last five or six years.

29,529. Do the deep-sea trawlers ever come down on this coast?—No.

29,530. Then you do not ascribe the changing of ground by the fish to any injuries which you have sustained by the practice of trawling on this coast?—The trawlers that were working in Aberdeen Bay did very great harm.

29,531. But I understand you have had no trawlers for the last 10 years?—No, but the trawlers have been working since I have been at sea.

29,532. Is the cod-fishing as good as it formerly was?—No.

29,533. Has all the white fishery rather decreased?—Yes.

29,534. With the exception of the herring-fishing?—The herring-fishing is not equal to what it was a number of years ago.

29,535. Have you a greater number of boats than were formerly employed here?—Yes.

29,536. Do all the men make a tolerable livelihood?—Yes.

29,537. Is the livelihood they make as good as when you began fishing?—No.

29,538. Do not the fish bring a better price?—Yes, the fish bring a better price; but we don't get as many in general.

29,539. With the increased number of men and boats, on the average, each boat was better stocked with fish at that time?—Yes.

29,540. With regard to shooting your nets before sunset, have you any remark to make upon that point; have you any desire to see a regulation enforced which would prevent any one man going fishing and shooting his nets earlier in the day than another?—I have heard plenty of the fishermen say that they never saw a good fishing when they shot their nets before sunset.

29,541. Have you observed that yourself?—Yes, unless it was rough weather.

29,542. Knowing that to be the case, do you not avoid shooting early for that reason?—If we can avoid it we do.

29,543. You do your best to avoid it for your own interest?—Yes.

29,544. Would you like to see the Fishery officer coming down here and compelling you to refrain from shooting your nets until half an hour before sunset?—I think it would be better if it was not done, as the fishermen consider that it may do them considerable harm to shoot their nets before sunset.

29,545. (*Professor Huxley.*) How many times in the week do the Aberdeen people practise their artillery—how often do you hear them?—We hear them once or twice a week.

29,546. Did they do that last winter?—They do it two or three times every month.

29,547. They have been practising regularly?—Yes.

29,548. Did you go out haddock-fishing last winter?—Yes.

29,549. Did you get haddocks?—We got a few, but the loads were small, as the weather was very bad, and we could not get at the fishing grounds often.

29,550. But still there were some haddocks got in the fishing last winter?—Yes, they did very well on some of the eastern coast of Scotland, in the Moray Firth.

29,551. But there were none in this neighbourhood?—We got more here than on the coast westward.

29,552. Then the firing did not frighten the haddocks here?—No.

29,553. If they practice three times a week, do you not consider that there is not much time for the haddocks to get over their fright?—The water is deeper here than it is with us.

The witness withdrew.

ROBERT BRUCE called and examined.

R. Bruce.

29,554. (*Mr. Caird.*) You are a fisherman at Peterhead?—No, at Buchanhaven.

29,555. Is that near Peterhead?—About a mile from Peterhead.

29,556. Have you long been a fisherman there?—From my boyhood.

29,557. Then you have considerable experience and knowledge of the different kinds of fishing practised along here?—Yes.

29,558. Speaking of the herring fishery, is it your opinion that the quantity of herrings caught, on the average, is increasing year by year?—I rather think it is diminishing.

29,559. Is there not a larger number of boats, and larger boats employed now than were formerly employed?—Yes.

29,560. Do you not think that the greater number of larger boats get a larger quantity of herrings?—No, I think they get a less quantity.

29,561. Has there been a progressive diminution or a fluctuating diminution?—About this time three years ago there was a good fishing, but I have seen it very much decrease since.

29,562. Has there not been one exceptionally good fishing within the last three years?—Yes; there was three years ago.

29,563. But you now have begun to have a winter fishing as well as a summer fishing, which formerly you had not?—Yes; there has been a little herring-fishing along the beach in the bay. We catch a few for bait for the cod.

29,564. Is there no winter fishing practised for the herrings themselves?—No.

29,565. Not along the shore?—No; there are only a few caught along the beach, and none by drift-nets.

29,566. They are obtained for bait only?—Yes, only for bait.

29,567. It is not a fishing that is practised in order that the fish may be sent to market? There is not a large proportion of the fish caught at that season sent to market?—No; very few are.

29,568. Have you found that the herrings go further to sea now, or are they much upon the same ground that they were formerly in the habit of frequenting?—I think they are found further out at sea now.

29,569. Can you give us any reason for that?—No; I cannot assign any reason.

29,570. With regard to the haddock-fishing, has it improved or diminished?—It has diminished; but there are plenty in the deep water, at some distance from land.

29,571. How far from land?—From 12 to 15 miles off.

29,572. Are they plentiful there?—I think they are just as plentiful there as ever they were.

29,573. Do you not follow them there?—Yes; but we have much larger boats now.

29,574. With those larger boats, going further out to sea, do you get more haddocks?—We do at times, but we only go twice or thrice a week; hardly three times on the average.

29,575. Did you get them oftener when they were near in shore?—Yes, we got them once a day.

29,576. Then you get a larger catch of them further out at sea, but you don't get them as often?—No.

29,577. Is the quality as good as it used to be?—No, the haddocks are worse in quality. They are not such well fed fish as when we got them off the shore.

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29,578. Are there no haddocks to be got off the shore?—There are a few, but only very few.

29,579. What do you fancy is the cause of the haddocks having left the shore?—I cannot tell you.

29,580. Have you no reason to give for it at all?—No.

29,581. You don't ascribe it to the deep-sea trawling?—No; I have not seen any trawling.

29,582. Are the haddocks easily disturbed by the steamboats passing?—I don't think they are.

29,583. You don't think that that can be the cause of it?—I have seen steamboats passing when we were getting plenty. I don't see that they do any harm.

29,584. Does the cod fishery continue to be as good as it was formerly?—No, except in Heron Bay, where we can get plenty of cod.

29,585. There is one place where you can get them?—Yes; when we go up to Heron Bay we can get plenty.

29,586. Then it is not from any want of cod that the cod fishery does not continue to be so good?—No; we can get plenty with the mussels there.

29,587. Have you been long in the habit of using herring bait for catching cod?—No; I don't think we have been more than four or five years trying for winter herrings.

29,588. Have you found out that the winter herring makes excellent bait?—Yes.

29,589. I think you said that if you had herring bait you could get plenty of cod, and that there was no appearance of the cod having decreased in the sea?—I don't think they have. In former days we had no herrings that we knew of in the winter which we could bait for cod, and when we baited with mussels we did not get any cod at all; but now we find that we can get plenty with herring bait.

29,590. That was the case in the early time of your fishing?—Yes, we did not use herrings then.

29,591. Did you catch them with mussels then?—Yes.

29,592. Do the cod not like mussels now?—No.

29,593. What do you think is the cause of that?—I don't know.

29,594. Is there any oyster fishery along the shore?—No.

29,595. Is there any lobster fishery?—There are some old men who catch lobsters sometimes.

29,596. It is not a matter of much importance?—No.

29,597. Is there a good crab fishery?—There are plenty of crabs among the rocks.

29,598. Are they fished?—No, they are not fished here; but the women and old men go down at low water in spring-tides to get them.

29,599. Are there a great many got here?—Not many; they don't lay themselves out to catch them.

29,600. Are they not considered worth following as a matter of business by the fishermen?—No.

29,601. (*Professor Huxley.*) What do you think of the guns frightening away the fish?—I don't know anything about it. I have heard complaints about the salmon fisheries, but I don't know that they ever did any harm to us.

29,602. Have you caught haddocks at the time the guns have been firing?—Yes.

29,603. Is that commonly the case?—I never knew it do them any harm, but I have heard complaints about it.

29,604. As far as your own experience goes you never found that it did any harm?—No; I should not say that it does.

The witness withdrew.

W. Strachan.

William Strachan called and examined.

29,605. (*Mr. Caird.*) Have you long been a fisherman on this shore?—I have been a fisherman for 45 years.

29,606. At Peterhead?—No, at Buchanhaven; but it is just the same thing as Peterhead.

29,607. Have you found in your long experience that the quantity of fish is increasing or diminishing?—When I came there were only two or three boats, and I believe we have now about 20 boats. We had as many fish when I came here first as we could take; but now we have upwards of 20 boats. I believe there are 27 altogether in our little village; all of which fish upon the same ground, and we get less fish. I think it is owing to the great increase which has taken place in the boats. That is the reason, I think, why the fish appear to be less.

29,608. With regard to the haddock-fishing, has the ground much changed?—At one time we could get them close in here, but now, what with so many fishing, and so many lines being put into the sea, and other things, they have left the ground. I believe the cause of that is the way in which we have been working them. The fish came back for a time, but only for a very short time, as compared with what we used to have them before. We have only had them, for instance, one week this season, whereas in my early time we used to have them the whole season round.

29,609. You had them for the whole season inshore?—Yes, but now when they come they only stop a week.

29,610. You ascribe that change to the great increase in the number of people fishing?—Yes.

29,611. Are the boats larger than they were formerly?—Yes, the large boats follow them to the offing, but in my early time we had only small boats engaged in the fishing.

29,612. How long is it since the fish changed their ground?—As we began to increase in the number of our boats the fish began to wear off. They wore off, in fact, in proportion as we began to take them.

29,613. Do they keep pretty steadily upon a certain range of ground?—The more we are going after them the further they are going off. At first we took the large boats 12 or 14 miles. For the last 10 years we have been going after them, and now we have to go 20 or 30 miles.

29,614. Have you always observed that as fast as you have increased the number of your boats the fish have gone further to sea?—Yes, they have always been going further off from us.

29,615. But when you get to them do you find quite as many fish as you were in the habit of finding formerly?—Yes.

29,616. Then there is no want of fish?—No; there are as many as there used to be, but the boats don't go as often after them. The fish are as plentiful as when I began, further out.

29,617. When you get out to the soft ground do you find them even more plentiful than they were formerly?—Yes.

29,618. Are they of as fine quality?—No, I cannot say that they are of the same quality.

29,619. Are they not as large?—They are as large, but not as good for eating. I hardly eat one myself. What we call sea haddocks are much inferior to the haddocks we used to get inshore.

29,620. Do the public complain?—Yes, I believe they do.

29,621. That does not prevent you from selling them?—No; but when we get any in the bay we get double the price for them that we get for sea haddocks.

29,622. When you get them inshore you get an increased price for them?—Yes, we get double the money. For any quantity of haddocks we obtain in the bay we get as much as for double the quantity of sea haddocks.

29,623. Is it a different bottom that you fish upon outside?—Yes.

29,624. Is it a rocky bottom or a soft bottom?—A rocky bottom with a kind of tide upon it.

29,625. What is the bottom inside?—A sandy bottom, and the fish live on sand eels and stuff of that kind. The food they get is altogether different from that they get outside.

29,626. Are there no sand eels on the bottom outside?—There do not appear to be; we get their insides, when we catch them in the bays, all full of sand eels.

29,627. When you open the haddocks inshore, do you find the contents of their stomachs different from what they are when you catch them outside?—Yes, they feed altogether upon a different kind of food.

29,628. Has that been the observation of any of the fishermen besides yourself?—Yes, we have often spoke about it amongst ourselves; we ken it very well.

29,629. With regard to cod-fishing, is it increasing or diminishing?—It is about the same; there were many more fish taken in our village 30 or 40 years ago than we can take now with a much larger number of us, and at that time we had not to go so far out to see for them. Now, there are upwards of 20 boats, and there are not so many fish caught and brought into our place upon the average as there were in my early days.

29,630. Then, though each boat does not get as large a haul, I presume that the whole number get more fish than you got in former times?—Yes.

29,631. Both of haddocks and of other fish?—Yes, but we only had a few boats formerly.

29,632. Have the cod changed the ground from where you were in the habit of fishing them?—No.

29,633. They continue upon the same ground where you formerly caught them?—We find them on the same ground when we go with the herring bait.

29,634. Are the cod the same in quality?—Yes.

29,635. Do you get many halibut or turbot?—Yes, we get a good deal of halibut.

29,636. Do you get any turbot?—Yes.

29,637. How do you catch them?—With lines; we call it a "Rawn fleuk"; that is what we call the turbot. I was once with a yacht here, and the thing that we called a "Rawn fleuk" was what they called a halibut.

29,638. Is not that one of the best fish caught here?—Yes.

29,639. What kind of bait do you use for catching it?—We use the sand-eel bait.

29,640. Is that the same thing that the haddocks feed on inshore?—Yes, precisely the same thing.

29,641. Then has the cod and ling and the turbot and halibut increased in quantity here?—Yes, there are far more than when I began first, but there are so many people taking them. The number of people taking the fish for a trade has much increased.

29,642. Does it require a different kind of bait to catch cod now than it did formerly?—Yes, we use the herring bait now when we can get it.

29,643. Formerly you did not use it, and yet you caught the cod?—Yes, there was no other bait to give them except that which we used. We did not try the herrings at all.

29,644. But the cod would feed on the herrings then if they could get them the same as they do now?—Yes, but now that we have got the herring bait we have been enabled to get plenty of cod. Last winter we got a large quantity of cod with herring bait, and we got nothing until we began to use the herrings.

29,645. Is the winter fishing purely for bait now?—Yes.

29,646. You do not follow it in order to sell the fish?—No, we only get a few for bait.

29,647. Do you think it possible that the winter fishery may increase, and that the catch will become so large that it will be of advantage for you to sell it?—We are thinking so, but we must have better means for catching the fish. At present we only use little boats with a few old nets. Some of the boats have got good takes, but what they have got has not been intended for sale; it is just only for bait that we take them.

29,648. Have you any remark to make with regard to the herring fishery. Are there any regulations enforced here or any modes of fishing practised in the herring fishery which are injurious to the fishing?—I do not know that there are any regulations that interfere with us. Sometimes the herrings are earlier, and then we have to shoot early for them. There is a kind of young fish that comes here, and we get those fish before the sun sets. If we did not shoot our nets before then we should not be able to get those fish.

29,649. Is it a peculiar kind of herring?—Yes, a young herring.

29,650. They come quicker up?—Yes, they always rise about the time the sun is going down, or just as it is going down. Unless we shot early we should not be able to get those fish.

29,651. Then you would not approve of any regulation that would prevent you shooting your nets until near sunset?—I do not think it would do any good, because in regard to that particular fish we should not be able to get many of them unless we shot our nets early.

29,652. Then you do not desire any interference with you in that respect?—No.

29,653. You rather prefer that the fishermen should be left to their own freedom to regulate themselves?—Yes; if they were stopped we should not get the same fish.

29,654. Do the fishermen adopt regulations among themselves to prevent one from getting an undue advantage over another in setting his nets?—We are very bad that way as to regulations. They will shoot over each other and not give enough berth or room for each other. Every boat in that respect does a heap of damage to itself and great harm to the fishing.

29,655. Are there any modes by which that could be better managed?—I do not know; perhaps if the Fishery people were to give us a little assistance in that matter it might do good; but then if any regulations were established, in all probability the fishermen would not keep them.

29,656. Suppose that some regulations were established making a provision that the boats should place their nets at certain distances apart from each other, would it not be difficult to enforce such a regulation?—There might be a little difficulty, but it would be easily done if they paid attention to it. At present they hardly care, and there are a heap of people going to the fishing who know nothing about it. There are a great many of them who hardly know anything about it, and they seem not to care where they shoot or what they do. They just put out their nets without caring what hurt they do to other people who are fishing.

29,657. Then you would like to have some Fishery vessel here to keep you in order?—It would be good for everybody, just to see what the boats are doing. Boats shoot many a time when there is no occasion for it, in order to get a good berth, and they do a good deal of damage.

29,658. Do you suffer from the Frenchmen fishing among you?—They did us some hurt three years back, but not lately.

29,659. Then you have no complaint to make with regard to them?—No, our only complaint is that they take the fish off the coast. They take a heap of the halibut and cod and ling with their lines inshore.

29,660. Do they come within three miles of the shore?—Yes, within half a mile.

29,661. Do they not pay attention to the regulation which prohibits them from coming within three miles of the shore?—No.

29,662. You know that there is such a regulation?—Yes, I know there is; but they are often fishing within half a mile.

29,663. And nobody interferes with them?—No, yet the people here know they are taking the fish.

29,664. Does anybody come here to examine the size of your nets?—There is nobody here to look at

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W. Strachan.

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the nets. Last year, at Peterhead, I heard them say that they considered our mesh too small, and I heard that they were going to examine them.

29,665. Are the meshes smaller than they used to be?—Yes.

29,666. What is the size commonly used?—From 31 to 32.

29,667. From 31 to 32 rows to the yard?—Yes, and they take a terrible deal of fish.

29,668. Are you making them smaller than that now?—Yes, I have seen them 35 to the yard in some of the strange boats that come here. It is quite small herrings that they take, and I do not consider that that is right.

29,669. Does the large herring mesh in meshes of that size?—No, they cannot; the herrings they take are taken before they come up to be proper fish. It is for the young fish that they use those nets. The size I use is about 31 or 32.

29,670. (*Professor Huxley.*) Are you aware that the law prescribes 36 to the yard?—That is about the size they have. Their nets are quite as small as 36 to the yard.

29,671. Do you consider that 36 to the yard is too small?—All I know is that they will take a very small herring; quite a young herring may be taken in a net from 35 to 36.

29,672. Your herring is rather a large one here?—Yes, it is large in size.

29,673. What is the average size?—They are from 65 to 70 dozen in a cran.

29,674. What do you think about the guns frightening away the haddocks?—I often hear them say that the small fish are down on the coast here, and then I hear them complain that as soon as the guns have been fired all the fish made away from the coast. Directly the guns have been fired off the fishermen are not able to get any fish. They are obliged to go out to a considerable distance before they can get any fish.

29,675. You are speaking now of people fishing along the shore?—Yes.

29,676. Does it affect the sea-fishing?—I do not think it does; but along the coast I know the fish are of a very frightened character, and they will go among the herrings if they are disturbed. The fish often fly to a great distance; I have often remarked that, and have known them do it. I am satisfied that they hear quite well below the water.

29,677. You have remarked that?—Yes, and I have often heard people complain of the guns. At the same time I do not think there is any cause to complain of the fish in the sea; they were shifting about before the guns fired, and I think that that was occasioned by so many boats going out to the fishing.

29,678. In fact, you overfished them?—Yes, I think so.

The witness withdrew.

A. Sutherland.

ALEXANDER SUTHERLAND recalled and examined.

29,679. (*Mr. Caird.*) Have you found it necessary to interfere with the French fishermen when they have been, in your opinion, transgressing their limits?—Many fishermen have complained to me of the practice adopted by the Frenchmen of fishing inshore. They have stated that their long-lines have been injured in the bays and creeks. As far as I have been able to communicate with them, I have always told them that that was not allowed by the Convention, and the Fishery cutter being on the coast I generally endeavoured to communicate with him, in which case he immediately took means for preventing a repetition of the infringement by ordering them to haul in their lines and cease to fish. No longer ago than Wednesday last there were complaints made to me of lines having been used in the bay, and I communicated with the commander of the Coastguard. I went out with him and boarded three of the vessels. We found one long line shot about a quarter of a mile from the vessel in the middle of the bay, and upon asking the master of a French boat if it was his, he admitted that it was. I told him that it was improper and that it would not be allowed; whereupon he hauled up his line, and I observed that there were fish upon it. On board of the same vessel there were some fish newly caught, and I have no doubt that they had been caught in the bay.

29,680. You warned the boats off?—I told them that they would not be allowed to fish there or to shoot their lines anywhere within three miles. I communicated these facts to the Fishery Board, and understanding that the French were collecting on the coast they sent down the cutter. She is now stationed on the coast.

29,681. Do you ever find the Frenchmen fishing for herrings within three miles of the coast?—No; the herrings are generally outside three miles. Before you leave the question of the French vessels, perhaps you will allow me to remark that one of those vessels which we warned went round and brought up at Buckhaven, and, as I am informed, shot her lines again, having been fairly warned.

29,682. (*Professor Huxley.*) Suppose the men refused to go away, what would you do?—I was not prepared to take any extreme measure, but I should have communicated with the Fishery Board.

29,683. Could you take action under the Convention Act?—Yes.

29,684. Do you feel bound to carry out the other parts of the Convention Act?—In what way?

29,685. I mean with regard to the lighting of the boats?—No; I am not called upon to do that. I have nothing more to do than to communicate with the fishermen. I have never been called upon, nor do I think it necessary, to say of myself that they must have two lights.

29,686. But are you not aware that that is part of the Convention?—Yes.

29,687. But you have no instructions from the Fishery Board to interfere in that matter?—I have no particular instructions from the Fishery Board upon that point.

29,688. The only instruction you receive from the Fishery Board is to carry out that part of the Convention which relates to the three-miles boundary?—Yes.

29,689. Do you feel yourself called upon to carry out any of the regulations in reference to decked boats shooting near undecked boats, and so on?—I am not furnished with the means of doing it.

29,690. But if the fishermen complained to you, would you move the commander of the Fishery cutter so that he might act in the matter?—Yes, immediately; I am bound to do that. I have instructions to communicate every information of that kind to the commander of the Fishery cutter. I am in constant communication with him, and I keep him informed as to how the fishing is carried on. I tell him the nature of the information I have received from the fisherman from time to time, in order that he may have full knowledge of what is going on.

29,691. Has the commander of the Fishery cutter here interfered when French decked boats have been fishing among English undecked boats?—I could not instance any particular case of interference, but when they have been upon the coast and have been going to fish with our boats, the Fishery cutter has gone out with the boats, and has seen that the Frenchmen took up their proper position at the fishing. I am aware that that has been done; but to carry it out on the water myself would be impossible, as I have no means of doing it.

29,692. Do you mean that the Fishery cutter kept them half-a-mile outside?—I think he could keep them three miles outside.

29,693. But would he keep them half-a-mile beyond the undecked boats?—I do not know the limits that are prescribed; but no doubt he would take means to prevent any collision between our boats and the French boats. He would be the best judge of what was necessary, being a seafaring man.

29,694. Do you feel yourself called upon to see that the regulations contained in the Convention with respect to the vanes of the boats are carried out?—Yes; that is a matter upon which I have spoken to the French crews. On Wednesday evening, when I was on board these vessels, I pointed out the necessity of their having a blue flag. Only one of them had a flag about a foot square, whereas it is required to be two feet by three.

29,695. I do not think the vane is quite as large as that?—They are obliged to hoist a flag when they come within the limits.

29,696. I am speaking of the vane they are always supposed to carry?—They do not attend to that at all.

29,697. You do not feel it necessary to make the English fishermen attend to it?—The English fishermen fishing in these open boats would find it very inconvenient to comply with that regulation. They take the masts up and down.

29,698. But you are aware that there is such an article in the Convention?—Yes; and I may mention also that last season, when the Fishery cutter was here, and one of the French cutters was also here in the harbour, Mr. Macdonald waited upon the commander of the French boat, and urged upon him the propriety of speaking to the French fishermen in order to insure their attending to these matters. He wished them to be told that they were to keep their vanes in proper order, and not to take fish within the limits.

29,699. But if our people do not pay attention to the regulations of the Convention, they can hardly expect the French fishermen to do so?—There is no doubt they do not do what they ought.

29,700. They do not seem to pay any attention to these regulations at all. For instance, one regulation of the Convention is, that the fisherman shall hoist two lights, three feet apart, on one of their masts?—They do not do that.

29,701. They do nothing of the kind?—No.

29,702. It appears to me, that none of the regulations of the Convention are carried out?—There has been some difference of opinion as to whether these articles extend down to these parts.

29,703. If that article of the Convention which defines the limits is operative here, then all the rest are?—Of course; that is only a reasonable argument.

29,704. It is not clear how you can carry out one without carrying out all the rest?—My opinion is, that the English fishermen would consider some of these regulations oppressive, such as hoisting lights and keeping up vanes of a particular description.

The witness withdrew.

ALEXANDER BRUCE called and examined.

A. Bruce.

29,705. (*Mr. Caird.*) Are you a fisherman at Peterhead?—Yes.

29,706. In the course of your experience have you found that the quantity of herrings caught off this coast is increasing or diminishing?—There are as many caught here as there have been ever since I began to fish; this last year past the fishing was very good. I do not know what it may be this year, but there are more boats, and that would perhaps decrease the average taken per boat.

29,707. But the whole quantity, you think, is greater?—Yes.

29,708. Have the herrings changed their ground from where you were in the habit of catching them formerly?—They do not come as close to the land now as they did when I first became acquainted with the fishing.

29,709. Do you know any reason for that?—No, unless it is that there are so many boats breaking up the shoals when they come close to the land.

29,710. Were you in the habit of having any winter fishing for herrings in former times?—I suppose it will be about 15 years since it began.

29,711. Has the winter fishing been becoming a more profitable fishing than it used to be?—Yes.

29,712. Is it likely to increase?—Yes, it is increasing here every year, and it is doing a great deal of good to the cod fishermen in the winter time.

29,713. Is it chiefly for bait that you fish for them?—Yes.

29,714. There are not many herrings got in the winter fishing, in order to send to market?—At times there are, but not always.

29,715. They are chiefly caught for bait?—Yes.

29,716. Has the haddock-fishing increased or diminished of recent years?—It has diminished.

29,717. Has the total catch diminished?—Yes, the total catch is not "nigh hand" as much.

29,718. They have shifted their ground?—Yes.

29,719. Have you to go further to sea to find them?—Yes, a good deal further.

29,720. But when you go there, do you find them?—Yes.

29,721. Do you find them very plentiful?—At times they are very plentiful.

29,722. Are there more boats engaged now than there were formerly?—Yes.

29,723. Does the greater number of boats not get more fish than the smaller number did formerly?—There are not as many of them caught east and west with the larger number of boats as were caught with a smaller number of boats since I can recollect.

29,724. Is that because it takes longer to go to the ground and come back again?—Yes.

29,725. You are not able to go so often as you were?—We can go three times a week, and since I can recollect we had only to fish a mile or two off, and then we could go twice in the 24 hours.

29,726. Are the fish as good in quality?—They are not as heavy, or so big or large.

29,727. Are they otherwise in good condition?—Yes.

29,728. There is no falling off in the quality of the fish?—No.

29,729. What bait do you use?—Mussels for the haddocks.

29,730. Is there plenty of that description of bait to be had?—It is very scarce on the coast.

29,731. Have you any difficulty in getting bait?—We have very great difficulty, and it is too dear for us. We can hardly get them brought to us.

29,732. Have you opened out any new source for them?—There is a supply which comes by rail, but it is very dear.

29,733. Has the price of the bait increased very much of recent years?—Yes.

29,734. Does it cost you much more in a season for bait than it did when you first began fishing?—Yes.

29,735. Much more?—Yes, it costs double the money.

29,736. How much does it cos tyou in a year for bait?—It costs 4*l.* each man.

29,737. Is that 4*l.* each boat?—No, there are six men in each boat, and it costs 4*l.* each man.

29,738. That is 24*l.* for the boat?—Yes.

29,739. What would the cost be 20 years ago?—We got them from Montrose then at 50 shillings a cargo.

29,740. How long would that last?—It would go all through the summer months while we were catching

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haddocks. The mussels we got from Montrose were also of a smaller quality, and they are better for the haddocks than the large ones. In addition to that they are now double or three times the price that they were at that time.

29,741. Are there no mussel beds in this neighbourhood ?—No.

29,742. Are there any along the coast ?—I believe there is one about 12 miles from this.

29,743. Is that in any way protected from being destroyed in consequence of improperly fishing the mussels ?—Yes, there is a person employed in order to take care of them.

29,744. Do they not get a pretty regular crop from that bed ?—They have plenty of mussels, but they will not sell them. They send them away to the markets where they use them for eating, and they are very dear. They fetch eightpence a peck.

29,745. Formerly were they only used as bait ?—Yes.

29,746. And now they have become an article of consumption as food ?—Yes. When I first went fishing we could get them in the neighbourhood, and now we cannot get a supply once in a dozen years.

29,747. You are compelled to bring all your mussels from a distance ?—Yes.

29,748. Do you get them from Boston ?—Yes.

29,749. And some of them from the Clyde ?—Yes.

29,750. Then the increased price of mussels has been rather disadvantageous to you as fishermen ?—Yes. Sometimes when we get them by rail they have been kept too long, and they are a loss to us.

29,751. Has your cod-fishing increased of recent years ?—They have decreased for the last two years because we could not get herring bait.

29,752. Now you have got herring bait you can get plenty of cod ?—Yes, in the season when the herrings are right.

29,753 Then there has been no decrease in the cod ?—No.

29,754. Only you have a difficulty in catching them, owing to the want of proper bait ?—Yes.

29,755. When you can get the bait you find that you can do very well ?—Yes.

29,756. Is the quality of the cod as good as ever it was ?—Yes.

29,757. Do you get many halibut and ling ?—Not in that season.

29,758. But in the course of the year ?—Yes.

29,759. Is the fishing as good as it formerly was ?—Yes.

29,760. Is there any beam-trawling on this coast ?—No, we have no beam-trawling here.

29,761. Has there never been any here ?—Not upon this coast. There has been in Aberdeen Bay where there is soft ground, but it is hard ground here. They could not trawl here with the beam-trawl. The ground is very rough, and has a rocky sort of bottom.

29,762. (*Professor Huxley.*) How do you light your boat ?—We hoist a light if it is a very dark night.

29,763. Do you hoist one light or two ?—We have one with three panes of glass in the lantern.

29,764. You have one light ?—Yes.

29,765. Were you ever spoken to by the commander of the cutter or anybody else about that ?—No.

29,766. Were you ever told that you ought to have two lights ?—No.

29,767. Have you ever heard of such a regulation as that ?—No.

29,768. Is there any matter in which you have been interfered with by the commander of the cruiser ?—No.

29,769. Does anybody interfere with the size of the mesh of your nets ?—No.

29,770. Do you make it of what size you like ?—Yes, but it is always big here in this place. The mesh is very large ; it is a large herring we get.

The witness withdrew, and the inquiry was adjourned to Cromarty.

Cromarty, Saturday, 30th July 1864.

PRESENT :

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

CROMARTY.
D. Manson.
30 July 1864.

DONALD MANSON called and examined.

29,771. (*Mr. Caird.*) You are a fisherman of Cromarty ?—Yes.

29,772. Have you had many years experience with regard to the different kinds of fishing followed on this coast ?—Yes, I have been at it for a good many years.

29,773. What is the principal kind of fishing the fishermen follow here ?—There is the haddock-fishing during the winter time, and when the haddock-fishing is done we commence from the 18th to the 20th of July with the herring-fishing, and that lasts to the end of August.

29,774. What kind of fishing do you follow after that ?—We go away then to the white-fishing after that.

29,775. Have you any cod fishery here ?—No ; there is no cod-fishing, except in the fall, when we catch some of them on the small lines.

20,776. With the same lines as those you use for catching haddock ?—Yes.

29,777. What part of the Firth do you find most productive of haddock ?—From near to the light-house down to the South Suter at the head of the Firth.

29,778. Do you find the fish inshore ?—Yes, the fish come from the deep to the shallow water, and we may get a few for a couple of days, and then they all go away to the deep again.

29,779. In the course of your experience have you found that the haddocks have gone more out to sea than they were in the habit of doing formerly ?—Yes, they used to come playing up the coast during the herring time. They came very regularly during the herring time, but I have not seen anything of it for many years.

29,780. During the rest of the year, when herrings were not on the coast at all, did they keep very well inshore ?—The haddock keeps in 6 or 8 or 10 fathoms of water until the middle of spring comes on ; then they make away off to the deep water into 20 fathoms.

29,781. We find that upon other parts of the coast there is a complaint that the fish have ceased to be as plentiful inshore, and that they have been going further off into the offing—is that the case here ?—No, they keep pretty fairly in here on the regular fishing ground,

29,782. Has the number of boats which fish for haddock increased of recent years ?—Pretty fairly.

29,783. Do you get as good catches as you were in the habit of getting ?—No, they are falling away every year. There are so many catching them.

29,784. You mean there are so many at the fishing now ?—Yes.

29,785. Does each boat not get as good a fishing as it was in the habit of getting in the course of a season years ago ?—No.

29,786. Is the total quantity caught as great as it was formerly?—We have been very scarce of cod for many years.

29,787. But do you think the total quantity of haddocks caught is as great as it used to be?—No, I do not think it is.

29,788. Do you think that the greater number of boats does not get as large a number of fish as the smaller number did in former years?—No; I remember about 20 years ago we got 20 cwt. of fish in a boat, and now in almost a month's work you will hardly find that.

29,789. Has there been a great change in the price of fish within the last 20 years?—Yes, we get very fair prices from the curers. We are paid from 8*l.* to 12*l.* and 16*l.* as a bounty from the curers in the season. We get 8*s.* a cwt. for the haddocks. We give them all to the curers here, and we have 8*s.* for every cwt. we catch.

29,790. What is the nature of the engagement the fishermen have with the curers here?—For the haddock-fishing?

29,791. Yes.—From the 1st of October to the last of March we are bound to give the fish we catch to certain curers. We receive 8*s.* per cwt. for the fish. We sell them all we get of the fish we catch here. The curers also pay us 12*l.* as a bounty, on condition that we sell our fish to them. There are four men who go in each boat, so that each man gets 3*l.*

29,792. Each man gets 3*l.* as a bounty or wages?—Not as wages; it is free money.

29,793. The curer who gets the fish pays 3*l.* to each man?—Yes.

29,794. And besides that, on condition that you deliver to him all the fish you catch, he pays you 8*s.* a cwt.?—Yes; and upon that arrangement the curer must have them every day.

29,795. Do most of you sell them at 8*s.* a cwt.?—Yes.

29,796. Is that an increased price compared with what you used to receive in former years?—Yes, in former years they were very cheap.

29,797. What was the price formerly?—When I was a youngster myself I have sold 10 large haddocks for sixpence, and sometimes 12 of them, according to the market. Sometimes they would only be six for sixpence.

29,798. Was there the same engagement with the curer in former times that there is now?—No.

29,799. Then this arrangement with the curer is of comparatively recent date?—Yes, it was established 12 or 14 years since.

29,800. When the curers commenced to cure fish did they give as much as 8*s.* a cwt. for them?—No, we sold them then to the curers for 5*s.* a cwt.

29,801. And what was the bounty then?—1*l.* a man I think.

29,802. Therefore there has been a considerable increase?—Yes.

29,803. Are all the haddocks that are caught here cured?—Yes.

29,804. Are there none sent fresh to the market?—No.

29,805. Are they all made into Finnon haddocks?—Yes, they are all smoked.

29,806. Is there any large quantity of cod or ling caught here?—We get a very few cod during the winter time here. They were plentiful some years ago; but since the Buckie men have fished them in such great quantities they have diminished here.

29,807. What do the Buckie men do?—They go to the herring-fishing during the winter time. They catch all the cod during the winter, and what we get is only very few.

29,808. Do the Buckie fishermen fish more for cod than any other fishermen?—Yes, they always make more after the cod.

29,809. Has your herring fishery improved or diminished within recent years?—It did pretty fair three or four years ago.

29,810. Are there many people engaged it?—There are none at all engaged in it for the season, except three boats, which are fixed here. There are three boats engaged here by the curers.

29,811. Do the rest work upon their own account?—Yes.

29,812-13. Are there more boats now of all kinds than there used to be?—Yes, I think there are about 19 or 20 boats which go out from here during the herring time.

29,814. Are they larger than they were in former years?—Yes.

29,815. Do they carry larger fleets of nets?—Yes.

29,816. Do they catch more fish than were caught here in former times?—I do not think they do. I remember seeing very weighty fishings.

29,817. Are there not more herrings cured here than formerly?—No; I do not think so. I have seen very weighty fishings brought in here.

29,818. Is there any oyster fishery here?—No; we get none in this water. There are some about, up on the Tarbet ground.

29,819. Is that not a valuable fishery?—I do not know.

29,820. Have you any difficulty in getting bait here?—Yes; very much difficulty.

29,821. Where do you get your bait?—Away north, or up on the new Tarbet Ground.

29,822. Is there none got within the Cromarty Firth here?—Yes.

29,823. Can you not get as much as you require?—No.

29,824. Has there been a greater difficulty lately than there was formerly?—Bait has got very scarce now. The mussel beds have become very scarce.

29,825. Does anybody preserve them in any way? Are they private property?—I do not think there is any person looking after them, unless it may be a small scarp of mussels on the west; but I believe they are going to claim them at New Tarbet.

29,826. Have you been in the habit of getting your mussels from New Tarbet?—Yes.

29,827. For many years back?—Yes.

29,828. Has anybody interfered with you?—No.

29,829. Do you get your mussels here from any other quarter than that neighbourhood?—No.

29,830. You do not get them from great distances?—No.

29,831. Not from the Clyde?—No; they come from all round the Firth here.

29,832. Are they so scarce that you have sometimes a difficulty in procuring your bait?—Yes. If the weather be bad we cannot get any bait to put upon our lines in order to enable us to catch fish. The bait is very scarce now. The Buckie men have made a clean sweep of it.

29,833. The Buckie men have made a clean sweep of the bait?—Yes; with a sort of dredge by means of which they dredge them up.

29,834. Has anybody interfered with them?—No; I never heard of anybody interfering with them. I believe some person claimed the bait at one place. They paid for what they got, I believe.

29,835. They paid for the bait?—Yes.

29,836. And you think they have swept away the beds, and destroyed them?—Yes; the bait is very scarce now.

29,837. Where do the Buckie men get their bait now?—At Tain Firth.

29,838. (*Professor Huxley.*) Does anybody look after the fisheries here?—No.

29,839-40. Is there any cruiser here?—No.

29,841. What is the size of the mesh of your nets?—The herring nets?

29,842. Yes.—I do not know; I have nothing to do with the nets.

29,843. Do you not practise herring fishing?—No.

29,844. Do you think that the quantity of herrings caught here has fallen off as well as everything else?—Yes.

The witness withdrew.

ALEXANDER FINLAYSON called and examined.

CROMARTY.

A. Finlayson.

30 July 1864.

29,845. (*Mr. Caird.*) You have long been a fisherman here?—I have been a fisherman here ever since I began to work.

29,846. What is your opinion as to the supply of fish found on this coast of all kinds—is it increasing or diminishing, or is it about stationary?—I think the supply is decreasing.

29,847. Do you refer to any particular kind of fish, or to herrings and all the other kinds of white fish?—To the herrings mostly,—the herrings they catch in the winter time. I think if they were not caught then we should get them in the proper season.

29,848. Do you catch them yourselves in the winter time?—No, we never try then.

29,849. Do you think that because other fishermen along the shore have caught them that it has injured your summer fishing?—Yes, I am very well sure of that.

29,850. Then is that the ground upon which you say you think the herring-fishing has rather diminished?—Yes.

29,851. Has the herring-fishing diminished within the last few years?—Yes.

29,852. Was the fishing last year a good fishing?—It was pretty fair.

29,853. Was there a good fishing the year before?—It was not as good.

29,854. And the year before that how was it?—It was worse then.

29,855. Then it has been rather improving than falling off?—It has been falling off for a number of years back. When I went to the fishing first I could get 200 barrels, and now amongst the whole of us we can hardly get as much.

29,856. Have you shifted your ground?—No, we fish on the same ground.

29,857. You find the fish on the same ground?—Yes, we look after them in the same parts.

29,858. Do you practise ground-fishing at all towards the end of the season?—Yes, we follow over the same ground. We look for them upon that ground regularly at a particular time of the season.

29,859. Does anybody interfere with you when you are following herring-fishing to see that your nets are of the proper size, or that the regulations are kept with regard to the time of shooting your nets?—Mr. Thompson looks after the nets at Cromarty pretty sharply.

29,860. Have you long practised haddock-fishing also?—Yes.

29,861. Do you find that the haddocks are increasing or diminishing?—They are decreasing; that is because there are too many catching them now. For one boat at Cromarty since I can recollect there are three now, and there are none of them very old. When I went first to the fishing there were only 14 boats, and now there are 21.

29,862. Do not those 21 get more haddocks now than the 14 got in former times?—I do not know; I should say they do not get as many.

29,862*a*. Is the quality of the fish as good as it was formerly?—Very much the same.

29,863. Do you find the haddocks on the same ground as that upon which you found them formerly?—No.

29,864. Where do your boats go now?—They go further to the northwards.

29,865. Further out to sea?—Not out to sea but to the northward. They used to lie on the edge of the deep water; now they go further into shoal water

29,866. What is the cause of that?—I do not know; I cannot give any reason for it.

29,867. Do any trawl-vessels come here?—No.

29,868. Then there is nothing of that kind to disturb your fishing?—No.

29,869. Are you an oyster fisher?—No.

29,870. Are there any crabs got here or partons?—There are plenty in the roads.

29,871. Are they followed as a matter of business?—There is one man who comes from Aberdeen, and takes them and the lobsters, that is all.

29,872. Do not the fishermen here follow lobster-fishing?—No.

29,873. Is there any mackerel-fishing carried on here?—No.

29,874. (*Professor Huxley.*) Is there any circle-net-fishing here?—No.

29,875. Do you ever get any garvies in the Firth?—No, we never try for them. We have none of those kind of nets at Cromarty.

29,876. Are there garvies here?—Yes, but we have no nets we could shoot for them.

29,877. Nobody tries to catch them?—Not in the Firth.

29,878. Did you say just now that the haddocks were coming more inshore than they were in the habit of doing?—Yes, they are further to the northward.

29,879. I understood you to say that the Fishery officer looks pretty sharply after the mesh of your net?—Yes.

29,880. Does the cruiser look after you when you are fishing?—No, we have had no cruiser disturbing us when we were fishing.

29,881. What do you find to be the best size of mesh to use?—About one and a quarter inches.

29,882. You do not want to use a mesh smaller than 36 to the yard?—No, we have none smaller. I have got them at 30, some of them, but that is rather a large mesh.

29,883. Then there is no necessity for Mr. Thompson to look after you?—No.

29,884. Are the herrings here of rather a large size?—Yes.

29,885. Where is the winter fishing practised?—At Tarbet Ness and other places. We do not work close inshore just now.

29,886. How long do you pursue the herring-fishing here?—It is according to the length of time they remain upon the coast.

29,887. What time do you begin?—Formerly we began on the 10th of July, but now we do not begin until the 18th.

29,888. Do all the fishermen begin at the same time?—Yes, most of them.

29,889. Is that a matter of agreement?—No; every man pleases himself, but we are bound to go on the 18th.

29,890. Do you keep the fishing up as long as the herrings are on the coast?—Just so.

29,891. What time are the fish full here?—The middle of August is about the time.

29,892. Do you get herrings here in the winter?—Very few; we do not bother ourselves much about them then.

29,893. Do you not like to have them for bait?—We go west for them; the women go and buy them at the point.

29,894. What point?—Fortrose Point.

29,895. Do they catch them there in the winter?—Yes.

29,896. What time in the winter do they catch them?—About the 21st of January.

29,897. In what condition are the herrings then? Do you ever get them full?—Only very few of them; perhaps one out of a hundred.

29,898. Do you get them full in the month of February?—I cannot say that I ever saw any full in February.

29,899. But sometimes you do in January?—Yes.

29,900. Have you a particular way of lighting your vessels here at night?—No.

29,901-2. Do you carry a light?—We have no light, but sometimes we keep a fire all night.

29,903. You carry no light?—No; we carry a fire along with us, but it is below the deck.

29,904. What do you carry a fire for?—To cook our grub.

29,905. Are the boats you use decked boats?—Yes, some of them are decked forward.

29,906. Do you go outside the Cromarty Firth?—Yes, below Tarbet Ness Point.

29,907. How far out at sea do you go?—Six or seven miles; sometimes further and sometimes nearer.

29,908. And yet you have no lights?—No.

29,909. Do you not get run down sometimes?—No, never; we keep a good look out for that.

29,910. Does nobody ever tell you that you ought to carry lights?—We have heard something about it here.

29,911. But you do not pay any attention to it?—No, we never take any great thought of it; we never have been run down, and we do not give it much thought.

29,912. When do you shoot your nets?—Mostly after the sun has gone down. Some of them do not shoot until 12 o'clock at night, having been looking for the fish through the water.

29,913. Do you ever shoot your nets before sunset?—No.

29,914. Why do you not?—There would be no advantage in doing that. When they were plentiful four or five years back we might have done so.

29,915. If you thought it worth your while to do so, would you shoot your nets an hour or two before sunset?—If we thought we should get a good shoot we should put them out at any time.

29,916. There is no regulation enforced here against your doing so?—I never heard of any. I should do it in a minute if I thought I was going to get a good haul of fish.

29,917. How long are your fleets of nets here?—Some go 28, some 30, some 31, and others 32; some boats carry less and some carry more.

29,918. What is the length of each net?—From 18 to 20 fathoms.

29,919. Is the length of each fleet greater now than it used to be?—Yes, it is very nearly double as much.

29,920. And your boats are of larger tonnage?—Yes, they are much larger.

29,921. And they are better found?—They are better found in every respect.

29,922. I suppose that has cost some money, has it not?—Yes, it has cost a good deal of money.

29,923. Has all that money come out of the fishing?—Yes, in some way or other.

29,924. How many men are there in each boat here?—Some have four and a boy, some five, and some five and a boy.

29,925. Has the length of your long-lines increased of late years?—Yes, by far—they are a long way larger.

29,926. Do you use the same boats for long-line fishing as you do for herring-fishing?—No, they are small boats, 18 feet on the keel.

29,927. Where do you set your long-lines?—From this to Burgh Head, five miles out.

29,928. What kind of ground is it?—Both soft and hard; some of it has a soft bottom, and some a hard bottom.

29,929. You have never seen any trawlers here?—No.

29,930. Is it the same ground that the Buckie fishermen go upon?—No, they never come near now.

29,931. They do not come in your way?—No.

29,932. Are you ever troubled with the Frenchmen up here?—We have not been troubled with them for a number of years back. I believe there was one here last season which injured one of our boat's drift nets, but it did not do a great deal of damage.

29,933. How did it injure the nets?—It got foul of the drift.

29,934. Did it shoot on the weather side?—Yes, and drifted upon the nets.

29,935. Were the nets torn?—They shook the nets and took the herrings along with them.

29,936. Did they take the nets and the herrings as well?—No, not the nets.

29,937. Then they do not often do you much damage?—They have not done so for four or five years back.

29,938. Did the instance to which you refer occur inside the limits or outside?—Inside.

29,939. Within three miles of the shore?—Yes fully within that.

29,940. Do you commonly take herrings within three miles of the shore?—Yes.

29,941. Commonly?—Yes, if we do not get them within three miles of the shore, the fishing is done that season.

The witness withdrew.

George Skinner called and examined.

G. Skinner

29,942. (*Mr. Caird.*) You are a fisherman here?—Yes.

29,943. Within your experience as a fisherman here, have you found that the quantity of herring you have caught off this place is increasing or diminishing?—I think it is diminishing to a very great extent.

29,944. Do you mean that each boat gets fewer, or do all the boats, compared with the boats which were in the habit of fishing in former times, get a smaller quantity on the whole than was the case formerly?—They used to be able to get here from 300 to 500 crans, and now they call it a good fishing if they get 150 or 160 crans.

29,945. One hundred and fifty or 160 crans in the season?—Yes, in the season.

29,946. Has that decrease taken place within recent years?—Yes.

29,947. Has it been more marked recently?—It has been more marked since the fleets have got larger.

29,948. Since you took means to get more, by having better nets and larger nets, the result has been worse?—Yes.

29,949. What do you think is the cause of that?—I have one idea at one time, and another idea at another. I think the herring is a fish that is caught all the season over, and it cannot be expected that they will go on being as plentiful as they would be in a general way as if there were none caught.

29,950. Do you mean that having a winter fishing is injurious to the summer fishing?—Yes, it must be; what fish are taken out of the sea then cannot be put in again.

29,951. Is the winter fishing of recent introduction on this coast?—A number of years back they used to catch a great number of small fish, and I suppose that what might be caught in one season of this small fish, would make a good fishing if they were left to grow large.

29,952. In what way do they catch them?—With small nets.

29,953. Who use the small nets?—They generally use them west from us. There is a place called Inverness Firth where they are used.

29,954. Do they catch a good quantity of small herrings there?—Yes.

26,955. At what time of the year is that?—In January and the month before that.

29,956. Are those the herrings which are used as bait for the cod?—They use both the large and the small herrings for bait; they catch both.

29,957. Is that below Beauly?—Not as far up as Beauly.

29,958. Is it just about Fort George?—About there sometimes.

28,959. With regard to the haddock fishery, do you find that that is also diminishing?—Yes, it is diminishing to a great extent also.

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29,960. What do you think is the cause of that?—I suppose it is the increase in the number of boats.

29,961. Do you think there are too many boats engaged in the fishing then?—I have no doubt of it.

29,962. Have the haddocks shifted their ground?—The decrease in the haddocks has made us much poorer in this quarter. There are a great number of fishermen from Nairn, who fish now upon our ground who were not in the habit of doing so formerly. They now fish generally all the winter when we are fishing, and that makes our fishing all the scantier.

29,963. Do you mean that there are now a new set of fishermen coming upon the ground which you were in the habit of fishing upon formerly alone?—Yes.

29,964. Have you found that the haddocks come upon the same ground now on which they were in the habit of coming in former years?—Yes, the very same ground.

29,965. They have not shifted out further to sea?—No.

29,966. Are they in as good a condition now as they were formerly?—Every bit in the season.

29,967. Do you get many cod here?—We have only got very few for the last few years back.

29,968. Do you follow cod-fishing as a special business?—Yes, when they are on the coast. They go to a great deal of winter fishing down the coast, and they take great hauls of cod in the winter; that diminishes them very much; they do not get liberty to come up here.

29,969. What part of the coast do you refer to?—From Wick westward towards Helmsdale.

29,970. Is that the best part of the coast for fishing cod?—It is generally a good ground, but if there were no boats catching them there, they would come up our way.

29,971. Do the fishermen from the Banffshire coast go across there to fish?—Yes.

29,972. Is that the best cod-fishing ground?—Yes.

29,973. Between Helmsdale and Wick?—Yes.

29,974. Are they caught chiefly with herring bait?—Yes.

29,975. The winter herring fishery is chiefly for the purpose of getting bait?—This last winter I have heard they were getting boatloads of herrings, and when they were getting as many herrings as that, they would probably not work at the cod at all.

29,976. Have you had any difficulty here in getting bait for your haddock fishery?—No doubt sometimes we have a little difficulty in the dead of the season, when we could not catch the mussels so well. We think we are lucky if we get some sprats then.

29,977. Do you get sprats here?—Yes.

29,978. How do you catch them?—We catch them with nets.

29,979. Have you special nets for that purpose?—Not us, but they have west, at Inverness Firth.

29,980. Do you obtain them for bait?—Yes.

29,981. Are there large quantities caught?—When I was a little boy we were in the habit of getting boatloads.

29,982. (*Professor Huxley.*) Do they catch a good many sprats up at Beauly?—Yes.

29,983. Do they catch them with circle-nets like the seine?—I cannot say.

29,984. Do you know what a seine is—it is what you call a trawl?—We catch them in the same way that we catch the herrings.

29,985. Do you catch them in the mesh?—Yes.

29,986. The only difference is, you use a smaller mesh?—Yes, it is much smaller; we have the meshes made on purpose for them.

29,987. Do you think that the fishing up at Beauly does you any harm here or at Inverness?—We cannot but expect that in catching these young fish there will be a heap of herrings among the sprats.

29,988. But seemingly it is not a matter of which you make any great complaint?—There were some years when a great quantity came to the Firth, and a great number of small herring were caught. In other years there was not so much; they are not so plentiful every year.

29,989. Do the herrings spawn about this part?—Yes.

29,990. Whereabouts do they spawn?—On the ground where we catch them generally, and sometimes very close in too.

29,991. Do you ever sink your nets to catch them?—Yes.

29,992. Is that a common practice here?—At some parts of the season, when the fish get sticking upon the ground full of spawn, we put our nets well down.

29,993. In what depth of water would that be?—In from 9 to 10 fathoms of water. I suppose we lost about 1,000*l.* in one week, what with material and fish, when we were fishing in that way.

29,994. How was that?—The fish struck so heavily that the boats were not able to make anything of them; the fish struck in a body and the nets got filled up with the fish. The consequence was that, as the boats were drifting, the nets became entangled with each other and became immovable. If the gunboat had been here at that time it would have been of great use. She would have saved in material and in fish from 1,000*l.* to 2,000*l.*

29,995. You lost your nets and fish and all?—Yes.

29,996. How long ago is that?—The year before last.

29,997. The gunboat could have helped you by putting out a boat's crew?—Yes, she could have put down a hook and have got many of them with a kedge; we could then have raised them up and got the fish out.

29,998. Do you mean a kedge anchor?—Yes, by using that she could have loaded every boat.

29,999. Could you not manage that among yourselves—have you no large boat of sufficient tonnage?—We had none at that time. There were 20 men in our boat and they could not get any length of nets up.

30,000. That is two years ago?—Yes.

30,000*a*. Have the nets remained at the bottom ever since?—Yes, and have rotted away.

30,001. Did the fish go on the ground last season?—Yes.

30,002. Did they spawn there again?—Yes.

30,003. Just as they did before?—Yes, just the same.

30,004. Have you any reason to believe that the nets remained there?—Yes, we often find them on our small lines.

30,005. So that the herrings and the nets will have rotted away together there?—Yes.

30,006. And yet you find that the fish come again?—Yes, on precisely the same spot.

30,007. Do you ever pursue the winter fishing for the herrings themselves?—We do no more than set a few nets to catch them for bait.

30,008. In what sort of condition do you find the winter fish?—We get them sometimes in the winter time full and sometimes not full. I think that sometimes herrings are caught at all periods of the year full.

The witness withdrew.

W. McClellan.

WILLIAM MCCLELLAN called and examined.

30,009. (*Mr. Caird.*) You desire to make some statement to us?—Yes. Some time ago we were out fishing when we came alongside a French boat. We were out with a small boat, and we were just taking our nets in, and were hauling them up as fast as we could, when they came across us and tore the nets.

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I cried out to the gunboat, but he would not heed us.

30,010. Was the gunboat here at the time?—Yes.

30,011. What was done in the matter?—A boat went away to see if he could catch the people who had done the damage.

30,012. Did it catch them?—No.

30,013. The French boat had disappeared?—Yes.

30,014. And never came back again?—No, it never came back.

30,015–115. Did you know him before that?—No.

The witness withdrew.

George Thompson called and examined.

G. Thompson.

30,116. (*Mr. Caird.*) You are the Fishery officer here?—Yes.

30,117. You have been stationed here for some time?—For about 14 months.

30,118. Can you, from the books in your possession, give us statistics with regard to the number of boats and their value, the number of men employed in them, and the quantity of herrings cured here from 1855 up to the present time?—Yes.

30,119. Then you will be good enough to do so?—The following is the return:—

Year.	Number of Boats.	Value.	Number of Men.	Herrings cured.
		£		
1855	268	4,674	821	20,030 crans.
1856	279	5,171	817	6,660 „
1857	288	5,847	849	7,992 „
1858	287	4,880	832	3,174 „
1859	289	4,973	824	7,191½ „
1860	290	4,943	826	12,186 „
1861	308	5,275	878	18,321 „
1862	308	5,286	889	11,554 „
1863	309	5,662	902	13,625 „

30,120. Is that in the Cromarty district only?—It is from Kessock Ferry to Inver in the Firth of Tain round the point.

30,121. How many stations does it include?—Eleven.

30,122. Can you tell us whether the proportion of the catch of herrings which goes fresh to the market now is greater than what it was in former years?—I do not know that the catch here is so much more.

30,123. Has the opening of the railway to Invergordon made any change in the destination of the fish?—Not much yet.

30,124. Then are the returns you have given us affected very little by any such change?—Very little.

30,125. (*Professor Huxley.*) Has there always been a winter fishing in your district?—There has been so, according to the records contained in this book.

30,126. From what date?—I cannot exactly say just now, but for a long time back.

30,127. Thirty or forty years ago?—Thirty years at all events.

30,128. What have been the stations for the winter fish?—Avoch is the principal place, about two miles above the point.

30,129. Does it take place at Beauly also?—Yes, it takes place all the way down. The fish shift very much according to the state of the fresh water.

30,130. In what months does the winter fishing take place?—It commenced last year in November.

30,131. Have you any record of the time when it begins?—I think I have.

30,132. Has that fishing increased or diminished of late years?—It has diminished very much for the last few years; at least the fishermen tell me so.

30,133. The fishermen tell us also that the summer fishing has decreased?—Yes.

30,134. And they also say that the winter fishing has diminished?—Yes, some of them say the catch is not so good as it was.

30,135. In that case it would not appear that the winter fishing has had much to do with the summer fishing?—No.

The witness withdrew.

Alexander Archie called and examined.

A. Archie.

30,136. (*Mr. Caird*). You are a fish-curer here?—Yes.

30,137. Has there been any alteration in the destination of the fish in consequence of the opening of the railway?—I cannot say anything about that. There has been no fishing since it was opened except for herrings.

30,138. Are all your herrings cured that are caught?—There are a few of them that are sent into the country.

30,139. There are not many of them that go to the London market?—No, very few of them from this quarter.

30,140. Is it your opinion that the herrings have increased or decreased here?—The number of boats and fishermen has been increasing, and the larger number makes a greater catch; but there cannot be as much for every man.

30,141. But the total catch, you think, is on the increase?—I should not say there has been much of an increase, and there has certainly been less fish for each man.

30,142. Do you use the brand?—Yes.

30,143. Do you think it of importance to you as a curer that the system of branding should be continued?—Yes; it is of great importance in regard to the foreign market, because there are generally persons there who buy on the faith of the brand. When we sell in that way for the Prussian and Stettin markets, we can draw the money without seeing the merchants at all.

30,144. Do you cure any herrings for the market here?—I have not done so for a year or two, but I have done so.

30,145. There is no brand upon them?—No.

30,146. Can you sell them as well without the brand?—That is a much smaller concern. They can be sent daily or weekly to the market. We send them to an agent, who sells them to the best advantage.

30,147. Has any change taken place in regard to the mode of curing herrings in recent years?—No.

30,148. Do you salt them as much as you were in the habit of doing formerly?—We salt them just as they are required for the different markets. The different markets want them cured in different ways.

30,149. But they are not salted as much as they were formerly?—No, not as much as in former years.

30,150-60. Has there been any considerable change in that respect of late years?—Neither the Irish nor the foreign market wants them as salt now as formerly.

The witness withdrew, and the inquiry was adjourned until August 1st, at Wick.

Wick, Caithness, Monday, 1st August 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

WICK.

J. Low.

1 August 1864.

JAMES LOW called and examined.

30,161. (*Mr. Caird.*) You are the Fishery officer here?—Yes.

30,162. Can you give us the statistics of the number of boats, their value, and the number of men engaged in the herring fishery here during the last nine years?—Yes, the following is a return:—

Year.	Number of Boats.	Value.	Number of Men.
		£	
1855	952	57,120	5,712
1856	1,051	63,060	6,306
1857	1,096	65,760	6,576
1858	1,061	63,660	6,366
1859	1,094	65,640	6,564
1860	1,078	64,680	6,468
1861	1,099	65,940	6,594
1862	1,122	67,320	6,732
1863	1,084	65,040	6,504

The average value of each boat is about 60*l.*, and there are six men in each. We have boats of every value fishing here. Some of them are only worth 50*l.* and some 70*l.*, but upon a fair average the value of each boat would be about 60*l.* Part of the boats belong to other districts.

30,163. The return you have given us is a return of boats that come to fish during the whole of the herring season?—It is a return of our own boats supplemented by boats from other places.

30,164. But boats which remain here all the season?—Yes.

30,165. Their catch comes in here?—Yes.

30,166. And on the average each of those boats is of the value of 60*l.*?—Yes, that is the estimated value of all the boats.

30,167. Are they each of the same class of build?—Yes.

30,168. And carry the same number of men?—Yes, they average about six men to each boat.

30,169. Have you any record of the quantity of cod and ling caught here?—Yes, and this is a return of the quantity of herrings caught:

1855	170,284½	barrels
1856	132,792½	,,
1857	101,833	,,
1858	105,931	,,
1859	103,396	,,
1860	124,383	,,
1861	122,715	,,
1862	125,757½	,,
1863	125,641½	,,

30,170. Do you keep any record of the winter fishing?—Yes.

30,171. Can you tell us the yield of the winter fishing of herring here?—7,000 crans was about the gross last year. Last year was the first real season of the fishing. We have had two winter fishings, but last year was the principal. There were about 1,000 crans the year before last, and 7,000 crans last year.

30,172. There have as yet been only two winter fishings?—Yes, only two.

30,173. The first yielded about 1,000 crans?—Yes.

30,174. And the second about 7,000 crans?—Yes.

30,175. There has been a great increase in the winter fishing of the second year as compared with the first?—Yes, it was better prosecuted and there were more boats engaged at it.

30,176. Do the fishermen anticipate that it is going to become a profitable fishing for them?—I think it will be more than it has been hitherto. Their success last year has encouraged them to think more of it, and another season there will be more boats.

30,177. Are any of the herrings caught in the winter fishing used for cod bait?—Yes.

30,178. Has that led to the prosecution of a cod fishery,—the fact of their being able to get bait at that season?—This year there have not been so many cod as there were last year.

30,179. Did a portion of the last winter's catch come into market for consumption?—Yes, they were dispatched fresh or in a semi-fresh state by the steamers.

30,180. They were not cured in barrels?—No, they were sent away in a semi-fresh state. They were sent away south for immediate consumption. I believe that part of them were cured and part branded.

30,181. Are you aware if there is any idea among the fishermen that the winter fishing interferes with the summer fishing?—I have heard such a thing mooted, but not to a great extent.

30,182. Has anything been brought before you as Fishery officer by the fishermen in the way of complaint as to the mode in which any one prosecutes the Fishing here?—I have heard no complaint whatever. There seems to be one universal mode of fishing adopted here, namely, the regular drift-net fishing and I have heard of no complaint in reference to it.

30,183. The fishermen have not lodged any complaint against each other for infringing the rules of the fishing as recognized by themselves?—No, I have heard no complaint whatever.

30,184. Do you enforce any regulation as to the time at which the nets are to be shot; do you prevent them shooting their nets until half an hour before sunset?—The nets are very seldom shot here before sunset.

30,185. But are the fishermen allowed to shoot their nets as they find it convenient for themselves?—Yes, I think so; there is a cruiser stationed here, but the question of shooting nets has never been called in question. We seldom hear complaints of such a thing.

30,186. Is there ever any occasion to question the size of the nets?—No; our herrings are generally large, and small nets would not be considered of any advantage.

30,187. Is the mesh of the herring nets used here generally above the standard size?—Yes, considerably above the standard size; they are from 32 to 36 meshes to the yard.

30,188. Are there any French fishermen off this coast?—Very few; there were a few Dutchmen at the early part of the season, but there are none now.

30,189. Then no complaints have been made to you with regard to French boats going among the fishermen's nets or damaging them or fishing within the prescribed limits of three miles from the shore?—No such complaint has been made to my knowledge.

30,190. Is there any deep-sea trawling—beam-trawling, off this coast?—There is none to my knowledge, and I do not believe there is any.

30,191. Is there any destruction of herring spawn that you know of by any means adopted for fishing the herrings, or in any other way?—No, not here.

30,192. Are you aware whether the herring spawn close to the shore?—Yes, close to the shore.

30,193. Is there a good haddock fishery here?—The haddock fishery is said to have fallen off here; the fishermen state that they find it necessary to go a considerable distance out to sea before they are successful in catching haddocks.

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30,194. Do the fishermen who are engaged in herring fishing prosecute the haddock-fishing in the season when the herrings are not on the coast?—It is not carried on to any great extent at all here now that the winter fishing has commenced. There are three fisheries which the Wick fishermen now attend to: first, the winter fishing; then they prepare their material to go to the Stornoway fishery, which commences on the 20th of May, and then they have their own fishing in the summer. In addition to which they have all their nets and material to look after and keep in order.

30,195. Then the Wick fishermen have three fishing seasons?—Yes.

30,196. Two on their own coast and one at Stornoway?—Yes; in fact those are fishings to which nearly all go.

30,197. When does the Stornoway fishing commence?—On the 20th of May.

30,198. Is the 20th of May the end of the close time?—Yes.

30,199. Then you cannot commence the fishing till the end of the close time?—No.

30,200. Did you ever hear that complained of as a hardship?—No.

30,201. The close time only applies to the Stornoway coast?—We have no close time here. The herrings got on that coast are supposed to be of inferior quality, and the curers would be glad if none were taken there. They do not take in the market. The curers generally lose money upon the early catch, and they think that the 20th of May is quite soon enough to commence fishing.

30,202. Is that the opinion of the fishermen as well as the curers?—It is the opinion of the curers at any rate.

30,203. Have you not heard the fishermen express an opinion upon the subject?—No.

30,204. They have three seasons of herring-fishing here?—Yes.

30,205. Do most of the boats that prosecute the herring-fishing go to Stornoway in the month of May?—Yes.

30,206. And how long do they stay there?—Until the end of June.

30,207. Do they come back then to commence the fishing here?—Yes.

30,208. Do they use the same nets and boats at Stornoway which they use here?—Yes, just the same.

30,209. Then when do they prosecute the haddock and the cod fishery?—A few boats prosecute a cod fishery in the spring when they are getting herring bait, but the white-fishing is not prosecuted at all compared with the southward and the other stations.

30,210. Does that arise from there being no ready market here?—Yes, and partly from the want of a suitable harbour. This harbour is considered very dangerous in the winter. Gales spring up suddenly, and the boats are afraid of going out; in addition to which they have not the same means of sending the fish fresh to market that they have at other stations.

30,211. Towards the end of the summer fishing do the fishermen ever ground their nets and fish at the bottom?—They never do that here that I have heard of.

30,212. They always fish with their nets upon the surface?—I never heard of anything but the regular drift-net fishing practised here.

30,213. Are there any facilities here for obtaining bait for the white fishery?—None; they bring mussels from the south.

30,214. Are there none on this coast?—None nearer than the Tain Firth; that is the nearest I know of.

30,215. They get them there in abundance?—They may get them there, but the system has not been worked out. The fishermen will not go there to purchase a boatload of mussels, because if bad weather arises they are apt to lose money by the transaction.

30,216. Then the white fisheries are not practised partly because the market is not so easily accessible here, and partly because you have a difficulty in obtaining bait; have those two reasons interfered with the prosecution of the haddock fishery?—Yes, and there is a third reason.

30,217. What is that?—The want of a harbour to run to, because the white-fishing is the most valuable in the winter season.

30,218. Has not something been done by a Society to improve the harbour here?—Yes.

30,219. Is it intended to make a considerable addition to the accommodation of the harbour by the works which are now going on?—Yes; a very large addition.

30,220. (*Prof. Huxley.*) What was the condition of the fisheries last winter?—I was not here at the time.

The witness withdrew.

GEORGE REIACH called and examined.

G. Reiach.

30,221. (*Prof. Huxley.*) You have been here for some years?—Yes, previous to this spring.

30,222. There have been only two winter fishings here for herring?—Only two.

30,223. Was that because formerly the herrings were not seen by the fishermen on this coast?—It was supposed there were none on the coast.

30,224. That would hardly have been the case?—They must have been on the coast.

30,225. But perhaps the fishermen did not look out for them?—They were used as bait, when they caught them, for the cod.

30,226. Were they caught with the dandy lines very often?—Not in the winter season.

30,227. What was the condition of the fish when they were taken in the winter?—They were very good sound fish.

30,228. What time were they full?—They were full about the middle of February.

30,229. Was that the case this year, 1864, as well?—Yes, generally speaking.

30,230. Did you see any difference at all between those herrings and the other herrings that come in the autumn?—They were rather smaller in size, but quite as rich in flavour when they were used.

30,231. When you were here did you pay attention to the haddock and cod fishery?—Yes.

30,232. Did you hear any complaints with regard to any falling off in those fisheries?—Yes.

30,233. What was the nature of those complaints?—The in-shore fish were supposed to be fished up, and the fishermen stated that they had to go much further out to sea for them.

30,234. Did the fishermen mean that the scarcity arose from their having over-fished them themselves?—Yes, but they could not account for it very well.

30,235. But it was the fact?—Yes; they were more scarce in-shore.

30,236. Was the quality of the fish as good when they were caught?—Yes

30,237. Their only complaint then was that they had to go further for them?—Yes.

30,238. Did the same thing apply to the cod?—Yes.

30,239. Has the quantity of haddock and cod caught here been very large?—No; not of recent years.

30,240. How many boats pursue that fishing?—It is very difficult to tell.

30,241. Can you not give us a rough average?—I cannot possibly say with any exactness, but perhaps there may be from 30 to 40. I cannot possibly speak to the exact number, as they do not go regularly.

30,242. What becomes of the herrings which are caught in the winter fishery; are they cured?—They were cured this last year.

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30,243. Has any quantity been sold fresh ?—A small proportion. They are mostly all cured. You see the transit to the market takes some time, and unless they were salted they would not keep.

30,244. The market to which they were sent was not the Continental market ?—I believe that some went abroad; those which were perfectly cured went.

30,245. Was the sea open enough to allow of their being exported—was the Baltic open ?—They were sent over in the spring to Hamburgh.

30,246. Have you seen any important change in the quantity of fish taken during the time you have known this fishery; do you think that the average quantity of fish taken by each boat has remained the same, or has it increased or diminished ?—Taking each individual boat I should rather say that it has diminished.

30,247. Has the diminution been at all considerable, or remarkable, or noticeable ?—Not very. They increase the quantity of netting, and that keeps the supply pretty near the mark.

The witness withdrew.

Lieut. H. J. Challis, R.N.

Lieutenant Henry Joseph Challis, R.N., called and examined.

30,248. (*Mr. Caird.*) You are in command of H.M.S. "Lizard" ?—I am.

30,249. And you are placed here, under the instructions of the Fishery Board, for the protection of the white fisheries ?—I am.

30,250. Will you state the nature of your instructions and the duties you are called on to perform under them ?—I am ordered by the Admiralty, through my commander-in-chief, to communicate with Mr. Primrose, the secretary of the Fishery Board at Edinburgh, and from him I receive my directions.

30,251. What are those directions ?—For the last two seasons they have been to proceed to the coast between Duncansby Head on the north and Helmsdale on the south, and to carry out the regulations contained in the several Acts of Parliament with which I have been furnished. My principal duty is to enforce the numbering of the boats and sails, and to keep foreign vessels off the English limit of the coast. But that part of my duties is practically a dead letter, because I have not seen any foreign vessels here during the two years I have been engaged.

30,252. Are you expected to keep order among the fishing boats ?—Yes; I have to carry out the provisions of the Act of Parliament which lays down the duties of the naval officers superintending the fisheries. They are all prohibitory regulations in reference to the time for commencing fishing, and the size of the meshes of the nets. Any illegal article which may be found is liable to seizure by me, and to be detained for a month.

30,253. (*Prof. Huxley.*) Is the Act you refer to the Convention between this country and France ?—No, I think not. It is an Act of Parliament, the 24th or 26th of Victoria. It is an Act passed very lately; in 1860, I believe.

30,254. (*Mr. Caird.*) Is that the Herring Fishery Act ?—Yes; that is my guide.

30,255. Have you not also the Convention Act placed before you ?—Yes, certainly.

30,256. And you hold yourself bound to enforce the regulations of that Convention ?—Quite so.

30,257. And in the execution of that duty do you find it necessary, frequently, to interfere with the fishermen ?—From time to time I do. For instance, I often find boats going out to fish without having any numbers upon them. It was only last week that I sent two boats back into harbour for infringing the regulations after they had already been warned by me in the person of one of my officers. They nevertheless came out in defiance and were going to the fishing. They are liable to seizure and detention for a month, but I have not considered it advisable to do more than send them back into harbour till the regulations are complied with.

30,258. Have they shown any unwillingness to comply with your orders when they have been requested to do so ?—They always say that they will do what they are desired, but very often they do not do it.

30,259. Yet they never resist you ?—No, never by any chance.

30,260. Have you ever found it necessary to interfere in regard to the size of the mesh of the net ?—I never had occasion to complain of that. It has been principally in reference to numbering the boats and sails that I have found it necessary to interfere.

30,261. Have you had any occasion to speak to them as to the time at which they shoot their nets, namely, half-an-hour before sunset or otherwise ?—I have not. I do not find that they attempt to contravene that law.

30,262. Where there is a large fleet of boats as they have here at Wick, would it be much against their interests as fishermen to hamper them by rigidly enforcing such a regulation ?—I do not feel prepared to express an opinion upon that point.

(*The witness James Low.*) The Fishery Board have sent a petty officer here from the Princess Royal cutter to see that the regulations with regard to numbering the boats are enforced, and also to carry out instructions with regard to receiving property found at sea, and restoring it to the persons who may have lost it. A considerable amount of business has been done in that way for many years.

30,263. Has that boat been stationed here for some years back ?—Yes.

30,264. And those duties have been performed by it ?—Yes; there is a store connected with the office. All property picked up at sea is brought there, and it is there labelled and registered, and ultimately returned to those by whom it was lost.

30,265. (*To Lieutenant Challis.*) I think you said that that part of your duty which is to keep foreign fishing boats from coming within the prescribed limits is very little exercised, in consequence of there being very few foreign boats fishing here ?—I have never had occasion to enforce that regulation during the two seasons I have been here. I have been cruising off the coast between Duncansby Head and Helmsdale, and I have not seen a foreign boat attempting to fish here.

30,266. There have been no foreign boats here at all ?—No.

30,267. Neither Dutch nor French ?—No, not in my district.

30,268. Your district is to the north of Helmsdale ?—Yes, from the borders of Sutherlandshire along the coast of Caithness, including Helmsdale.

30,269. You do not go south of Caithness ?—No.

30,270. Is there any suggestion which, from the experience you have had, you desire to offer to the Commissioners with regard to any mode by which the supply of fish may be increased on this coast ?—No, I think that the fisheries are at present prosecuted with great skill.

30,271. They are prosecuted both with skill and perseverance ?—Entirely. At the same time I think it is a matter of some importance that there should be increased harbour accommodation. At present the coast of Caithness is entirely devoid of safe harbours. A work of the utmost importance to the herring fisheries will be the harbour which it is intended to construct at Wick, so that boats may have some safe place to run for at all times. At present, if it comes on to blow from the eastward and the boats are out of the harbour, they have no shelter whatever to run to.

30,272. Do you know all the fishery harbours on the coast ?—I am acquainted with all those in my district.

30,273. Has any considerable amount of expenditure been made upon them of recent years?—I can only speak of the two years during which I have been here, and with regard to expenditure, I have never seen any alterations or repairs undertaken except those which are now going on at Wick.

30,274. Would you lead us to infer that if the harbours on the coast were improved, it would lead to a large increase of fishing on the coast?—It would no doubt add to the safety of the boats and increase the number of people following the trade, more particularly at Wick; the others are only tidal harbours. There is in point of fact no place to run to if it comes on to blow from the eastward.

30,275. Have you heard any complaint made by the fishermen that there is already a sufficient number of boats fishing on the station?—No, I have never heard a complaint of that nature.

30,276. Have you been here during the time the winter herring-fishing was being carried on?—No, I have not.

30,277. Do you know anything of the haddock or cod-fisheries on this coast?—No, I do not.

30,278. (*Prof. Huxley.*) Under the Convention, I presume that you would warn off any foreign vessel; a French vessel, for instance, that you found fishing within the prescribed limits?—I should do so if I had occasion, but so far I have never had occasion.

30,279. Does the Act of the 24th of Victoria give you no power of that kind?—I do not bear in mind whether it does so or not, but I do not think it does.

30,280. Your powers in that respect are then, in point of fact, given to you under the Convention?—My power of interfering with foreign vessels fishing within the limit is given under the Convention.

30,281. Do your instructions require you to carry out any other portions of the Convention than that?—Not ordinarily.

30,282. For example, it is clearly part of the Convention that fishermen using drift-boats shall have their boats lighted in a particular way?—Yes, they are to carry lights.

30,283. Suppose you were to find drift-net fishermen carrying no lights, would you take them into port?—No, because if I were to attempt to do that, I should have to take half the herring fleet into port very often. The state of the weather when they are fishing and other matters render it almost impossible to carry out such a regulation as that.

30,284. You are aware that it is one of the regulations contained in this Act?—Yes, I am aware that a regulation to that effect is contained in the Convention Act.

30,285. Your instructions do not bind you to carry out that article of the Convention?—My instructions are to carry out the Convention Act and the British Fisheries Act, but my experience is that it would not be advisable to attempt to enforce all the regulations.

30,286. In point of fact you never have enforced the article to which I have called your attention?—No, and there are other particulars in which I have not considered it advisable to enforce the regulations contained in that Act.

30,287. We shall come to that bye and bye. The Convention not merely says that the boats shall carry lights, but it specifies the particular kind of lights they are to carry. The Act says:—"In "order that boats fishing with drift-nets may be "easily recognised at night, the masters of these "boats shall hoist on one of their masts two lights, "one over the other, three feet apart." You see from that, that merely having a single light is not in accordance with the law?—Yes.

30,288. But if they do not carry a light at all you do not trouble yourself about it?—No, I do not.

30,289. With regard to another matter, do the fishing boats here carry any vanes?—No.

30,290. You are aware that that is contrary to the Convention Act?—No.

30,291. They are bound to carry a particular kind of vane?—I was not aware of that.

30,292. The article says, "For the purpose of distinguishing by day drift-net fishing-boats from "trawl-boats, both shall carry at the mast head "vanes, which shall be at least eight inches in "height and two feet in length." There are other regulations as to the colour of the vanes?—Practically that article would not come into operation here as there are no trawl-boats on this coast. The drift-boats, therefore, could not get mixed up with the trawlers.

30,293. The Convention says nothing about that at all. It simply says that vanes are to be carried. With regard to shooting the nets before sunset, what is the practice here?—Their practice is to carry out that law very rigidly of their own accord.

30,294. They do not shoot their nets earlier than half an hour before sunset?—No, certainly not.

30,295. Suppose that in cruising about here you found that the herring made its appearance an hour or an hour and a half before sunset, and that the boats shot their nets, would you think it necessary to take those boats into your custody?—No, because if I were to attempt to do that I should do a great amount of damage. I should probably mention the matter to the Secretary of the Fishery Board, but I should not attempt to stop the boats in the prosecution of their fishing.

30,296. Has such a thing ever been done?—I have never seen an instance of the kind.

30,297. They do not shoot their nets before sunset?—Certainly not, as a general rule.

30,298. Do you look after the size of the mesh of the nets?—Yes.

30,299. Is there any tendency here to use a net with a mesh smaller than the legal size?—No.

30,300. Have you ever had occasion to seize nets on that account?—No.

30,301. Are the majority of the boats here decked or undecked?—The majority of the boats are undecked, but they have a small covered forecastle which has been getting more into use of late years. All the boats built now have that part covered in order to afford some slight shelter for the crew.

30,302. Are there any decked boats at all?—There are none entirely decked belonging to the fisheries at Wick.

30,303. Are there any decked boats that come up here from the south?—Some of the Inverness boats are partly decked, and they are rigged in a different manner.

30,304. Have you found it necessary to enforce the articles of the Convention respecting decked and undecked boats?—No.

30,305. What do you think of this regulation:—"The decked boats on their part shall shoot their "nets to leeward of the undecked boats, unless they "prefer going to the windward to a distance of at "least half a mile, to shoot their nets." What would be the practical effect of a decked boat with heavy gear and nets, going half a mile to windward of open boats and shooting her nets? What would be the probable result of that?—I confess that I do not see the importance of the law.

30,306. The intention of the law evidently is to keep the decked and undecked boats from coming into collision with each other, and to prevent the decked boats with their heavy gear from becoming entangled with the undecked boats. I presume that the decked boats would drive more rapidly than those which are undecked?—Yes, they would.

30,307. So that shooting half a mile to windward would not prevent an entanglement?—No.

30,308. They would soon drift down for half a mile?—I think so. The wind also would be likely to shift very much. It is never good for three hours at a time on this coast, and what would be to windward at one moment would soon be to leeward.

30,309. Have you had any complaints against the undecked boats from the decked boats?—No; but

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there is only one size of boats that fish on this coast. There is sometimes a little difference in the rig, but the majority are rigged in the same manner, and they are of the same size.

30,310. The Convention makes no mention of the size of the vessels, but it is merely a question of decked or undecked boats?—I presume that those who framed the Act had in their mind the large French luggers. That part of the Act would hardly come in force here.

30,311. There are no beam-trawlers here?—No.

30,312. If any beam-trawlers were to make their appearance off this coast it might occur to you, as commander of the cruiser here, to have complaints made to you?—I should not think they would come here, as this coast is not adapted for trawling.

30,313. Is there no soft ground here?—No; it is a rocky coast, quite unsuitable for trawling.

30,314. Do the fisherman here ever anchor their fishing nets?—No, not that I ever heard of.

30,315. Do you carry out the regulation of the Convention with respect to painting the names of the boats?—Yes, I do.

30,316. Are the names painted on the sails?—No; the number of the boat and her district are painted on the sails, and the names of the boat and of her owner are painted on the stern. The principal work I have to carry out is to see that that regulation is enforced.

30,317. Are not the numbers and names painted on the sails;—Not the names, but only the initial letters of the district they belong to. The number at the Custom House is painted on the sail; and the name of the boat in full and the name of her owner are painted on the stern.

30,318. You enforce that part of the Convention here?—I do.

30,319. Then the enforcing of the regulations of the Convention does not in any way depend upon the presence or absence of a foreign vessel here?—Not at all. The regulations are carried out precisely the same as they would be carried out under the same circumstances at any other place.

30,320. I ask that question because in the Report of the Commissioners of the British Fisheries in 1855 this paragraph occurs:—"In reference to the Con-"vention Act, so many admirable provisions are con-"tained in it for the due regulation of the fishing "grounds and fishing-boats, that it is to be regretted "they are special, only coming into operation where "the French boats fish." The meaning of that paragraph is, without doubt, that the Convention is inoperative unless French boats are on the ground?—Yes; but the Act in reference to the numbering of the boats is a later affair. The numbering of the boats has only been enforced in the way in which it is now carried out for the last two or three years.

30,321. But it is also part of the Convention?—It was in the Act of Parliament passed in 1861, I believe.

30,322. You mean the Act of 1860?—Yes, I think that is it.

30,323. Then, in point of fact as regards the numbering and painting the numbers on the sails, what you carry out is not the articles of the Convention?—No.

30,324. But the Act of Parliament, the 23rd and 24th of Victoria?—Yes, that is principally what comes into play.

30,325. Do you carry out any part of the Convention at all?—My orders are to carry out the Convention in its entirety. The whole of it is referred to me, and I should enforce it if I had occasion to do so, and if the circumstances arose from foreign boats being present.

30,326. But do you understand that the articles of the Convention are to be carried out only if foreigners are present?—They are to be carried out in any case. They are given to me as my guide.

30,327. Your guide in any case?—Yes, and I have also given to me other Acts of Parliament in reference to the fisheries.

30,328. And yet you perceive the bearing of the passage of the report which I just read to you?—It says that it is not to be carried out generally, except foreign boats are there.

30,329. But you, by your instructions, feel bound to carry the regulations out if foreign boats are there or not?—Yes, the Acts are given to me as my guide, and they are my guide. A copy of the Convention is given to me as well as all the letters and reports and papers which have been published in reference to the fisheries for a good many years.

30,330. In practice you have never been called upon to carry out any of the articles of the Convention?—No, I have not.

30,331. You seem to exercise a considerable dispensing power according to your own discretion?—Yes; but I can give you an instance of the mode in which the fisheries would be affected if I were to enforce the articles of the Convention rigidly. I might seize 50 boats a night, all of them infringing some regulation. I was out the other evening, and I might have seized at least 50 or 60, and brought them into harbour. It would not do to do that.

30,332. This regulation respecting the lighting of the boats appears to me to be an important matter?—Yes, so it is. Last year I was questioned about the lighting of the boats, and in pursuance of my instructions I said that the boats should have lights, but I have not seized a boat on that account.

30,333. But you feel empowered to do so if you like?—There is nothing to prevent me from doing so, but I do not think it desirable to seize them.

30,334. You would not feel yourself restrained from doing so on account of the absence of French vessels from the coast?—Certainly not.

30,335. Have you carefully looked at the articles of the Convention?—Yes, I have read them all through.

30,336. Do you think it practicable or desirable to carry them all out? Would it be to the interests of the fisheries to do so?—I think that many of them would be highly troublesome and bothering to the fishermen For instance, the article in reference to carrying vanes would be exceedingly difficult to carry out. The boats have shifting masts, which are up or down according to the state of the weather. It would involve a considerable amount of trouble and inconvenience to the fishermen if they were compelled to comply with the regulation. Then again, with regard to the names on the boats, so long as a boat can be identified by her number and the number of her district, that is quite sufficient without her being required to paint the name on the stern. All that you want is to be able to identify a boat if necessary. As it is there is considerable trouble in inducing them to put the names on the stern, and also the number on the buoys which is required according to the Act of Parliament.

30,337-8. What would be the effect of carrying out this regulation, supposing that there were decked boats on the ground:—"When undecked boats shall "arrive on grounds where fishing is already begun "by other boats, amongst which shall be decked "boats, the undecked boats so arriving shall shoot "their nets to windward of the decked boats, except "they prefer going to leeward, to a distance of at "least half a mile, to shoot their nets." Would not the enforcement of such a regulation give the practical possession of the ground to the decked boats?—Certainly it would, because the decked boats would choose their place, and the others must be guided by them. But I have never seen the large and small boats mixed up together fishing.

30,339. Suppose that a few French decked boats, or some of the large decked boats from Yarmouth and the south were on the ground, would you consider it expedient to carry out that regulation?—I should feel myself bound, if foreign boats came up, to carry out the Convention with regard to the distance from the coast at which they must fish.

30,340. But the decked boats would have the first chance of getting to the fishing ground ?—Yes.

30,341. And by this regulation, as soon as they have shot their nets all the Scotch undecked boats would be precluded from shooting their nets within half a mile of them, either to windward or leeward ?—Yes.

30,342. Would not that be a matter of great importance to the fishermen here ?—I think that a distance of half a mile or so would not make much difference in the fishing.

30,343. At any rate, would you feel yourself bound to carry out the regulation ?—I should feel bound to carry out the law, particularly in the case of foreign vessels, as it might become a question of dispute afterwards.

30,344. Suppose you were to find men fishing on Sunday, what would you do ? Do they fish here on Sunday at all ?—Never.

30,345. But suppose they took it into their heads to do so, would you feel empowered by the Convention to interfere with them, the article of the Convention being: "Herring fishermen, being within the "fishery limits of either country, shall comply with "the laws and regulations of the said country re-"specting the prohibition of fishing on the Sabbath "day ?"—I should feel bound to carry out the law; but I have never seen an infraction of it in that respect.

30,346. What is the law ? Is there any law against fishing on Sunday in Scotland ?—Yes, I think there is.

30,347. Apart from the Convention ?—I do not know whether there is any written law on the subject; but there is a well understood custom. I believe, however, that there is a law.

The witness withdrew.

MALCOLM GEDDES called and examined.

M. Geddes.

30,348. (*Mr. Caird.*) You are a fish-curer here ?—Yes.

30,349. Do you cure any other kind of fish than herrings ?—No.

30,350. The herring fishery is the great fishery on this part of the coast ?—Yes, it is.

30,351. Is it increasing or diminishing ?—I am rather inclined to say it is diminishing.

30,352. How is it with regard to haddocks ?—The quantity of haddocks they are getting now is not as much as it was formerly.

30,353. Is the quantity of cod and ling increasing or diminishing ?—The cod and ling fishery is not much practised here locally; it never has been to any great extent.

30,354. Do you think it would be more prosecuted if access to the markets was facilitated by the railways coming further north ?—I have no doubt of it. A good deal of cod might be got here if we had access to the markets.

30,355. Then the want of access to the markets prevents the cod and ling fishery from being prosecuted here ?—Yes; it is the want of markets that prevents it being prosecuted.

30,356. Over what length of years does your experience of the fisheries here extend ?—Upwards of 30 years.

30,357. Has the herring fishery increased during your experience, or is it stationary or diminishing ?—It fluctuates a good deal in different seasons; there are seasons that are pretty prosperous, and in others there is a good deal of falling off; but to speak of it generally, and taking into consideration the number of boats concerned, it may be that they have not fished as well, but the quantity of fish, taking one year with another, has not been equal to what it was formerly per boat. In the total quantity, however, there is not much difference.

30,358. Does the quantity of fish fluctuate according to the seasons ?—Yes.

30,359. But the whole catch of fish has shown no signs of dimunition, is that the case ?—I cannot say precisely as I have not the statistics before me.

30,360. Within your experience has the size of the boats and the length of the nets much increased ?—Yes, very greatly.

30,361. The boats are larger and the nets are larger ?—The nets are larger and more numerous.

30,362. Is the large proportion of all the herrings caught here cured for the foreign market ?—Yes, chiefly for the foreign market; chiefly for the German market. That is our principal market.

30,363. Has there been any change in the proportion of fish sent to the home market within recent years; are there more of them sent to be consumed fresh ?—There is not a large quantity sent from here fresh in our principal season.

30,364. Or to be consumed in the home market ?—Not much. There is a great want of convenience; we have no convenience for sending the fish to the home market.

30,365. Then the great fishery here is for the supply to the foreign market ?—Yes.

30,366. What markets do you principally send to ?—The German markets: Stettin, Dantzic, Koningsberg, Hamburg, and other places.

30,367. Do the German markets take the principal quantity ?—Yes.

30,368. Are none sent to Russia ?—Occasionally; but not much.

30,369. Do you send any to Austria ?—They mostly go to Austria through Prussia. We send them to Prussia, and some of them find their way to Austria and Poland through Prussia.

30,370. Are there any duties levied on the importation of fish into those countries which affect your interests ?—The duties which are levied affect the entrance of the fish into the Austrian market, and the large duties imposed affected the entrance of the fish into Prussia until they reduced their tariff.

30,371. Do you send none to the West Indies, as you were in the habit of sending in former years ?—Scarcely any are sent there now. We do not pack up for the West India market.

30,372. Have those interested in the fisheries made any representation to the Government in regard to the duties which are levied in foreign countries upon the fish exported from here ?—I believe that representations have been made, but whether any combined representation has ever been made or not I am not aware. Several representations have been made against both the Austrian and French tariff.

30,373. Is it the case that during the last two years a winter fishery has sprung up here ?—You may say that it chiefly sprung up last year. There had been a few caught for some years before the last year; but last year was the principal fishing.

30,374. It began the year before, and was continued last year ?—Yes.

30,375. Was it continued with success last year ?—Yes; the winter fishery last year was a very great success, I believe.

30,376. Was the quality of the fish good ?—The quality of the herrings was not equal to that of our summer fishery; but it was good, nevertheless.

30,377. The fish taken in the winter fishery were good marketable fish for consumption ?—Yes.

30,378. What was done with them ?—They were sent chiefly to the English markets.

30,379. Were they branded and salted ?—Some of them were cured and sent to the Irish market.

30,380. Were many of them used for cod bait ?—Yes, as far as they were required for cod bait; but there is not a large quantity that would be required for that purpose.

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30,381. Is that because the cod fishery is not much practised here?—Yes; the attention of the fishermen here is directed almost wholly to the herring fishery for the time being.

30,382. Do boats from the other places to the southward of this congregate here to prosecute the winter fishing?—Not much.

30,383. The boats which engaged in it were chiefly local boats?—Yes.

30,384. Taking the number of boats engaged last year in the winter fishery, and comparing them with the number of those engaged in the summer fishery, was the yield of each boat as good in the winter as it was in the summer?—I cannot speak with any accuracy as to that.

30,385. Did the fishermen themselves find that it was a profitable fishing?—I believe they did.

30,386. Are they likely to continue it in future seasons?—I believe it will be prosecuted to a great extent next year, in consequence of the encouragement they got.

30,387. Has any opinion been formed that the winter fishing will be injurious to the summer fishing?—No, I do not think so.

30,388. Is the price of the winter fish quite equal to, or is it greater than the price of those caught in the summer fishery?—Last year it was just about the same. It was a daily price, and of course there was a great variety and difference in the prices.

30,389. There is an abundant demand for winter fish at a good price?—Yes.

30,390. Although the Continental markets are practically closed to you at that season?—I have sent a cargo to the Continental markets even down to the spring. They have been prepared and sent in the spring. The fishing commenced last year a little after the new year, and continued until the month of February.

30,391. Has there been a discussion here among the curers with regard to the advantage or disadvantage of continuing the Government brand upon the herrings?—Yes, there has been a discussion.

30,392. Do opinions much differ among the curers as to the advantage of the brand?—They are divided in opinion.

30,393. What is your opinion about it as a curer?—My opinion has always been in favour of the brand.

30,394. What are your reasons for entertaining that opinion?—My principal reason for entertaining that opinion is that the Prussian market is our chief market. The Prussians come from the Continent at this time of the year, and they purchase herrings on the spot. My impression is that if the brand were abolished they would not be able to do so; they would not have any guarantee for the making up of the herrings, and we should therefore have to consign our herrings to Prussian agents, and I have no great expectation of that turning out very well.

30,395. Do the Prussian agents come here at present?—The Prussians come here and purchase.

30,396. Even although the cured herrings have the guarantee of the Government brand upon them?—Yes.

30,397. And they know what they purchase?—Yes.

30,398. If there were no brand upon them, would there not be a greater necessity for them coming here?—No, the reverse would be the case.

30,399. Why would that be so?—Because we should be compelled to consign them to agents in the Prussian ports.

30,400. Why would you be compelled to do that more if there were no brand than you do now?—Because they have told us that they would not come here to purchase.

30,401. But is it not reasonable to conclude that they would have a greater interest in coming here to see that they got a good article when they bought it than they have now that they have the Government guarantee for the quality of the fish?—Their idea is that they purchase it cheaper at Wick of our commission agent.

30,402. I presume that they come here because they want the fish?—Yes.

30,403. They do not come here for the purpose of accommodating you?—No, not to accommodate us; it is to accommodate themselves.

30,404. Do you not send a good deal of fish to the Continent without any brand?—Yes; we send a good deal in the earlier part of the fishing.

30,405. Have you any difficulty in getting them sold without a brand?—We seldom or ever consign any; we have sold them here.

30,406. Do you not send chiefly to the home market without a brand?—Yes; those sent to the Irish markets are without a brand.

30,407. Have they the mark of the curer's name upon them?—Yes.

30,408. Is not that a guarantee of the quality of the cure?—I can scarcely say that. There are many engaged in the trade who know nothing about the curers, and they have to depend upon the brand. There are also a number engaged as fish-curers who are not practical curers.

30,409. Is there a great difference in the skill exercised on the part of the curers in carrying out the cure?—Yes.

30,410. Does not the Government brand set aside altogether the capacity of one man as compared with that of another, and give an equal value to all?—My impression is that the regulation which the Government or the Board of Fisheries have established for the branding of herrings nearly comes up to a pitch which is as far as we can go. If the herrings secure the Government brand, then I consider they are nearly up to the cure, which is as good as it can possibly be.

30,411. How many barrels will be cured here in the course of a morning when there is a successful fishing?—Occasionally I have seen as high as 25,000. I have seen from 20,000 to 25,000 crans cured; that would make possibly one third more barrels.

30,412. Then there would be between 30,000 and 40,000 barrels?—Yes.

30,413. How many inspectors are there looking after the quality of the cure?—I think there are four here generally.

30,414. Then each Fishery inspector would have nearly 10,000 barrels to look after?—We do not depend altogether upon the Fishery inspector to look after them while the curing is going on. They only come when the fish are prepared, and then they inspect the barrels.

30,415. Are the barrels closed up when they come?—Yes.

30,416. They do not see any of the process of cure themselves?—They do if they choose; they are always going round, and they frequently see the curing going on.

30,417. Do you think the fact that they are going round, and that they have to make some sort of inspection of the cure, insures greater care in the cure?—There is one thing I may state in reference to it. Assuming that the catch some mornings is different from what it is in other days, if there was not some check on the women employed in packing the fish, almost all the coopers we employ would not be capable of looking after them. There is, however, this dread, which upon each packer has a salutary check, namely, that if they do not gut and pack the fish rightly the officer will reject them. That acts as a great check upon them.

30,418. Would it not be as great a check if it were left to the curer to see that the cure was well done?—Scarcely; we should have to employ a great number of men more than are necessary. We could not get enough for the catch we have some mornings. Some days we have very little to do, while upon other days we are overloaded, and the coopers have to work a great deal harder.

30,419. I suppose that eventually it is found that the advantage of the brand is to make your sales abroad more easily negotiable and managed?—Yes;

that is one of the main fruits of the branding system. It is a guarantee that when I sell herrings, if I sell them with the Crown brand upon them, the purchase is of course complete.

30,420. But it is only in the foreign market that the Crown brand is used at all?—It is chiefly in the foreign market. I do not know that it would be of much use in the home market.

30,421. (*Prof. Huxley.*) Do you think it is absolutely necessary for the inspection to be exercised by Government officers?—I should say absolutely necessary.

30,422–5. Could it not be done by some other authority? Is there a corporation at Wick?—There is a municipal corporation; but they take no cognizance of anything with reference to the fishing.

30,426. Might it not answer the purpose for the municipality here to appoint persons independent of the curers to examine and inspect the fish—in short, to appoint persons to exercise the same functions as those which are exercised by the Government inspectors now?—I am afraid they have no power to do it.

30,427. But I am supposing that they had the power?—If they had the power, it would probably act in the same manner.

30,428. At present you pay a tax of 4*d.* a barrel upon all the fish that are branded.

30,429. That raises a considerable sum does it not?—Yes.

30,430. The only advantage you derive from it is that your fish undergo a system of inspection?—Yes.

30,431–2. Do you know what sum is raised altogether from that tax of 4*d.* a barrel?—I cannot say.

30,433. I may take it that the sum yielded by the branding is a pretty considerable sum?—Yes, it is a pretty large sum.

30,434. I suppose if a light tax were raised by the municipality, and that they paid their own agents as inspectors, it would answer your purpose as well?—It would answer the purpose well enough if the German buyers had confidence in it. If their inspectors were clothed with the same powers as the Fishery officers now exercise of course it would answer the same purpose.

30,435. So that the advantage at present gained at Wick in consequence of the system of inspection might be obtained from a system worked by the local government?—Yes.

30,436. And it might cost you less?—We should not like it to cost us more. We should at any rate be inclined to oppose that.

30,437. What is the number of barrels upon which the full Crown brand is imposed?—About 81,000, but that is above the average.

30,438. It yields something like 1,300*l.* in revenue?—Yes, about that.

30,439. That would be a considerable revenue to the municipality?—I believe they would be very well pleased to get it.

30,440. Do you think if they had that revenue that they could appoint inspectors to do all the work without throwing it upon the country?—I have no doubt of it.

30,441. Is the brand of any advantage to the fishermen?—I do not know of what advantage it is to the fishermen; I am not aware of any except this, that it induces many to follow the business of curers who otherwise would not, and makes the competition greater.

30,442. It makes a greater demand?—Yes, except for that it does not benefit them. We take their herrings good or bad.

30,443. What is the system of engagement you have with the fishermen here?—There are various kinds of engagements. A great many engage without any price being agreed upon and a great number of them engage at a fixed price.

30,444. How do they engage without any price?—When they engage there is no fixed price. They do not know what the price is to be until the end of the season. Those are chiefly the boats which have large advances from the curers.

30,445. Suppose you were to engage without a price, what would be the terms of the engagement?—The engagement is that the fisherman fishes for me and is paid the general price.

30,446. He fishes for you, and is paid according to the average price of the market during the season?—Yes.

30,447. He is bound to fish for you during the season?—Yes.

30,448. Then what advantage does he get from making that arrangement?—He would probably get a pretty large sum for the time being, and probably a large sum at the end of the season. It is an advantage we should like to get rid of if we could do so.

30,449. Are you aware whether the fishermen are in debt to the curers?—Yes, they are very largely in debt.

30,450. And then they work it out?—Yes, if they can.

30,451. Is that generally the case here?—It is so general that the number of free boats, free to engage anywhere, is not very numerous here.

30,452. Does the curer make an advance to the fisherman upon the catch of the next season?—His advances are made at the end of the season. If the fishermen have not obtained enough fish to clear them, then they must get advances in order to enable them to go on.

30,453. Then the tendency of that system is to place the fishermen in a worse position every year?—I am sorry to say that they are not getting any better.

30,454. But yet a considerable sum is made by the fishing?—Yes.

30,455. Has there been any discussion here in reference to the close time?—No.

30,456. Is there anybody here who would like to see a close time enforced on this coast?—I am not aware that there is any number of persons here who would think it proper to have a close time.

30,457. There is a winter fishing coming on now?—Yes, there is.

30,458. Suppose that it should turn out well, would you like to see it prohibited?—No; I do not think so, nor have I heard any persons say so; but the fishing is of so recent a date that we are not able to say yet what the effect of it will be.

The witness withdrew.

FRANCIS SINCLAIR called and examined. *F. Sinclair.*

30,459. (*Mr. Caird.*) You are a fisherman here?—Yes, I am.

30,460. Have you been long engaged in the fishing here?—For upwards of 38 years.

30,461. Is it chiefly the herring fishery that you follow?—Yes, for the last few years.

30,462. Have you been in the habit of fishing for haddocks and cod?—Yes, I have.

30,463. Is that an improving or diminishing fishery?—The haddock fishery has diminished, but the cod fishery has been rather better for the last few years, owing to the herring bait which we have been able to get.

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30,464. Has the haddock fishery diminished of late years?—Yes, it has diminished a good deal.

30,465. Are not haddocks found to the same amount?—No.

30,466. Where have they gone to?—That is a question I cannot answer.

30,467. Have you found them further out?—They are not to be found anywhere for the last few years.

30,468. Is there any reason in your own mind to which you can ascribe that change of ground?—I cannot give you any reason for it.

30,469. Was the fishery of much importance before?—Yes, it was of great importance.

30,470. Has it become a loss to you?—It is a good deal of loss to this place, and to other southern towns.

30,471. How far does that change of the fishery ground extend along this coast?—As far as the Firth of Forth, and down to the English coast.

30,472. We would rather you would speak only of what you know here; we desire merely to get information from the fishermen from the Ord to the Noss Head?—I am acquainted with the fishermen from the Ord to the Noss Head.

30,473. From the Ord to the Noss Head have the haddocks comparatively disappeared?—Yes.

30,474. Has there been any deep-sea trawling that could have affected the haddock fishery?—No, nothing of the kind.

30,475. You as a fisherman can assign no reason for it?—No; no reason whatever.

30,476. Have you attempted to follow the fish into deeper water?—Yes, we have gone further off after them.

30,477. And have you not succeeded in finding haddocks then?—No, not for some years back.

30,478. The cod-fishing, you say, has improved in consequence of your having herring bait?—Yes. It has been better owing to our being able to get herring bait.

30,479. Are the cod you get here of very fine quality?—Yes, they are of first-rate quality.

30,480. Would the cod fishery be increased very much if it was more diligently followed, and if there was a good market for the cod?—I believe the number of fish we take might be considerably increased if it was better followed.

30,481. Where do you get the cod?—All over the coast.

30,482. Are there no particular cod banks on this coast on which you find your best fishing?—No, we find them on all parts of the coast.

30,483. Do you find that the herring bait is the most killing bait you can get for cod?—Yes; it suits the fishing best.

30,484. Do you get any soles here?—Only a very few.

30,485. Have they ever been fished for by beam-trawlers?—There has been nothing of that kind here.

30,486. Do you get any turbot?—No, not many turbot, but a good many halibut.

30,487. Do you get any ling?—Yes, a good many ling.

30,488. Are there any shellfish—crabs and lobsters—here?—A few, but not many.

30,489. Has that fishing been increasing or diminishing?—I cannot say much with regard to it.

30,490. Is it not a very important fishery here?—No, there is not much done in it.

30,491. With regard to the herring fishery, do you find that while it has been fluctuating from year to year, there has been no sensible and material change in the total quantity taken upon the average of years?—I don't know that I can say much about that.

30,492. Do you think that the gains of the fishermen in recent years have been less or greater than they were in former years?—They have been less in a good many cases; but there is such a multitude of boats here that it is nearly impossible for all hands to be prosperous.

30,493. Has there been a large flee o boats for many years?—A very large fleet.

30,494. Are they increasing rapidly in numbers?—They have been increasing largely in numbers for the last few years.

30,495. Have they increased this season?—They have rather decreased, I believe, this season.

30,496. Do you believe that the shoals of herring which come on this coast are much the same as they were in former years?—They are much the same in quantity.

30,497. Are they found on the same ground?—Yes; we very often find them on the same ground.

30,498. And about the same time?—Yes; about the same time.

30,499. But a new fishery has sprung up here?—Yes.

30,500. A winter herring fishery?—Yes; it has commenced within the last year or two; but I do believe that the herrings which they catch now in the winter have frequented the coast for a long time back, and that they would have been caught if they had been tried for.

30,501. Did the fishermen never go out formerly to look after them?—No; none of them tried.

30,502. Do you expect that fishery to increase and become an important fishery?—Yes, there is every appearance of it.

30,503. Are the fish, when they are obtained, got in a good condition?—Yes, in very good condition.

30,504. Are they found on the same ground as you find the herring in the summer fishing?—For the most part they are on the same ground, but they are closer in shore.

30,505. They are found nearer land?—Yes, for the most part.

30,506. Does a boat in a day's fishing make as good fishing in the winter as in the summer?—It is better, I think, in proportion.

30,507. For the time it lasts?—Yes; it is much better.

30,508. How long last year did the winter fishing continue?—Rather better than six or seven weeks.

30,509. Then did the fish disappear?—They did not disappear altogether; there were a few still to be got.

30,510. But you found that it was not worth your while to continue the fishing?—Yes.

30,511. What do the fishermen do then?—They just remain idle. Perhaps they might go fishing just now and again.

30,512. Do they go to any other fishing?—Not until May or June.

30,513. Do most of the fishermen go to Stornoway in the month of May?—Yes; a good many of them do.

30,514. Do they leave this place and go to Stornoway?—Yes.

30,515. Do they find that an advantageous fishing?—Some do and some do not. To some it is a losing concern, and to others it is profitable.

30,516. Do you find, as a fisherman, that there is a disadvantage from the number of fishermen going out from this place in shooting your nets according to your own convenience, and not waiting till a particular time?—There is great inconvenience sometimes. Such a number of boats being gathered together makes it greatly inconvenient to shoot our nets at sea; but I don't see that there is any way of stopping it.

30,517. Do you mean that there is such a large number that no mode of interfering could be adopted that would help the individual fishermen?—It would be a very great trouble to try to put a stop to it.

30,518. But do you think it is at all practicable?—I don't know. It would require great attention.

30,519. Have you ever observed that shooting your nets before sunset is injurious?—Yes.

30,520. Does it prevent the fish from rising?—I believe it does.

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30,521. Did you ever see it have that effect ?—I can't say that I ever did, but I believe so.

30,522. Do you ever catch fish before sunset ?—Very rarely.

30,523. Do they seldom come up till after sunset ?—Very rarely.

30,524. Do you ever, towards the end of summer, sink your nets and fish upon the ground ?—No, never.

30,525. Are there any spawning grounds known to you off this coast where the fish go to spawn ?—Yes, there is a good deal of spawning ground, or at any rate ground where I suppose the fish spawn.

30,526. Is there any destruction of spawn going on by any of the modes of fishing which you adopt here?—No, there is no destruction of spawn.

30,527. Are there any regulations enforced upon you that are injurious to you as fishermen ?—No, not as far as I can learn.

30,528. Do you desire to see any regulations adopted that will improve your position as fishermen ?—No.

30,529. Do you think it is best to leave you to follow the fishing as you think best and most profitable to yourselves ?—Yes.

30,530. (*Prof. Huxley.*) What number of hooks were there on your long-lines when you first began fishing ?—Four hundred.

30,531. Has the number much increased now ?—Yes.

30,532. How many do you put on your lines now ?—I cannot exactly say. I do not follow it in this part.

30,533. You do not follow it now ?—No.

30,534. Do you commonly carry any lights in your boats ?—Yes, we do.

30,535. In your drift-net boats ?—Yes.

30,536. What sort of lights do you carry ?—A white lantern.

30,537. Is that the general custom among the drift-net boats ?—Yes, it is.

30,538. The general custom is to carry only a single light ?—Yes.

30,539. Are your boats mostly decked or undecked?—They are a small bit decked.

30,540. They have a small half-deck ?—Yes, 12 or 15 feet.

30,541. Has the tonnage of the boats increased of late years ?—Not the last six or seven years.

30,542. Has the number of boats increased very much ?—Not this season, but within the last ten years.

30,543. Within the last few years ?—Yes.

30,544. And has the length of the fleets of nets increased ?—Yes ; to a very great extent.

30,545. Then a great deal of capital has been put into the fishing ?—Yes, a great deal.

30,546. And it has come out of the fishing, I suppose ?—Yes.

30,547. Then the fishing cannot have been so unprosperous ; it must have answered very well ?—Yes, it has answered very fairly for some time back.

30,548. For what reason did you increase the length of your fleets of nets ?—To increase the quantity of fish we could take.

30,549. Did you find that you could catch more by doing that ?—At times we do, but at times we do not. Sometimes it is impossible to get the length clear.

30,550. Do you get foul of each other ?—Yes, very often.

30,551. When you first went to sea what was the number of nets in your fleet ?—It differed very much, but it would be from 18 to 24 to each boat.

30,552. How many are there now ?—There are from 44 or 45 to 50.

30,553. There are twice the number, in point of fact?—Yes.

30,554. Is the length double what it used to be ?—It is more than double in many cases.

30,555. Do you catch a larger proportion of fish per boat now than you did some years ago ?—Some catch a larger quantity of fish than others do, but there is very little difference.

30,556. But is there an increased quantity of fish caught in proportion to the increased length of the nets ?—No.

30,557. Is it anything like as much ?—No

30,558. Is that because you get foul of each other, or because there are not so many fish ?—When we get foul of each other we get no fish.

30,559. Are there something like 2,000 or 3,000 boats that go out from the coast altogether ?—Perhaps there may be along the whole coast.

30,560. How many go from Wick ?—I don't know exactly, but there are more than 1,000 this year.

30,561. Then it will take them a great deal of time to get well clear of each other before they shoot their nets ?—Yes; in a sharp breeze of wind.

30,562. Perhaps you do not always wait to get well clear of one another ?—No; not sometimes.

30,563. (*Mr. Caird.*) Do you sell your fish direct to the curer, or do you engage as fishermen ?—We are commonly engaged.

30,564. Do those who do not engage to the curers make a better thing of the fishing than those who do?—There are none disengaged in the fishing season.

30,565. Do you engage at so much wages and give the whole of your catch to the curer ?—We get so much per cran for every cran we catch.

30,566. Is there no difference in the rates paid by the curers to the fishermen?—Yes, a great difference.

30,567. Does it depend upon the quantity of fish ?—No.

30,568. Then what does it depend upon ?—It is just owing to how they make an agreement; the curers strive to get them as cheap as they can, and we strive to get as much as we can for them.

30,569. Do the rates differ much ?—I believe they do.

30,570. Are the rates known to the public ?—No.

30,571. Then are they private agreements that nobody knows anything about ?—Yes ; they are very little known.

30,572. Are there any circumstances which enable one man to make a better agreement than another ?—Sometimes there are.

30,573. Is there any circumstance besides his own skill in making an agreement ?—Yes ; if he stand pretty clear he will have a better chance of obtaining a better price for his cran than those who are very much in debt.

30,574. Do those who are heavily in debt agree to take what is offered them ?—In most cases they do.

The witness withdrew.

JOHN MORE called and examined.

J. More.

30,575. (*Mr. Caird.*) Have you long been a fisherman here ?—Yes.

30,576. Do you agree with the previous witness that the haddock fishery has fallen off very much here?—Yes, I do.

30,577. Is there any reason in your own mind you can assign for that falling off ?—No, I do not know that there is any reason that I can assign.

30,578. You are not aware of any cause for it ?—No.

30,579. Was it a valuable fishery here ?—Yes, it was at one time.

30,580. In your opinion have the haddocks almost entirely left this coast ?—They have not altogether left it, but they get thinner and there are fewer to be got.

30,581. When you follow them further out to sea do you not get them ?—There is no advantage in that.

30,582. Have you tried it ?—Yes.

30,583. It is a somewhat important question, however, because they say further south that they can always find plenty of haddocks when they go further out to sea; I understand you to say that that is not the case here ?—No.

30,584. You have had no trawling to interfere with the haddock fishery on this coast?—No.

30,585. Is it good trawling ground here?—No.

30,586. Is it a hard or a soft bottom?—In deep water here it is a hard bottom.

30,587. Is there any destruction of spawn caused by any mode of fishing which is practised here that you know of?—I don't think there is.

30,588. With regard to the herring fishery, I suppose you find that the most profitable fishery on this coast?—Yes, it is the most profitable.

30,589. Is that one reason why you do not go so much after haddocks as you did at one time?—We don't go now owing to the winter fishing. That prevents us from following it so much.

30,590. Since the winter fishery came in it has been found the more profitable fishery?—Yes.

30,591. The haddock fishery for that time has been suspended?—Yes.

30,592. Is that, you think, one reason why fewer haddocks are got?—Yes.

30,593. It is not altogether that the haddocks have left the coast?—Yes; it is just that.

30,594. Do you think that the winter fishing is likely to become profitable to you?—It has been profitable for the last year or two.

30,595. The herrings are got in good condition at that time?—Yes, they are.

30,596. Do you fish with the same nets at that time as you do in the summer fishing?—Yes.

30,597. The nets are the same size?—Yes.

30,598. The cod fishery is the best here?—When you can get the herring bait.

30,599. Do you think it will become an increasing fishery bye and bye?—Yes; if we continue to get the herring, because that is the best bait for the cod.

30,600. Have you a ready market for the cod here?—The markets don't suit very well here.

30,601. Where do they go from this place for consumption?—They are sent south.

30,602. Are they sent away by steamboat?—Yes.

30,603. How often do the steamboats come here?—Twice a week, and I think once in winter.

30,604. What will you get for a good cod here?—About 1*s.* for a good cod; sometimes less and sometimes more; the price goes up and down in that way. It is very fine cod that we get here.

30,605. If the price got better, you would follow the fishing more regularly?—Yes.

30,606. Would that be succeeded by a larger quantity of cod?—Yes.

30,607. There are plenty to be had if the fishing is prosecuted?—Yes.

30,608. Do any of the English fishing vessels come on this coast at all?—Some years ago I have seen plenty, but there are not many now.

30,609. Have you any complaints to make as to the scarcity of bait for your white fishery?—If we get herrings that is the best bait for the cod.

30,610. For the cod?—For the cod and haddocks too.

30,611. On the whole, do you say that the condition of the fishermen is an improving one?—I really could not say that. Some of them are improving in their condition, and some are going the other way.

30,612. The boats are getting larger?—Yes.

30,613. And the nets larger?—Yes.

30,614. And the lines larger?—Yes; they are all increasing in that way.

30,615. Every one of those changes involves a larger expenditure of capital?—Yes.

30,616. Then the owner of a boat must be richer than he was 20 years ago?—I don't know that.

30,617. If the boat is his own?—Yes; if that is the case; but there are not many of them who have their own boats.

30,618. Do the sons of fishermen become fishermen in the course of time?—Yes, some of them do.

30,619. Do any of them go into trades, and go to sea?—Yes; some follow trades and some follow fishing.

30,620. Do the fishermen here farm bits of land as well as follow the fishing?—Yes; along the coast they have bits of farms.

30,621. Which they conduct at the period when the herring fishery is not going on?—Yes.

30,622. Do they not do that at Wick?—No; there are no farms in the town of Wick.

30,623. Then when they have no other occupation, do the fishermen not prosecute the fishing more constantly than those who have farms?—They go to the Lewis, to the fishing at Stornoway.

30,624. They don't continue at the haddock fishery?—The haddock fishery is mostly dropped.

30,625. Do the Buckie fishermen come on this coast to fish for cod?—Yes; they are often down here.

30,626. Do they fish in the same way that you do here?—Yes, in the same way.

30,627. Do they use the same kind of long-lines and the same kind of boats?—Yes.

30,628. Do they run with their fish to Buckie?—Yes.

30,629. Do they get a better price for their cod then you do?—Yes; I suppose they do; they are nearer the markets.

30,630. Would it not be better for you, if you had a good catch of cod, to send your fish to Buckie?—The weather might not suit us to get across.

30,631. But it would suit you as well as the Buckie fishermen?—If that was our home we should try and fight for it.

30,632. Have they the same kind of boats?—They have not just the same hull, but they are equally as good boats.

30,633. Would your boats keep the sea equally as well?—I believe so.

30,634. (*Prof. Huxley.*) Have you found the summer fishing for herring at all affected by the winter fishing?—No.

30,635. You find that there are as many fish here in summer as there were before the winter fishing was established?—I know no difference at all.

30,636. Have you any wish to have a close time for this coast?—I see no necessity for that on this coast. I don't see that it would do any good.

30,637. You were saying just now that herrings were very important for your cod and haddock fishing. Supposing you were prohibited from taking herrings from the beginning of January till the month of May, could you catch any cod and haddock?—Only very few.

30,638. The haddocks at that time will not take mussels?—The haddocks will, but the mussels are not bait for cod.

30,639. At any rate, the herring bait is the best?—Yes.

30,639*a*. And a prohibition against taking herrings for bait would injure your fishery very much?—It would injure the cod fishery very much.

30,640. Were there not lots of mullet taken here last winter?—I don't think there were.

30,641. Do you happen to know any thing about it?—There might be a few got, but I don't think it would be of any consequence.

30,642. Are you at all interfered with by the Dutch or French fishermen here?—Not very much; there are very few of them on this coast now.

30,643. Do they come here occasionally?—I have seen two or three here this season.

30,644. Were there any last season?—Yes, a few last season.

30,645. Are there always two or three here?—Yes; but they are about to go away now; this is the time they leave the coast.

30,646. But still they do come?—Yes.

30,647. Have you ever any trouble with them?—Not much; but we may have to shift them about.

30,648. When they shoot their nets to windward of you, do they drift down upon you?—Yes; and we have to shift then.

30,649. Does anybody ever look after them to see that they keep from damaging you?—I never saw anybody looking after them.

30,650. They are all decked boats, of course?—Yes.

The witness withdrew.

WILLIAM BRUCE called and examined.

30,651. (*Mr. Caird.*) You are a fisherman on this coast?—Yes.

30,652. You have heard the evidence given by the previous fishermen in regard to the different kinds of fish caught here?—Yes, part of it.

30,653. Do you agree with them that the haddock fishery is decreasing?—Yes; quite so.

30,654. Is there any reason to which you can attribute that in your own mind?—No, none whatever, except that which has already been stated.

30,655. Partly, according to the last witness, it is because a better interest has sprung up in the winter herring fishery?—Yes.

30,656. The fishermen have found it more profitable to follow that than the haddock-fishing?—They have found it more profitable latterly; but it is a fishing that is in its infancy yet.

30,657. Do you think that the winter herring fishery is likely to become an important fishery?—Yes, I think so.

30,658. It has not yet shown any signs of being injurious to the summer fishing?—Not that I know of.

30,659. Are there any regulations enforced among the fishermen here in regard to the herring fishery of which you have reason to complain?—No.

30,660. Would you desire to see any regulations enforced with regard to the shooting of your nets?—I think that would be quite proper.

30,661. Would it be practicable, do you think, among so many boats, to enforce a regulation that would prevent the fishermen from shooting their nets until half an hour before sunset?—I think it is quite right that that should be the case.

30,662. Do you think that sometimes great injury is done to the fishing by the nets being shot before sunset?—I think that no profit comes from it.

30,663. Do fishermen do it frequently?—They do it sometimes, but not frequently.

30,664. Do they do it at any time when it could be avoided?—It could always be avoided if they were strict enough.

30,665. Do they often do it when they need not do it?—The principal reason why they shoot their nets before sunset is, that if they happen to be anywhere near the fishing ground they put out their nets where they think there is a good fishing berth, and where they have the best chance.

30,666. They do not put them out because they get the fish earlier in consequence, they do it in order to occupy the ground?—Yes; it is in order to occupy the ground that they put their net out soon.

30,667. Would it be possible among such a large fleet of boats as a thousand to make them all wait until one time?—Yes; when Captain Macdonald was here, he went out to prohibit them from shooting until the proper time.

30,668. Was that regulation followed by an increase in the take of fish?—I cannot say much about that. The fish seem thinner now than they were. Some years we have a good fishing, and sometimes an inferior one.

30,669. That is the case now?—It has been the case ever since I can remember.

30,670. Do you wish to see any regulations enforced as to the time at which you should shoot your nets?—I think it would be very proper indeed.

30,671. Is there any other point in regard to which you wish to have any regulation enforced?—I don't see that we could get any benefit from any other regulation.

30,672. Is there any mode of fishing adopted along the coast that is destructive to the spawning of the fish?—I cannot say much about that.

30,673. Have you ever seen the spawn destroyed?—No; none to my knowledge.

30,674. Then you do not think there is any destroyed on the coast?—I don't think we can destroy the spawn of the fish by any way that we try the fishing on this coast.

30,675. You do not think that any mode of fishing is practised on this coast which is destructive to the spawn?—I don't think so.

30,676. Is there any mode which you can suggest, as a practical fisherman, by which any regulation could be established which would improve the fishery here?—I am not aware of any.

30,677. Do you suffer much from want of a good harbour?—Yes, we do much. We are injured to a great extent because we have no place of safety to run to.

30,678. If you had a good harbour would it increase the number of boats coming here?—Yes, and the number of fish taken.

30,679. How would that increase the number of fish?—Often when the fish are on the coast, the boats cannot prosecute the fishing owing to the want of a safe harbour.

30,680. Do you mean that they cannot venture out because they do not know how to get in again?—Yes.

30,681. If they had a good harbour to run for would they take the sea oftener than they do?—Yes, there would be double the boats if we had a good harbour.

30,682. Where would you desire to see a good harbour of that kind established?—I don't know that there is any place better than Wick.

30,683. Is that the best local station?—It is the most central on the coast of Caithness.

30,684. And most easily accessible from the fishing grounds?—Yes, there is none that could be so easily made.

30,685. Has the fact of the railway being brought so far north as Meikle Ferry had any effect upon the price of fish yet?—No, we have no proper means of communication between this place and Meikle Ferry.

30,687. Would not increased railway accommodation be a great improvement to you?—Yes, it would be a great improvement.

30,688. Is the price of fish here and on the Banffshire coast different?—I don't think there is much difference. We had some London buyers who sent it up at once to the London market from here by steamer.

30,689. That was codfish?—Yes, codfish caught in the winter time.

30,690. Do you think the cod fishery is capable of much extension here?—That depends entirely on whether there is good fine weather.

30,691. If you had plenty of bait it would be better?—Yes, it might be improved.

30,692. It might be extensively pursued?—Yes, there are only a few boats that prosecute it when they can get herrings.

30,693. The great majority of the fishermen are employed in the winter herring fishery?—Yes.

30,694. But some go after the codfish?—Not in the summer time. The cod are scarce on this coast at this season of the year.

30,695. But in the winter time when they are following only the winter herring fishery you get bait for the cod as I understand?—Yes.

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30,696. Are there boats that go specially to the cod fishery at the times that others are going to the winter herring fishery ?—Yes, but they are only few in number. The smaller boats do not prosecute it to any great extent.

30,697. But how this fishery is to be prosecuted, and whether you catch any cod, depends upon obtaining herring for bait ?—Yes.

30,698. At the time the winter herring fishery is going on the cod will take no other bait ?—No, it is of no use to try them here unless we have got herring bait.

30,699. Have you any remark to make with regard to the mode of engaging your catch for the curer; during the summer season do you find that it operates disadvantageously to you as fishermen ?—No; it is a bargain between the parties, and nobody interferes.

30,700. It is not an open bargain with which any body has anything to do?—No.

30,701. Is it satisfactory to both parties ?—Yes, it is always so before they make an agreement, unless something occurs during the servitude, such as having occasion to pay off a man for not being competent to do the work; but that seldom occurs.

30,702. Then each man is in the habit of making an agreement with the curer ?—Yes.

30,703. Does he make the agreement with the boat's crew ?—The agreement is generally made by the person who owns the boat.

30,704. And he agrees with the other men manning the boat along with him ?—Yes.

30,705. Has there been a considerable increase in the number of curers of recent years ?—I think they have rather decreased lately. Trade has been very bad for the last two or three years.

30,706. (*Prof. Huxley.*) Is there any garvie-fishing here ?—No.

30,707. Is there any circle net fishing practised on shore ?—No, there is nothing practised here in connection with fishing except the cod and haddock-fishing and the herring-fishing.

30,708. You have no small trawls or seines ?—No, we have very few soles on this coast.

30,709. Was there not last year a catch of mullets or pilchins ?—Yes.

30,710. I believe you call them pilchins here ?—We call them mullets generally; I do not know if that is the proper name for them or not, but there are very few caught here.

30,711. There was a statement in the papers about there having been a large catch in the early part of the year ?—There may have been a few barrels caught in a small creek called Buckhaven.

30,712. Was it not of any consequence ?—No.

30,713. They were not pilchards ?—No, I know what pilchards are.

The witness withdrew.

D. Harper.

DONALD HARPER called and examined.

30,714. (*Mr. Caird.*) You are a fisherman here ?—Yes.

30,715. You have heard the evidence given by the fishermen who have just been examined ?—Yes.

30,716. Do you agree generally with the opinions which they have expressed ?—Yes, I do.

30,717. Is there anything you should like to add to what they have stated with regard to the supply of fish ?—No, nothing. With regard to enforcing restrictions, I should like to see a restriction enforced to keep the boats from shooting their nets before sundown.

30,718. Do you think that would be possible ?—Yes, perfectly possible.

30,719. How would you do it ?—I think there was an Act passed that would prevent it.

30,720. There is an Act in existence at this moment that would prevent it if it were enforced. The article in the Convention Act is:—"It is forbidden "to herring drift-net fishing boats to shoot their nets "earlier in the day than half an hour before sunset, "except at places where it is customary to carry on "the drift-net fishing by daylight." It is not customary to carry out drift-net fishing here by daylight ?—No.

30,721. Then there is an Act at this moment which, if carried out, would prevent you from shooting your nets earlier than half an hour before sunset; is that complied with generally ?—No, far from it.

30,722. Do the fishermen shoot their nets as they find it convenient for themselves ?—Yes. Wherever they find fish one night it is customary for the boats to go down to the same ground next day before sundown and shoot their nets.

30,723. Do they commence fishing at once ?—Yes.

30,724. Do you think that is injurious to the fishing ?—Yes.

30,725. Have you noticed that the fish do not rise ?—I have noticed them shoot their nets among the herring when they have been playing in the water, and they have not succeeded in getting one of them up.

30,726. Do the fish go down at once ?—Whether they go down or not they go under the net.

30,727. But here is an Act which is at present in existence, and it is not sufficient, you see, to prevent the evil of which you complain ?—It is not put in force. I think the steamboat here ought to see that it is complied with.

30,728. Would not the interference of the steamboat lead to confusion among so many boats ?—No, I think not.

30,729. Do you think that in this case if they would comply with the regulation it would be a benefit and not a hardship to themselves ?—Yes, I think it would be a benefit.

30,730. Is there any other point you desire to bring before us other than what you have already stated ?—Nothing.

30,731. (*Prof. Huxley.*) Do you think the size of the mesh is the right size ?—Yes, but it varies very much. Some have a mesh very small.

30,732. What is the smallest size ?—I have seen some under an inch.

30,733. But that is against the law ?—I should say that it is.

30,734. Is there anybody who examines the meshes of the net ?—Yes; I think the late Mr. Russell took the nets from some persons two or three years ago.

30,735. Is the herring that is caught here a large herring or a small one ?—They vary according to the different seasons.

30,736. What is the average size of the mesh; how many are there to the yard ?—I believe there is about an average of 32 to the yard.

30,737. Do you agree with what the previous witnesses have stated about a close time ?—Yes.

30,738. That it would prevent the haddock and cod fishing here ?—Yes, it would almost entirely prevent it.

The witness withdrew.

J. McAdie.

JOHN MCADIE called and examined.

30,739. (*Mr. Caird.*) You are a fish-curer here ?—I am.

30,740. Do you approve of the continuance of the Government brand ?—Not under the present rule adopted by the Board of Fisheries.

30,741. What do you object to in that rule ?—There are many of the regulations connected with the Board of Fisheries that I would change.

30,742. In regard to the brand especially ?—Yes, in reference to the brand; but there are very few of

those regulations which operate injuriously which could not be remedied by the Board of Fisheries if they were willing to do so.

30,743. Tell us what they are?—I may mention one. It is one that has created the greatest amount of difference between the fish-curers and the Fishery officers, and it has reference to the filling up of the barrels. The curers conceive that the cure of the fish is damaged by the amount of fish which is pressed into the barrels.

30,744. Is there a certain amount of fish pressed into the barrels in consequence of a particular regulation of the Fishery Board, and without which being complied with no brand would be given?—Yes, that is the evil we complain of. There was an Act of the Fishery Board, or rather an Act of Parliament, which provided that a certain weight should go into a barrel of fish. That Act of Parliament is still in existence. It has never been repealed; but the curers are not allowed to take the benefit of it. Each curer is obliged to abide by the opinion of the Fishery officer, whether the barrel is full or not; he cannot fall back upon the Act which gives a certain amount of weight.

30,745. Is there a certain amount of fish that is held to fill a barrel?—No, not now. It is left entirely to the judgment of the Fishery officer whether the barrel is full or not.

30,746. Do you mean that the judgment of the Fishery officer is generally to force more fish into the barrel than can properly be put into it?—I mean to say that all Fishery officers are not alike, and one Fishery officer will pass a barrel as being of full weight which another Fishery officer would condemn.

30,747. Is there any rule to guide you in filling a barrel, or do you take it just by the eye?—There is nothing at all but the opinion of the Fishery officer. That is what we have to abide by. We have no appeal court to fall back upon in the event of our being dissatisfied with the decision of the Fishery officer.

30,748. Have you any other point to complain of upon that head?—Not upon that head; but I may say this, that that is the chief cause of the character of the British herrings being worse in the estimation of the foreign consumer than those which are cured in accordance with the Dutch method of curing.

30,749. Is it the fact that the British herrings have a lower character in the foreign market than the Dutch?—They do bring a lower price in the same market.

30,750. And do you think that is owing to the method of cure?—Yes.

30,751. What is the method of cure practised by the Dutch curers, and in what does it differ from the method of cure you adopt?—The barrels cured by the Dutch are filled slacker. The brine and pickle have then free access to go among the fish, whereas our barrels are filled so tightly and pressed together so hard that the pickle in the barrel has no free circulation.

30,752. Are we to conclude that the action of the Fishery Board in insisting upon a certain mode of filling the barrels before they consent to give the brand is injurious to the cure of fish?—Yes, I believe so myself.

30,753. If it were left entirely to yourselves do you think that following your own opinion upon the matter you would make a better cure?—If I were left to myself I should not fill the barrels so full.

30,754. And would the result be that the fish would be better in quality?—I am certain of it.

30,755. Then in your opinion it is injurious to you as a curer to have this brand?—It damages the quality of the fish.

30,756. Is there any other objection you have to the brand than that?—I do not recollect anything particularly just now.

30,757. Do you see any advantage you derive from the brand which compensates you for that?—There are certain things connected with the branding of herrings and the rules of the Fishery Board which might be reformed so as to meet the wishes of the trade without inconvenience to the Fishery Board. The system then might be made to work perfectly well; but there have been remonstrances sent up to the Board from Wick and other places which have not been heeded at all by the Board.

30,758. Is much skill necessary in curing fish?—There is more or less skill certainly required, but I cannot say what amount.

30,759. Is there, for instance, a considerable difference in the quality of one curer's herrings from those of another, according to the manner in which the cure is done?—There is a difference in the quality certainly. For instance, there are two brands which the Board give to the fish, that is, a full brand and a brand for lank or spent fish. There are full fish which may be branded with the full brand which may be of two shillings or three shillings a barrel less in value, according to the quality of the cure.

30,760. Then the care and the skill with which the cure is performed have a considerable influence on the quality of the fish?—Undoubtedly they have, but they have no effect upon the price of the fish after the brand goes upon the barrel. They all then fetch the same price.

30,761. Then a man's skill which he may have acquired by great diligence and perseverance go for nothing in that case?—Yes, after they are branded.

30,762. Has the use of the brand led to persons going into the business as curers who had not much skill?—I would not say that; I am not prepared to say that; I cannot tell.

30,763. If the brand were entirely taken away, would it be injurious to you, as a curer, the want of the brand?—I do not believe it would; but then at the same time I believe we should have to institute something else in its stead locally.

30,764. Could you not depend on the name which you as a curer would give the fish, after they became known in the foreign market?—Perfectly well; but it would put the curer to additional trouble, and would require additional handling of the fish. For instance, a buyer comes to me to-day and wishes to buy herrings from me of one particular description. He would have to examine them, and they would have to be all opened as he came along, whereas if they had either the Government brand or a mark affixed to them by the local authorities all that trouble would be spared.

30,765. But would not your character as a curer be taken as a guarantee as much as the brand of the local authorities?—It may be so.

30,766. Is it the case that the foreign buyer sends his agents here to buy the fish?—Yes.

30,767. Do they not become acquainted with the different curers and the method in which the cure is effected?—They do not appear to ask anything more than if the fish are full branded or lank.

30,768. But if the branding were done away with and the same buyers came here they would think it necessary to ask more than that probably?—No doubt they would.

30,769. Could not they satisfy themselves on the spot, whether the fish were properly cured?—Un doubtedly they could.

30,770. Then does your evidence go to this; that you do not see any advantage in the continuance of the Government brand?—I do not see any advantage in it in the manner in which it is conducted at present.

30,771. Do you know any way in which it could be conducted so as to make it more advantageous?—I am not prepared to notice specially all the different grievances we have as to the proceedings of the Fishery Board, but there are several such as that which I have mentioned. But the question of weight is considered a greater grievance than any other we have. In point of fact we have no test to fall back

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upon at present. We do not know what is to be considered a full barrel of fish at the present moment.

30,772. You are left as it were to the changeful opinion of the inspector as to the weight?—Yes, of the different inspectors.

30,773. As the case may be?—Yes.

30,774. Have you found that there is an increasing demand at home for the fish caught here? Has access to the home markets been opened up?—I cannot say that there has been much difference in that respect for the last few years.

30,775. The foreign market remains your best market still?—Undoubtedly.

30,776. Have you bought any of the winter caught herrings?—Yes, I have done so.

30,777. What do you do with them?—I cured them and sold them.

30,778. Did you sell them in the home market?—No, I sold them here for the foreign market.

30,779. Were they branded?—They were.

30,780. Then are the herrings caught in the winter fishing likely to go to the foreign market as well as those caught in the summer fishing?—I believe so.

30,781. Is that because they would bring a higher price?—I do not say that.

30,782. Then what is the reason?—I do not believe that they will bring a better price.

30,783. But will they not bring a better price if they are sent and sold abroad than if they are sold in the home market?—Undoubtedly.

30,784. Do you cure any other kind of fish except herrings?—No.

30,785. Do you cure any haddocks?—No.

30,786. Any cod?—No.

30,787. (*Prof. Huxley.*) Do you think that if municipal inspectors were appointed here, the whole expense being borne by the municipality, that that would answer the purpose of the foreign merchant as well as the Government inspectors do?—I do not see why it should not.

30,788. If the agents of foreign merchants are here why do they not exercise some inspection themselves as the cure goes on?—They get it cheaper as it is at present. We pay for the inspection being done.

30,789. But if they were left to the same resources as other merchants would they not be obliged to look after it for themselves?—Yes.

30,790. Supposing that the brand were abolished altogether, would that create any irreparable disturbance in the trade?—It is very possible that it would create a little annoyance and a small revolution in the trade for the first one or two years, because in the continental markets the brand is the acknowleged standard at the present moment of the value and quality of the autumn fish, but that is not the case with the May and June fish.

30,791. The fact is, then, that the Government, under the branding system do for the fish merchants what all other classes of merchants have to do for themselves?—Unquestionably.

30,792. Would the enforcement of a close time here be of any advantage to you as a curer?—I am not prepared to give any answer to that. That is the question on which there is a great diversity of opinion. Fishermen are the best parties to give a decided opinion upon a question of that nature. Some say it would be better if there were a close time from May until the 19th or 20th of July, and others oppose it.

30,792*a*. I ask now with special reference to you as a curer, would it be of convenience to you?—It would not be injurious to me at all.

30,793. Would it not rather help to clear the market for you?—That is a time of the year when the fish generally are not of good quality, they are not so good in the months of May and June.

30,794. Do you catch herrings here sometimes in May and June?—There are a few boats which go to sea, but our fishing does not commence generally till the 19th or 20th of July.

30,795. If the herrings here are not of good quality why do you buy them?—There are always plenty of fish markets to consume all the quantity that is caught, and the quantity of those that are caught in May and June is very trifling.

30,796. With regard to the winter fishing which is now coming on would you like to have a close time prohibiting that?—No, not at all.

30,797. You rather like to buy those herrings?—Yes.

30,798. You can dispose of as many of them as you can get?—That was the case last year, and it was the only time we had a winter fishing to speak of.

30,799. Do you buy codfish?—No.

30,800. Do you buy haddocks?—No.

30,801. Do the agents of the fish merchants here buy your herrings straight out?—Yes, certainly.

30,802. Do they buy any quantity they like on your curing grounds?—Yes, on the guarantee of the barrels being properly cured and branded. That is the thing upon which they buy them on the spot.

30,803. So that after they have left your curing grounds you have no further risk or responsibility?—No.

The witness withdrew.

M. Gunn.

MARCUS GUNN called and examined.

30,804. (*Mr. Caird.*) You are an agent for the purchase of fish here for some of the foreign merchants are you not?—I buy herrrings for Mr. Wellmann of Stettin.

30,805. Then your principal is well acquainted with the character of the fish here caught?—I have been a good while at it.

30,806. Do you buy largely here for him?—Yes, pretty extensively.

30,807. Has he been in the habit of buying here for some years back?—Yes, for 30 or 40 years.

30,808. Does he know the names of the principal curers here?—I have no doubt that he does.

30,809. And the character of their cure?—Yes, he is regularly here every year.

30,810. Does he depend very much upon the Government brand as a guide to him in his purchases?—I have had no correspondence with Mr. Wellmann for nine months back, but I am of opinion that he is in favour of the brand.

30,811. Does it enable you who are resident on the spot and constantly among the curers to select a better quality of herring, or without the Government brand could you equally satisfy yourself as to the quality?—It has been a guarantee to the purchaser and exporter for many years back, and we rely a good deal upon it.

30,812. Then the fact of its being there relieves you of the necessity of looking much into the cure?—Sometimes we examine the herrings even after the official brand has been placed upon them.

30,813. Do you ever reject any that have been branded?—I never rejected an entire parcel, but I have got some few barrels filled up afterwards.

30,814. Supposing the brand were abolished, would that prevent your principal from coming to the market here to buy fish?—I have no doubt it would be an impediment in his way.

30,815. Could he get the fish anywhere else?—I do not know. There is a great deal of fish on the west coast of Scotland, but this is the principal place.

30,816. But if the brand were done away with on all parts of the coast, there would be no difference in that respect with regard to the fish obtained at any place?—There would be no difference if the Government brand was done away with.

30,817. Can you say whether the demand for fish at Stettin is so great that it would induce your principal to come here whether the fish were branded or not?—I can hardly give an answer to that.

30,118. Are the Dutch fish ever branded?—I do not think they are.

30,819. You do not know?—No, I do not know.

30,820. Are there any foreign buyers present now?—I do not think there are.

The witness withdrew.

SAMUEL LAING, Esq., called and examined.

30,821. (*Mr. Caird.*) Can you give us any information as to the prospect of a reduction of the duty upon herrings in the foreign markets to which the herrings of this part of the coast are sent?—I may say that I believe that, next to the existence of a railway at Wick, a reduction of the duty on herrings in foreign countries would be of the greatest benefit to the fisheries of this district. I think there is a fair prospect of getting a reduction effected, more especially in Austria, for I recollect being there in 1858 and pressing the matter very much on Baron Bruck, who was then the finance minister of Austria, and I believe he was persuaded that a reduction of the duty would be beneficial to the finances of Austria; that they would make a larger revenue with a reduced duty. And he promised me that he would make a reduction in the first change of the tariff that should be introduced; but unfortunately the Italian war came then, and Baron Bruck committed suicide, and in consequence the matter fell to the ground.

30,822. Are you aware whether there is any prospect of a revision of the Austrian tariff being entered upon soon?—I am not aware specifically.

30,823. Do you think that the promise that was then made to you is likely to be kept in view when a revision of the tariff shall take place by Austria, or would you recommend any representations to be made by our Government to Austria upon the subject?—I think if a private representation were made to Baron Pleuer, the present finance minister, showing the facts and figures on the papers prepared by Mr. Mackie here, there would be every prospect of inducing him to make a reduction.

30,824. Do you know anything of the duties upon herrings imported into France and what prospect there may be of obtaining a reduction there?—I know this only, that at the time the French commercial treaty was under negotiation efforts were made to induce the French government to reduce the duty, and the great difficulty was that it was not purely a commercial question with them, but a question of the encouragement of their marine. They go upon the system of giving bounties to the fishermen, and it was considered to be inconsistent to reduce the import duties, so as to create a competition with their own fishermen, at the same time that they were giving bounties.

30,825. Is the same system still in force and would it prevent their adopting any modification of the duties on imported fish?—They still pursue the system of bounties, but the principles of free trade have made very rapid progress in France and perhaps they would be more willing now to apply those principles to the fisheries.

30,826. Do you think that the only action we can take in the matter is to keep it steadily before the French government in any question that may arise with respect to the revision of their tariff?—Yes I think so.

30,827. Is there any other point you desire to place before us?—No.

30,828. (*Prof. Huxley.*) There is a statement contained in a document which has been prepared by Mr. Mackie, that the revenue, in spite of the reduction of duty in Prussia, has greatly increased?—Yes.

30,828*a*. Are you aware that that is the case?—I went into the figures three or four years ago, and I am aware generally that that is the case.

30,828*b*. The statement here is, that in 1862 the duty was reduced to one dollar, and the result was that Prussia derived a revenue which increased 50 per cent.?—I cannot enter into the particulars, but I know there was a large increase of revenue and that the trade increased enormously. The reduction of the duty in Austria is very important, because a great deal of the import trade is in transit between Austria, Silesia, and Poland.

The witness withdrew.

JOHN MACKIE called and examined.

30,829. (*Mr. Caird.*) I believe, Mr. Mackie, that you have prepared a paper in reference to the fisheries which you are desirous to bring before us?—Yes, I was asked by Mr. Traill to prepare a paper and I have done so.

30,830. You wish to put that paper in?—Yes. It is as follows:—

"Northern Ensign" Office,
Wick, 1st August 1864.

HAVING for many years directed considerable attention to the fisheries of Scotland, particularly of the north-east coast, and more especially of that portion which extends from Peterhead to Wick inclusive, I am anxious to have an opportunity of bringing under your notice certain facts in regard to them, which I conceive are pertinent to the object of your inquiry.

As you are aware, the chief product of these shores has, since the early part of this century, been the herring. But as the herring-fishing season has hitherto extended over but about two months in the year, it is evident that the fishermen must either devote the rest of the year to other employments, or pursue their calling in search of other descriptions of fish. They do both. A large portion of those who prosecute the herring-fishing on the seaboard indicated have small farms which they cultivate; many are engaged in other departments of industry during the year, and probably a half of the 27,000 persons engaged in the north-east coast herring fishing come from the West Highlands and Islands early in July, and in the beginning of September return home, when the fishing is closed.

The remainder are *boná fide* resident fishermen, and regularly prosecute other fishings of various descriptions throughout the year. These fishings are in haddocks, cod, ling, halibut, skate, turbot, and lobsters.

The haddock fishery has of late years greatly fallen off, especially on the coasts of Aberdeen, Banff, and Moray, so much so that within the last few years considerable numbers of Banffshire crews have found it necessary to leave their homes during winter and spring, and to settle on the Caithness coast, where they have been to a considerable extent successful in the capture of haddocks, though here also the fishing has during the last two years a good deal fallen off. The haddocks thus caught are generally cured, and converted into what are popularly known as "Finnan haddies," and are in that state despatched by steamer to the Aberdeen, Edinburgh, Glasgow, London, and other markets. The haddock fishings of the Caithness and Sutherland eastern seaboard have at times yielded from 10,000*l*. to 15,000*l*. a year.

The cod fishery has during the last few years greatly risen in productiveness and importance, especially on the Caithness and Sutherland coasts. That the cultivation of the cod fishery on the Caithness coast has improved and is still gradually extending will be seen from the fact that

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the Fishery Board Returns for 1841 report a total catch on this coast of about 58,000

In 1842 about	- - -	71,000
„ 1843 „	- - -	93,000
„ 1844 „	- - -	66,000
„ 1847 „	- - -	90,000
„ 1848 „	- - -	60,000
„ 1849 „	- - -	82,000
„ 1850 „	- - -	66,000
„ 1851 „	- - -	61,000
„ 1852 „	- - -	61,000
„ 1853 „	- - -	92,000
„ 1854 „	- - -	126,000
„ 1855 „	- - -	113,000
„ 1856 „	- - -	93,000
„ 1862 „	- - -	84,000
„ 1863 „	- - -	122,000

Now that herring bait is to be had in winter, I have no doubt of this fishing assuming still larger proportions. In the past season, with that bait, a large number of Banff and Moray crews were, with those of Caithness, actively employed in that branch of fishing along these shores, and very large quantities, amounting on several days to many thousands of splendid fish, were landed. The ling, tarbot, and halibut are caught simultaneously with cod, and have for several years been abundant.

The skate-fishing is always, at the proper season, productive on the Caithness coast, and forms an important article of local diet.

The lobster-fishing is only cultivated to a very limited extent, and is not likely ever to bulk largely as a means of fishing industry,—the time and expense of transit adding largely to the cost.

As is known to you, the chief branch of fishing is that of herrings. Before referring to the autumn fishing, I may remark that up to a couple of years ago the popular and universal belief was that although the herring was certainly not a migratory fish, and never entirely left our shores, it abandoned the neighbourhood of the coasts at the close of the autumn fishing, went to the offing in deep water, and there remained till July, when it gradually approached land for spawning purposes. The experience of the last two winters has entirely swept away this belief, and left no room to doubt that the herring is local in its habitation, never leaves our coast, and is to be found in vast shoals a few miles off the east coast of Sutherland and Caithness, as well in January and February as in July, August, and September.

In the winter of 1862–3 the idea struck some fishermen of the possibility of a few herrings being caught off this coast, at that time, for the purpose of being used as cod bait, and an attempt being made it was crowned with such success that other fishermen imitated the example, and in a few weeks herrings to the value of several thousand pounds were brought ashore. This year, early in January, another and more general effort was made, and for nearly two months the winter herring fishing was prosecuted with a success considerably greater in proportion than the most prosperous autumn fishing ever presented in Caithness. Fishermen belonging to this county, to Sutherland, Moray, and Banff, gathered at Wick, Lybster, Dunbeath, and Helmsdale, and by the end of February herrings to the value of fully 15,000*l.* were landed, and were nearly all sent off in a semi-fresh condition to the southern markets. With such undoubted evidence of the presence of huge bodies of herrings off these shores in winter it is obvious that, with other favourable circumstances, a large and prosperous winter herring fishery will soon be established on this coast—to the effect of which it is impossible to attach too great importance.

The autumn herring-fishing from Peterhead to Wick is the most extensive, the most productive, and consequently the most important branch of fishing industry in the British empire. I herewith hand you the statistics of last year and several previous, and need not therefore burden this paper with other figures, farther than to say that over that short seaboard there were last year caught in two short months no fewer than 304,780 crans of herrings, the value of which, after being cured, and including freight to other ports (chiefly in British vessels), insurance, and other charges, may be safely stated at 450,000*l.* The entire catch of six years may be stated at 1,700,000 crans, the value of which on being exported, could not be less than two millions and a half sterling. Of these quantities the narrow eastern seaboard of Caithness yielded last year not much short of half, and has in six years caught, cured, and exported herrings to the value of a million and a quarter sterling.

The only outlets for our herrings previous to the enterprise assuming its present large proportions were the West Indies and home markets, chiefly Ireland. But since the abolition of slavery in our West India colonies, the demand for herrings has fallen off, and our exports to them are now *nil.* Ireland was, prior to the outbreak of the potato disease, a very large consumer of our herrings, but since then the consumption has greatly fallen off, as the following figures will show:—

Exported to Ireland in	1841	-	187,953	barrels.
Do.	do.	1842	- 165,327	„
Do.	do.	1843	- 127,770	„
Do.	do.	1844	- 120,300	„
Do.	do.	1847	- 102,690	„
Do.	do.	1848	- 78,262	„
Do.	do.	1849	- 77,334	„
Do.	do.	1850	- 62,705	„
Do.	do.	1851	- 75,091	„
Do.	do.	1852	- 58,392	„
Do.	do.	1853	- 90,063	„
Do.	do.	1854	- 118,023	„
Da.	do.	1855	- 93,569	„
Do.	do.	1856	- 84,060	„
Do.	do.	1859	- 64,390	„
Do.	do.	1860	- 76,546	„
Do.	do.	1862	- 61,771	„
Do.	do.	1863	- 66,513	„

These figures clearly prove that Ireland cannot now be relied on for more than a very partial consumption of our herrings, probably not more than 10 per cent., and that we must look somewhere else for markets.

These we have secured to some extent in Prussia, which, through the beneficial operation of a reduced tariff, is gradually extending its consumption of Scotch herrings, as is shown by the fact that whereas in 1841 the entire import into all foreign European ports was but 91,069 barrels, Prussia last year alone took from us upwards of 300,000 barrels. The imports into the various ports for a series of years indicate the gradually increasing importance of our export herring trade. As taken from Prussian official returns, they will be found in a letter which I beg to hand herewith. I may add that in 1826, the imports of Scotch herrings into Stettin was 7,695 barrels; in 1863, 159,357 barrels.

I need not here refer to the obvious injury which the blockade of the Prussian ports exercised at the commencement of the fishing this season upon our herring trade. It is clear that if markets which consume three-fourths of the catch of Caithness, Sutherland, Ross, Moray, Banff, and Aberdeen are shut against us other means of outlet must be glutted; and that for a large quantity caught there can be no market, except at greatly reduced rates, to the serious injury of all engaged in the adventure, who (even with the present markets, which are far from adequate to take off the supply and regulate prices, so as to secure such an average return as to give fishermen and fish curers a suitable reward for their labour and outlay) entered this year on the undertaking with a more nervous dread of the issue than for many years, the effect of the Danish war, and even the temporary blockade, being to reduce prices to many fishermen who were engaged before its removal, and render them anxious to be protected by a heavy fishing; while the curers feel that a small catch is their only hope of being saved from serious loss. One very striking instance of the effect of the blockade occurred last month in the St. Petersburg market, which last year yielded excellent returns to the produce of the Lewis fishing; but this season, owing to the largely increased import, rendered necessary by the blockade of the Prussian ports, the returns have been ruinously low, and in some cases are barely equal to the original cost of the barrels when empty, leaving the curers in the loss of the fish, freight, salt, &c., amounting to upwards of 1*l.* per barrel. I may also note, that, from the same cause, the number of the boats fishing on this coast, whose reliance, owing to distance from home markets, is the Prussian market, is considerably diminished this year, and is under that of any season for 10 years.

I have written thus almost preliminary to entering on the question into which the Commission has been appointed to inquire, and which is one to which too much importance cannot be attached. And I venture, with respect, to submit to you certain *desiderata* which I conceive are essential to the maintenance and the increased prosperity of the trade. Some of these have been referred to in my letter to Mr. Traill, and I shall do no more in regard to them than say that the erection of the new Harbour works at Wick, enabling the fishermen to go to sea with the confidence of a sufficient shelter if overtaken by a storm, will undoubtedly warrant their prosecuting the fishing more frequently, and will otherwise tend greatly to increase the catch of all descriptions of fish, and consequently add to the importance of this branch of national industry.

As to the duties imposed by Austria, France, and Spain, it is clearly, as a question of finance, as well as one of

obvious national and international policy, their interest to follow the example of Prussia. Were that done, a very great impetus would be given to our fishing trade, and the north-eastern seaboard would to a great extent become the fish mart of Europe.

Austria itself has already, in one case, shown how preferable a low tariff is to a high one in its effect upon revenue. In the article of tea, Austria, previous to 1851, levied a duty of 90 gulders per Austrian hundredweight of tea, and then reduced it to 15 gulders per Zollverein hundredweight, and whilst from 1841 to 1851 the total imports of that article were only 3,601 cwts., with a revenue of 324,070 gulders, the imports during the succeeding years were:—

620	cwts. in	1851
1,938	do.	1852
3,795	do.	1853
3,637	do.	1854
6,490	do.	1855
4,170	do.	1856
3,771	do.	1857
4,226	do.	1858
4,306	do.	1859
4,975	do.	1860

being together, with a gradual yearly rise, 37,928 cwts., yielding 568,920 gulders.

It may also be noticed, that this country, which is much more interested than any other in the prosperity of its fisheries, now interposes no obstacle to the importation of fish. Since the abolition of our fish duties the importation of herrings, salmon, &c., from Norway and other countries having fisheries has immensely increased, and, as regards herrings, it is now the practice of some Scotch curers to send representatives to Norway during the progress of its herring-fishing to purchase largely for our markets, so much so, that whereas in 1858 only 8 barrels were imported into this country from Norway, in 1859 there were 889 barrels, in 1860, 45,891 barrels; and it is believed that in 1862 and 1863 the quantity imported was about 30,000 barrels. No injurious result has been suffered by our fisheries in consequence of this opening of our markets, nor did our fishermen or fish-curers utter a murmur of regret on the removal of our protective duties on fish.

It is, moreover, worthy of notice, that Austria does not require a protective fish duty, as it has no fishing in its own seas, nor does it send vessels to prosecute the fishing elsewhere. And it is deserving of remark that this country has long ago reduced its tariff on articles of Austrian produce. Wool is imported free of duty, and while on corn and other grain the duty is only 1*s.* per quarter, the duty on wine is reduced to 1*s.* per gallon. At present, *via* Stettin, considerable quantities of Austrian wool and grain are imported into this country; and the wine trade, by the same route, is just beginning to develope itself. Consequently, apart from the consideration of revenue, which the remarkable experience of Prussia clearly points to, as presenting but one line of duty, it is but fair that we should expect Austria to reciprocate with Great Britain in the matter of an article, which, neither on protective nor revenue considerations, they can have any object in longer excluding.

Of late years there has been a considerable import of Scotch herrings into St. Petersburg, where, however, the high duties and the system of filling barrels known as the "brack" exert an injurious influence on the extension of the trade, and render it hopeless to expect any material increase till the duty is lowered and the "brack" abolished. There is also a transit duty of about 1*s.* per barrel imposed, and altogether the expense of conveying a barrel of herrings to St. Petersburg, is, freight, insurance, duty, brack, and transit duty, about thrice the amount of that on a barrel taken to Stettin or any other Prussian port.

In regard to the duties levied by France, which practically prohibit the import of our herrings, one significant fact merits attention, viz., that at an early period of even this season herrings were bought on this coast by French vessels, and were carried off to France, and imported there as the *bonâ fide* catch of French fishermen. This is done yearly and systematically, and shows that one of the chief reasons for which the French government shut us out of their markets is rendered nugatory to a great extent by the parties on whose account the high protective duties are maintained. Cases have again and again been known of Boulogne vessels being fitted out with nets and curing materials proceeding to the Scotch coast, and returning at the end of the season laden with herrings purchased from Scotch curers, and without once casting their own nets into the sea.

I may here interject the remark that the question of Highland Improvement is inseparably connected with the success of the East Coast Herring-Fishing. In addition to the rising importance of the Lewis herring-fishing, now giving employment in its season to some 6,000 individuals (not included in the statistics herewith handed you), the comfort of a large portion of the West Highlanders and Islanders rises and falls with the success or the failure of the Caithness or Sutherland fishing. It is, perhaps, well for me to state that a large proportion of the rents of the small crofts in these western districts is drawn from the herring-fishing of the north-east coast, and that it has of late years exerted a great influence in teaching the Highlanders habits of industry, and converting many of them into owners of herring boats and materials. It is not difficult, therefore, to see that an increased demand for our fish, by the opening up of new markets, would not only add to the national wealth, but would greatly assist in relieving the Highlanders of the incubus of poverty which has so long hung around the necks of the people.

But there are certain seasons of the year when the herrings caught are not of a quality that suits them for the continental markets, or in which the frost shuts the Baltic, and consequently we are at these times dependent entirely on the home consumption. Here, however, our great distance from the marts of home industry interposes and shows how important to our fisheries is the securing of suitable means of speedy transmission. Reference to this matter is made in my letter to Mr. Traill, and I now only supplement the remarks then made by our subsequent experience. At the commencement of our fishing, a few days ago, herrings were in excellent demand on the two days per week of the steamers' sailings for Aberdeen and Granton, but even on these days the price was never within 50 per cent. of that obtained at stations to which railways extend, and on other days the demand was almost nominal. Thus, on the same days on which as high as 30*s.* to 50*s.* per cran was quoted at Dunbar, Stonehaven, Peterhead, and Lossiemouth, which have direct railway communication with the south, the price at Wick never exceeded 20*s.* and was at times as low as 10*s.*, while at Lybster it was actually down at 5*s.* These striking differences, though certainly connected with the question of supply and demand, would not have occurred had there been a means of carrying the fresh fish by rail from Caithness to the southern markets. And though it is clear that such a means of transmission must be mainly provided by private enterprise, it is a question whether it is not a matter of consideration for the Government to encourage to some extent the extension of the railway to a district which can, at the most important seasons of the year, so largely provide an article of nutritious diet to the various centres of population and industry throughout the kingdom, as well as greatly assist the material and social progress of the Highlands of Scotland.

This remark brings me to submit to the Commission certain other means by which I humbly conceive the Government can greatly contribute to the promotion of the North East Coast Fisheries. You will allow me, by way of illustration, to refer to the manner in which other powers foster their fisheries. France, Holland, and particularly Norway, take the liveliest interest in the prosperity of their fishermen, and Norway yearly expends a large sum for that purpose with the best results. Telegraph stations have, at Government expense, been erected in every fishing district, where also a staff of Government officials has been established to protect, assist, and otherwise encourage the undertaking. Here, cut off as we are by a distance of 85 miles from the nearest telegraph office, and having the most unreasonable postal arrangements with the fishing stations opposite, we are left in the dark for days as to the state and progress of the fishing and markets elsewhere, so much so that letters reach Wick from Paris sooner than from even Fraserburgh and Peterhead, and telegrams take days in their transmission when other districts have them in hours.

Another excellent means of aiding the fishing could be supplied by Government. For several years a small steamer has been sent down ostensibly "for the protection of the fisheries," but that vessel has been practically of no use. She has lain in the bay for days on end, and for all practical purposes the fishermen would have been better without her presence, as she has occupied the fairway, and been otherwise a hindrance. It is the opinion of all engaged in the fishing that, besides securing men for the navy, a number of vessels sent down, say one to each important station, would be of immense value. Night after night they would proceed to sea with the herring fleet, reporting in the morning where the shoals of the herrings were to be found, assisting crews when their nets were foul or sunk with fish, towing boats to sea or land in calms, or aiding them in distress, intimating the daily success at their respective stations, assisting in the conveyance of stock where it might run short, and otherwise promoting the enterprise. In times of peace no more useful employment could be given to such vessels as the "Lizard," nor could a better plan be

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devised for recruiting to Her Majesty's service. I feel bound to say that a small sailing cutter, under the command of Captain Samuel McDonald, of the Fishery Board's service, stationed several years ago, for some successive seasons, on this coast, though without steam assistance, was of the greatest service. Every night, along with the fishing fleet, this vessel went to sea, returning in the morning, and at all times and in all weathers, inspiring confidence in the minds of the fishermen, and otherwise promoting and protecting the fisheries. Why the steamer now on the service should not be thus employed is a question which all interested have year by year put.

Allow me briefly to sum up what I conceive to be the essentials to the prosperity and increase of the fishings on this coast:

1. A reduction of the fish duties imposed by France, Austria, and Spain.
2. Means of speedy transit of fresh fish by railway to the home markets.
3. Telegraphic communication with the various stations.
4. Government steamers at the respective stations, for the purposes above indicated.

With such essentials secured I have no doubt our fisheries would expand and prosper, and by the blessing of Providence this coast would become the great fish market of the world, while the nation at large, as well as the districts immediately interested, would be proportionally advantaged.

I have not thought it necessary to advert to modes of fishing and the close time, because neither question has been agitated on this coast. We have no trawling of any description, and our mode of fishing by net is uniform. I might, however, have remarked on a very injurious practice that is prosecuted by the Dutch busses when off this coast, viz., that of casting large quantities of herring offal into the sea where they catch and cure the herrings. This practice has been found to do a serious injury; it disturbs the shoals, the herring being an exceedingly sensitive fish, and it draws to the spot immense shoals of dog-fish, which commit great havoc on our fishermen's nets, and on the herrings after being meshed.

Some years ago an impression prevailed in favour of a close time here during the months of April, May, and June, but since then the prosperity of the Lewis fishing has drawn away the greater part of our fishermen to that island during most of the period named, and rendered any legislation for this coast unnecessary, as the effect of only a few boats prosecuting the fishing with a limited supply of nets, chiefly with the view of catching herrings for bait to the cod-fishing, can do little or no injury to the maturing shoals, and not prejudicially affect the markets by filling them with immature fish.

In regard to close time in the island of Lewis, the impression of those who have given the subject unprejudiced consideration is that the system has wrought well, but that a modification of it to the extent of allowing the local fishermen to catch herrings for bait may be safely and beneficially conceded. The fishermen themselves approve of the present arrangement subject to this modification, and it is perhaps deserving of remark that, apart from the general question of close time, the quality of the herrings caught between the commencement of the regular season (20th May) and 1st June is almost uniformly so inferior as to involve the curers in a loss. I have no doubt the fact will be attested by many curers who have had practical experience of the Lewis fishing.

I have not entered on the disputed questions relating to the official brand of the Fishery Board or the general utility of that establishment. The former is practically a fish-curer's question; but in one respect it is certainly a matter affecting the public. Viewing it in that light, I am of opinion that the brand is of importance, and that its abolition would be followed by a serious derangement, for some years, of our relations with foreign customers, who very strongly object to any interference with the brand. At the same time a majority of the curers here seem to be favourable to the abolition of the brand; some objecting to it on the broad principle of the impolicy of all such modes of interference with trade, while others take exception to the fee as being by far too high, and really making Wick pay for a much larger share of the expenses of maintaining an establishment from which they derive little benefit beyond that obtained from the official imprimatur on their herrings. There are also serious objections here and elsewhere to certain regulations issued by the Board, against which the Chamber of Commerce has in vain memorialised; and I am of opinion that the disinclination on the part of the Board to concede claims obviously just, and founded on practical views of the modes of cure and general conduct of the fisheries, has had a good deal to do in sustaining the opposition to the Board and its brand. I believe that, so far as continental opinion is concerned, the view entertained is that it is to the brand we are indebted for having succeeded in successfully competing with the Norwegians, and gaining such a preference in Prussia and Poland for our herrings; and it is worthy of being observed that the complaints against careless and insufficient cure of Norwegian herrings up to 1862 induced the Norwegian government to interfere, and now there are official sorters and packers appointed by the "Commune," and the fish have since then been classed according to quality and size, with a favourable result, last year, in the demand for the herrings of Norwegian cure.

Up to two or three years ago, the impression among the trade was that the brand was a legal guarantee, and that herrings once branded and sold could not be legally rejected on any ground whatever. In fact, this was publicly notified, the Board having published a letter from Mr. Wellmann, of Stettin, to Mr. Traill, M.P., dated February 1851, in which he states:—"When a party purchases Crown and full branded herrings at present, he is bound to receive them, if they bear that brand, independent of the quality;" and our courts of justice have frequently given their decision in accordance with this statement, upon the ground that the Fishery Board is a Government establishment, and, therefore, reliance can be placed upon their impartial inspection and strict superintendence." Even in 1859, a circular signed by the herring dealers of Stettin, Dantzic, and other ports, alleged that "at present the Government brand is a legal tender in every court of justice, even in this country." Two years ago, however, this view was exploded, several cargoes of full Crown-branded herrings having, in a falling market, been rejected in Stettin and elsewhere in Prussia, on the ground of imperfect character and cure. I herewith hand you copies of the documents from which I have quoted, and two others bearing on the same subject.

If, however, the brand were abolished, there is no doubt that a surveillance equally strict, though not involving the fish-curers in any direct expense for its support, would still be required. On public grounds it is clear that the herring curing trade has no more right to be exempted from official surveillance than has any other. Merchants are superintended in the matter of their weights; and other trades, including butchers, are narrowly watched in the interest of the public; and it is worthy of notice that the department of herring cure which has shaken itself clear of superintendence, that of *reds* has not only become less important in its character, but the want of inspection of the barrels has brought about practices by which the public have greatly suffered.

In the matter of statistics, it appears to me that an improvement can be made. I do not see what confidence can be placed in the cod returns as presently made up; at all events I am satisfied that those for Caithness and Sutherland are much understated; and that the most practical mode of securing correct returns would be that every fisherman having a boat registered at the Custom House should be obliged, under a penalty, within 14 days after the 31st of December in each year, to hand in to the Fishery officer of his district, a return of the quantities of crans of herrings, number of cod, &c., landed from that boat during the year, according to a schedule given to the owner in the beginning of the season. All the boats being now numbered,—a regulation of the greatest importance to the fishermen themselves,—this arrangement could be easily carried out, and, under suitable penalties rigidly enforced at the outset, would secure perfect returns from every district.

I am strongly of opinion that the Fishery Board has, on the whole, been of the greatest public service. In the matter of fishery harbours it has erected and encouraged the erection of not a few, to the manifest advantage of the fisheries and the saving of human life. It has a staff of officials of great practical intelligence and integrity, and anxious to promote the fishing interests under their charge; and I feel satisfied that were there a greater readiness manifested to popularise the details of superintendence, and make them keep pace with the advancing spirit of the age, throwing no unnecessary obstacle in the way of curers carrying out such approved modes of cure as do not either interfere with fair dealing or otherwise do injustice to the buyer, the feeling of hostility by many would be overcome, and the Board and the trade would act with harmony, to the increased advantage of an interest now so wide in its ramifications, so extensive in its influence, and whose increased prosperity is of such vital national importance.

Perhaps it may not be out of place here to refer to the saving of the lives of the fishermen at sea. I do so with the view of directing the notice of the Commission to a certificate by an eminent Newcastle firm regarding an invention by a gentleman in this county, which promises to be of important use to the thousands engaged at sea in this

enterprise. Such an invention, which is represented as being cheap, simple, and applicable to every emergency, is certainly entitled to at least favourable enquiry and consideration by the Government, and all interested in the saving of human life. The inventor, who has devoted many years of study to the subject, assures me that there is no emergency which his plan will not meet, and that any fishing boat can, without encumbrance or involving additional labour to the fisherman, have it applied.

I beg you will excuse the prolixity of the details I have given, and have to add that if I have not been sufficiently explicit on any of the points referred to, I shall be happy to have an opportunity of explanation, and meantime have the honour to be,

Gentlemen,
Your very obedient servant,
Jno. Mackie,
Editor of "Northern Ensign."

List of Papers appended to this Letter.

1. Letter to Mr. Traill, M.P.
2. Do. do. from foreign herring dealers.
3. Do. do. from Alex. Miller, Esq., Leith.
4. Do. do. from A. Wellman, Esq., Stettin.
5. Paper on the herring brand, by the foreign dealers.
6. Certificate by Messrs. Andrew Leslie & Co., regarding invention of saving life.
7. North-east coast herring fishing statistics. (*See Appendix.*)

30,831. That paper has reference to the fisheries of Wick?—It relates to the fisheries upon the north-east coast from Peterhead to Wick.

30,832. It contains a good many statistical returns and tables?—Yes.

30,833. What basis have you for those tables and returns?—They are partly the official returns of the Fishery Board, partly Austrian official returns, and partly Prussian.

30,834. Have you carefully collated those figures?—I have.

30,835. As far as you can do so, you vouch for their accuracy?—I am quite satisfied as to their accuracy.

30,836. Have you any returns which show the exports to Ireland?—Yes, I have.

30,837. Are those returns obtained from the Custom House?—From the Custom House and the Fishery Board returns.

30,838. What access have you had to information in regard to Prussia?—I got the returns from Mr. Wellmann, who received them from the Secretary of the Stettin Chamber of Commerce.

30,839. Do the facts you state here apply exclusively to Stettin?—Austria and Stettin.

30,840. Austria through Stettin?—Yes.

30,841. The herrings do not go by the Mediterranean at all?—No.

30,842. Have you in the course of your experience here been able to arrive at any opinion as to the advantage or disadvantage of the Government brand?—I have formed an opinion in favour of the maintenance of the brand.

30,843. Will you give us the grounds of that opinion?—It is chiefly upon the ground given by the previous witnesses, that it is a guarantee to the purchaser as to the quality of the fish. It saves an immense amount of trouble and expense, and very probably, in the case of a falling market, saves the curer from having the herrings thrown upon him after they have reached foreign ports.

30,844. Is it not the fact that the foreign merchants send their agents here to purchase?—The foreign merchant comes himself to purchase, and he purchases the herrings on the faith of the brand.

30,845. Do you not think it is contrary to the modern principle of trade to give any Government guarantee for the quality of anything a man sells?—That is the only tangible argument that could be urged against the maintenance of the brand; but I think this is an exceptional case.

30,846. Is there anything in the character of the particular article of herring that should make it an exception?—The objection in the case of a barrel of herrings is, that you cannot accept the sample without examining every herring in it. If you are to stand by the quality of the fish, as a test you must open and examine every fish.

30,847. Are not large quantities sent into the market which are not branded at all?—Not many. Out of 110,000 barrels that are cured here from 80,000 to 90,000 go away branded.

30,848. Then there are 20,000 or so which go away without being branded?—Yes; but a good many of those go away fresh, and are sold in the fresh markets.

30,849. Are they partially cured?—Yes, they are in a semi-fresh state

30,850. Would not the same objection you mention apply to them, namely, that each barrel must be examined?—No; they are not bought by persons here at all. They are sent to the market, and taken out and sold in dozens and half dozens, and the party who sends them from here gets a return accordingly. They are not purchased by any dealer on the spot.

30,851. Has there been any change of opinion among the dealers themselves as to the advantage or disadvantage of the brand?—I think there are more now who are opposed to the brand than there were before.

30,852. Is the opposition to the brand a growing one here?—It has been in Wick.

30,853. You heard the evidence of the previous witness, Mr. McAdie, as to the injury sustained by the curers from being obliged to fill the barrels to such an excess as to be injurious to the cure?—That is a fish-curer's question. They are opposed to the recent regulations of the Fishery Board, I believe. I have referred to their objections in my paper.

30,854. Is that not one of the natural consequences of any Government interference in trade?—It may be.

30,855. It substitutes a rule for a man's skill?—Yes, it certainly does.

30,856. But notwithstanding that, you remain of opinion that it is of advantage to the trade generally, and to the interests of the fishery here, that the brand should be continued?—Yes, I think it is.

30,857. Can you give us any information as to the progress of this new winter fishing for herrings?—It was never tried until last winter. A few boats made the attempt, and they got a few thousand crans. This winter, in the early part of the new year, another attempt was made, and it was so successful that the number of boats increased, and between Helmsdale and Wick 15,000*l.* worth of herrings were brought ashore in the course of a few weeks. We never knew anything like it before.

30,858. Then that fishery is likely to continue?—I think it is.

30,859. And with great advantage to the place?—Yes, when once the harbour is completed; and if we had a railway to the fishing districts of this coast we should be still more greatly benefited. I think that is essential to the success of the fisheries here.

30,860. Do you think that a harbour is necessary owing to the commencement of this winter fishery, which takes place at a season when the boats would be more exposed to the inclemency of the weather?—Yes; the nights are long and dark then. In the present fishery they have the benefit of daylight half their time.

30,861. Are the improvements which are now begun to be made in the harbour such as will be very useful to the fishing interest?—I have no doubt of it. There is to be about 120,000*l.* laid out on them.

30,862. When do you expect those improvements to be completed?—The contractor is allowed seven years for the completion of the work.

30,863. Have you received any Government assistance in the matter?—None. But 80,000*l.* had to be borrowed.

30,864. From the Public Loan Commissioners?—Yes.

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30,865. Will that sum be borrowed on the security of the dues of the harbour ?—Yes.

30,866. Who has made up the rest ?—The British Fisheries Society, whose property the harbour is. They have 40,000*l.*, which has accumulated from their estates, and which they are to lay out.

30,867. The accumulation of their property is to be spent in enlarging the harbour ?—Yes.

30,868. Have they now the entire control of the dues of the harbour ?—Yes.

30,869. Have they mortgaged them for the loan they have obtained from the Public Loan Commissioners ?—Yes, or they are to do so. But they are to expend their own 40,000*l.* first, and then the Public Loan Commissioners will advance the balance at $3\frac{1}{4}$ per cent.

30,870. What depth of water will there be in the harbour ?—30 feet at ordinary spring tides.

30,871. So that fishing vessels can enter the harbour at all times of the tide ?—Yes ; and ordinary coasting vessels and steamers also. There will be an addition of 15 acres to the harbour accommodation, whereas at present there are only $12\frac{1}{2}$ acres altogether.

30,872. Then, in the interest of the fisheries here, you have no representation to make to us as to the necessity of increased harbour accommodation, that being now about to be accomplished ?—Certainly not.

30,873. Can you tell us anything with regard to the haddock fishery here ?—It had fallen off a good deal last year. More were caught this season than for some years previously, but the catch was not numerous.

30,874. Is the haddock fishery followed with any great perseverance ?—It used to be followed to a considerable extent between Lybster and Wick.

30,875. Where is Lybster ?—Lower down on the coast.

30,876. If there were greater facilities for getting to the market, do you think the haddock fishery would be followed with more perseverance ?—Possibly it would ; but I think the winter fishing, with a large catch of cod, would be likely to draw away many of the fishermen from it.

30,877. Has there been an increase in the catch of cod ?—Twenty years ago the catch of cod was not nearly so great as it was here last year. Twenty years ago 50,000 cod were caught on this coast, and last year the number caught was 120,000, so that it had more than doubled.

30,878. Do you think it is capable of still further increase ?—I believe it is. We can get plenty of herring bait, and we got the very finest cod this season and last.

30,879. Have you heard any opinion expressed as to the propriety of having a close time ?—My opinion was certainly in favour of a close time; but of late years the fishermen have taken away to the fishing at Lewis and Stornoway, so that a few only are following catching herrings for bait. I do not see that a few following fishing in that way would do any great injury to the maturing shoals.

30,880. Are you aware that any destruction of spawn takes place on this coast by any mode of fishing that is practised ?—No ; I do not think so. I never heard of it or saw it.

30,881. Have you heard any demand on the part of the fishermen for new regulations to be enforced, or for others to be done away with, that in their opinion are injurious to the fisheries here ?—No, I have not.

30,882. Have you heard any remarks made with regard to their shooting their nets before sunset ?—I have heard remarks made upon that, I believe it was prevented for some years when the Princess Royal cutter was here.

30,883. In this paper, which I understand was prepared by you—a printed paper—you state that the proportion of the winter catch to the number of boats has greatly exceeded the most productive autumn fishing ?—So it did.

30,884. Do you mean that each boat made a better fishing than in the autumn ?—Yes, in proportion to the time and the number of boats engaged. They had more men of course on board the boats in consequence of the season.

33,885. Had they more nets ?—No, not nearly so many nets.

30,886. Does the increased number of men enable them to get more fish ?—It enables them to get quicker to the fishing grounds. The boats now are very large, and they require more strength in the winter than in the summer.

30,887. But it is correct to state that in proportion to the number of boats the catch has greatly exceeded the most productive autumn fishing ?—Decidedly so.

30,888. If that continues to be the case, do you expect the winter fishing to become the most productive of the two ?—I should not say that because the summer fishing brings an immense number of fishermen from the Highlands and the isles which would not be the case with regard to the winter fishing. We cannot expect these island men to come to the winter fishing.

30,889. Still this winter fishery will add immensely to the profits of the native fishermen ?—Yes. All that we want for the winter fishery, after the harbour is completed, is the means of transit to the markets. The Baltic is shut in in the winter by the frost, and our chief reliance must be upon the home market.

30,890. Is there any prospect of a railway coming upon this coast ?—I hope so. If Mr. Laing and others will put their shoulders to the wheel they will bring it here.

30,891. Have you any knowledge whether the winter fishery is likely to injure the brood, and in that way to be injurious to the summer fishing ?—I do not think so. I never heard those who are practically acquainted with the fishing express any fear upon that head. I have had so little experience in it practically, that I should prefer not hazarding an opinion upon it.

30,892. Is the price of the herrings caught here in the winter time, in consequence of the distance from the markets, very much less than that of the herrings caught further south—off Dunbar for instance ?—Very much ; 50 per cent. sometimes, or even more.

30,893. Does that arise from the facilities for getting to the market being better at Dunbar ?—It is all owing to railway communication. There were herrings last winter from Lossiemouth and other places selling for 30*s.* and 40*s.* a cran, while they were selling here at 10*s.* a cran ; and one day at Lybster at from 5*s.* to 7*s.* a cran.

30,894. Would you say that increased facilities for getting to the market would lead to a large extension of the fisheries here ?—I should say so.

30,895. Do you think there is no chance of a great extension of boats and the appliances for catching fish in any way diminishing the general catch by over fishing ?—I do not think so.

30,896. Has there been no sign of the fish being over-fished on this coast ?—I do not think so.

30,897. There are as many fish in the sea now as were ever taken out of it ?—I am satisfied there are. The reason why an increased number of nets has not produced an increased number of fish arises from two important facts. In the first place, the want of a proper harbour so that boats would be able to leave at all times of the tide. They have now to go out in a body altogether, and the result is that they all meet on the fishing ground at the same time. They have no time to spread themselves out. They all cast their nets over each other, and the catch of fish has been diminished by the confusion thus created as well as by the fouling of the nets.

30,898. Would not that evil be avoided by enforcing the regulation that the fishermen should not be allowed to shoot before sunset ?—No ; I think if they had an opportunity of getting out of harbour and of going to sea at all times of the tide they would be enabled to spread themselves more.

30,899. Having a better harbour they would be able to get to the fishing ground at all times of the tide ?—Yes.

30,900. (*Prof. Huxley.*) Have you paid attention to the Acts of Parliament relating to the fisheries here ?—Yes.

30,901. Is it your opinion that by the 23rd Victoria a close time might be enforced by the Fishery Board ?—I think so, if they chose.

30,902. There is a particular passage in the Act to which I will direct your attention :—"The Commissioners may on application made to them, and after such inquiry as they shall think necessary, by regulations to be made by them from time to time, prohibit on the coasts of Scotland, and within such limits and for such periods as they may think fit, the use of any trawl, drag, or beam net, which in the opinion of the said Commissioners is injurious to the spawn of herrings or otherwise to the herring fishery; and every person who commits any breach or contravention of any such regulations shall be liable to a penalty of not less than 5*l.* and not exceeding 20*l.* for every such offence; provided that this provision shall not in any way affect any of the prohibitions or requirements of any of the recited Acts, in so far as relates to fishing for herrings." That gives the Fishery Board power over the whole coasts of Scotland ?—Yes.

30,903. So that it is possible for the Fishery Board, if they thought fit, to enforce a close time under this Act ?—Yes, they have power, but they are not likely ever to be asked to exercise it.

30,904. The Act does not define who should ask them ?—If there was a strong pressure brought upon the Local Board, they would be likely to do what would be right for the interests of the fishing.

30,905. For example, if the fish-curers on the west coast found it desirable to shut up your fishing temporarily they are competent to make the application ?—They had better not try it.

30,906. That is another matter; they can make such an application ?—Yes, no doubt.

30,907. Do you think it desirable that the Fishery Board should possess such a large power as that ?—I think it is rather dangerous to give them such a power.

30,908. You think your winter fishing is likely to prove a valuable one ?—Yes.

30,909. The Fishery Board could enforce a close time of the same duration as that now enforced upon the west coast ?—I do not see on what ground the Fishery Board would do that.

30,910. That is another thing. The question is whether it is within the power of the Board ?—They are interested in the promotion of the fisheries, and though they have the power, they would not interfere if they were not asked. They were asked on the west coast.

30,911. By a portion of the body interested, not by the whole ?—I think it was a very strong feeling generally.

30,912. Do you think it desirable that a Board should have that power over your fishing and over your interests ?—If there was a proviso added, in the event of its being asked for by the localities.

30,913. Do you think that, as matters now stand, it is desirable ?—I do not think there is any likelihood of its being used. It would be dangerous to give to anybody such powers.

30,914. In the paper you have placed before us here you seem to be rather favourable to a close time in May and June ?—Yes.

30,915. Is there no considerable quantity of herrings ever caught in May and June here ?—There is not a very large quantity caught, but I have seen a few caught. My impression is that it disturbs the shoals, but now that cannot be done because the fishermen go to Stornoway to fish there. You are probably aware that the herrings are exceedingly sensitive. It was suspected, although not definitely established, that the herrings were disturbed at a very critical period of their maturity.

30,916. Do you not think that the fishermen themselves would abstain for their own interests from fishing when they knew that it would be injurious to their own interests ?—I would not say that.

30,917. As regards the brand, are you of opinion that if the municipality here were to undertake the inspection and the branding of herrings that that would meet all the wants of the fish-curers ?—I do not think it would. The difference between a municipal brand and the Government brand would be very material in the estimation of the public. I think there is everything in the fact of its being a Government brand. Besides that, I do not see the practicability of having a municipal brand carried out as efficiently as a Government brand. For example, you might instance herring-fishing stations that have no corporations at all. In Wick the municipality only embraces 1,500 inhabitants. When you go to Pulteney you are beyond the municipality altogether, and if you go to Lybster, Helmsdale, or Dunbeath, there are no corporations whatever.

30,918. If they thought it so very desirable to have a responsible inspection of that kind established, it of course would be done ?—I do not see the necessity for introducing any new system at all.

30,919. That is another point. Would it be of service if introduced ?—I think no new plan would be as well as the present system.

30,920. You state in your paper here that certain curers took exception to the fee as being too high, and as making them pay too large a share of the expenses of maintaining an establishment from which they derived little benefit beyond that obtained from the official stamp upon their herrings. Do you think that is a valid objection ?—I think it is rather hard to make Wick pay between 1,200*l.* and 1,500*l.* a year for the herrings that are cured here.

30,921. But it would be rather hard that I living in the south of England should pay these fees for Scotland ?—You do not do it.

30,922. We contribute in England to the expense. It is paid out of the Estimates ?—There are 26 officers, and the salaries of those officers does not come to more than from 3,000*l.* to 4,000*l.*

30,923. Do not the accounts of the Fishery Board include superintendence and various other items far beyond what is paid for by the fee levied upon branding the herrings ?—Perhaps so.

30,924. (*Mr. Caird.*) You limited your answer to the cost of the brand alone ?—No, to the salaries of the officers as well.

30,925. (*Prof. Huxley.*) You seem to forget that there is an inspecting vessel employed by the Fishery Board, and a great number of other expenses to be provided for ?—With regard to the inspecting vessel we consider that the steamer here is more of an incumbrance than otherwise. Except when we had Capt. Macdonald here we have always regarded these vessels as injurious to us.

30,926. Why so ?—Because, instead of going out to the fishing grounds with the fishing boats and encouraging the fishermen, and giving them notice of the shoals of fish, the steamer we have here now has laid in the bay for weeks without once accompanying the fishing boats. In addition to that, she once saw, about two years since, a boat perishing under her lee without making any effort to save it. The cruelty of doing so was represented to the captain, and he said he did not interfere because it had not been officially reported to him that the boat was in danger. The fishermen further complain that when the wind is in a particular direction, and they require to beat out of the bay, the steamer is an incumbrance to them rather than an assistance, and that she is practically injurious to the promotion of the fishing. (*See letter from Lieut. Challis, R.N., in Appendix.*)

30,927. I see it is stated in your paper here, to return to the subject of the brand, that the Government brand gives no legal guarantee ?—We were under the impression that it did.

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30,928. But your statement is that it did not?—Two years ago there were some herrings sent that were defective on reaching Stettin, and they were cast.

30,929. Then in what respect can the brand be better than one that would be put on by the local authorities?—Only because it is a Government brand.

30,930. Do you think that sounds better to foreign people?—Yes.

30,931. Without really being more effective?—I think it is more effective.

30,932. Have you formed any opinion about the expediency of enforcing the Convention Act here?—I think that the Convention Act generally applies to cases of trawling in decked boats.

30,933. There are a great many regulations about lighting the boats, and so on?—I think it is of great importance to have the boats lighted, and I believe that is almost universally neglected.

30,934. Are you aware whether foreign boats are usually here during the fishing season?—There are not many of them.

30,935. But there are always some?—Yes, there are always some. The French boats come very often to buy herrings. As Mr. Laing remarked, there are bounties paid in France to the French fishermen. A case occurred here not long ago. A French vessel came to this coast; she had the usual supply of nets and barrels and salt for the purpose of curing, but she bought herrings here; and since then she has proceeded to France and discharged her cargo without having once wetted her nets. A larger number of vessels come to Fraserburg and Peterhead, and they receive the bounty afterwards on the faith that they have caught the herrings themselves.

30,936. Are you of opinion that there are French boats fishing here every year?—Yes, two or three of them at any rate.

30,937. So that if that is all that is required for enforcing the Convention, they do exist here?—Yes.

30,938. Then there is nothing to prevent the Convention being enforced so far as relates to the appearance of French boats?—No.

30,939. Yet it does not appear that the regulations contained in the Convention Act are carried out at all?—Not at all. I think it would be of the utmost importance if that part of it with regard to lighting was insisted upon.

30,940. You say in your paper: "In the matter of statistics it appears to me that an improvement can be made;" in what way would you suggest an improvement?—I think I have suggested it in that document itself.

30,941. From what you know of the way in which the catch of fresh fish is estimated, would you say that you could depend upon the statistics in reference to fresh fish?—I think so. I have reason to know it, because for several years I have adopted a test of my own for discovering the actual amount, and I have compared my returns with those of the Fishery officer. My figures have seldom shown more than a few hundred barrels difference at the close of the season when compared with those of the Fishery Board.

30,942. Would it not be a matter of importance that some accurate statistics should always be gathered?—I think so.

30,943. So that it would be important to have somebody to take it in hand and set up an accurate system of statistics?—I think the present staff is sufficient for the purpose.

30,944. Do you think the mode adopted by the Fishery Board of collecting statistics insures accurate returns?—I think their herring statistics are practically correct; but I have not much confidence in their statistics with regard to the catch of cod. I do not know how it is possible with the present mode of collecting statistics to come to an accurate approximation. I know that the quantity caught off the coasts of Caithness is far greater than it is estimated.

30,945. Does that apply to haddocks as well?—Yes, my observation would apply to haddocks, but I do not think they take notice of haddocks in the statistics.

30,946. Then there are no trustworthy figures to show the progress or retrogression of the haddock fishery?—Not as regards haddocks; but the returns are trustworthy as regards herrings generally. They do all in their power to obtain them accurate. But I think you will find a suggestion in the document which I have handed in, by which the work would be much more effectually done.

The witness withdrew.

J. Bremner.

JOSIAH BREMNER called and examined.

30,947. (*Mr. Caird.*) You are a fish-curer here?—I am.

30,948. We have been making an inquiry into the operation of the Government brand, and we are desirous of ascertaining the opinion of the curers as to its advantage or disadvantage. What is your opinion upon that matter as a curer?—My opinion has long been that it ought to have been done away with long ago.

30,949. Have you been for many years a curer here?—Yes, for upwards of 30 years.

30,950. Then you do not think that the brand has been of any advantage to you as a curer?—No, I think it is a great disadvantage.

30,951. Will you give us the reasons on which you form that opinion?—My reason is, that we have now to pay for it, and besides that, when there are two curers curing for the brand one will, perhaps, cure so that he just gets the brand, while the other will cure his fish very well indeed; but the moment the brand goes on, both in the estimation of the buyer are of the same quality, because they are Crown full brand herrings. The system of branding does not encourage anything like emulation.

30,952. Do you think there is a considerable difference, according to the mode in which the cure is effected, in the quality of the cured fish?—I do not only think it, but I am certain of it.

30,953. And do you think that the existence of the brand does away with those careful operations which a man's self-interest would lead him to adopt?—I do.

30,954. Do you cure largely for the foreign market?—I cure mostly for the foreign market; it is never a very large quantity, but yet I cure a pretty fair quantity.

30,955. Would you have any difficulty in selling your herrings in the foreign market if they had no brand?—I would take all the risk of that; I am not afraid of it.

30,956. That is if the brand were done away with altogether?—Yes, it must be done away with for all.

30,957. You would then sell in your own name as a curer?—Yes.

30,958. Do you think that in doing so no injury would be done to you as a curer?—I am satisfied of that.

30,959. Do you think the brand, by the power it gives the Fishery officer of inspecting and imposing the necessity of filling the barrels in a certain way or otherwise, operates injuriously upon the cure itself or not?—Yes, they generally require them to be filled so full as to be injurious to the fish.

30,960. If you were left entirely to your own opinion as to how you should cure and fill your barrels, and so on, do you think you would insure a better cure than by having them exposed to an inspection of that kind?—I think so; I am sure many would do it.

30,961. For their own self-interest?—Yes.

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30,962. You would do your best to get a good marketable article ?—Certainly.

30,963. Is that an opinion which you find is shared by many of the curers in Wick ?—Yes, by about three-fourths of them, I think.

30,964. Is it an opinion that is progressing in Wick ?—I think it is.

30,965. Are the people beginning to feel more and more that there is less necessity for the retention of a Government brand ?—We have found latterly that it is useless, because after getting the Government brand we have the purchasers examining the barrels for themselves, and in the continental markets some of them have been rejected.

30,966. Then do you find that the barrels which have the Government brand upon them are just as much liable to be rejected ?—Those which I speak of which were rejected, had the Government brand upon them.

30,967. Then the Government brand does not protect you from having the fish rejected ?—No, it appears not.

30,968. Has it any compensating advantages ?—None, in my estimation.

30,969. Can you speak at all as to the progress of the white-fishing on this coast ?—No.

30,970. You do not cure white fish ?—No.

30,971. Do you cure the winter herring as well as the summer herring ?—Yes, I cured some last winter.

30,972. Were they in good condition ?—Yes, but they were not a very fine article.

30,973. As a curer, do you think it is likely to become an important fishing ?—Yes, it appears so from what has been going on for the last two seasons; but the fishing is only in its infancy yet and there cannot be much said about it.

30,974. (*Prof. Huxley.*) Is there any considerable variation of quality among the herrings which receive the full Crown brand ?—Yes, a good deal.

30,975. Is there any corresponding variation in the price in the market ?—I dare say not; unless, as I said before, there happens to be a falling market. If there is a rising market the same thing does not apply.

30,976. You were speaking just now of a particular mode of packing the herrings. You said the Fishery officers required the barrels to be packed too full ?—That is my impression, and I think it is injurious to the fish.

30,977. If you were allowed to pack the barrels more loosely do you think the herrings would sell better ?—My opinion is that the fish would be much better.

30,978. And consequently they would sell better ?—Yes.

30,979. What do you think about the question of close time ?—I think that such a thing ought never to have been established ; that is my own opinion.

30,980. Do you think that that is another restriction on the course of trade ?—Yes.

30,981. Do you think there would be any advantage in having a close time in the months of May and June ?—I do not think so.

30,982. You would not care to have any sort of guarantee at all upon your barrels ?—I think the curer's name ought to be a sufficient guarantee for them. I do not see what exception ought to be made in the case of herrings. Let the character of the person who cures them be the guarantee. I was of that opinion long before there was a fee charged.

30,983. The system of branding arose out of the bounty ?—Yes, that was the commencement of it.

30,984. And in point of fact it is a bounty still ?—It is a bounty.

30,985. It is a certain amount of Government money expended in giving advantages to a particular trade ?—It is not in that way that any money is expended, it is expended in keeping up a staff elsewhere. We give them more money than they pay for branding the herrings in Wick.

30,986. Do you think that the money goes to the Government ?—It goes to keep up the Board altogether. I do not know where it goes, but I know we pay more money than is sufficient to keep up the staff they require here.

30,987. Would it be practicable, if you found it to be useful to have some kind of inspection, to set it up among yourselves ?—I have no doubt if it were found useful.

30,988. And supposing it were found to be useful and beneficial, could you do it at less expense than fourpence a barrel ?—Yes, at less than half of it.

30,989. So that if you were empowered to organize a local board of inspection you could do it out of your own funds and be released from a large proportion of the tax ?—Yes.

The witness withdrew.

D. Davidson.

David Davidson called and examined.

30,990. (*Mr. Caird.*) You are a fish-curer here ?—I am.

30,991. What is your opinion with regard to the advantage or disadvantage of the continuance of the Government brand upon herrings ?—Well, I think that the brand is very useful. I have been curing herrings here for more than 30 years, and of course I watched the trade over all that length of time, and I think that the brand has been of the greatest possible advantage.

30,992. In what way have you found it to be of advantage ?—I refer particularly to a recent improvement, and that is the special brand, separating the full from the spent fish. Before that was established the fish were generally packed promiscuously and they could not at all compete with the Dutch fish in the foreign market, as the Dutch were in the habit of selecting their fish from the very best of their herrings. After the full brand was introduced the trade experienced the greatest possible benefit in the German markets. I recollect when the export of herrings from this coast to Germany did not exceed 5,000 barrels, speaking from memory, and now it is about 80,000 barrels a year. I have also the authority of the German herring dealers for stating that at the present moment the Scotch herrings with the full brand are even preferred to the Dutch herrings in Stettin.

30,993. Have the Dutch any government brand upon their barrels ?—They have no brand exactly, but they mark each kind with an M.

30,994. With a curer's mark ?—Yes.

30,995. There is no Government brand there ?—Not as far as I know.

30,996. Then it would appear that the Dutch, not having a Government inspection, rely more than you upon a system of separating one class of herring from another ?—They did.

30,997. Would you not from self-interest have done that without the Government helping you ?—We never did it until the Government insisted upon the brand.

30,998. But now, knowing the advantage of it, would you continue it whether the herrings were branded or not ?—Of course.

30,999. Then the brand is not necessary to enable you to continue that which you believe to be beneficial to your own interest ?—No. I could buy herrings by a written contract binding the curers to separate the herrings, but it would never be done perfectly. They only do it perfectly when they know that they have to subject their barrels to the Fishery officers.

31,000. Could you not do that by agreement ?—It would involve our frequently going into a court of law. They would just tell me to take the herrings if they were not pleased with them. I should sue them for damages, but I do not care about being put to that trouble and expense.

31,001. Does the Fishery officer, by inspecting the fish, insure that this is done better that you could do

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by any other means?—It is done in that way as perfectly as any human institution does any other thing. There are some exceptional instances where herrings get the Government brand, and are subsequently found to be faulty. Some of the officers may be remiss in their duty, but that very rarely occurs; years and years pass by in which there is not a single parcel of Crown-branded herrings objected to.

31,002. You have stated to us that one advantage you have derived in consequence of the introduction of the Crown brand consists in the separation of the different qualities of the herrings?—Yes.

31,003. Is there any other advantage?—All the foreign correspondents I have tell me that the Government brand is of the greatest possible benefit to the trade.

31,004. Do they send their agents here to buy the fish?—They come themselves or appoint agents.

31,005. Are they not acquainted with the different curers here and the quality of the cure?—Of course they are; but they must go and inspect the herrings, and it is not every one that can judge of a barrel of herrings by looking at it.

31,006. Is not the man who buys the herrings as likely to inspect them as the Government inspector?—If the buyer were to purchase herrings without the brand, he would find the greatest difficulty in getting the best possible article. The curers might fill their barrels too slightly, or mix the fish without paying much attention to separating them.

31,007. Would it not be to their interest to prepare a good marketable article that would procure a good price?—Of course it would; but the orders for the herrings come from distant places. For instance, in Stettin or Dantzic, there are very few herrings consumed; the orders come there from Warsaw or the interior of Germany. The persons there who buy the herrings, unless they were aware that they would get Crown-branded herrings, would only buy to a limited extent; and the same class of men would not engage in trade, because they would be so liable to be imposed upon and be served with a bad article.

31,008. Are the Crown branded herrings ever rejected in the foreign markets?—Perhaps there may be exceptional cases of that sort once in five years.

31,009. Then there is nothing in the brand itself that prevents them from being rejected?—Some of the largest Prussian dealers told me that as a rule it was held in a court of law there that if a man sold Crown-branded herrings and delivered them Crown-branded herrings, that was held to be an acquittance of his obligation.

31,010. Has any case arisen in the courts of Germany or Prussia, where the fact of the herrings being delivered as Crown-branded herrings was held sufficient to acquit the seller from the obligation of delivering a good article?—There have been one or two exceptional cases where the officer has not examined them sufficiently, and where they have not turned out so well; but that might occur in anything; no human institution is perfect. I may likewise mention that those connected with the herring trade, the large dealers, say that we have almost nullified the Dutch fish, so that it is now a mere bagatelle. The Norwegian curers have not succeeded as well as we have, also on account of the brand. If there was no brand there would be no regulation as to the size of the herring barrel. Red herrings are not branded, and the people who manufacture red herrings make the barrels 25 gallons, 26, or 28, according to their own taste, whereas the legal sized barrel must be 32. If there was no brand, and a man from Warsaw sent an order for 1,000 barrels, he would not know whether he would get them 25 or 32, which is the legal size.

31,011. But would he not rely upon the character of the man he dealt with, as in any other transaction?—Yes, I suppose so; but it is a notorious fact that the red-herring barrel is made of 25, 26, and 28 gallons, while only a very few of them are made of 30 gallons.

31,012. Is there any advantage with regard to the payment for the herrings, when you draw upon a foreign buyer, after having sold them with a Government brand?—Yes. I am a bank agent, and I can speak positively with regard to that. It gives the greatest facility for raising money here and in discounting bills. We often discount bills accompanied by a bill of lading. We should be very slow to advance money upon a bill of lading if the brand was not upon the cargo, and most other bankers would.

31,013. Then the brand gives an additional commercial value to the herrings?—Yes, an immense value; and it enables parties to get advances three months before the herrings are out of the sea.

31,014. How is it possible, if you only get the advances upon documents reciting that the herrings have the Government brand, how can the herrings not out of the sea be branded in any way?—You are confounding two things.

31,015. I want you to explain?—The party is bound to deliver the herrings as soon as they are out of the sea.

31,016. He could not conveniently deliver them before?—It is not I, but the curers and the buyers, who speculate; it is not the banker.

31,017. Bills are not discounted on documents signifying that the brand will be given; but that operation only takes place after the herrings are branded?—They are bound to deliver to the man who gives the money Crown full brand herrings.

31,018. Then in that case you depend upon the character of the man with whom you are dealing to fulfil the obligation?—Yes, by delivering full branded herrings.

31,019. It is a personal guarantee?—Exactly; but the money would not be advanced unless herrings were to be delivered with the brand.

31,020. (*Prof. Huxley.*) Do you know any other branch of trade in which anything like the brand is affixed to the commodity of the merchant?—No, I do not; it is an exception.

31,021. Does the herring trade differ so much from any other description of trade that it should have that peculiar privilege?—I think it has been the means of raising the trade to its present state of prosperity, and it would be injurious to do away with it. I hold it to be beyond a doubt that the fish-curer would not receive the extreme high price he does now if the brand were abolished.

31,022. But to take another example:—people buy wine in bottle, but they take the risk of the merchant supplying them with a good article?—Yes, I believe they do; but in that case they taste it.

31,023. Only an odd bottle or so?—There is one thing that makes the herrings differ from the importation of wine, or the stamping of linen, or anything else. We are sometimes forced to have bad herrings, contrary to our wish and all the care we can exert. On some occasions when the fish are weighty, and the boats get large shoots, and the day is hot, they are bad before they come to us, and no curer can make them good. A large boatload of herrings on a hot day will get into a state of fermentation, and their bellies will burst. If it were not for the brand, by some means or other those herrings would be made to look better than they really are, and would be sold in the foreign market.

31,024. Does not the same difficulty relate to wine? The merchant gets a bad vintage as well as a good one, and tries to pass it off?—I am not able to speak on that matter; I am not in the wine trade. I have had to do with the herring trade before the branding was introduced, and since, and I say the greatest possible benefit has been derived from the brand.

31,025. I thought the brand was established when the bounty was given?—Yes; but I speak of the special brand which was given since.

31,026. Do you think that great advantages have arisen from that division of the herrings under the

special brand?—Even when it was first introduced it created an immense improvement here. I have seen the herrings before the brand was introduced, and a great part of them was unmarketable.

31,027. Do you remember the period before the bounty was given for herrings?—Yes, I do.

31,028. When was the brand first introduced?—I think in 1814 or 1815. The first branding was by the Excise merely for the sake of the salt. I was working among the herrings when the brand was introduced. My father was in the trade before me. I was a boy then.

31,029. There can be no doubt from what you say that it is a great convenience to a peculiar branch of trade, there is no question about that; but the point to get at is, if there is anything in the nature of the trade that gives it a right to the privileges it enjoys?—If there were any foreign merchants here they would tell you that with that brand the herrings pass free from hand to hand with only 6*d.* per barrel profit. A bill of lading is given which passes from hand to hand for 6*d.* a barrel without any trouble. If it were necessary to have an examination of the herrings it would have a tendency to spoil them, because the barrel could not be made up tight again.

31,030. But the same advantages would accrue to many other branches of commerce by the institution of a Government brand?—I do not think that it is exactly so, because in manufactures they can make their articles good if they choose, but if they get bad herrings they can never make them good.

31,031. But manufacturers cannot make good linen out of bad flax. I wish to understand clearly why this brand is given. I can comprehend that it is an advantage to the trade in some respects to have a Government superintendence, but I do not see how the trade differs from every other trade in such a degree as to give it a right to that sort of superintendence which no other trade has?—The foreign merchants say they could not carry on the trade in the way they do without the brand.

31,032. Do you think that any kind of voluntary inspection could be established?—By no means. I think that would have very little influence. If the present system of branding were to be done away with, the best way would be to sweep the brand away altogether.

31,033. If that were done, how long would it disturb the trade before the foreign merchants would come to the place, and would learn to depend upon the brand of the individual curer?—Perhaps four or five years.

31,034. After that things would go on satisfactorily?—Yes; but I think it would never be of the same advantage to the fishermen as now.

31,035. Is there not a considerable demand for those herrings abroad on the Continent?—Yes, the demand is very large. We depend upon Germany almost wholly for the consumption of our herrings. The home markets are next to nothing.

31,036. The Continental market then must have the herrings?—Yes, but at their own prices. The great advantage of the system of branding is, that we can get more money for the herrings, and pay the fishermen more. It is a serious business to convey a barrel of herrings 500 miles into the interior of Germany and to have them rejected. At present, under the system of branding, it is only in very exceptional cases that the fish become bad.

31,037. Do you deal in cod?—Not now; I did at one time.

31,038. There is no sort of Government brand on cod, is there?—At one time they used to stamp them.

31,039. But of late years there has been nothing of the kind?—No.

31,040. Have you any difficulty in disposing of your cod?—Cod is a very different thing from herring; every fish is open and dried. That is very different from a barrel of herrings, which would take an enormous time to go through separately.

31,041. Are the cod sent loose?—Yes, every fish is sent quite loose.

31,042. But the buyer would not inspect every cod; would he not take his chance by taking a sample here and there?—Yes; but every one of them is seen by the people who land them. In passing from the buyer to the seller every individual fish is handled.

31,043. Did not that trade go on without any superintendence?—Yes.

31,044. Have you anything to say with regard to a close time?—With regard to the close time, I must say I came from Stornoway about 14 years ago. I had been curing there for upwards of 20 years. My opinion is that the close time which has been appointed for the Stornoway fishing is very injurious, and it would be very improper to extend the close time which they have upon the west coast here. The circumstances of the people along the western coast are very poor; some of them are almost starving, and yet the effect of this close time is to prevent people who are really in want of food from fishing the sea in order to obtain it.

31,045. (*Mr. Cairdl.*) In your opinion should the close time be entirely abolished, and the western coast of Scotland be placed upon the same footing as the east coast?—I think so; although, perhaps, it might be found desirable to have a close time from the 1st of April until the 20th or 25th of May.

31,046. Are there any circumstances on the west coast which place it in a different position from the east coast?—It was considered that the fish were not fit for food, but they are fit for bait. My own opinion is, the regulation enforcing a close time ought to be swept away altogether.

31,047. Do the fishermen complain of it?—Yes. At Stornoway they told me last season that there were times when they could get from 10,000 to 20,000 and 30,000 barrels of herrings if they had liberty to fish.

31,048. And yet they were starving and were not allowed to fish?—Yes.

31,049. When should the fishing commence with advantage to the fishermen and to secure good fish being caught?—Not before the 20th or 25th of May. The present close time ends on the 20th of May, and that would be a suitable time to begin.

31,050. They are allowed at present to begin then?—Yes. They might have a close time from the 1st of April, but whether it should extend so long or only for 20 days might be a question. I understand that before the 20th of May the fish are very bad.

31,051. How long are they poor and inferior?—They are poor on the 20th of May, but they improve when June commences.

31,052. When do they begin to get worse?—About the month of April. They are pretty good in the winter.

31,053. At what time could the fishermen have caught that additional quantity of fish they spoke to you about in Stornoway?—In December and January.

31,054. In the winter fishing?—Yes, similar to what they get here.

31,055. That is now entirely cut off from them?—Yes, unless they commit an illegal act. If it is difficult to arrange about a close time, I should say sweep it away altogether.

31,056. Is the quality different of the Stornoway herrings as compared with those you get here in the winter time?—The herrings we got there were very fine. We had the finest herrings in the world in June.

31,057. Do you cure them?—Yes.

31,058. For the foreign market?—Yes.

31,059. Did you brand them?—We had no time to keep them for branding; we wanted to ship them off as soon as we got them.

31,060. Then you did not find any difficulty in consequence of the want of branding?—A great quantity were thrown away because the fish were

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ticklish. They were quite a speculative article; sometimes we got nothing for them and sometimes we got a large price.

31,061. Is there a large quantity cured there?—Yes, 55,000 crans were got in the month of June.

31,062. (*Prof. Huxley.*) Do you know the Isle of Skye?—I have been there, and I know it. The fishermen there are very poor, and the close time has affected them very injuriously.

31,063. During the last winter were they not entirely prevented from catching herrings?—Yes, but they did it "under the rose." What I say is, that if there is any difficulty in arranging a close time, let it be done away with, and throw all the fishing open.

31,064. Is it within your knowledge that the circumstances of the fishermen of the Isle of Skye are very poor?—Yes.

31,065. What was their condition last winter?—I read in the papers that they were really starving. It is not a good fishing island, however, the Isle of Skye.

31,066. Still there was a good deal of herring there in the winter?—There was a good deal for bait, and some years they have had plenty to cure.

31,067. Has the prohibition from catching this fish and catching the codfish through having no bait been a heavy blow to them?—Yes.

31,068. Why should any difference be made between the east and the west coasts of Scotland?—I do not know.

31,069. Are you aware that at Anstruther, a winter and a summer fishery go on every year without one affecting the other?—Yes.

31,070. Then why should the winter fishing be prohibited on the western coast?—I believe it was to protect the Loch Fyne fishing. I was at Anstruther and Dunbar in 1816, and there was a double fishery then.

31,071. A winter and a summer fishery?—Yes. There was an immense fishing there in 1816.

31,072. Has that continued ever since?—One year they have a good fishing and another it is bad.

31,073. It does not appear to have entered their minds that one fishing is injurious to another?—No, I think it is a different fish they catch in the different seasons.

31,074. You think there are two descriptions of herrings?—There are great varieties of opinion about that. Although we have caught herrings on this coast during the last two winters it is not my opinion that those herrings are always there. My opinion is that if the herrings had been present on this coast in such bodies as they were during the last two years they would have been discovered.

31,075. What led the fishermen here to expect the appearance of herring in the winter?—I suppose it was the general appearance which shows the presence of herring and also the fact that some of the men were using old nets to catch herrings for bait and they were surprised to find such a quantity, and then they shot the proper nets and got a good take.

31,076. What makes you think they were not here before?—At one time there used to be immense bodies caught up in the neghbourhood of Burntisland, but now they have all disappeared.

31,077. That is high up in the Firth of Forth?—Yes. They have often caught them at Anstruther, but there has been almost no fishing for herrings in the Forth of late years. I am inclined to believe that for two or three years they disappear, and then come again as they have done here.

The witness withdrew.

P. Murdo.

PETER MURDO called and examined.

31,078. (*Mr. Caird.*) Are you a curer?—Yes, and I am the son of as old a curer as there is in Caithness. My father happened to be a curer in Caithness for 40 years.

31,079. Have you had a long experience as a curer?—Yes.

31,080. Is it your opinion that the continuance of the Government brand on cured herrings is desirable and advantageous to the fisheries?—I will state this: during my father's time he was connected with about as extensive a firm of curers as there was in the north of Scotland, named James Miller and Sons, of Leith. My father was their manager and friend for years. A great quantity of the fish they had were cured, and a great many more were purchased by my father for Messrs. Miller, and sent to Ireland without the brand. We made up our own herrings as carefully as we could, and we found we could send our own cure without a brand as advantageously as we could those that we purchased with the brand.

31,081. That was for the home market?—Yes, the Irish market.

31,082. But with regard to the foreign market, how would the case be there?—My father bought for a Lisbon company, an extensive company on the Banffshire coast, of which he was agent. He had to purchase the herrings branded, but when he was anxious to get early into the market to compete with other merchants he would take several cargoes unbranded, selected from out of a careful curer's stock; he would take them on their character and on looking at an odd barrel or so by a cooper of our own. They were sent into the market, and I suppose they would obtain the same price as those of his neighbours.

31,083. Would the want of the brand lead you to be more particular in the selection of your coopers and curers?—Yes.

31,084. Would it make you more active in the superintendence yourself?—Yes. If I cure for a particular market, and make them up carelessly or indifferently, then I must suffer for it. The more particular and more careful I can make up my cure for the market the better it is for me, because I suppose that in that case the parties who purchase from me will come to me again next season.

31,085. Do you think the foreign merchant who comes here would not soon discover whether he could rely on the character of the curer as well as upon the Government brand?—He might be deceived for one season, but I should not expect that he would be deceived for two seasons in succession.

31,086. (*Prof. Huxley.*) You seem disposed to let everything go to an open competition?—Yes.

31,087. You would have every man trust to his own skill and to his own name?—Exactly. I suppose the nature of the institution of the Fishery Board was this:—When the fisheries of Scotland were in their infancy, the Government guaranteed a bounty in order to enable deserving struggling men to get into the trade. They gave them a bounty of some four shillings a barrel, which enabled them probably to get the steam up. The trade was in its infancy then, but afterwards it became improved. It was just like the growth of children, they begin to creep first, and then they get hold of the wall and walk, and then they begin to swagger.

31,088. You want now to get rid of the Government leading strings?—I think we can do without the protection of the Fishery Board, because our credit is good.

31,089. Does the existence of the brand oblige every fish-curer to have recourse to it whether he wishes or no?—That just depends.

31,090. But he must have it for the foreign market?—It depends on circumstances. If there is a small fishing, if the fishing is slack and backward, the merchants will give you the same money for unbranded herrings as they will give you for those which are branded; but when we come to a general or heavy fishing then they say brand them. On the Continent the German buyers often hold surveys on our branded fish, and inspectors have been over from the Fishery Board, specially sent from Scotland, to inspect them. Perhaps they may have lost the pickle,

and the merchants have said, with the sanction of the inspector sent by the Fishery Board, "These herrings require five per cent. more to make them sufficient for the market." Now that would not be the case if the market was scarce of herrings, and there was no deficiency in the demand. Anything will sell in a case of scarcity, but it requires a very good article to sell in the foreign market when the supply is good.

31,091. Then you think that the existence of the brand gives no advantage to the fish which are branded when there is a great demand?—When the demand is great the stamp might do as well on the bottom of the barrel as on the side of it. We brand the barrels on the bottom with our private marks, and my big M. will pass for as much value as Mr. Primrose's full Crown.

31,092. Do you think that the abolition of the brand would cause any great disturbance in the trade?—No; I think not. Why should you not protect the farming interest by a brand as well as the fishing interest. Suppose a farmer comes into Wick with a crock of butter and I purchase it, if I get a good crock of butter from him, in all probability I should deal with him again next time; but if he gives me an inferior article I should pass him by and select another farmer.

31,093. Do you think the fish merchants would deal with you in the same way?—Yes. If we cheated them one year, they would be certain to pass us by the next, and our trade would soon come to be self-supporting without the surveillance of any officials from the Fishery Board or the Government brand. It is not the 13,000*l.* that is voted by Parliament to promote the fisheries that I object to; it is the principle, and the sterling principle, and the honesty of the trade, that ought to support the trade, and not their 13,000*l.*

The witness withdrew.

JOHN CLEGHORN called and examined.

J. Cleghorn.

31,094. (*Mr. Caird.*) Are you connected in any way with the fisheries here?—No.

31,095 Have you any interest in the fisheries?—Not much.

31,096. Have you had an opportunity of ascertaining in any way how the fishery interests here are progressing?—My attention was called to the fluctuations in the fishery some years ago, and I set about inquiring into the causes of those fluctuations; and I have had my attention particularly directed to the herring fishery ever since.

31,097. What is the result of your inquiry and observation?—The result of my observation has been to show that the fluctuations in the fishery have been caused, not by a greater or less number of herrings being on the co st in one year or another. What I mean is, that there has not been a greater quantity in some years than there has been in previous years; but the fluctuations are caused by fluctuations in the netting.

31,098. Do you mean in the quantity of nets used in catching the herrings?—Yes, it is there that the fluctuations exist. As far as I have been able to ascertain there appears to have been a constant decrease in the size of the shoals of herrings about which the fishermen are engaged.

31,099. A decrease in the size of the shoals?—Yes.

31,100. I thought you said just now that it depended on the netting and not upon the shoals?—There has been a constant decrease in the quantity of herrings off our shore; but some years we get a larger quantity of herrings caught and taken ashore than in other years. It has been generally supposed that this large quantity is owing to our getting herrings from some unknown region.

31,101. Is it not a natural conclusion that if the fishermen catch more herrings there are more herrings on the coast?—No, it is not.

31,102. Is it not so if the same industry has been employed in procuring them?—No, it is not.

31,103. How do you contradict that?—I contradict it by the statistical tables which have been furnished by the Fishery Board.

31,104. (*Prof. Huxley.*) Those very statistics are all furnished by the results of the catch, are they not?—Yes.

31,105. Then are you not arguing in a circle?—In addition to those statistics, I have taken into account the quantity of nets used and the number of boats employed.

31,106. (*Mr. Caird.*) Is there any fact that you can place before us?—I have some facts here. I have here the statistics of last year of the herring fishery which were published here, and I see in them a list of the boats and the number of crans taken by the boats fishing from Wick for the last 27 years. I have omitted the first year, and I have divided the table into two parts. I have calculated the number of boats employed during the first 13 years and during the second 13 years, together with the average number of crans taken in each period, and the total number of crans; and the result has been that in the first 13 years there were 10,202 boats, the average crans were 1,457, and the total number of crans 1,134,302.

31,107. That is in the first period of the 13 years?—Yes.

31,108. What conclusion do you draw from that as compared with the second period?—In the second period there were 13,522 boats, and the average was 1,201¾, and the total quantity 1,235,678 crans. Thus with 3,000 more boats, and perhaps from 30,000 to 40,000 more nets we only took 10,000 more crans of herrings.

31,109. What is the conclusion you draw from all that?—The conclusion I draw is that the shoal of herrings has not increased, but that it has diminished.

31,110. Is there any remedy you can suggest for that?—Well; I think we must be prepared to show that that is really the case, because it has been called in question.

31,111. But suppose it is admitted, what conclusion do you come to from that?—I come to the conclusion that some steps must be taken to secure a permanence in the catch of herrings if we wish to prosper, seeing that we have built a town on the faith of the herrings being eternal and enduring for ever. I think it is the duty of the Government, or of some other body, to take some steps in order to secure their permanence.

31,113. What steps would you take?—Naturalists are not prepared to state whether the fish spawn twice a year.

31,114. (*Prof. Huxley.*) I beg your pardon, I think they are?—Do fish spawn twice a year?

31,115. Not the same fish, but the herrings spawn twice in a year. There are two spawning times.—I have been noticing the herrings for the last 40 years, and I believe we have a spawning time for the herrings every month in the year. That being the case, I think it would tend to their permanence if we were prevented from fishing them at one of the spawning months.

31,116. (*Mr. Caird.*) That is to say, for one month of the year?—Perhaps for a longer period than that; but I am not prepared to say what steps should be taken.

31,117. You merely wish to call the attention of the Government to the fact?—Yes. I wish to call their attention to the fact that there is a change going on, and that it has been going on since we began to fish, and that if it continues to go on we must in the course of time arrive at a period when we shall have no herrings to fish.

WICK.

J. Cleghorn.

1 August 1864.

31,118. (*Prof. Huxley.*) When you speak about the herring spawning in every month in the year, do you mean that they are the same herrings which spawn then?—I believe that we have races of herrings that spawn in January, February, March, April, May, June, July, August, September, October, November, and December.

31,119. In every month you find a certain number of herrings spawning?—Yes.

31,120. But that does not interfere with the fact that a great and maximum spawning takes place in certain months of every year?—We have much larger shoals of herrings which come to maturity in the month of August.

31,121. And again in the month of February?—Yes. The greatest amount of herrings we take is on the 12th of August. They come to maturity with a regularity almost beyond all belief, without the aid of these statistics to throw a light on the fact.

31,122. Do you think that, supposing you were to stop the fihing at one period of the year, all the fish we should not catch would remain for us to catch another time?—No; but I think all that nature has done to diminish the herrings is as nothing at all compared to the quantity we destroy by netting. We employ at the present moment 36,000 nets, or about 1,000 miles of netting every evening during the fishing here, and we are sweeping night after night the district in which alone the herrings can spawn.

31,123. Have you happened to see the report of the Commission which sat two years ago, and which deals with that very question?—Yes.

31,124. The reporters there are of opinion that the herrings destroyed by men are as nothing compared to the quantity destroyed by other fish and by porpoises?—With all respect to the Commission I do not think that they had facts to bear them out in the conclusions to which they arrived. In the first place, they take it for granted that the cod constantly lives upon herrings, and that every day he is destroying herrings.

31,125. During a certain period of the year?—I think the cod, like a number of other rapacious feeders in the sea, take herrings when they can get them more easily than other food. I think the cod acts as we do. In the spawning season, when the herrings congregate in large masses, I believe the cod do destroy a great number of them, and so also do the gulls and other birds. But at the same time I regard what they destroy in that way as nothing at all. All that they do is rather healthy than otherwise, as it leads to the promotion of the health of the general body of herrings, and has no tendency to make any perceptible diminution in their numbers. On the contrary, it keeps them in a healthy state. In the first place, they take the weak and sickly sooner than any others.

31,126. It has been stated to us in the course of the evidence, that a winter and summer fishing have been going on at Anstruther for the last 40 years; are you aware of that?—Yes.

31,127. Yet there has been no decrease in the number of fish found there?—But I think the period has now arrived when that decrease will be found.

31,128. Then your opinion is formed rather as a matter of logic than experience, as a matter of reasoning rather than based upon positive data?—Yes; from the statistics I have seen I believe that the herrings in the Firth of Forth are done, and that the fishery is finished.

31,129. Finished?—Yes. I am positive from what has been going on there that it is finished.

31,130. Why there is a large fishing going on there at this moment?—No, there is not, begging your pardon.

31,131. Not down off Dunbar?—They may be getting five or six crans in a morning, but it is a very small fishing. It is not what it used to be. They had a large fishing at Burntisland at one time, and it has altogether disappeared.

31,132. The statistics of the Fishery Board show a very different state of things from that which you mention?—I do not see how they can. All my statistics prove that what I say is correct.

31,133. Last year, according to this return, there were 36,943 barrels cured in the Eyemouth district, and 23,000 barrels cured in the Anstruther district?—Yes.

31,134. Is that the fishing you refer to as coming to an end?—Yes; in 1860 they took a great deal more. In previous years they took 48,000, 23,000, 21,000, and only 8,000 last year.

31,134*a*. That is not like the fishing coming to an end?—I think it is, if they took 48,000 one year and only 8,000 last year.

The witness withdrew.

J. Low.

JAMES LOW re-called and examined.

31,135. (*Mr. Caird,*) Can you give us any information with regard to the falling off in the herring fishery in Dunbar?—It was a light fishing at Dunbar last year, but it was an exceptional year.

The witness withdrew.

J. Bremner.

JOSIAH BREMNER re-called and examined.

31,136. (*Mr. Caird.*) Can you tell us from your long experience whether the fisheries are carried on now with more or less spirit than they were in former years?—I think with rather less spirit.

31,137. What is the reason of that?—I think it is owing to the kind of boats and the bad harbour; the boats are afraid to go out in bad weather.

31,138. Then will the improvements in the harbour considerably alter that?—Yes.

31,139. Is there any difference in the men being paid wages instead of by the cran?—I think it makes them much lazier. For instance, a boat has four or five men, according to the size of the boat, but they are hired men, and we cannot get them to go out to fish as we wish. They are not as active as they would be if they were paid by the cran. Just now they are getting wages; they receive so many pounds each, and the master of the boat or the owner has all the advantage. However good a fishing they make, the men only get a certain amount, perhaps 4*l*., 5*l*., 6*l*., or 7*l*. a man.

31,140. Then the fishermen employed in the boat do not share in the catch of the boat in any way?—No.

31,141. That is limited entirely to the owner of the boat?—Yes.

31,142. And he makes his contract with the fish-curer?—Yes.

31,143. The men being generally paid wages?—Yes, some owners fix so much wages and so much chance; others pay the men wholly by wages.

31,144. Is that system a change from the system that previously existed?—I cannot say that it is.

31,145. Has it long been carried on in the same way?—Yes, ever since I can recollect.

31,146. Is there any disposition among the fishermen themselves to ask for a change of the system, are they anxious to get a share of the fishing?—Not very much: they themselves think it safer to be sure of a

certain number of pounds and have no more about it.

31,147. But do you think that if they had a joint interest with the owner of the boat it would prompt them to use greater exertion?—I think that would be the natural consequence. Mr. Davidson states that we cannot sell the herrings in the Baltic if they were not branded. I am not in the least afraid of that. A lot of hungry Germans will always like the herrings if they can get them.

The witness withdrew.

DANIEL STUART called and examined. *D. Stuart.*

31,148. (*Mr. Caird.*) You have heard the evidence of the previous witnesses?—Yes.

31,149. Is there anything you desire to add in regard to the curing or the operation of the brand?—I would sweep away the brand altogether.

31,150. Do you think there is no advantage in having it?—No.

31,151. In your opinion is there any disadvantage?—If the brand were done away with we should do the utmost in our power to cure to the satisfaction of the buyers, but we have no need to do that just now.

31,152. Do you mean that there is no motive for showing greater skill or using greater exertions?—None whatever.

31,153. If the brand were done away with that motive would come into play?—Certainly it would.

31,154. Is there anything else you are desirous of saying to us on the subject?—No.

31,155. Does the existence of a Government brand, when a curer is curing for the foreign market, compel him to make use of it whether he cares about it or not?—No.

31,156. But unless he brands his herrings he does not get the same chance of selling them as he would otherwise do?—Quite so, but he is not compelled to brand them.

31,157. Do you not feel obliged to have the Government brand, whether you care for it or not, simply because you would be placed at a disadvantage without it?—I am obliged to have it, but I do not care for it.

31,158. Then you are placed under an artificial disadvantage owing to the existence of this Government brand?—Yes.

31,159. One argument which is used to show that there is a desire for the brand is, that you continue to pay a fee for it?—Yes.

31,160. Then the effect of having them branded in that way is, in fact, to show that you want to have them branded?—Yes.

31,161. Whereas in consequence of the existence of the brand, you are obliged to take advantage of it in order to compete with other fish dealers in the foreign markets?—Yes.

31,162. Then is the amount of the fees paid an index of the feeling of the curers?—No, there are a few connected with the foreign buyers who desire to have the brand. Three-fourths of the trade are against it.

31,163. So long as it exists do you think you would be placed at a disadvantage in going to a foreign market if you were not to have it?—Yes.

31,164. You are obliged to have it whether you wish it or not?—Yes.

The witness withdrew.

JOHN MCADIE re-called and examined. *J. McAdie.*

31,165. (*Mr. Caird.*) I believe that you desire to add something to the evidence you have already given?—Mr. Davidson, in his evidence, spoke in reference to the Fishery Board. He said that if the Board were done away with that was the whole thing, and it did not matter how the branding was carried on—that the abolition of the Board was the great matter.

31,166. Is not that the feeling of the trade generally?—Yes, it is the Board which the trade is opposed to. It is from the Fishery Board that these non-practical rules issue to the practical portion of the establishment, namely, the Fishery officers.

31,167. You object to the Fishery Board more than to the brand?—Yes, because it is from them that these non-practical rules issue. I am not altogether decidedly opposed to the branding system if it could be reformed so as to meet the wishes of the trade.

31,168. But you think that the Board do not correctly interpret the wishes or interests of the trade?—They do not. As a proof of that I may state this last year, in January, we sent a petition to the Board of Fisheries requesting some alterations; those alterations were in reference to the filling of the barrels and the altering the bunghole. Yet that petition was refused by the Fishery Board; they would not make the alteration we suggested; but the first alteration we then wished to have was the cause of their entailing on the country the cost of a commission to Stettin and to the Baltic. Herrings which had the Crown full brand were rejected for being slack. The trade wished them to fall back again upon the weight test. That would have saved the necessity of any commission going out.

31,169. Is there anything else?—There was also a statement made that no money would be advanced upon herrings unless they were branded. That is not the fact. Every year there are cured in the Lewis islands from 20,000 to 50,000 barrels, and each year money is advanced upon those herrings before they are shipped. They are all of them unbranded.

31,170. In the same way as money is advanced upon branded herrings here?—Yes, the very same way. Money has been advanced both in this and in former years. There is another objection which the trade have to the proceedings of the Board at Edinburgh. The Fishery Board consider it right to adhere to any suggestions that are made to them by the foreign merchants, but they ignore the trade altogether. The foreign merchants were the persons who urged the extraordinary filling of the barrels which has been doing so much damage to the fish.

31,171. The foreign merchants did that?—Yes.

The witness withdrew, and the inquiry was adjourned to the 3d of August at Kirkwall.

Kirkwall, the Orkneys, Wednesday, 3rd August 1864.

PRESENT:

J. CAIRD, Esq. M.P. (Chairman). | Professor HUXLEY, F.R.S.

KIRKWALL.

JOHN MUIR called and examined.

J. Muir.

3 August 1864.

31,172. (*Mr. Caird.*) You are a fisherman here?—Yes, and I have been engaged as a pilot for nine years in the service.

31,173. Are you acquainted with all the different kinds of fish caught here?—Yes, quite well.

31,174. What are the principal fish caught in this quarter?—Cod is the principal fish; that is generally the great run of fishing, and we have herrings at this time of the year.

31,175. Have you any haddocks?—Yes, there are haddocks, but there are not many on this side of the island; there are generally more about Copinsha and Scapa Bay.

31,176. Are you acquainted with the fishing carried on in all parts of the island?—Yes, quite well.

31,177. Then my questions will apply to the whole. Have the cod and ling fisheries been increasing of late years, or have they fallen off?—I do not think they have increased for the last two or three years.

31,178. Have they kept as good as they were in former years?—They are pretty good, but not quite as plentiful as they were. There is good ling-fishing and cod-fishing about Stronsa.

31,179. Has the haddock-fishing been increasing or diminishing lately?—No, it has not done much.

31,180. Has it been falling off?—It has been falling off for the last two years.

31,181. What in your opinion has been the cause of that?—I really do not know exactly.

31,182. Are there many people engaged in it?—Not in the haddock-fishing, but there are a good many engaged in the herring-fishing.

31,183. Do you know if the haddocks have changed their ground at all?—They do change their ground.

31,184. Have they gone more into the deep sea?—They shift about; they go into the deep sea and off the banks now; they shift out and in. I have seen them in Kirkwall Bay caught on the hook and line, but we do not get any now.

31,185. Where do you find them now?—South of the banks of Copinsha and in Scapa Flow.

31,186. Outside?—Yes.

31,187. Are there plenty in Scapa Flow?—Yes.

31,188. Are there many people engaged in fishing at Scapa Flow?—Not many now; they are generally all engaged at the herring-fishing.

31,189. At this time of the year?—Yes.

31,190. But I am speaking of the regular time for haddock-fishing?—There is a good deal caught in the Flow then.

31,191. Are there more caught there now than there were formerly?—I do not think so.

31,192. Has the herring fishery much fallen off in the islands?—It has fallen off, but it has been much owing to the weather.

31,193. Has the weather been unfavourable to the fishing?—It has been very windy.

31,194. Whereabouts are the herrings generally found?—Generally from the Start at Lopness away down to the Skerries.

31,195. Is that outside altogether?—Yes, outside the country altogether.

31,196. Do not the herrings come into the bay at all?—They do about this time of the year; when the herrings set in on the coast then they come into the bay.

31,197. What kind of bait do you use here for the white-fishing?—We use the lug-worm, whelks, and mussels.

31,198. Is there a good supply of bait to be had?—Yes, there is plenty. Mussels are the best bait for the cod.

31,199. Were you in the habit of practising the cod-fishing more in former times than you do now?—A great many more sloops and boats were in the habit of coming and going from here.

31,200. What is the reason in your opinion that it has fallen off?—I do not know; they thought the sloops did not fish very well, and they got open boats for it, but they did not do so well.

31,201. Was there any bounty paid for the cod-fishing?—There is none now. There was a bounty for it when I followed it.

31,202. Was it a good fishing time when you followed it?—There was a great deal more fish.

31,203. Was it a good deal more followed then?—Yes, it was more followed.

31,204. Was that on account of the bounty?—Yes, to some extent, but the fish are not found as they were formerly.

31,205. The fish are not to be had?—Not in the same quantity, but they fish with long-lines now and mussels bait, and generally when they go out with one of the lug-boats they have one man to attend to the bait and another to attend to the line. That is the best way of catching fish now. But before we used to fish them over the vessels side with hand-lines baited with whelks.

31,206. Is the present method of fishing a more expensive method than you were in the habit of following in former years?—I do not think it is more expensive.

31,207. Is it more difficult?—It is more difficult.

31,208. Are there different kinds of boats employed in the fishing here?—Yes.

31,209. What are the different kinds?—There are both small and big; there are large herring-boats from 28 to 30 feet keel, and skiffs which are quite small boats.

31,210. Are there any decked boats employed in the fishing?—There are sloops for the cod-fishing; they are decked boats.

31,211. Have you any idea how many of them there are?—There is only one out from here, I believe. There may be one more from the north isles.

31,212. Are the boats and nets employed in the herring-fishing larger than they were formerly?—Yes, they are a great deal larger. They used to go with little boats from 18 to 20 feet keel, and now they are from 30 to 32 feet.

31,213. Do the boats from all parts of the island assemble where the herrings are expected to be?—They generally assemble in Shapinsha.

31,214. Are the herrings expected to be here all the year round?—We never try them in the winter time.

31,215. Have you no winter herring-fishing at all?—No.

31,216. Have you only a summer fishing in July, August, and the beginning of September?—Yes, they fish sometimes in Ireland or on the west coast in the latter part of June, and they get a good deal of herring there, the same as they do in the Lewis islands sometimes.

31,217. Are they in good condition when the early fishing begins?—Yes, they are small but fat.

31,218. Has winter fishing been attempted here?—None for the herrings, but plenty for the cod.

31,219. I mean for the herrings?—There is none for the herrings.

31,220. Is there any good lobster-fishing in these islands?—Very good.

31,221. Is it followed by many people?—They fish a good deal of lobsters in the course of the year with creels.

31,222. Is that a new thing?—Yes, it is a new thing here.

31,223. What were they in the habit of fishing them with before?—With nets.

31,224. Creels are pots?—Yes; they plant them near the shore and put bait in them, and the lobsters crawl in and cannot get out again.

31,225. Is the lobster-fishing increasing at all?—It has done very well. I do not think it is increasing.

31,226. Are lobsters found on all parts of the coast?—They are generally best about the islands where there is a good tide; they are not so good in the dead water.

31,227. Are partons or crabs much fished here?—There are plenty of partons.

31,228. Are they much fished?—Yes, they are caught along with the lobsters.

31,229. Is there no particular fishing for them?—No.

31,230. They are only caught along with the lobsters?—Yes.

31,231. Are they caught in the same creels?—Yes, and the same nets.

31,232. Is there any oyster-fishing here?—Yes, in Bay Firth and Tankerness and Deer Sound.

31,233. Are they fished diligently?—They can only catch them in calm weather, and they haul them up with the dreugh.

31,234. What is the dreugh?—It is a long seaweed that grows on the sea shore. It is like twine. They haul the oysters up with it.

31,235. Do the oysters stick to it?—Yes, and the small stones, and they haul them all up together.

31,236. Cannot they dredge them in the usual way?—No, they cannot dredge them on the hard ground.

31,237. Is it too rocky?—Yes.

31,238. There are no oyster scarps here?—There are plenty caught in a moderate way.

31,239. But there is no regular fishing?—No further than that they catch some in Bay Firth and Deer Sound.

31,240. Are there many caught there?—300 or 400 at a time.

31,241. What is your experience as a fisherman over a great many years? Do you think that the quantity of fish that can be caught on this coast is as great now as it was in former times?—I think it might be if it was well persevered with.

31,242. You have seen no signs of the sea falling off in the supply of fish?—None, but the fishing is not so well followed up, especially the cod-fishing, as it used to be.

31,243. What is the cause of that?—There are times when the codfish generally go off to the sea. They go off to the north side of Westra, and there plenty of cod, and large ones too, may be got; but they are not so good near inshore.

31,244. Have they been more fished inshore of recent years?—Yes; and I have seen them so close in that 28 score might be got in a couple or three hours.

31,245. Can that be done now?—No, it cannot.

31,246. Do you ever fish for cod with herring bait?—Yes, and capital bait it is too.

31,247. There will be a winter fishing to catch the herring at that time?—Yes, but the weather is rough in the winter time, so that there is no getting out with the boats.

31,248. (*Professor Huxley.*) Do you manage to catch a considerable quantity of cod in the winter time with your mussels?—Yes.

31,249. Do you think that you catch as many as if you had herrings for bait?—I think that mussel bait is as good for the cod as herrings.

31,250. Can you get plenty with mussel bait here?—Yes.

31,251. What time of the year do the herrings spawn on this coast?—Perhaps about three weeks after this.

31,252. About the end or the middle of August?—Yes, they spawn then. Perhaps we shall get a run of the spawned ones in about a week, and a fortnight after that we shall get full ones again.

31,253. Will they be spawning in September as well?—Yes, the run of the herrings generally comes from the northward.

31,254. In what sort of condition have those been which you get in January and February?—They are quite thin then.

31,255. Is there any cruiser up here when you are engaged in the herring-fishing,—any Government cruiser?—I never saw any only the Jean cutter. That used to attend the fishing a good while ago.

31,256. How long ago?—It is about eight or nine years since she attended the fishing here.

31,257. What is the size of the mesh you have in the nets here?—I am not exactly sure.

31,258. How many to the yard?—I cannot tell. I do not know exactly.

31,259. Does nobody look after your nets to see how large the mesh is?—I suppose they do, but the fishermen just make them of their own size, according as they think they can fish with them.

31,260. Do you make them any size you like?—Yes.

31,261. Do you light your boats when you go out at night?—We mostly have a light on dark nights; we put up a fiery brand if we see a vessel coming.

31,262. That is the plan you adopt?—Yes.

31,263. You do not carry two lights?—I do not think so. I never saw any of them carrying two lights.

31,264. Does nobody look after you to see how your vessels are lighted?—I do not think so, but they must keep a good look out for their own safety.

31,265. Do you think they do it for their own safety?—Yes.

31,266. Do any French boats come up here?—Yes, French boats and Dutch boats too.

31,267. Do they all come up here fishing?—Yes, and pretty close too.

31,268. They come within three miles of the shore?—I have seen them within two miles of the shore.

31,269. Have you ever been annoyed by their fishing?—No, I never was.

31,270. Were you ever interfered with by them?—No, never.

The witness withdrew.

JAMES WALLS called and examined.

J. Walls.

31,271. (*Mr. Caird.*) You were at one time engaged in the export trade of cod from these islands to Spain?—I was engaged in the curing.

31,272. In curing cod for exportation?—Yes, for exportation.

31,273. How many years experience had you of the cod-fishing in the Orkneys?—At that time I had 15 years or so. I was only five years engaged for the Spanish market. The rest of the time I cured for the home market.

31,274. Off what part of the islands were cod found in the greatest abundance when you cured?—On the south and north islands.

31,275. Were there many boats engaged then in the fishing?—Considerably more than are engaged now. I cannot give the exact number, but I should suppose there were about 100.

31,276. When did that business cease to be prosecuted?—In 1852.

31,277. What was the cause of its being stopped?—Partly because Mr. Anderson, of the Peninsular

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Company, who used to run a steamer, in order that the trade for the Spanish markets might be carried on, gave it up and ceased his connexion with the trade in the Orkneys.

31,278. It was not from any excessive charge of import duties, or anything that interfered with the sale of the fish?—No; it arose, I believe, from local causes in Orkney.

31,279. Was it a large export that was carried on?—About 600 or 800 tons a year were sent away, and sometimes more.

31,280. What were those fish worth a ton?—At that time they were worth from 12*l.* to 14*l.* a ton, shipped on board.

31,281. Has that source of income to the fishermen been entirely lost in consequence of the cessation of the trade?—Not as regards prices. Prices have advanced, but the quantity of fish caught is not nearly so large.

31,282. Has nobody taken up the trade since Mr. Anderson gave it up?—No, not for the Spanish market.

31,283. Was it not found a lucrative trade by Mr. Anderson while he followed it?—I am not aware, but I rather think not.

31,284. Had that anything to do with its abandonment?—I believe it arose from a bad system of management and from the prices.

31,285. Was the cure not considered satisfactory in the Spanish markets?—Yes.

31,286. Had the cure anything to do with the abandonment of the trade?—It was not so much the cure in Orkney as the carriage and cost of conveyance in Spanish bottoms.

31,287. Has any improvement been discovered in the mode of cure?—Yes, very great improvement.

31,288. Is the cure better now than it was then?—Yes it is.

31,289. But the Spanish markets have not been re-opened?—No, they go now by way of Shetland to Spain.

31,290. Is that because there is no direct communication with the Spanish market from here?—Yes, principally.

31,291. But it is still exported through Shetland to Spain?—Yes.

31,292. Has the fishing since that time much decreased?—Yes, by Orkney boats.

31,293. On the coast of the Orkney Islands?—Yes.

31,294. Are there no other boats which come on your coast now?—There are a large number of smacks from Grimsby and the south.

31,295. Then has the total catch increased rather than decreased by other means?—I suppose it is about the same.

31,296. Is the quality of the cod the same as it was?—They are better I think.

31,297. Do you know whether if the fishing were zealously practised the quantity that would be taken would show any sign of diminution?—I have no doubt that if the fishing was properly conducted and carried on that it would be greatly increased in the Orkneys.

31,298. At what season of the year is that cod-fishing carried on?—Through the whole season.

31,299. Both summer and winter?—Yes, summer and winter.

31,300. What kind of bait is used?—Various kinds. In the summer time they prefer fresh herrings if they can get them, but they generally use whelks.

31,301. We have been told in some places that where the herring bait can be had, the cod refuse all other kinds of bait?—They prefer herring bait.

31,302. Are all the cod caught by the Orkney and Shetland boats cured for the foreign market?—No.

31,303. Are some of them sent fresh to the home market?—Yes, and to the Irish market.

31,304. Is that a new destination for the fish?—The home market has always been a destination for the fish, but inferior fish have always been sent to the home market.

31,305. Are they partly cured?—They are all salted.

31,306. Then none are sent absolutely fresh?—No.

31,307. Do the Grimsby boats send their fish fresh?—They were accustomed to do so, but now they land them in Orkney and have them cured here. They cleanse them well and take up a large quantity at the end of the season and then go off for the winter season.

31,308. Are there a number of boats engaged in that fishing?—Yes, a very large number.

31,309. Are you able to say how many?—I don't quite know. Last year in Orkney there were about 40.

31,310. Is that an increasing number?—I am not aware.

31,311. You cannot say whether the number of boats engaged in the cod-fishing is greater now than it was some years ago?—The number in Orkney itself has greatly diminished.

31,312. But taking both your own boats, the Shetland boats, and the boats from the South, has the number increased or diminished?—I cannot speak with regard to the Shetland boats at all.

31,313. Do not the Shetland boats come here?—No.

31,314. Then taking all the boats which appear on your ground and comparing them with what the number was when you had an export trade to Spain, is the number as great now as it was then or not?—I think the number has diminished.

31,315. Have you ever heard that there has been any sign of a falling off in the fish; has the quantity of cod which can be caught on the coast decreased?—I don't think there has been much falling off. There has been a falling off as regards the catch of our own boats, but not as regards the aggregate number.

31,316. Are the boats engaged in the cod fishery larger or smaller now than they were when you were engaged in the fishing?—I believe that they are about the same size.

31,317. Has any change taken place in the size of the boats, the length of the lines, and the gear employed in catching cod?—No.

31,318. Has there been much change in the price of cod of recent years?—Prices have advanced considerably.

31,319. What is the change that has taken place?—From 4*s.* 6*d.*, which I paid for a hundredweight of fish delivered with their heads off, it has advanced to 7*s.* and 8*s.*

31,320. Then there has been an advance of nearly 100 per cent.?—There has been an advance of 75 per cent. at any rate.

31,321. That of itself, if the catch had continued as good, would have been a great temptation to continue the fishing?—Yes, but our herring-boats are annually diminishing in number.

31,322. What is the cause of that?—It arose originally, in my opinion, from two causes. One is the practice of advances made by the herring curers. I do not know what the motive was for resorting to that, but as the fishermen got the same price, whatever quantity of fish they had, the consequence was that they had no inducement to prosecute the fishing as they otherwise would have done. The herring-boats engaged in the cod-fishing also, and when the people came to receive payment, they found that half the money had been swallowed up by the curers or merchants, and so the boats fell off, and as they fell off they could not replace them again, as they had no money; that is one cause. Another cause has been the increased agriculture of the country. Our fishermen being partly farmers and partly fishermen they found that prosecuting the agricultural interest was more to their advantage.

31,323. Then the fishermen are not solely employed as fishermen?—No.

31,324. They are engaged in agriculture as well as in fishing?—Yes.

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31,325. In recent years, do you think that part of their occupation has paid them best?—They seem to have thought so. They do not get themselves so embarrassed and involved in debt as they did formerly when their connexion with the curers existed.

31,326. When they were engaged in the cod fishery, were they under a system of advances by the curers of cod?—No, Mr. Anderson and I refused to give them advances.

31,327. Did you pay them so much for what they brought on shore or did you give them wages?—We paid them for what they brought on shore.

31,328. So that their income was entirely in proportion to their own exertions?—Yes, when we had a man who had no advances from the herring curers, we found him generally an active and successful fisherman; but when we had a man who was embarrassed and in debt, we found that he had no inducement to be active and that that class generally finished as bad as they commenced.

31,329. Then the herring fishery has not been a profitable one to the Orkney fishermen?—No; when they might have been able to obtain 15*s.* or 16*s.* per cran they have been in such circumstances that they could only obtain from 8*s.* to 10*s.*; they were obliged to take what the herring curers offered them. The quality of the boats and the drift-nets fell away so much that at last it was not safe to go to sea, and the people were never able to replace the property.

31,330. Are there different classes of boats engaged in the fishing here?—Yes.

31,331. What are the different classes?—In some of the islands they prosecute the cod-fishing in skiffs or yawls, and in others they fish with the same boats that they use in the herring fishery.

31,332. Are they large boats?—Yes, they carry about 10 men.

31,333. Are there no decked boats engaged in the fishery?—Most of them are half-decked.

31,334. Are there none that can keep the sea in all weathers?—There are some small smacks or sloops.

31,335. Within your experience has the cod-fishing ground shifted at all?—The fishermen think so.

31,336. Have you reason to believe that that is so?—I think it does shift from one sea to another, but there is no permanent shifting.

31,337. Are there certain banks that are well known to be productive of cod?—Yes.

31,338. And those banks are regularly fished?—Yes.

31,339. Has there ever been any beam-trawling on this coast?—Not that I have heard of.

31,340. Are there any soles found here?—Flat-fish are not much caught here.

31,341. You have no flat-fish here?—A few are caught in shallow water sometimes, but not many.

31,342. Are not turbot caught?—Occasionally; there are a great deal of coalfish between Fair Island and the Orkneys.

31,343. Do you know anything of the haddock-fishery?—Very little.

31,344. Then are we to understand that the herring fishery in Orkney is a declining business?—Yes.

31,345. And in declining has it also diminished the cod fishery?—Yes.

31,346. That has not arisen from any scarcity of fish, but from the embarrassments of the fishermen?—Yes, we consider that the fish are here before they go to the Caithness coast. The fishery could be prosecuted with great advantage, but the people are not able to do it.

31,347. (*Professor Huxley.*) Was there any Government brand attached to the cod exported to Spain?—Yes, there was for the Spanish market.

31,348. On what principle was that brand affixed to the cod?—Under the inspection of the Board of Fisheries.

31,349. Was there no bounty on the cod then?—No, there was no bounty.

31,350. Was it continued after the bounty ceased?—I understand it was a condition of the bounty that they should be branded; latterly there was no value attached to it.

31,351. There was no value attached to the brand?—No.

31,352. How was that?—Mr. Anderson and the Spanish merchants considered that they were as able to judge as the Government inspector.

31,353. Did you find that the withdrawal of the brand had any effect on the continental market?—Not in the least.

31,354. Were no conditions attached to the cure before the brand was affixed?—Nothing but the brand.

31,355. The Government inspector would not brand them unless they came up to a certain standard?—Yes.

31,356. You found that you could do without it?—Yes.

31,357. The foreign buyer trusted to your cure?—Yes.

31,358. And so the system of branding dropped of itself?—Yes.

31,359. From neither party finding any advantage in it?—Yes.

31,360. When you speak of the system of advances, do you wish us to understand that the men spent all the advances made to them?—They spent them in support of their families and in other things before they realized anything to pay them up.

31,361. After they had been engaged in the fishing, were they able to pay those advances and to leave a margin?—Only a small one.

31,362. I suppose the advances were not spent very thriftily?—Not in all cases.

31,363. If they had spent them in a more economical way, could they have paid them off?—They were most anxious to get the advances, but they precluded them from making any arrangement as to price.

31,364. I suppose that having the money they spent it rather more freely than they would have done if they had had to work for it first?—It was not likely they would be more economical.

31,365. Has the system of branding herrings extended up here?—Yes.

31,366. Are you an exporter of branded herrings?—I exported one cargo last year.

31,367. What do you think of the system of branding?—I can give you no opinion upon it.

31,368. Are you in favour of it or otherwise?—I have not had such experience of the herring fishery as would enable me to give you my opinion. Perhaps I may explain also that I was an agent for four years in the lobster trade.

31,369. (*Mr. Caird.*) Can you give us any information as to the lobster trade?—Very little. During that time they were carried away by the smacks in wells; now the system is altered, and they go away by steamers.

31,370. Do they not go as fresh to the market?—I think they do; they go to Aberdeen.

31,371. Is the trade extensive?—It was. I think it has been doing better since the people were better paid; the business is altogether quite as well conducted, and it is rather increasing now; I am certain it is.

31,372. Have you any idea as to how much money may be brought to these islands in consequence of the lobster fishery?—I cannot say what may be brought now; eight or 10 years ago I could tell you.

31,373. What was it then?—About 2,000*l.*

31,374. 2,000*l.* a year?—Yes.

31,375. Did that include the crab fishery?—There never was at any time here a crab fishery, except a little, locally.

31,376. Do they not pay the expense of their long transit?—No.

31,377. Do you know anything in regard to the oyster fishery?—Nothing.

31,378. Is it a matter of little importance here?—Here there is little done in that way; there is only one place where they are caught.

The witness withdrew.

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ROBERT SCARTH called and examined.

31,379. (*Mr. Caird.*) I believe you have had experience of the different kinds of interests connected with the fishing trade in these islands for many years, have you not?—Yes.

31,380. Can you tell us whether the fishing interests of the Orkneys are increasing, stationary, or diminishing?—I think they have been increasing. They were stationary for a time, but I think they are again increasing, because the sale of the fish is becoming more immediately in the hands of the fisherman.

31,381. And they can get them more readily to market?—Yes, they can get them more readily to market, and the fisherman comes nearer the consumer than he used to do.

31,382. In that way the profits are less divided?—Yes, I think so.

31,383. I suppose that the price of the fish also has increased in recent years?—Yes, very much.

31,384. Do you think that the number of people engaged in the fisheries of all kinds in these islands is on the increase?—No, I don't think that. I believe it is because the agriculture of the country has very much improved and labourers are well paid for agricultural work. Many of them too have no capital to purchase boats and materials for the fishing, and not having been accustomed to it from their youth they will not go now. I think the fishermen are wearing out in this country.

31,385. But are the fishermen who have good boats and good tackle and who specially make fishing their business, making a good business of it?—They are making more of it than they did formerly. I think whenever they are independent of advances they are doing very well.

31,386. Has the system of advances proved injurious to the fishermen?—Yes, but without advances I don't see how the fishing could be carried on. Previous to 1815 there was no fishing whatever in Orkney except lobster-fishing; then a few fishermen engaged in the cod and herring-fishing for the market. In 1815 Mr. Driver and a few others commenced curing herrings on the North Island, and afterwards when Kirkwall was likely to go down, Mr. Laing introduced the system of advances, and by that means boats and nets were created. The men here had no capital to do it for themselves, and the fishing consequently is only a recent thing in Orkney. We never have had true fishermen here. The men have not been devoted only to the fishing as they are in other places. Our fishermen have been partly farmers and partly fishermen. I think the decline in the fishing has been owing much to that circumstance.

31,387. And also to the increase in the demand for agricultural labour?—Yes.

31,388. Has the decline in the manufacture of kelp had anything to do with the embarrassed circumstances of the people?—Yes. In a great part of the island they don't manufacture kelp; there are only a few of them engaged in that.

31,389. You described the gradual growth of the fisheries as being the consequence of advances made to the fishermen; how long did that system continue; when did it begin to fall off?—Of course the fishermen were enabled to go on at first by means of these advances, but the result in the end was prejudicial to them. After a time, as is well known to all here, the fishermen got into the habit of taking larger advances, and the consequence was that they had to borrow money and they sank under a load of debt. Others who were careful and cautious went on pretty fairly, and to this day are fishing and doing well.

31,390. By degrees are you getting from that unsound class of fishermen to a sounder class?—Yes, quite so.

31,391. And are the fishermen who are prosecuting the business becoming more entirely fishermen and less connected with farming?—Yes.

31,392. Is that the case inside and outside the island?—All through the country.

31,393. Is one part of the coast more favourable to the existence of a class of fishermen solely dependent upon fishing than another?—The North Islands are more particularly so.

31,394. Is that where the cod-fishing is most prosecuted?—Yes.

31,395. Has there been anything in the state of the fish market to have caused any decline in the cure of codfish?—I don't think there has been.

31,396. Do you know whether the banks which formerly yielded cod are as productive of cod as they ever were?—I believe they are, but the fish are not found each season on the same banks; they shift their ground a good deal. At least when I had experience of the fishing I was living in the North Island and I found that to be the case. Where we had a great number one year we did not find that they came back there the next.

31,397. Has there been a decided decline in the system of curing cod in this island?—I cannot tell you anything about it since the year 1849, which was the last year I had anything to do with it. I have not given much attention to the cure of the fish since, but the advance in the cure up to that time was very considerable.

31,398. Is it your opinion that the cod fishery in these islands might be very successfully extended?—If we had a race of fishermen bred to the business as they have in other places, and if they followed it, I think it might be very successfully extended. My reason for thinking so is that within the last few years two Banffshire boats came down to the west side of the main land where the fish were never sought before and they cured a great quantity of fish besides supplying the people about the country with halibuts, eels, and skate.

31,399. Was it principally cured cod?—Yes, cod and tusk.

31,400. Did they catch them on grounds that were not known to the country people?—It was known but not followed there. They had only hand-lines, but these men had the proper long-lines, and they have had a most successful fishing for the last three years.

31,401. Are you of opinion that the coast is capable of yielding a large amount of fishing?—I believe that the sea is swarming with fish. From the large quantity which I see brought ashore every day I have an opportunity of judging. I saw also the quantity cured and stacked by each of these large boats. They are very large boats. The first year they came, supposing they were coming to a barren country, they carried with them turnips, potatoes, and provisions for consumption. Afterwards they merely brought their fishing gear when they found they were among hospitable people, who treated them very well. They have loaded their boats of 30 tons completely with dried fish and taken them home with them, besides selling as much as 40*s.* worth of green fish in a day to the country people.

31,402. Then the people of the islands are to some extent indebted to the exertions of people from a distance for a supply of fish?—Yes. The same thing has been done at Offa, where Mr. Fortescue introduced some poor fishermen from Buckie, and most of the inhabitants have had a continual supply of fish since.

31,403. Do they prosecute the fishing with greater industry and perseverance?—Yes, and they have better materials and lines for the purpose.

31,404. Has the price of fish, within your knowledge, gradually increased?—Yes; the price of green fish has much increased.

31,405. Is the example which has been shown by the men coming from the south, and the profitable fishing which they have had, likely to be followed by the native fishermen here?—Yes, I think so.

31,406. Then do you think it is likely to increase the fishing on the islands themselves?—Yes, I think the fishermen are fully equal to those men in hardi-

hood in going to sea, but they have not been bred to the fishing from their infancy as those men have. Neither have they materials and lines.

31,407. I suppose they have always a little bit of land to fall back upon?—Many of them have pieces of land to fall back upon.

31,408. We have been confining our attention exclusively to the cod and herring fishery, can you tell us anything about the haddock fishery?—No, except that it has increased. We more frequently see haddock in the market than we did formerly.

31,409. Do you think it is capable of still further increase?—Yes.

31,410. Can you tell us anything with regard to the herring fishery?—I know nothing about it now. When Mr. Laing attempted to establish the fishery here the herring seemed of first-rate quality. Most of them were packed up for Spain and the West Indies. We were indebted to the Fishery Board for the attention paid by their Fishery officer. When the thing was quite new, and the people working, as it were, quite inexperienced, the instructions given by the Fishery officer were invaluable. That was from the year 1819 to 1823 or 1824. At that time we could send no fish to the West Indies without having them properly branded; so much did the character of the fish depend upon the brand.

31,411. Have you yourself any knowledge of the brand?—At that time I was greatly in favour of it. I cannot speak of it now. I have been out of the trade for a long time.

31,412. Do you not think that the fishing interests of these islands might be left to depend upon the natural rule of increased remuneration for increased exertions rather than upon any help from Government?—Yes; I certainly think so.

31,413. You are not in favour of artificial assistance of that kind?—Certainly not. I don't see any advantage to be derived from help of that sort.

31,414. You stated just now, in answer to a question from me, that you believed that in the early infancy of the fisheries they were indebted to the Fishery Board for instructions in the art of fishing, do you think that the time has arrived when that is no longer necessary?—I don't say that. With regard to the surveillance of the Fishery officer and the Fishery Board, I think it would still be needed, and that the fishermen would be much indebted to it.

31,415. Do you not think that the fishermen who have come from the south and who have introduced improved methods of fishing, would be better able to instruct the fishermen than a paid Fishery officer?—I should think so.

31,416. From the fact of their own success?—Yes.

31,417. And, therefore, you would leave the interests of the fishery in these islands to that natural mode of teaching rather than to any artificial mode of teaching?—Decidedly. But the Fishery officer was of very great advantage in the early stage of the fishing. I always look upon this as an advantage—that the Fishery officer would check any chance of sending away bad fish among good. If that were done it would greatly injure the market. As to the Spanish market, the services of the Fishery officer were decidedly valuable. The cod had all to be examined, and all below a certain length were struck out, and any that were improperly cured, or thin, or wasted, were thrown aside. The fish that were then considered fit for the market and were branded by the Fishery officer to be shipped.

31,418. (*Professor Huxley.*) The previous witness told us that the brand became neglected for the Spanish market?—That was not the result of my experience when I had to do with the Spanish market.

31,419. Are you aware if there is any mode of fishing practised on this coast which is destructive and wasteful?—I don't think so.

31,420. Is circle net-fishing practised on this coast? No.

31,421. Nor trawling?—No.

31,422. Is there any seining?—No; the only seining is a large seine net that is principally used to take the young of the coal-fish.

31,423. Is that prosecuted considerably here?—Yes; considerably in this harbour.

31,424. Is it considered that it is destructive to the fish?—There is a great variety of opinion about it; but it does not appear to destroy them, for they have had as many fish as ever they have had.

31,425. Has it been practised for many years?—Yes.

31,426. Are there large quantities of young coal-fish caught in that way?—Yes, very large quantities.

31,427. Are stake-nets of any kind used here?—No.

31,428. (*Mr. Caird.*) There are no salmon caught on these islands?—No.

31,429. Not along the coast anywhere?—Not as far as I know. There are disputed cases of a single fish being caught; but it has not been well authenticated that there ever was a salmon caught on the islands. I have no doubt, from the appearance of many of the streams and lochs, that if ova were transplanted here we would have salmon, because I believe that the fish have their particular beds, and that they return every year the same as migrating birds do.

31,430. You have no large rivers?—We have no large streams; but we have some large lochs, which are closely connected with the sea.

31,431. Would salmon breed in those lochs?—Yes; there are excellent gravel banks. I think they would breed there, and that if they were once tried the salmon would return every year.

The witness withdrew.

CHARLES SMITH called and examined.

C. Smith.

31,432. (*Mr. Caird.*) You are a fisherman here?—Yes.

31,433. In this neighbourhood?—Yes.

31,434. Have you followed all the different kinds of fishing that are practised here?—No, I have only followed the herring-fishing to any extent.

31,435. At what seasons of the year are the herrings fished for in the Orkneys?—The latter part of July and August and about two weeks in September. There are about two weeks in July that the fishing is followed.

31,436. Is there no winter fishing?—No.

31,437. Nor any May fishing?—No; I believe there was a May fishing at one time on the west coast of the islands, but I am thinking that that has been discontinued for some time past. I have not heard of it latterly.

31,438. Have you been for a good many years engaged in the summer fishing?—The herring-fishing do you mean?

31,439. Yes.—I began in 1817, and I have continued it ever since.

31,440. Are you still fishing with the same kind of boat you began with, or have you a larger boat?—The boat is rather larger.

31,441. And the fleets of nets, how are they?—They are larger also; but there were as many of them when I began.

31,442. Do you manage to get twice as many fish?—Sometimes three times as many.

31,443. Are the shoals of herrings improving or diminishing?—They are some years improving and then another year there will be a great diminution.

31,444. They vary a good deal?—Yes.

31,445. They fluctuate from year to year?—Yes, very much.

31,446. Do they appear on the same part of the coast as they were in the habit of coming to formerly?—To some extent, but they change their ground considerably. For some years you will find

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them in shoals in one place, and then for a number of years you will not find them on the same ground. Perhaps there will be miles between the places where you find them.

31,447. Has the number of fishermen engaged in taking them increased or diminished since you began?—The boats have greatly diminished, but the men have not diminished so much as the boats.

31,448. Are they larger boats?—Yes.

31,449. And do they carry more nets?—Yes.

31,450. How many men were there in a boat when you first began?—Only four.

31,451. How many men are there in a boat now?—Five generally, and six in some of them.

31,452. Do you think there are more nets put into the sea than there were then considering the increased size of the boats now?—There was one time when I think there were quite as many nets put into the sea as now. We are beginning to improve here a little again. The boats have rather increased this last season.

31,453. Has the business been improving in consequence of the increase in the price of the fish?—I cannot say anything about the increase of the business. There is one thing, and that is that the fishermen are clearer than they have been for some time past. They are not so much in the hands of the curers though there are some who are yet.

31,454. Has the system of advances to the fishermen by the curers much interfered with the herring fishery?—Yes, it has interfered with it very much, because it placed the fisherman entirely in the power of the curer.

31,455. Do you consider that it was hurtful to the fishing?—I consider that to a great extent it was the ruin of the business. Perhaps it raised it at first, but by and by it converted it into a very bad business. I daresay one thing that made it bad was that a great number of fishermen were not very faithful, they took the advances at first and they sold their fish to other persons after all. That however is all ended now.

31,456. Are your herrings principally cured for the foreign market?—Yes, but they are sold both in the home and foreign markets. For a while I have been selling for the home markets. I am a fisherman and not a curer.

31,457. Then you do not know where they go?—I believe they went to Ireland last year.

31,458. Has the size of the mesh of your nets been the same that it was in former years?—Yes, just about the same.

31,459. Does anybody ever interfere with you as to the size of your nets?—No, nobody.

31,460. Nobody ever inquires into that at all?—No.

31,461. Or as to the time of the evening when you should shoot your nets?—I never saw anyone meddled with except once. One morning they were shooting their nets and an officer interfered.

31,462. Do you think there is any occasion for interference in that respect?—I never saw any.

31,463. Is any harm done by the men being left to shoot their nets as they like?—No, they cannot fish unless they shoot at a proper time.

31,464. Do you think it would be of advantage to have a regulation of that kind?—No.

31,465. Do you think it would be best to leave them to consult their own interests in the matter?—Yes.

31,466. Did you ever see any destruction of spawn by any mode of fishing adopted here?—I never saw any spawn destroyed. I have seen spent herrings in multitudes.

31,467. (*Professor Huxley.*) Are there any modes of fishing practised here which destroy the young of the herring?—I do not think there are.

31,468. What is the size of the mesh you use here in your nets?—There are generally about 30 meshes to the yard; they run about 30 and 31.

31,469. Does anybody look after the size?—Nobody.

31,470. Can the fishermen here make the mesh of any size they like?—They have done so, and they have made it according to the way in which they felt they could best catch the fish with it.

31,471. Does nobody interfere or examine the size of the mesh?—Nobody.

31,472. Do you largely cure spent fish here?—They cure all they catch, and they have a good deal of spent fish sometimes.

31,473. Have you ever practised the winter herring fishery here?—No, it was never tried here.

31,474. Are there any herrings caught here in small quantities for bait?—No.

31,475. Does anybody try for them?—They were never tried for as far as I know.

31,476. Do you think that the herrings are off the coast at that time?—I have never seen any sign of it.

31,477. Do you never catch them in the stomachs of the cod at that time?—I have caught cod in the winter time, but not with herrings in them.

31,478. Had they any other fish in them?—Yes, small cod, but nothing of any consequence.

31,479. Have you ever cured fish as well as fished for them?—No, I never cured fish.

31,480. Have you had any interference with your fishing here by the French or Dutch fishermen?—The Dutch come now upon our coasts at the latter end of the month of June. They were down here this year.

31,481. Do any considerable number of Dutchmen come?—There are a number of them, but how many I cannot say.

31,482. Are the fishermen of the Orkneys interfered with by them; do they shoot their nets down upon you?—They are away before we go out to the fishing.

31,483. Do they fish in deeper water than you do?—Yes, and they are deeper in the water too.

31,484. Do they sink their nets deeper than you do?—Yes.

31,485. Have you ever known any case in which the French or Dutch fishermen inflicted damage to the nets of the Orkney fishermen?—Not that I am aware of.

31,486. You never heard any complaints of that kind?—No, I never heard any complaints.

31,487. (*Mr. Caird.*) Is there any influence upon the fisheries by the spring or neap tides?—There are some places where the tides slack at the springs and where they are rapid at the neaps.

31,488. Whereabouts are the best fishing grounds?—At Stronsa; from the Start up to the heads and about the heads generally.

31,489. About the heads of Stronsa?—Yes.

31,490. Are those grounds well known to the herring fishermen?—Yes, they are.

31,491. Are there any herrings caught in Scapa Flow?—I believe there are in the summer time. There is one thing I should like to mention and that is that some means ought to be taken to prevent the fishermen from injuring one another at sea. They take away each other's buoys and do great damage to one another when they come in contact. I think that ought to be put a stop to.

31,492. Would you like to see a system of interference with you established in that respect?—I should like to see a system established which would prevent any sort of theft of buoys.

31,493. Would you be willing to pay the expense of a police to protect you at sea?—I do not know anything about that, but we should be willing to be protected in any way.

The witness withdrew.

KIRKWALL.

JOHN SHERER called and examined.

J. Sherer.

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31,494. (*Mr. Caird.*) You are a fisherman and a fish-curer?—I am a fish-curer. I never was at the fishing.

31,495. Of what kind of fish have you had the curing?—Nothing but the herrings; I have been curing herrings since 1817.

31,496. Has your cure been increasing in quantity during that period?—Yes; but the fishings here are very irregular. Last year there was a very good one as is proved by the returns of the Fishery Board, which show that it was equal to the three former ones. There were 26,000 barrels, I think.

31,497. Where do you carry on your cure?—At the farm of Holm Sound.

31,498. Is that where there is a large catch?—Some years there is, but we generally get most of our herrings from Stronsa and the northern islands.

31,499. Do they bring them to you?—Our own boats go there and come round with them.

31,500. On that farm in the course of a season how many barrels of herrings do you cure?—We differ according to the season. Last year, as I just said, was a very good one. Upon the average the boats brought in 140 crans. I got as many as 700 crans from five boats. That was very good. Some years it has been as low as 25.

31,501. Then it must make a great difference to the fishermen, whether there is a good year or a bad one?—Yes, the fishing varies very much; it is very uneven.

31,502. Have you been in the habit of having your cure branded with the Government brand?—Yes, if I send anything to the foreign markets; but not if I send the fish to Ireland. Last year I branded 500 barrels.

31,503. Then you would send away 200 without a brand?—Yes, they went to the home market.

31,504. Were they cured in the same way?—Yes, they were of the same quality and cured in the same way,

31,505. Which paid you the best?—They both sold alike; but if they had gone unbranded to the foreign market there would have been a deal of difference.

31,506. But you saved the price of the brand?—Yes, on a few. Three-fourths of the fish that are caught on the north-east coast go foreign.

31,507. Do you approve of the continuance of the Government brand?—Yes, I do.

31,508. Could you not sell your herrings abroad without it?—Not with any satisfaction.

31,509. Do foreign buyers come to you?—They come to Wick but not here.

31,510. Cannot they depend upon anything but the brand?—No.

31,511. Is there no inspection at the place of cure?—No, the fish just go from hand to hand.

31,512. Are there any disputes when they are exported abroad?—There have been disputes but they have resulted in nothing. It was only a trial to get out of a falling market. The Fishery Board sent over a commission to inquire into that matter and after that commission went out it was never tried. That was in 1862, I believe.

31,513. Have you had experience of the system of making advances to the fishermen?—That is not much done where I am.

31,514. Is it not a system that is usually followed there?—Well, to a very trifling extent. A few pounds may be advanced perhaps for an outfit; but there are no heavy advances made.

31,515. Have you not found that those advances have been going on in arrears from year to year?—Yes, further south.

31,516. But not with yourself?—No, it has not done any material injury to me, but it would perhaps be good if advances were never given except fit to out the boat for another year.

31,517. And you would never have advances made to any large extent?—No.

31,518. Never to such an extent as would make it burdensome to the fishermen, and prevent them from coming year you again?—I never knew that done. Perhaps 20*l.* would be the highest advance.

31,519. What would be the value of a fisherman's boat and gear ready for the sea, with all the nets and every other appliance?—About 150*l.*, taking a new boat and all her drift-nets.

31,520. And in advancing money to the fishermen you never give more than 20*l.*?—The average would be nothing like that. That might perhaps be given upon a new one.

31,521. What would the average be?—I cannot say exactly. It would depend upon the boat and the nets.

31,522. Have the fishermen who bring the fish to the place you speak of increased or diminished in number within your experience?—They have rather decreased.

31,523. Have the boats decreased in size?—No, they have increased in size. They are larger boats, and the drifts are about double.

31,524. Have those increased boats and nets resulted in a larger fishery than there was in former years?—Yes, as far as the boats are concerned, but the boats are fewer in number. They have been increasing, however, within the last two years.

31,525. Do the herring fishermen who fish there engage in any other fishing at other seasons of the year, or do they go to their farms?—Most of them have little patches of ground which they cultivate.

31,526. Do they cultivate them at all seasons except the herring-fishing season?—Yes.

31,527. Is that prejudicial to the prosecution of their business as fishermen, with perseverance?—I have no fault to find with regard to the herring-fishing.

31,528. But with regard to other kinds of fishing?—It may be so.

31,529. Have the men you speak of never been in the habit of following any other fishing than the herring-fishing?—No.

31,530. That is just the sort of harvest which they get from the sea?—Yes, and they attend to the farm closely, but they do not follow any other fishing.

31,531. Are they not experienced or skilled in any other fishing?—No.

31,532. Then the same class continue to be employed in herring-fishing as formerly?—Yes.

31,533. But they do not increase?—No.

31,534. Then their families do not go into the same business?—No, some of them are dropping off If we have a poor season it does not pay, and then they drop off from it.

31,535. Has your market for the home consumption been increasing in proportion to the quantity exported abroad in recent years?—No, the Irish market has much declined. They do not take half the quantity which they took since I can recollect.

31,536. But there is always a plentiful demand from the north of Europe?—Yes.

31,537. From Prussia?—Yes.

The witness withdrew.

DONALD HARPER called and examined.

D. Harper.

31,538. (*Mr. Caird.*) You are the Fishery officer stationed in Orkney?—Yes.

31,539. What extent of district have you the charge of?—The whole of the Orkney islands.

31,540. Then the returns you can place in our hands will apply to the fishing of the whole of the Orkney islands?—Yes.

31,541. Have you made out returns of the number of boats employed, their value, and the number of fishermen from the year 1855 to 1863 inclusive?—Yes.

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31,542. Are they applicable to the whole of the islands of Orkney?—Yes.

31,543. They apply to the whole of the fisheries?—Yes; the boats are put in one class, although they are in reality in three.

31,544. Then do you put in a return of the number of boats, their tonnage, the number of fishermen, the number of fish-curers, of coopers, the value of the boats, the nets, and lines, and the total value engaged in the different kinds of fishing in the Orkney islands from the year 1855 until the year 1863 inclusive?—Yes, the following is the return:

AN ACCOUNT of the Number of Boats, Decked or Undecked, employed in the Herring, and Cod and Ling Fisheries from the Year 1855 to 1863, with the Number of Fishermen and Boys, by whom manned, the Number of Fish-curers and Coopers, with the Estimated Value of Boats, Nets, and Lines.

Years.	Number of Boats.	Tonnage of Boats.	Number of Fishermen and Boys.	Number of Fish Curers.	Number of Coopers.	All other Persons estimated.	Estimated			
							Value of Boats.	Value of Nets.	Value of Lines.	Total Value.
							£	£	£	£
1855	623	3,989	2,507	40	75	1,126	11,066	11,473	761	23,300
1856	703	4,201	2,517	39	67	1,538	12,264	18,086	820	31,170
1857	683	3,968	2,489	32	66	1,006	11,390	17,554	563	29,507
1858	708	5,087	2,521	35	73	769	11,423	13,072	440	24,935
1859	692	4,001	2,515	31	69	729	10,828	11,835	479	23,142
1860	691	4,033	2,510	30	73	799	10,826	12,128	491	23,445
1861	687	3,941	2,505	29	69	753	10,964	12,046	435	23,445
1862	672	3,882	2,449	25	52	1,028	10,788	11,761	446	22,995
1863	656	3,818	2,399	29	66	1,228	10,014	11,054	466	21,534

31,545. You have also an account of the quantity of cod and ling cured in the Orkney islands?—Yes.

31,546. From what dates?—From 1855 to 1863 inclusive.

31,547. What is the return?—It is as follows:

AN ACCOUNT of the Quantity of COD and LING cured in Orkney for each Year, from 1855 to 1863.

Year.	Number of Fish.	Cwts. Cured, Dried.	Tons.	Cwts.
1855	353,491	9,553	477	13
1856	352,655	9,706	485	6
1857	483,152	12,062	603	2
1858	445,560	14,065	703	5
1859	479,970	13,850	692	10
1860	453,178	13,800	690	0
1861	413,907	12,852	642	12
1862	404,685	12,354	617	14
1863	417,527	13,549	677	9

31,548. You have also an account of the quantity of herrings cured in the Orkneys?—Yes, it is as follows:—

AN ACCOUNT of the Quantity of HERRINGS cured in Orkney from 1855 to 1863.

Year.	Boats.	Average Crans.	Total Crans.	Average Price.
				s. d.
1855	362	76	27,512	12 6
1856	377	31¼	11,800	15 0
1857	380	35½	13,481	19 0
1858	370	37¼	13,822	16 0
1859	330	34¾	11,490	20 0
1860	347	33	11,890	20 0
1861	335	28¾	9,600	20 0
1862	274	43	11,755	18 0
1863	220	97	21,390	13 0

31,549. Have you been long stationed here?—No, only very recently.

31,550. From when?—From the 1st of May.

31,551. The 1st of May last?—Yes.

31,552. Then you have not visited all the stations yet?—No, but I have visited the principal fish-curing stations.

31,553. At the principal stations do you find that the fishing is practised with the same perseverance as before?—The herring-fishing has been more than it has been for the last six or eight years.

31,554. How is the cod and ling fishery?—The weather this year has been unfavourable for the cod and ling fishery.

31,555. It has not been as successful as formerly?—No, it has not met with the same success.

31,556. That has been on account of the weather?—Yes, the fishermen tell me that.

31,557. Have you heard of any decline in the quantity of fish caught off the coast of the Orkneys?—Some of the curers say it is owing to the fishermen not being so diligent as they were at one time.

31,558. Not from any want of fish?—They say so to me.

31,559. Have you heard that with regard to any other kind of fish as well as cod and ling?—No.

31,560. How is the haddock fishery here?—There are very few got on the coast of the Orkneys.

31,561. Is it a fishing that is not much followed?—Yes.

31,562. Does that arise from the fact that there is no paying market for haddocks on this coast?—There is a scarcity of haddocks on this coast, I think.

31,563. It is not a plentiful fish here?—No.

31,564. Is there any trawling on this coast?—None that I ever heard of.

31,565. Is there any fishing for soles?—Not that ever I heard of, but they take a great many of the young saithe; they draw them in with the sweep net.

31,566. And how do they use it; from the shore?—Yes.

31,567. Does a boat go out?—I am not aware how they manage it. I have never seen them. There is a person here from South Ronaldsha who can tell you all about it.

31,568. (*Professor Huxley.*) Do you know anything about a winter fishing here for herring?—No.

31,569. Have you not heard of such a thing on any of these islands?—No; nor is there any winter fishing going on here in these islands.

31,570. Have you ever heard of herrings being found here in the winter?—Yes.

31,571. Where?—At the different creeks; at Scapa Flow, St. Margaret's Hope, and other places.

31,572. Are they a smaller description of herrings?—Yes.

31,573. Are they caught with the large herrings?—We get them sometimes larger with the sillock.

31,574. Are they young herrings, or are they full grown?—They are young herrings. When I arrived here in May they were getting a herring which was very like those they get at Wick.

31,575. (*Mr. Caird.*) Had you had experience as a Fishery officer for some time on the coast before you came here?—No, I had none before.

31,576. Is this the first time you have been a Fishery officer?—Yes.

31,577. Did you live on the sea coast before?—Yes.

31,578. Where?—At Wick.

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31,579. Do you think from what you have heard since you came to the Orkneys that there is any great hardship in the weather here which prevents the fishermen from following their business more than on the coast of Caithness?—The tides are very rapid here.

31,580. Do they experience bad weather here and strong tides?—Yes.

31,581. Are there not strong tides and bad weather on the Caithness coast as well as here, and not so good harbours on the Caithness coast as in Orkney?—Perhaps so.

31,582. Have you heard any complaints from the fishermen as to the difficulty of prosecuting their business arising from the uncertainty of the weather, and the strong tides?—Yes.

31,583. But it does not occur to you that it is a greater difficulty than on the Caithness coast?—It is not as bad for getting out to sea and getting in again. The winter is perhaps more regarded here than on the Caithness coast owing to the strength of the tides.

31,584. (*Professor Huxley.*) With light winds might it be difficult for the fishermen to bring their cargoes home?—Yes.

31,585. More so than on the Caithness coast?—Yes.

The witness withdrew.

JOHN CROMARTY called and examined.

J. Cromarty.

31,586. (*Mr. Caird.*) Are you a fisherman?—Yes.

31,587. You know something, I believe, about the mode of fishing by circle-net?—No, I never saw a circle-net set.

31,588. Have you seen a seine-net?—Yes, I have seen a seine-net.

31,589. Do you know how to manage it?—Yes.

31,590. How is it done?—It is taken into a boat which goes off from the shore and takes a sweep round and shuts all within it.

31,591. What do you catch with it?—Small coal-fish.

31,592. Is it practised on particular parts of the coast?—No, nearly all over.

31,593. Anybody who likes to fish with that net can do so?—Yes.

31,594. Is it followed to any great extent?—It is followed on the coast. People do it for themselves.

31,595. Just to catch fish for their own use?—Yes.

31,596. Then is it mostly the case that any person who has a house near the shore practises that kind of fishing for his own use?—They will have a net among a whole lot of people, perhaps one net will serve 20 families.

31,597. So that there is a very good supply of fish at home generally speaking?—They get a good deal of them in the winter.

31,598. Are they sillocks that they get?—Yes.

31,599. They are never fished for sending to the market?—No, they are not. They are not sent away until they come to be large.

31,600. Do they form a considerable article of food among the people?—Yes, they do.

31,601. Are you acquainted with the other kinds of fishing followed in the Orkneys?—Yes, I have been at the cod-fishing for years.

31,602. Do you think the cod-fishing is capable of being increased in the Orkneys?—The codfish have left the country very much. There are not so many of them to be found as we took there at one time.

31,603. Are they not so numerous now as they were some years ago?—I was master of a small fishing-boat for three years constantly, and I was not able to get enough to keep them up.

31,604. Have you been at the cod fishery within recent years?—No.

31,605. When was the last time you were at it?—Twelve years ago, and then I was in a smack.

31,606. Then you cannot tell us what is the state of the fishing now?—I have been at it since, but not constantly. The last time I was at it was five years ago, and there were very few to be got. Where before I could have got 20,000 in a season of three months, I could only get a few hundreds.

31,607. What do you think is the cause of the change?—I do not know. I think it is that the small fish in all the bights and bays are caught up when they are young, and they cannot get the large ones in the sea in consequence.

31,608. Did you ever try the haddock-fishing?—Yes, I have been after the haddocks too.

31,609. Are there plenty to be got here?—There were plenty once, but it is nothing now like what it used to be.

31,610. Have they changed their ground?—They have changed their ground, but I have no doubt that good fish are to be caught if the fishermen went round the coast to the Lewis. Sometimes when fishing round by the Butt of Lewis and Cape Wrath we have caught from 30 to 40 tons.

31,611. Whereabouts did you get your best fishing?—The best fishing we got from Cape Wrath.

31,612. Not in the Orkney islands at all?—Yes, we were in the habit of fishing here and did a good fishing. We also had a good fishing both to the eastward and westward. Sometimes we went as far as the Faroe islands.

31,613. You were sure to find them somewhere?—Yes.

31,614. What is the size of the mesh of the seine which you say is used here?—The mesh is of a very small size, not more than half an inch.

31,615. Is it a seine with a cod—a pocket?—It is just a straight herring-net only it is of great length and not so deep.

31,616. Then it is not a regular seine with a pocket?—No, not at all.

31,617. Did you get many young herrings among the sillocks?—Sometimes we have caught a few.

31,618. Did you get any garvies?—Garvies?

31,619. Yes, sprats?—Sometimes we got a few, but not often.

31,620. But you did get them sometimes?—Yes, I have seen them off Stromness, but it is not often they are here now.

31,621. Do you think that the catch of these fish with the seine has a tendency to destroy the fish out at sea?—No; I think the small cod are all caught up when quite young, not with the seine but with lines. They are caught in that way when very young and they are not allowed to grow big.

31,622. Are there more caught in the seine than on the lines?—Yes, but not so many cod.

31,623. What are mostly taken up with the seine are the saithe?—Yes, sillocks, and perhaps a damaged cod among them.

The witness withdrew.

ROBERT BROCK called and examined.

R. Brock.

31,624. (*Mr. Caird.*) You are a fisherman here?—I have been a fisherman, but not of late years.

31,625. What kind of fishing did you particularly follow?—Herring-fishing.

31,626. Anything else?—Lobster-fishing.

31,627. Any other kind?—No.

31,628. Have you ever been in the habit of fishing in Kirkwall Bay?—Yes, for sillocks.

31,629. With a sweep-net?—Yes.

31,630. Did you find it a profitable fishing?—Yes.

31,631. Are there always plenty of these sillocks to be had?—Yes.

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31,632. At all times of the year ?—No, only in the winter season.

31,633. Did you sell the fish that were caught in that way ?—Yes, when we could get them sold.

31,634. Were they got so plentifully that they only brought a small price ?—They were got so plentifully that we had to sell them for the dunghill in some cases.

31,635. They were not sold to eat ?—No.

31,636. Are they good to eat ?—Yes.

31,637. Is there a large quantity of them consumed ?—Yes, by the people.

31,638. In the winter time ?—Yes.

31,639. What price are you in the habit of selling them at ?—About three shillings the cran.

31,640. Then it is a very cheap kind of food ?—Yes, very cheap indeed.

31,641. Did they salt them or use them fresh ?—They did not salt them.

31,642. Are there many boats engaged in the winter in that fishing ?—Yes, a good many.

31,643. Is that commonly the case round a good part of the coast of these islands ?—Yes, they get them all round the coast of these islands.

31,644. Everywhere ?—Everywhere.

31,645. Are they used for bait at all ?—They do not make very good bait.

31,646. Do they try them for bait ?—They do try them, but they do not do very well.

31,647. Are you always certain of catching them when you go out ?—Yes, generally.

31,648. Are they in such abundance that you are quite sure of getting them ?—Yes, sometimes, but not at all times.

31,649. But you are certain of getting less or more ?—Yes, less or more.

31,650. Do you ever get large quantities ?—Yes, I have seen six or seven boatloads taken at one haul.

31,651. Then they will be a very cheap food for the poorer classes in the winter time ?—Yes.

31,652. And they are very much used in that way ?—Yes.

31,653. Have you ever been at the haddock fishery here ?—Yes.

31,654. Have you found it a good fishery ?—Well, at one time they were more plentiful than we find them now.

31,655. Do they not come on the same ground that they were formerly found upon ?—No.

31,656. What do you think is the cause of that ?—I cannot say.

31,657. Have you also been a cod fisher ?—No, I have not fished the cod much.

31,658. Have you ever fished cod at all ?—I have fished cod, but not much.

31,659. Are you still following the herring-fishing ?—No.

31,660. Did you find it a profitable fishing generally ?—The herring-fishing ?

31,661. Yes.—It was very well for a few years, but it got very bad, and a good many dropped it.

31,662. Did they drop it because they found it was ceasing to be productive to them ?—They dropped it because the fish could not be found. There were a few years here when the fish could not be found, but it got better a few years back.

31,663. Have you any experience or knowledge with regard to the system of advances from the herring curers to the fishermen ?—Yes.

31,664. Is it advantageous to the fishermen or not ?—I think it is not advantageous to the fishermen. I think it is very bad for them.

31,665. You think they had better suffer a little, and endeavour to do without it ?—Yes, I never had any advance.

31,666. Has the system of advances diminished the number of fishermen ?—It has greatly.

31,667. Have the fishermen been getting into embarrassed circumstances, and not been able to get out of them ?—They got in debt, and the curers took their boats and nets and everything away from them.

31,668. (*Professor Huxley.*) Did you ever catch any full-sized herrings here in the winter time ?—Yes.

31,669. Full-sized herrings ?—Yes.

31,670. At what time of the year ?—In the winter.

31,671. In January or February ?—I think I have in the month of January caught full-grown herrings.

31,672. In what condition were they ?—They were about half full.

31,673. Did you ever catch any spent herrings at that time ?—No.

31,674. Not in January or February ?—No.

31,675. Did you only catch one now and then ?—Yes, they were not plentiful.

31,676. What time do the herrings spawn here ?—In August and September.

31,677. (*Mr. Caird.*) Can you tell us anything about the lobster fishery ?—Yes.

31,678. Have you followed it ?—Yes.

31,679. Have you found it increasing ?—Yes, it is increasing.

31,680. Is the price of the lobster better than it was formerly ?—It is more than double what it was formerly.

31,681. That would make it therefore an object of increased importance to the people who follow it ?—Yes.

31,682. Do more go out to it ?—Yes, a great many more.

31,683. Are there more lobsters caught than there used to be ?—Yes, I think so from the experience I have had.

31,684. Are the places where the lobsters can be fished extensive on the coast of Orkney ?—At what time of the year ?

31,685. At the proper time ?—They fish them here all the winter now.

31,686. Are there many parts of the coast where they can be obtained ?—Yes, they can mostly be obtained all round the coast.

31,687. Have the lobster fisheries shown any sign of falling off ?—None. From all the experience I have had they have shown an increase.

31,688. Is it likely to be an increasing business ?—I think so.

31,689. Is it paying very well ?—Yes, it is paying very well.

31,690. Do you know anything about the export of whelks ?—Yes.

31,691. Is that a large business ?—There is a good deal done in that way.

31,692. Where are they sent to ?—To London.

31,693. Are they sent by steamer ?—Yes.

31,694. Is the trade increasing ?—No, it is decreasing if anything.

31,695. When you say there are a good deal sent away, what number of tons go away every year ?—I can only say what I send myself.

31,696. What do you send ?—Forty or 50 bags a week.

31,697. Do they leave a profit after paying the carriage ?—Sometimes they do, and sometimes not. If they get them to the market fresh then they leave a profit, but if they happen to get there in bad order then they do not.

31,698. Is there much money coming into this country from them in the course of a year ?—Yes, a good deal.

31,699. As much as from the lobsters ?—No.

31,700. Then it is not to be compared to the lobster-fishing ?—No.

31,701. Is there any other kind of shell-fish sent from this island ?—Yes, a few oysters.

31,702. Do the oysters bring much money ?—No, they are not much fished.

31,703. Are they fished with the dredge in the way in which oyster beds are usually fished ?—No, they are not dredged.

31,704. Is there a large crab or parton fishery ?—We get plenty of partons along with the lobsters in the creels.

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R. Brock.

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31,705. Are they sent away ?—No, they will not keep to send away. We are too far from the market.

31,706. Do the lobsters keep ?—Yes, they do very well.

31,707. Do you send them away alive ?—Yes, to London. They go by rail from Aberdeen.

31,708. But the crabs would not pay the carriage ? No, they would not live.

31,709. Do they not live as long as the lobsters ?—No, in a short time they would die away.

31,710. How are the lobsters packed ?—In boxes.

31,711. Are they packed up with anything ?—A little seaweed.

31,712. In seaweed ?—Yes, above and below them.

31,713. Are the partons packed in the same way ? —Yes, somewhat in the same way.

31,714. But they do not live as long ?—No, it will not do to send them away, not even to Edinburgh.

31,715. Has the lobster trade sprung up very much since the opening of the railway to Aberdeen ?—Yes, a great deal.

31,716. Formerly you could not get them quick enough to the market ?—No, we used to send them to Granton, now they all go from Aberdeen.

31,717. (*Professor Huxley.*) How do you get your whelks ?—We catch them at the ebb.

31,718. Are they as abundant as that ?—Yes, the people go and pick them up.

31,719. Is it the large whelk ?—No, the black whelk.

31,720. Do you mean periwinkles ?—Yes.

31,721. That is quite another matter. What we call whelks you call buckies ?—Yes.

31,722. You mean by whelks the periwinkle ?—Yes.

31,723. Do you use whelks for bait ?—Yes.

31,724. How do you catch them ?—They catch them upon a cod's head.

The witness withdrew.

ALEXANDER RUSSELL called and examined.

A. Russell.

31,725. (*Mr. Caird.*) What experience have you had with regard to the fisheries of the Orkneys ?—I have had some experience with regard to the herrings and lobsters.

31,726. Is the herring fishery an important one or a declining one ?—It improved for some time and then fell off again, and now I think it is improving again.

31,727. What was the cause of the decline ?—I think the great cause was the want of fish.

31,728. And now the fish seem to have shown some signs of coming back again ?—Yes, at least for the last three months.

31,729. Is there any suggestion you could offer to the Commission with regard to the fishing interest of the Orkneys by which it could be improved ?—I do not know that there is.

31,730. Is there any destruction of the young of fish by any mode of fishing that is carried on here ?—No, I do not think there is.

31,731. Are there any regulations imposed upon the fishermen here which are injurious to them in their trade ?—No.

31,732. Are you a herring fisherman ?—No, I cured herrings for some time, but I have not done so for the last three years.

31,733. Have you received advantage from the Government brand ?—I think the brand is very useful.

31,734. Were you in the habit of sending some of your herrings to the home market ?—Yes, to Ireland.

31,735. Is there any brand upon the herrings sent to Ireland ?—No, it was never used for the Irish market.

31,736. Then how did the Irish purchaser satisfy himself as to the quality of the cure ?—Both by bargaining with the seller as to the quality, and then opening the barrels and examining them.

31,737. Is that not done by the foreign purchaser ? —Yes, but the transaction is made more handy by having a guarantee.

31,738. Can you tell us anything about the lobster fishery here ?—Yes.

31,739. Is it an increasing fishery ?—At present it is increasing, but I suppose there were as many caught 30 years ago as are caught now. At that time they were carried away by well-smacks.

31,740. Were they carried alive in the wells ?—Yes.

31,741. Is not the present mode of transit much cheaper and quicker ?—It is quicker, but they were carried in better order when they were carried on board the well-smacks. They are very liable to die on board the steamers.

31,742. Is it not a superior fish that is caught now ? —A higher price is given for them.

31,743. What is the principal season for fishing for them in the Orkneys ?—May and June. The principal portion of them is caught during those two months.

The witness withdrew, and the inquiry was adjourned until August 4, at Lerwick in Shetland.

Lerwick, Shetland, Thursday, 4th August 1864.

PRESENT :

J. CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

GEORGE H. B. HAY called and examined.

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31,744. (*Mr. Caird.*) You are a fish-curer here ?—Yes.

31,745. What kind of fish do you cure ?—White fish and herrings.

31,746. What are the principal fisheries that are carried on in Shetland ?—The cod and ling fisheries, I should say.

31,747. Is there also a herring fishery here ?—Yes, but it is not very extensive.

31,748. At what season is the cod fishery carried on ?—On this coast it is chiefly carried on by decked vessels which begin the fishery about the month of May and go on until August. There is also a cod fishery by boats from certain parts of the country during the winter time.

31,749. But the principal fishery is carried on from May till August ?—Yes.

31,750. What are the kinds of fish taken during those months ?—Cod and ling and tusk.

31,751. Is there a large number of boats employed in that fishery ?—Yes, a considerable number.

31,752. Is the fishery followed with long-lines ?—The ling fishery is entirely followed with long-lines.

31,753. But how is the cod fishery carried on ?—The cod fishery is carried on with hand-lines.

31,754. Has that fishery been increasing or diminishing in its yield within recent years ?—Well, I think the ling fishery has rather increased. The cod fishery is carried on in quite a different manner from the way in which it was carried on at one time.

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31,755. What is the change that has been made?—The cod are not so abundant on the coast here now as they were and the vessels which are now used are built of a different character and they are obliged to go to a greater distance and they partly fish on the coasts of Faroe and Iceland.

31,756. Are the fish not brought here as they used to be?—Yes; they are split and salted in the holds of the vessels and then they are brought here to be washed and dried.

31,757. Then the vessels continue their fishing on the fishing grounds for a considerable period?—Yes, for a month or six weeks at a time.

31,758. And I presume that they come in with a large quantity of fish at a time?—Yes.

31,759. What weight of fish will a vessel bring in at one time from the cod fishing ground?—In the wet state they will bring in from 20 to 30 tons if there has been a successful fishing.

31,760. Are there many vessels engaged in that fishery?—Yes, I think this year from Shetland there are about 40 vessels.

31,761. And they are all decked boats?— Yes, decked vessels.

31,762. And are there strange vessels also?—Yes; smacks come to the cod-fishing from Hull, and Grimsby, and London.

31,763. Do they use the cod they catch in the same way by partly salting them and bringing them here to be dried?—Yes; they bring them in here and sell them to persons at Lerwick.

31,764. To the curers you mean?—Yes.

31,765. In fact they follow exactly the same fishing as the native vessels?—Yes.

31,766. Do they use the same kinds of lines and bait?—Yes, just the same.

31,767. And they come here regularly every year?—They are beginning to come more each year. For the last four or five years they have been increasing in number. They find that it fills up a portion of the time that would be unoccupied on their own coast.

31,768. Are the native boats increasing in numbers and size?—I think there is very little change as to the number of ling boats. The ling-fishing is carried on entirely in open boats.

31,769. Speaking of the cod-fishing boats are they increasing in number?—They are increasing I should say.

31,770. Has the size of the boats within recent years increased also?—Yes.

31,771. Have they changed their lines; do they use longer lines now than they did formerly?—No; I think the lines they use now are the same as they always used.

31,772. And do they use the same kind of bait for catching the fish?—Yes.

31,773. What kind of bait do they use?—They use shell-fish when they can get it.

31,774. Buckies?—Yes.

31,775. Is that bait not to be found in abundance here?—When they are fishing as far off as the Faroe Islands they are obliged to go in there to get it.

31,776. Do they find it there without much trouble?—Yes.

31,777. Then when those partly salted fish are brought in here what is done with them?—They are washed and dried.

31,778. And are prepared for export?—Yes.

31,779. Are they exported to foreign markets?—Yes, to Spain.

31,780. Do none of them go to the home markets?—Only the small and inferior ones. All the finest go to the foreign markets.

31,781. Are they put into barrels or sent loose?—They are sent loose.

31,782. Is there any trade or Government mark on them when they are sent away?—No; that has been abolished. There was at one time.

31,783. Were you in the trade when that Government brand was placed on them?—I was quite young at the time, but I was in the business.

31,784. Do you recollect whether the operation of the brand was for the advantage of the fishery or otherwise?—I think it did very little good.

31,785. You do not find that you sustain any loss from the want of that brand now?—No, I cannot say that we do.

31,786. Then, with regard to the ling fishery, when is that carried on? Are the ling and tusk fisheries carried on together?—Yes; all along the coast. The greatest stations are to the north part of the North Mainland.

31,787. I understood you to say that the boats used in the ling and tusk fishery are all open boats?—Yes.

31,788. Then is there a greater number of persons employed in the ling and tusk fisheries than in the cod fishery?—Yes, there is a larger number, I should say, employed in the ling fishery.

31,789. During what season is that carried on?—It is carried on during the same time.

31,790. From May to August?—Yes.

31,791. Then it is not a winter fishery?—They do carry on a winter fishery in some parts, but not in a general way over the country.

31,792. Is there a large quantity of that kind of fish caught?—Yes.

31,792*a*. Is it an increasing or a diminishing quantity?—I think it is an increasing quantity.

31,793. And are the ling and tusk cured in the same way as the cod are for export to the foreign markets?—There is not so much ling caught as cod. They are occasionally sent to Australia, but very little goes now to Spain.

31,794. But none of those fish are to any extent sent fresh to the market?—No, none are sent fresh.

31,795. Is there a particular kind of bait used for the ling and tusk which is different from that used for the cod?—Yes.

31,796. What is it?—It is a fish-bait.

31,797. What sort of fish-bait do they use?—I think they use the haddock and herring when they can get them, and also mackerel.

31,798. Is there any haddock fishery round this coast?—Not to any extent. There are haddocks for the supply of the town. They catch about sufficient to supply the town and neighbourhood.

31,799. But the haddock fishery is not followed as an object of much importance?—No, it is not.

31,800. Might it be extended do you think?—Well, I don't know that it could.

31,801. Was it ever a valuable fishery in Shetland?—No.

31,802. (*Professor Huxley.*) Have you sent out vessels to the Faroe Islands fishing for cod?—Yes.

31,803. Was there not a particular period at which the cod left these islands?—Yes.

31,804. What year was that; was it about the year 1835 that they left these islands or Faroe?—I cannot speak so much about Faroe, but they have left this coast at different periods.

31,805. Can you give us some of the periods when they have left the coast?—I think that previous to 1835 or 1836 they left this coast; or, at least, the fishing had greatly diminished. It had fallen off so very much that vessels went to Faroe at that time in search of fish.

31,806. Did they find the fish at the Faroe Islands?—Yes, but they were not so abundant as they have been found during the last few years.

31,807. Is the cod fishery liable to spontaneous variations of that kind?—I think it is.

31,808. And for no apparent reason?—No.

31,809. Was there any cause supposed to exist which would account for it?—Not that I know of.

31,810. There is nothing like trawling going on here?—No, nothing of that sort.

31,811. There is no beam-trawling practised here?—No,

31,812. Do they use seines along this coast?—No.

31,813. I suppose the coast is too rocky?—Yes, I believe it is.

31,814. Did you ever send vessels to Davis's Straits for cod ?—Yes.

31,815. How long ago is that ?—I think the first time would be about the year 1845 or 1846.

31,816. Did you find that the cod were abundant there ?—Yes, for some years they were found very abundant.

31,817. How many years did it remain abundant ?—I think for four years it was abundant, and they had very good fishing.

31,818. Then did it fall off again ?—Yes, the last year but one the quantity was very much less, and the last year of all there was scarcely any cod got at all.

31,819. What year was that ?—That would be in 1850, I should think. We have tried it once since then.

31,820. And with what success ?—We found the cod very scarce indeed.

31,821. Then they had not recruited themselves ?—No, and just 10 years had elapsed.

31,822. Was any other kind of fishing going on in Davis's Straits at that time ?—Not at that place.

31,823. Have you paid any attention to the cure of herrings here ?—Yes.

31,824. Can you tell me what time of the year you get full fish in these islands ?—About the month of August.

31,825. And when do they become spent fish ?—At the latter end of September.

31,826. You find them full from August to September ?—Yes ; but there are full fish to be seen at other seasons. I have seen full fish much later.

31,827. Much later than September ?—Yes.

31,828. How late have you seen full fish ?—I have seen full fish up to the beginning of October, but they are generally spent at that time.

31,829. Are herrings taken here in the winter,—in January or February for instance ?—There are none taken here at that time now.

31,830. Have they ever been taken here in those months ?—Yes.

31,831. Then was there ever a winter-fishing here ?—Yes, but it is very long ago—100 years ago, I believe.

31,832. Are herrings never taken here for bait in the months of January or February ?—No, I think not ; they cannot get them at that time.

31,833. Then you do not happen to know in what condition they are at that time of the year ?—No, I do not.

31,834. Have you noticed any peculiarity in the size of the herrings of Shetland ?—No.

31,835. Are they larger than the herrings which are obtained elsewhere ?—No, I think not.

31,836. Have you noticed them at different seasons of a large size ?—I have seen herrings caught by some of the Dutch vessels as late as November somewhere in this neighbourhood of a very large size.

31,837. In the previous Commission on which I was engaged some two years ago I was told by some of the fishermen that herrings were not unfrequently found on the shores of the Shetland Islands as much as 14 inches in length ?—I cannot speak of that. Some of the fishermen will be better able to give you information on that point.

31,838. Are the fishermen here wholly engaged in fishing or have they land to cultivate as well ?—Most of them have land.

31,839. So that they do not depend entirely on the fish they take ?—No, not entirely.

31,840. What would be the cost of the outfit of a cod vessel ?—That depends entirely upon its size. The class of vessels we are using just now would cost about 500*l.* each, I suppose.

31,841. Then I presume they are decked vessels ?—Yes.

31,842. That cost includes everything; the vessel with all its apparatus of long-lines, and so on ?—They do not use long-lines.

31,843. Do they use hand-lines ?—Yes, they use hand-lines. Some of the vessels will cost a good deal more than that.

31,844. Will that be a fair average price ?—I think it will.

31,845. Have the size of the vessels, and the expense of them increased of late years ?—There were many of a much smaller class of vessels used when they fished on this coast.

31,846. Then all that has come out of the fishing, I suppose ?—In what way ?

31,847. I mean the additional capital that has been put in the vessels ?—No, I do not think it has.

31,848. How has it been managed then ; are the vessels the property of the fishermen themselves generally ?—No, they are scarcely ever the property of the fishermen.

31,849. Then the fishermen are merely employed in them ?—Merely employed in them. They get a share of the fishing.

31,850. Then the vessels are the property of the merchants on shore, I suppose ?—Yes.

31,851. I presume that as the size of the vessels has been increased and more capital has been put into the trade, it has been yielding a fair profit?—Only of late years. The fish diminished altogether almost. A large fleet of vessels went to the cod fishery from this place and they went on for many years, the cod getting scarcer every year and the fishery was nearly given up, when there was found to be an abundance of fish at Faroe. That continued for a certain time, and in order to carry on that fishing new vessels were got chiefly.

31,852. Does no fishing take place on the old ground ?—Very little. There are a few smacks working at it still, but not a great many.

31,853. You were saying that foreign vessels fished here a good deal, I think ?—No, I meant vessels from England.

31,854. Do foreign vessels come up here to fish for herring ?—Yes, Dutch vessels.

31,855. Have you ever heard of any complaints with regard to their interfering with the other fishermen ?—I think the Dutch fishing boats have seldom or ever been complained of.

31,856. Is there ever any Fishery vessel up here looking after the interests of the fisheries ?—Yes. There was at one time some interference by the Belgian fishermen ; they came into the harbours and sent out boats, and there was a Fishery steamboat down for some time, but there has been little complaint lately of any interference.

31,857. (*Mr. Caird.*) Is there any lobster fishery here ?—No. I believe there are a few lobsters to be found, but they have not been fished with success.

31,858. They never have been fished as a matter of business here ?—They have been tried, but it has not been found successful.

31,859. Are there any oyster fisheries here ?—There are none for the purposes of trade. They are to be found in various places.

31,860. Are there any good oyster beds on the island ?—Yes.

31,861. Is the quality of the oysters good —Yes, they are very good.

31,862. Then is it a business that might be developed by the application of industry to it ?—Well, I do not know whether that is so or not. They are some distance from this place, and the expense of bringing them here and shipping them would add very much to the cost.

31,863. Do you think the cost of conveyance south would be too expensive to make it answer ?—The difficulty would be more to get them conveyed here to Lerwick. That would add considerably to the cost.

31,864. What means are there for sending them to the south from Lerwick ?—There is a steamer once a week.

31,865. If the difficulty of conveyance could be got over, are there beds which are established for the

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development of the oyster fisheries ?—I do not think it ever could be made a very extensive fishery.

31,866. Are you aware if there is any mode of fishing practised in the islands which is wasteful of the brood or the spawn of the fish ?—I do not know that there is any. Some of the fishermen complain of the taking of young coal-fish in that way in large quantities.

31,867. That is the sillock, is it not ?—Yes, they call them sillocks.

31,868. Have you any reason to believe that there has been an increase of the catch of those fish of later years ?—No, I do not think there has been.

31,869. Are they found here in great quantities ?—Yes.

31,870. Is that in the winter time ?—Yes.

31,871. Are they taken by nets ?—Yes, with round nets.

31,872. Circle nets ?—Yes, round nets.

31,873. They are drawn along the shore ?—They dip them, gather the fish about them, and lift them up.

31,874. Do those nets take great quantities of fish ?—Yes.

31,875. Does that mode of fishing form a considerable portion of the business of the fishermen during the winter months ?—Yes, they take the fish sometimes for the liver in order to extract the oil.

31,876. Is there much oil extracted from them in that way ?—Yes.

31,877. Is it a matter of considerable importance in the way of trade ?—It is in some parts.

31,878. Is it in Lerwick ?—No ; we seldom get more here than supplies our own wants.

31,879. In some parts of the island does it really become sufficient in extent to form an export of oil ?—Yes.

31,880. Is that carried on to any considerable extent ?—Yes, I think so.

31,881. Is it a valuable oil ?—Yes.

31,882. You get whales here occasionally ?—Yes.

31,883. What kind are they ?—They are only of small size, about 18 or 20 feet long.

31,884. (*Professor Huxley.*) Is it the calling whale ?—Yes.

31,885. (*Mr. Caird.*) Are they found here every year ?—No, not every year.

31,886. But mostly every year ?—A few years.

31,887. Is there a considerable quantity of oil got from them ?—Yes.

31,888. (*Professor Huxley.*) Is there any great difference in the size of the fish got from the Faroe islands and those got along the coast here ?—What they get on the coast of the Faroe islands are much about the same as they are here. There is a bank some distance from the Faroe islands where they get cod of very large size.

31,889. A bank some distance from the Faroe islands ?—Yes.

31,890. What would be the difference in size ?—They are more than twice as large.

31,891. (*Mr. Caird.*) Has that bank any name ?—They call it the Faroe bank.

31,892. Is it a well-known fishing bank ?—Yes.

31,893. Is it as productive of these large cod as ever it was ?—No. They got large fish there last year, but they have got scarcely any this year.

31,894. What is supposed to be the cause of that ?—I cannot tell.

31,895. Is there any beam-trawling practised here ?—No.

The witness withdrew.

JOHN ROBERTSON, senior, called and examined.

J. Robertson, sen.

31,896. (*Mr. Caird.*) You are a fish-curer here ?—Yes.

31,897. From your experience can you tell us whether the supply of fish caught round the islands has been increasing, stationary, or diminishing during the last 10 years ?—I think it has been rather increasing.

31,898. Has any change taken place in the mode of fishing cod, ling, or tusk within your time ?—No.

31,899. Are the number of boats engaged in the fisheries on the increase ?—Yes ; for a few years back they have been on the increase. Last year there were rather less than there were in the year before.

31,900. Do the fish frequent the same fishing-grounds that they frequented formerly ?—Yes, the same.

31,901. Have you only one weekly steamer here ?—Yes.

31,902. And are your fish chiefly sent by that steamer to the south ?—There is not much of it sent by steamer.

31,903. Then you are not much dependent upon that steam communication for the export of your fish ?—No.

31,904. Are the fish exported in cargoes ?—Generally in cargoes.

31,905. So that the opening of communications of this kind has not much altered your mode of fishing here, or led to any great change ?—No.

31,906. I suppose there is no part of the fish caught round the islands sent fresh to the market, except to the home market and to the islands ?—There are none sent fresh from here.

31,907. Are none of the vessels which come from the English coast cod-well vessels ?—They have wells, but a very few of them take cod south fresh.

31,908. Do they not come far north for that description of fish ?—No.

31,909. Is the herring fishery an improving or diminishing one here ?—It has been rather decreasing. It was carried on to a greater extent some years ago than it is now.

31,910. Has it ever been a valuable fishery in Shetland ?—I cannot say much about it. I was once engaged in curing herrings, but I am not engaged in it now.

31,911. Speaking of the curing of cod and ling, were you in the trade at the time there was a Crown brand upon them ?—No.

31,912. Have you ever found in your business as an exporter of fish any cause to regret the want of such a Crown brand ?—Well, I cannot say that I have.

31,913. You have never found any difficulty in marketing your fish abroad ?—No.

31,914. Have you any mark whatever upon them that they may know the cure by ?—We have no mark upon them.

31,915. Then how do they know that the fish are well cured ?—Only by examining the quality of the fish.

31,916. Within recent years has the price of fish increased ?—Yes.

31,917. The price given for fish abroad ?—Yes.

31,918. And the price given to the fishermen also ?—Yes, in proportion.

31,919. Are there more of the sons and families of the native fishermen going into the fishing business than did formerly ?—They have been for the last 10 years more engaged in the fishing than before.

31,920. Has it been found a more remunerative business than it formerly was ?—Yes, the price has been rather better.

31,921. Are the fishermen in any case solely fishermen, or are they in all cases also small farmers ?—They generally have small farms.

31,922. They do not follow the business of fishing all the year round ?—Not entirely.

The witness withdrew.

JOHN HARRISON called and examined.

31,923. (*Mr. Caird.*) You are a curer and exporter of fish?—Yes.

31,924. In your opinion is the quantity of fish caught and cured here increasing or diminishing?—It has been increasing ever since I have been in the trade.

31,925. How long is that?—For about the last six years.

31,926. Has it been a regular and progressive increase?—I should say that it has.

31,927. Has the price at the same time been improving?—It has varied occasionally, but on the whole it has increased.

31,928. Is the increase of price at all the cause of the increased application of the fishermen to the business?—No, I think not.

31,929. Do you think that the fish have become more plentiful?—The fish have not become more plentiful, but the increase of the price in the case of the ling fishery has stimulated the men to further exertions in order to catch the fish; that, however, has not been the case in the cod fishery. The increase of the fishing in the case of the cod has not been occasioned by the increase of price; but still the success of the few vessels that went to the fisheries a few years ago has caused more men to enter into it than were engaged in it formerly.

31,930. Has the cod-fishing been a more increasing business than any other kind of fishing here?—Much more so.

31,931. Have there been more going into it than to any other kind of fishing?—There has been more capital employed in it.

31,932. Is that capital more productive than that employed in any other kind of fishing?—I think so.

31,933. Is it because the fishing is more valuable, or what is the cause of it?—The great reason of it is that the vessels are capable of sticking to the fishing the whole season, though in the case of the home-fishing here the boats they use are open boats, and the men have to lay by for two-thirds of their time in consequence of bad weather. The boats are so frail that they cannot stand anything that would be called bad weather.

31,934. Are they half-decked boats?—No.

31,935. Are they open boats?—Yes.

31,936. The decked boats which can keep the sea for this reason do not lose their time, and make a better business of it?—Yes.

31,937. Do the decked boats keep the sea for long together?—Yes, for three months at a time in some cases.

31,938. Without coming ashore at all?—They go in occasionally to the Faroe Islands to supply the boats with water, but they will be eight or 10 or 12 weeks away from Lerwick before they return again.

31,939. Is that the whole fishing of the season?—That is about half the season's fishing. In some cases where they are more than ordinarily successful they will go three times.

31,940. What weight of fish will a boat bring in as the result of 10 or 12 weeks' fishing?—This season, on the average, a boat's catch has been about 8,000 fish for the first voyage, from the 7th April to the 15th June. It was a somewhat earlier fishing this year, but the quantity caught would yield about 11 or 12 tons of dried fish on the average.

31,941. What does that dried fish make a ton here?—I should say about 20*l.* a ton.

31,942. That would be a good average yield?—They do not do so well here afterwards. The second is never so productive as the first, because in the first of the season the fish are more plentiful on this coast than at the end of it.

31,943. Sometimes they make a third voyage?—Yes, sometimes, but the Faroe fishery is never so productive at the end of August, the fish all go away then.

31,944. What do the boats do at the latter part of the year?—Latterly they have gone to Iceland towards the end of September; they find there always a good run of fish at the latter end of August, and in the month of September.

31,945. What do they do with the fish?—They generally salt it down in a wet state, and cure it in the following season.

31,946. How long do they stay on the coast of Iceland?—Five weeks.

31,947. Do they bring home the fish they catch?—They may be able to fill themselves in four weeks there.

31,948. Is it a more productive fishery?—Yes, there is a more extended ground to fish over.

31,949. But it is not fished so early?—Yes, in the month of May and there is a fine fishing there always in the month of June, until the 15th July, then the fish generally go off the ground.

31,950. Are they found here then?—The same quality of fish is not here at all, that is quite a distinct quality.

31,951. Do your fishermen go there in May when the fishery begins?—Very rarely.

31,952. What do they do after they leave Iceland in the latter part of the season?—The vessels are laid up then.

31,953. Until next April?—Yes.

31,954. Do the fishermen employ themselves in agricultural operations during the winter, or what do they do?—I think they do nothing at all. The fishermen have nothing to do with the vessels; they are generally, on the average, of about 40 tons register.

31,955. Who do they belong to?—To the fish-curers themselves.

31,956. Do the fish-curers hire the men at wages, or do they give them some share of the fishing?—The fishermen have half the catch, a share of the fishing, and some other perquisites as well.

31,957. Has that been found to be a good remuneration for the fishermen?—A very good remuneration during the last few years.

31,958. And have the fishermen been improving their condition under that arrangement?—Many of them have been improving their condition, very decidedly so.

31,959. Are they going in increasing numbers to this business?—They have been increasing every season.

31,960. And the fish-curers are increasing their vessels?—Yes.

31,961. Do your vessels ever go cod-fishing at all to Norway?—No, not any of them within my recollection.

31,962. With regard to the ling and tusk-fishing, you say it is not so remunerative in consequence of the boats being unfit to keep at the sea?—Yes.

31,963. Is it a fishery that would pay to place better boats in the business?—I do not think there is any fishing that would at all pay so well.

31,964. Then why do not the curers turn their attention to it?—It is not so much that the curers would not be inclined to undertake the cost of any new experiments, as that the fishermen have a sort of dislike to any innovation.

31,965. Is the fishing season for ling and tusk the same as that for cod?—It commences later and ends earlier.

31,966. What is the season?—From the 12th May until the end of July, or perhaps for a few days into August.

31,967. Do cured ling and tusk bring as good a price as cured cod?—Latterly it has brought a better price in the last two or three years, but now the cod have got up to the price of ling.

31,968. Has anybody thought of trying the use of decked vessels at the ling fishery?—It has been tried, but there have been great difficulties in the way. I believe they have tried vessels with a couple of boats. There is generally a swell on the sea, and they have a difficulty in managing the boats as they go along. There are seven men in each vessel. A small decked-craft here of about 25 tons register had one boat only, and they set out their lines eight times and out of those

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eight times they were only able twice to get the fish aboard without the aid of a line. There is so much sea on that it is impossible at times to conduct the fishing.

31,969. They cannot fish the ling in the same way as the cod?—No.

31,970. What do they fish the ling with?—Long lines.

31,971. Are they hauled in?—Yes, by means of a boat. The boat is from 20 to 21 feet on the keel. They are boats with six men.

31,972. The ling cannot be fished out of those vessels?—Not in those waters. They might fish them out of decked vessels even with the water as deep, but the ground is so uneven. There are patches of sand and patches of rock, and the lines would be liable to break.

31,973. Then there is a practical difficulty in changing from open boats to larger vessels?—Yes.

31,974. Is there any appearance, as far as you know of, of any decrease in the quantity of cod and ling upon the fishing-grounds which those fish frequent?—The only decline, and a very great decline it has been, is on our own coasts here on the west side of the country—on the banks here to the westward. About the time I was born, about the year 1834, 1835, or 1836, we had a very heavy fishing, even more than they get now at Faroe. Some of the small smacks had as good a fishing as the large ones of from 40 to 50 tons register. The only reason which I can assign for the decrease is the spring fishing, which we carry on on the west side. I think that is a bad thing. There are a few fishermen who take up the fish in the month of February when the cod are full of spawn, and that must operate injuriously to the summer fishing of cod. There is nothing else that I am aware of.

31,975. Are those banks which have declined in their yield of fish more liable to be fished in the month of February than the other banks which have continued to yield well?—As a general rule they do not fish in February. The fish come in-shore to deposit their spawn, but they are sometimes taken up by the fishermen when they are in-shore.

31,976. That is not in the May and June fishery?—No, in the month of February; that is the time that the cod are full of spawn. They spawn here in the month of March.

31,977. Are they got in February?—Yes.

31,978. Is there any haddock fishery of any importance here?—No.

31,979. With regard to the oysters, a previous witness said there were plenty of beds, but that it was not found profitable to fish them?—I do not understand anything about oysters at all.

31,980. Do you cure herrings?—No, not at all. I know very little about the herrings.

31,981. (*Professor Huxley.*) Is it an ordinary thing in your experience for the codfish to shift their ground after a few years?—I have not had the benefit of many years' experience, so I am not able to say that; but I am aware that in some cases, such as Faroe Bank last season, there was a very plentiful fishing, the most plentiful that was ever remembered, yet this season they can get nothing at all.

31,982. Upon the same banks?—Yes. And the year before last there were no fish at all in the first part of the season; three or four weeks afterwards they became very plentiful and the fishermen had a good run. They remained for a short time on the bank and then went away again.

31,983. Have any of your people been at the Rockall fisheries?—Yes.

31,984. There was a great fishing there some years ago?—Yes.

31,985. How many years ago is that?—Three years ago.

31,986. Has that fishery remained the same or has it fallen off?—It has fallen off. At the first of this season there were some vessels that went there about the latter end of May, but the got there rather too late. The first two or three days there were plenty of fish on the ground, and they got great numbers. The men seemed to say if they had been there a fortnight earlier they would have made a good fishing. They were too late for the Rockall fishery this year.

31,987. Are you of opinion that the fish will go back there?—Yes, I think so.

31,988. Was last year a bad season?—Only a few vessels went there then.

31,989. Was that on account of the weather?—No, because they had got rather disgusted with it.

31,990. Had it been so the year before?—Yes.

31,991. In 1862?—Yes.

31,992. Was the fishing of 1862 a bad fishing?—A good many vessels went there, but they did very poorly. The weather was also very bad, it was too boisterous to enable them to do much. There is one thing I should like to mention with regard to our cod-fishing, which is a very great trial and trouble to our fishermen when they go to the Faroe fishing. They require to go to the Faroe islands to get whelks for bait.

31,993. (*Mr. Caird.*) Is the whelk the best bait there?—Yes.

31,994. Buckies?—Yes, what we call buckies.

31,995. Well, what do you complain of?—Why, the Danish Government have placed restrictions on fishing them. They won't allow any fishermen to fish but themselves, and unless we get the Faroe men to fish for us and pay them so much a-day, we are not allowed to get the whelks at all. Now in many cases the Faroe men are very lazy, and when they are called on they won't fish; the consequence is that sometimes our men are obliged to lay in harbour for eight days, whereas if they were allowed to catch the bait themselves they might have got out in two—that is a serious injury to our fishery.

31,996. Could not your men have got the bait themselves and paid the Faroe men wages, although they did not do the fishing?—They won't even allow one of our men to go into the boats.

31,997. Is that a Danish regulation?—It is either a local or a government regulation. They say it is a local regulation of the governor who has been appointed there lately.

31,998. Was it not the case in former years?—No, it has only been the case for the last two years.

31,999. Was there not formerly a regulation that British fishermen should pay for that bait?—Each vessel paid 2*s.* 6*d.* anchorage money.

32,000. And was she allowed to take what bait she pleased?—Yes.

32,001. Is it supposed that the bait is decreasing, and that it is necessary to have some regulation in order to prevent it from being overfished?—That is not the reason assigned for the regulation, because the Faroe people do not use much of the bait themselves.

32,002. Then there is no complaint that it is decreasing?—No, there is plenty of bait.

32,003. Do you think it advisable to have some representation made to the Danish Government on the subject?—Very advisable indeed. I have no doubt that our vessels have lost one-third of the quantity of fish they might otherwise have caught, or equal to 300 tons this year, in consequence of that regulation.

32,004. Do you desire some regulation by which you would be able to procure the bait?—Yes.

32,005. You do not object to pay for the bait?—No, we have not the slightest objection to pay for it.

32,006. But you object to be kept unnecessarily waiting when bait could be got for you?—Yes.

32,007. (*Professor Huxley.*) Do the Danish Government allow you to fish within three miles of the shore of the Faroe Islands?—I do not think there is any restriction.

32,008. Of any kind?—No. It is rarely that our vessels are obliged to fish within three leagues of the coast off the north-west part of the island; but in the case of the tides being against them they may draw closer in towards the land. They do not even fish

within nine miles of the coast; they generally keep 20 or 30 miles off the coast.

32,009. Do you cure your fish on shore at the Faroe islands?—No.

32,010. Have you no establishment for that purpose?—No.

32,011. Are they cured on board?—They are split and salted on board; they are dry salted.

32,012. (*Mr. Caird.*) Is the offal thrown overboard?—Yes.

32,013. (*Professor Huxley.*) Do the Faroe people carry on a considerable fishing there?—No, it is not very considerable. It is mostly in open boats, but the quantity of fish has increased.

32,014. Do they complain of any interference on the part of our people with them?—I have heard of nothing of the kind.

32,015. (*Mr. Caird.*) Do the Danes fish much on the banks on that coast?—They fish along the coast in the same way as our fishermen do. The Faroese have open boats as well.

32,016. They do not fish with decked vessels at all?—No.

32,017. They do not compete with you?—No.

32,018. Nor do you compete with them?—Not in any way.

The witness withdrew.

John Stove called and examined.

J. Stove.

32,019. (*Mr. Caird.*) Have you long been a fisherman in Shetland?—Yes.

32,020. How long?—For more than 40 years.

32,021. And have you practised all the different kinds of fishing that are practised in these islands?—Yes.

32,022. Have you gone to the cod-fishing outside?—Yes, some time ago.

32,023. Was that in a decked boat?—Yes, it was in our home-fishing upon what we call the Faroe banks.

32,024. Was that hand-line fishing?—Yes.

32,025. During the time you were following the cod-fishing were there any signs of an increase or diminution in the quantity of fish?—It was just at the very time that the increase in the fish came; it would be about 22 years ago.

32,026. Have you not been there since then?—No.

32,027. Then you cannot tell us what is the state of the matter now?—No.

32,028. Have you been a fisherman for ling and tusk also?—Yes.

32,029. That is followed in a different manner and in a different kind of boat?—Yes, in open boats.

32,030. And with long-lines?—Yes.

32,031. Cannot it be followed in the same manner as the cod-fishing?—No.

32,032. Are the two kinds of fish taken by different kinds of bait?—Yes, there are different kinds of bait.

32,033. What bait do you use for the cod, and what for the ling and tusk?—Buckie and mussel for cod and fish-bait for the ling and tusk. The principal bait is what we call pulters, which are small codfish.

32,034. The ling and tusk do not take the mussel and whelk?—No, herring and the mackerel are the best bait for ling and tusk.

32,035. Is not herring the best bait for cod?—It is a fine bait for the cod, but we cannot get it.

32,036. Is the catch of ling and tusk in your experience increased in quantity?—Yes, it has.

32,037. Are you well acquainted with the fishing grounds for both cod, ling, and tusk?—I am well acquainted with the home grounds.

32,038. Has there been any sign in your knowledge or experience which shows that they are not yielding as well as they were in the habit of doing in former years?—I think they are yielding better; but there is a better mode of fishing them, and the gear is differently made in all respects from what it was in olden times.

32,039. More fish are caught now in consequence?—Yes.

32,040. And the more the grounds are fished is it your opinion the more fish are to be got?—I will not say that there are more fish to be got, because in former years I think the fish were more plentiful, but they were not so much caught as now.

32,041. Are there not many more people engaged in fishing for them now?—Yes.

32,042. Are the fish of as good a quality as they formerly were?—Yes, equally as good.

32,043. Is there any mode of fishing practised here which is injurious to the young of the fish or the spawn?—Yes, in the westward in the month of March the small cod are taken up at the very time they are breeding.

32,044. The small cod?—Yes.

32,045. Is there much injury done to the cod fishery by that?—I cannot say there has been much injury done by that, but it is considered that it has been injurious to the home banks.

32,046. But are not those small cod very good for food?—Yes, they are.

32,047. And they are very readily sold?—Yes.

32,048. Are there plenty of them to be got?—Yes, there are plenty to be got. They are taken up at the same time with the breeding cod which has spawn in it.

32,049. Are they in a very good condition?—They are in the very best condition at any time of the year.

32,050. Is there much cod-fishing in the months of February and March?—On the west side there is a good deal of ling and cod caught in those months.

32,051. In-shore?—Yes.

32,052. It is not at the distant fisheries that this is done?—No; it is done by open boats in sight of the land.

32,053. Has that mode of fishing been increasing or diminishing of late years?—It has increased.

32,054. Is there plenty of bait to be got here for all the kinds of fishing that you follow?—Yes, there is good bait to be got.

32,055. Then there is no difficulty in following your business for want of bait?—It is very rarely that we cannot get bait, unless we have bad weather. Under other circumstances we have not much difficulty in getting it.

32,056. Have you been a herring fisherman?—I was for some short time, for about five years.

32,057. At what time of the year did you fish for herrings?—In the harvest time, in the months of August and September.

32,058. Just the summer fishing?—Yes.

32,059. Never at any other time?—No, unless there were a few boats making a trial in the latter part of the month of July.

32,060. Have the herring fisheries improved or diminished in Shetland?—Whether it is that they have not been so closely worked I do not know, but they have diminished as compared with the quantity that was caught in former years.

32,061. Then they have not increased?—No, they have diminished. The quantity compared with what was caught in former years has fallen off.

32,062. Is there any improper mode of fishing adopted in fishing them. Do the fishermen shoot too early in the evening, or do anything of that kind?—There have been south country people fishing here, and they have fished in the same way. They have only one mode of shooting their nets, all of them, but they have tried early and late for the fish.

32,063. Have they shot their nets both early and late?—They have shot them soon in the night and in the middle of the night, to see which would answer.

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32,064. And which answered best?—Sometimes one way and sometimes the other, as the fish were up and down in the water.

32,065. I suppose it is considered best to shoot the nets just before sunset?—Yes, or in the middle of the night.

32,066. But not earlier?—No.

32,067. Have the fishermen thought it would be advantageous to have some strict regulation enforced as to the time at which they should shoot their nets?—I have never heard of it.

32,068. Then the fishermen do not want any Government officer or anybody else to come here and interfere with their mode of fishing?—I never heard that they did.

32,069. (*Professor Huxley.*) You sometimes get rather large herrings here, do you not?—Just at the time that they are full, then they are larger than at any other time. They are generally of a fair size. But as for the size you mentioned a short time ago, I never saw anything of the kind here.

32,070. Did you never see herrings 14 inches long here?—I cannot say that I have, but they would not be very far from it.

32,070*a*. Some of them would be as large as that?—I have seen occasionally one or two that would be very large, and perhaps as big as that.

32,071. Have you seen them bigger?—I cannot say that I have.

32,072. Is it common to get herrings as large as that?—Sometimes we may get four or five crans out of twelve crans in a boat which are generally of a very large size.

32,073. Do you think they would be as large as that?—They may be about as large, or just under it. I would not say that the generality of them are as large as that.

32,074. What time are the herrings full here?—In August and September.

32,075. When are they mostly spent?—In the latter part of September, then they are about the worst.

32,076. Did you ever catch herrings for bait in the winter time?—No, but I have known them to get herrings here, with a rare one occasionally in the winter time that was completely full, about Christmas.

32,077. Did you ever get spent fish in the winter time?—I never saw any, but I have known them get rare ones in the winter time.

32,078. Did they occasionally get spent ones?—No, they were full about Christmas.

32,079. Do the Dutchmen fish amongst you in the winter time?—No.

32,080. Are there any Dutch busses fishing with you?—No, they are all open boats here.

32,081. How many of them are there?—From 50 to 60, but at one time upwards of 100.

32,082. Whereabouts do they fish?—Upon the coast off Bressay Head and Sumburgh Head.

32,083. How far off from the coast do they fish?—Sometimes three or five miles off, and sometimes ten.

32,084. Do they ever fish within three miles?—I will not say that; if they did that they would injure their nets.

32,085. Do they ever interfere with you?—Very little; there may be a rare time when they interfere with us, they may interfere a little bit every year.

32,086. Do the French boats come up here to fish?—No, they did in former times, but they have not done so now for a long time.

32,087. Then are there no other foreign vessels but the Dutch up here?—Not unless there are one or two boats from Belgium or Hanover, but we call them all Dutch.

32,088. How many meshes to the yard are your nets?—That I could not positively say, but they are of rather a large size that we use in our fishing. There are lots of herrings here in the month of May, but they are so small that the nets usually shot here for them cannot take them.

32,089. Does anybody look to your nets here to see that the meshes are of the right size?—Yes, there was great notice taken of that at one time.

32,090. Who looks after them?—I cannot say, but I know they were not allowed to have them below a certain size.

32,091. How do you light your boats here, do you light them when you go out at nights?—No, unless we have a little fire; we have a fire in them generally, and if we see any vessel coming we hold up a fire. We have no oil light.

32,092. Does anybody look after that?—I never heard that it was looked after; all we do is to take a little bit of coal and hold it up in a dark night if we see a boat or have anything in our way.

32,093. You do not carry two lights in your boats?—No, never; we never have anything of that kind; all we have is just a piece of fire.

The witness withdrew.

G. Hay.

GEORGE HAY recalled and examined.

32,094. (*Mr. Caird.*) You wish to add something to your evidence?—Yes, I should like to add a few words. You said something with regard to an interference on the part of the Government for the extension or promotion of the fisheries here. Now what is felt as the greatest hardship here is the excessive duties which are charged in foreign countries on our fish.

32,095. In what countries especially do you feel that? To what countries do you send your fish? Is it chiefly to Spain?—Spain chiefly, for cod-fish and also for ling.

32,096. Is the import duty levied in Spain upon that fish very heavy?—Yes, very heavy.

32,097. But it is not prohibitory, inasmuch as you do sell your fish there?—No.

32,098. What per-centage is it upon the total value of the fish?—It is nearly half as much as the price of the fish.

32,099. And if that import duty were lowered do you think the fishery would be largely extended?—Yes, and there would be also an extension of the ling fishery.

32,100. Is there no demand for your fish except in Spain?—There would be a great demand for it in other countries, but it is prohibited in certain countries. For instance, there would be a great demand in France, but it is practically prohibited there.

32,101. Do you cure herrings?—Yes.

32,102. Do you use the brand?—Yes.

32,103. What is your opinion of the value of the brand to you as a curer?—I think it is very valuable.

32,104. Do you not find any necessity for it in the case of dried fish?—The quality of dried fish can easily be seen by a cursory examination of it, but it would be always difficult to detect that in the case of herrings. It would be very troublesome to open a great quantity of herrings, and besides that, I think the brand affords a security to the curer against being imposed upon after he has sent his herrings abroad.

32,105. In what way does it do that?—The best quality is guaranteed before the herrings are sent away, and the merchants cannot raise objections to it. You would have such objections raised in the foreign markets if there were no brand that it would be found very inconvenient, and we are a great distance from the place where the fish is consumed.

32,106. Do you never hear objections raised against herrings that have received the brand?—I believe that objections have occasionally been raised.

32,107. Are foreigners at all bound by the brand of this country?—If the bargain is made that the merchant is to buy them after they have been inspected by the Government officer here then he is bound to take them.

32,108. Would a foreign court of law consider the bargain completely fulfilled if you delivered fullCrown branded herrings, and they should turn out on their arrival not to be in the condition the foreign buyer expected them to be in?—I do not know how the foreign lawyers might look upon that point; but if we could show that the herrings were good enough to be entitled to the brand when they left here, I think the curer would have fulfilled his bargain after he had shipped them in good condition.

32,109. But if there have been instances in which branded herrings have been rejected as well as herrings without the brand, is that not a proof that the brand is held to be insufficient by the foreign buyers to enforce their contract?—I have only had one case of that sort. I sold herrings to a Hamburgh merchant which were shipped in good order and branded. They were agreed to be sold according to the brand—so many barrels of Crown branded herrings. They were in good condition when they were sent, but the vessel had a bad passage, the weather was very bad, and they got strained a good deal, and the consequence was that there was a considerable loss of pickle in some of them. That was the statement made to me, but I think the real fact was that the market had fallen. When they were delivered the merchant wished to throw them up and to cancel the bargain.

32,110. They were branded herrings?—Yes, he wished to go into a court there.

32,111. He wished to do so?—Yes, in Hamburgh.

32,112. Relying on the fact that the herrings were not such as he expected them to be?—Yes, but we proposed a reference to any of his consuls in this country, and it was referred to the Hamburgh consul in Leith, a German, who decided that the bargain was fulfilled and that the merchant was not entitled to reject the herrings.

32,113. Did he act upon that award?—Yes.

32,114. And paid the money?—Yes. I believe we should have got nothing for them at all if it had not been for the brand.

32,115. You do not know what would have been the result if it had been left to the decision of a court of law in Hamburgh?—No.

32,116. (*Professor Huxley.*) How do you know you would have got nothing at all for them if they had not been branded? Suppose the consul at Leith had been satisfied they were a good article when they were sent out without any brand, would he not have been bound in equity to decide for you, whether they were branded or not branded?—Yes, but the bargain specially was that they were to be branded.

32,117. Did he rely upon that?—Yes, and on the evidence of the officer that they were good when they left here he decided in our favour.

32,118. (*Mr. Caird*). Do you not send some of your herrings to the home market which are not branded?—There are not many sent to the home market.

32,119. Not many sent from here?—No. There is one thing which has been very much against the herring fishery, and that is the want of a sufficient market for the spent fish specially. At the time that the herring-fishing was carried on to the greatest extent here there was a large quantity of spent fish exported to the West Indies, and that market has quite ceased now. The herrings that are caught here are chiefly spent herrings, the greater proportion of them are spent. They do not begin the herring-fishing here until the ling-fishing has ended, and at that time the herrings are chiefly spent.

32,120. (*Professor Huxley.*) Is that in August?—No, in September. Last year the only markets we had for spent herrings were Stettin and Dantzic and the price was so low as to make it scarcely worth while catching them.

32,121. Is the ling-fishing so much more profitable than the full herring-fishing that they rather keep to that than go to the herring-fishing?—It is a more certain thing. But it is thought that if the herrings could be got into France or Austria it would do a great deal of good; if the duties were relaxed there that might be done.

32,122. (*Mr. Caird.*) Your principal market, I suppose, is Prussia?—Yes.

32,123. Are there many curers here in Lerwick?—No, not a great many.

32,124. Can you say what is the general opinion of the curers with regard to the brand?—No, I cannot tell that. There are some of them here who can speak for themselves.

The witness withdrew.

PETER GARRIOCK called and examined.

P. Garriock.

32,125. (*Mr. Caird.*) Are you a curer here?—Yes, to a small extent.

32,126. What is your opinion with regard to the advantage of the Government brand? Do you think it is an advantage or disadvantage to continue it for the herrings?—I decidedly think it is of advantage.

32,127. Upon what ground do you base that opinion?—Merely because I think it gives a character to the article. I have probably done more in the way of purchasing for a foreign merchant than in curing, and I could not have acted for him at all unless the herrings had some such character given to them as is given to them by the brand.

32,128. Do not the foreign merchants come here themselves or send agents to purchase fish?—Very seldom; one or two may come.

32,129. Then this gentleman employed you to do that for him?—Yes.

32,130. Is it not in your power as local agent yourself to examine the fish, and to be able to certify as to whether the cure had been good or bad?—I might do so, but in addition to my own opinion I have in the brand that of the Government officer.

32,131. Has not the Fishery officer a good many different stations to look after?—Yes.

32,132. Then he cannot always be on the ground when the cure is going on?—No.

32,133. He can only take some sample barrels and look at them?—Quite true.

32,134. But you could have them constantly under your eye?—Yes.

32,135. Is this the principal curing station in Shetland?—No, the principal part of the herrings are cured out of Lerwick at stations on the north and south of the island.

32,136. Has not the Crown brand the effect of making a common price for all the herrings, whether they are carefully cured or not so carefully cured?—Yes.

32,137. Do you think that is an advantage?—As far as the cure of Shetland is concerned, I think that one barrel of herrings that has the full Crown brand upon it would be in as good a condition as another. There is not so much difference.

32,138. Is there no superiority of skill or care exercised in the process of curing?—There may be, but not to that extent which would induce a merchant to refuse one man's fish more than another's.

32,139. But would it warrant him in preferring one man's fish to another's?—I think not. I do not think there is that difference of cure here.

32,140. Is there any other remark you desire to make to us in regard to the fishing interests of Shetland?—None, as far as I am aware of at present.

The witness withdrew.

LERWICK.

J. Harrison.

4 August 1864.

JOHN HARRISON recalled and examined.

32,141. (*Mr. Caird.*) You desire to add something to your previous evidence?—Yes; I wish to make a statement in reference to the import duty charged upon our fish in Spain. I think it has not been mentioned to you that there is a differential duty in the case of Spanish and English bottoms which is very injurious to our interests here, because many times there is not only a difference in the price which amounts to 2*l.* 10*s.* per ton, but many years in the winter time we cannot get Spanish vessels. 2*l.* 10*s.* is a considerable difference in the freight of a vessel.

32,142. Do you as an exporter try to get Spanish vessels to carry your fish?—Without exception Spanish vessels carry all our fish from here, on account of the differential duty, which precludes the possibility of sending it in English bottoms except at a great loss.

32,143. Do they come here in ballast?—Yes.

32,144. Just for that special purpose?—Yes; the 2*l.* 10*s.* leaves them a wide margin of profit.

32,145. You wish to bring before us the fact that there is that differential duty imposed?—Yes, in addition to the Spanish import duty.

32,146. These Spanish vessels do not come in the winter time?—They do come, but we find it very difficult in many cases to get them, and I have no doubt that a greater quantity of fish would be exported and consumed if the differential duty were removed, because it would make the freight 2*l.* 10*s.* less.

32,147. Would that lead to a large increase in the supply of fish?—Yes, there would be an increase in the consumption, and a consequent increase in the supply of fish.

32,148. Have you no fear that by increasing the number of boats employed upon the grounds the fisheries would in any way run out?—I have not the slightest fear of that. I believe the quantity of fish caught could be increased *ad libitum*.

The witness withdrew.

T. Anderson.

THOMAS ANDERSON called and examined.

32,149. (*Mr. Caird.*) Have you long been a fisherman here?—Yes, I have been fishing here for a long time.

32,150. Have you been engaged in cod-fishing?—Cod-fishing, ling-fishing, herring-fishing, and all sorts of fishing. I have been at every kind of fishing.

32,151. In your time has the yield of all the different kinds of fish increased or diminished?—The herring-fishing is getting worse now.

32,152. But all other kinds are improving?—The other fishing depends very much on the weather. The weather has been generally very bad, or else the fishing would have been good.

32,153. Is there no sign of the fishing grounds ceasing to yield plenty of fish?—I do not think there is.

32,154. (*Professor Huxley.*) Of what size were the largest herrings you have seen here?—The largest herrings ever I saw here were caught off the Norway coast; I should say they were 14 inches long.

32,155. Have you seen any as large caught here?—No, none.

32,156. What is the largest you have seen caught here?—I have never measured any of them, but I should say they would run from 10 inches to about a foot.

32,157. Did you ever take any herrings in the winter season—in January or February?—No; the only herring seen at the latter end of the season is the Norway herring.

32,158. Is that the principal time for the herring fishery in Norway?—Yes.

32,159. Have you been herring-fishing in Norway?—I never was fishing there, but I know that in Norway they never commence the fishing until the months of January and February.

32,160. Have you ever caught any at that time of the year yourself?—Yes, plenty. I did not catch them, I was only there and saw them.

32,161. What sort of condition were they in then?—They were full.

32,162. Full fish?—Yes, the same as they are here in the month of September.

32,163. What time did they become spent in Norway?—I do not know. At the end of the fishing the herrings were full, and they were full also when it first commenced. There was one year in Norway when the herrings were very plentiful. They have there a large net with a small mesh which the herrings cannot mesh themselves in. If they get among the herrings they scoop them round, pull the net round them, and take them in that way; then they have one particular day at which they are obliged to knock off the fishing in Norway, and if they do not happen to have got all of them out of their nets at that time they must let the rest go.

The witness withdrew.

J. Kennedy.

JOHN KENNEDY called and examined.

32,164. (*Mr. Caird.*) You have been for some years Fishery officer here?—Yes.

32,165. For how many years?—Thirteen.

32,166. Then you have a good knowledge of the interests of the fisheries in Zetland?—Yes, I ought to have.

32,167. Can you tell us whether during the time you have been Fishery officer the different descriptions of fish caught in these islands have been increasing, stationary, or diminishing?—I think they keep pretty equal.

32,168. Are they not increasing on the whole?—They may be a little bit, but not much.

32,169. Is there no kind of fishing increasing?—The Faroe fishing has increased, but not upon this coast. Some years it is better and some years worse.

32,170. Is the produce of the Faroe fishing brought here to be cured?—Yes.

32,171. So that it comes into your returns?—Yes.

32,172. Can you give us from the books in your possession the statistics of the number of boats, the number of men, their value, and the quantity of fish caught since the year 1855, up to the present time? Yes; I have not the year 1855. I commence with 1856. The return is as follows:—

Year.	No. of Boats.	Tonnage.	Value.	No. of Men and Boys.
			£	
1856	279	558	2,953	2,965
1857	669	1,327	6,279	2,990
1858	666	1,307	6,362	2,985
1859	653	1,218	6,077	2,929
1860	689	1,241	6,773	3,068
1861	681	1,241	6,144	3,055
1862	683	1,269	6,278	3,118
1863	672	1,224	6,280	3,136

32,173. That does not include the smacks employed in the cod and ling fishery. Have you any return of them?—Yes, but it is not here.

32,174. Can you give us the quantity of fish exported in the same time?—I can give you the cure from 1855, the cure of cod and ling, the quantity exported, and the cure of herrings.

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32,175. You need not give us the quantity exported if you give us the cure. That includes all, does it not?—Yes; the return is as follows:—

Year.	Herrings cured.	Cod and Ling cured.
1855	14,760 barrels	47,235 cwt.
1856	10,200 „	44,548 „
1857	17,860 „	43,625 „
1858	11,926 „	43,146 „
1859	6,670 „	60,245 „
1860	10,550 „	55,960 „
1861	8,164 „	39,005 „
1862	3,720 „	51,706 „
1863	9,733 „	69,699 „

32,176. Can you give us the number of vessels engaged in the cod-fishing, commencing with the year 1855, and showing their tonnage and the number of men engaged?—Yes; the return is as follows:—

Year.	No. of Vessels.	Tonnage.	Men.
1855	56	1,368	561
1856	51	1,170	509
1857	57	1,493	613
1858	58	1,638	647
1859	64	2,008	737
1860	67	2,287	817
1861	65	2,471	752
1862	65	2,514	732
1863	68	2,391	781

32,177. Are those all the statistics you can give us?—Yes.

32,178. Are there many men from Shetland who go to the whale fishery?—Yes, a good many.

32,179. Is it an increasing number, or is it diminishing?—It is falling off.

32,180. Then the interest of Shetland in the whale fishery is diminishing?—Yes, rather; the men are employed better at Faroe.

32,181. Do you know anything about the whale fishery, whether it is increasing or diminishing?—It is falling off.

32,182. Do you know that of your own knowledge?—I have some little knowledge of it.

32,183. (*Professor Huxley.*) Do you exercise any inspection over the fishermen here?—Which class of fishermen?

32,184. The cod and ling fishermen?—No.

32,185. Do you exercise any over the herring fishermen?—Not much.

32,186. Is it part of your duty to examine the size of the meshes of the nets?—Yes.

32,187. You do that?—Yes.

32,188. And what is the average size?—Thirty-three meshes to the yard is about the size. It generally runs from 32 to 33.

32,189. You do not make a close examination?—It is not necessary unless the nets come below the size, which is an inch from knot to knot.

32,190. Do you make a regular examination of the nets?—I do not consider it necessary.

32,191. Then how do you know that the meshes are of the legal size?—I look at them in passing, but it is a rare thing to find any below that size.

32,192. Does the Fishery cutter come up here?—Occasionally, but not often.

32,193. Is there any inspection of the fishing exercised by the cruiser when she comes up?—Not much. She comes very seldom here.

32,194. Does she come in the herring season at all?—She never has been.

32,195. Is there no one to see that the French Convention is carried out here?—No, there are no foreigners fishing here.

32,196. But there are foreigners off the coast?—Yes, Dutch fishermen in the early part of June.

32,197. But there is nobody to see that the Convention is carried out?—The steamer comes up once a year.

32,198. What steamer?—The Fishery steamer.

32,199. The man-of-war steamer?—Yes.

32,200. Does she come up at the time the fishing is going on?—Yes, generally about that time.

32,201. Does she send her boats among the nets?—No, she only stays here one or two days.

32,202. Does she lie in the harbour here?—Yes, in the harbour.

32,203. Then she does not do much in the way of superintending the fisheries?—No. She never has been here when the Dutch fishermen were fishing on the coast.

32,204. Then in point of fact there is no superintendence over the fisheries here?—There is a Revenue cutter, but she does not interfere.

32,205. Then there is really no superintendence to see whether the Convention Act is carried out or not?—I should say not.

The witness withdrew, and the inquiry was adjourned until the 6th of August, at Stornoway.

Stornoway, the Hebrides, Saturday, 6th August 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

RODERICK GEORGE MACKENZIE called and examined.

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32,206. (*Mr. Caird.*) You are a fish-curer here?—Yes.

32,207. Can you give us any statistics with regard to fish-curing here?—I have a memorandum here which perhaps will be of service to you. It gives the average takes of three successive years—1862, 1863, and 1864.

32,208. Are you speaking of herrings now?—Yes.

32,209. Can you not give us the whole take?—Yes, the gross take as well.

32,210. Then will you give it for each of the three years you have mentioned?—Yes.

32,211. Can you also give us the number of boats engaged in the fishery here?—Yes.

32,212–3. What is the number?—In 1862 there were 900 boats, and the average take was 70 crans, being equal to 63,000 altogether.

32,214. What was it in 1863?—In 1863 there were 800 boats averaging each 56½ crans, or equal to 45,271 crans altogether. In 1864 there were 700 boats averaging 85 crans each, or equal to 59,500 crans altogether.

32,215. Then the last has been a very good fishing season?—Yes, a very good season.

32,216. Can you give us the number of men engaged in each of those three years?—There were 4,500 in the first year of fishermen alone, in 1863 there were 4,000, and in 1864, 3,500.

32,217. In what proportion were they natives of the island, and in what proportion strangers who came here during the fishing season?—Do you mean of boats or of fishermen?

32,218. Of fishermen?—About 1,000.

32,219. One thousand were native fishermen?—Yes.

32,220. And the rest were strangers who came to the fishing?—Yes.

32,221. Has the herring-fishing been more frequented by strangers every year?—It has been on

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the increase during the last three years, and would have been considerably so this year but for the Baltic blockade.

32,222. What injury did the Baltic blockade do to the fishing?—It discouraged the fish-curers from entering into the trade.

32,223. Did they fear the loss of a market?—Yes.

32,224. Did it lower the price of the fish?—No, not eventually.

32,225. Then are we to understand that had it not been from a fear of the consequences of the Baltic blockade depressing the price of the fish there would have been a greater number of boats engaged in the take of fish?—Yes, exactly so.

32,226. There was no want of herrings then?—No, there was no want of herrings.

32,227. During what months is the fishing carried on?—From the 20th of May till the 15th of July.

32,228. Is the 20th of May the commencement of the open fishing time by law?—Yes.

32,229. Have you any observation to make to us with regard to the effect of the close time which has been established on the west coast?—The cod and ling fishermen complain that, in consequence of not being allowed to take herrings, they are unable to prosecute their fishing with success.

32,230. What time is that?—From January until the month of March.

32,231. Is it only on the score of the difficulty of getting bait for the cod and ling fishery that the complaint is made?—Yes.

32,232. Is there any desire on the part of the fishermen to get the herrings for the sake of the herrings themselves?—It was a serious loss to the island last winter that they were not permitted to take the herrings. There was a very large body of fish upon the coast.

32,233. At what time was there a large body of fish upon the coast that might have been taken?—In January and February.

32,234. Were the fish in good condition at that time?—Yes, pretty good.

32,235. They were good marketable fish?—Yes.

32,236. If they had been allowed to fish then would that have injured your May and June fishing?—No, I think not.

32,237. Were they not the same herrings?—No.

32,238. Were they different shoals?—They were a different quality of fish altogether.

32,239. From being precluded from fishing in the months of January and February, do you lose the fish altogether?—Decidedly so.

32,240. Do you desire to have a close time at all?—I think it desirable on the part of the curers especially, because the quality of the fish in May is not very good. They are not fit for human food or preservable, and it is a very desirable thing to make the early herring-fishing the starting point. I think they ought to begin on the 1st of June and continue the fishing as late as possible when the quality becomes such that the fish are a good and marketable article.

32,241. Then when would you commence the close time?—In the month of March.

32,242. At the beginning of the month of March?—Yes.

32,243. And continue it during the months of March, April, and May?—Yes.

32,244. You would have a close time for three months?—Yes, that I believe would suit both classes of our fishermen as well as the curers.

32,245. Do the fish not get in good condition before the beginning of June?—No, I do not think they do in my experience.

32,246. How late would you continue the fishing?—Until the month of August.

32,247. Then in fact you desire to have no close time until the month of March?—No.

32,248. You desire to have the months of March, April, and May as a close time?—Yes.

32,249. You would allow the fishermen to fish all through the other nine months?—Yes.

32,250. Do you think that could be done without any injury to the early fishing?—Yes.

32,251. Or without any injury to the general interests of the fishermen at Lewis?—Yes.

32,252. Has the winter fishing ever been attempted to be prosecuted as a matter of business here except for bait?—Not to any extent.

32,253. Do you think that a winter fishery could be created here?—Yes, I am quite impressed with that idea.

32,254. Do you think that if created it would become a valuable winter fishery?—Yes.

32,255. When the herring season closes here as at present in the month of July, what do the fishermen do then?—They go to Caithness to the fishing there.

32,256. Do they come from Caithness in the month of September?—Yes, in September and October.

32,257. They come home in September?—Yes.

32,258. Then when they come from Caithness in September what is their business during the rest of the season?—They make preparations for the cod and ling fishery.

32,259. When does it begin?—In some districts it begins in the month of November.

32,260. Does it continue during the winter?—Yes.

32,261. Until when does it continue?—Until July, the first week of July.

32,262. Through the period of the herring-fishing?—Yes.

32,263. Then all the fishermen are not engaged in the same fisheries at the same time?—Yes, they are engaged in both, and those engaged in both discontinue the cod and ling-fishing in the month of April or March.

32,264. Are you acquainted with the cod and ling-fishing here?—Yes.

32,265. Do you cure or purchase those fish?—Yes.

32,266. Can you give us any idea of the progress of that fishery of recent years?—Yes, I believe it has been on the increase.

32,267. What has been the average of the take?—The average would be from 500 to 800 tons.

32,268. On the whole, would you say that the cod and ling fishery is an increasing interest in Lewis?—Yes.

32,269. What would be the total take in a single season?—800 tons.

32,270. In what proportion are the cod and ling?—There is a much larger quantity of ling than cod.

32,271. Are they fished in the same manner and with the same lines?—Yes, and the same material is used.

32,272. Are they caught at the same time?—Yes.

32,273. Do the boats that follow the cod and ling-fishing continue on the fishing ground for some time; are they decked boats?—No, they are mostly all open boats.

32,274. Do they come in every night?—Yes, except during the summer season when the weather is fine. When the weather is fine some of them stop out all night.

32,275. Where are the best fishing grounds?—Off the Butt of Lewis; there is a bank there that is a very famous bank for cod.

32,276. Do those grounds continue to yield as well as they did in former years?—I think they do.

32,277. Is there no sign of those fishing grounds falling off in the yield of fish?—No, none whatever.

32,278. Are the fish brought ashore as they are caught, and gutted ashore?—Yes.

32,279. What is done with them then?—They are split up, put into vats, and cured.

32,280. And are they then dried?—Yes, they are then dried.

32,281. And then in a dried state are they sent to market?—Yes, they are sent to market dried.

32,282. Is there any haddock fishery on this coast?—I think the haddock-fishing has failed in the last few years. It has not been practised to the same extent.

32,283. Was it in former years a good fishery?—Yes, very good.

32,284. When you say it has failed, do you mean that the fish have ceased to be got in the same plenty as formerly?—They have disappeared within the last two years very much indeed.

32,285. Can you give us any idea of what may be the cause of that?—No, I can give you no idea of the cause.

32,286. Is there any other white-fishing practised around this coast?—Salmon is the only other fishing, I believe.

32,287. Do you not catch saithe?—Yes.

32,288. And tusk?—Yes.

32,289. Are tusk got here in large quantities?—There is a large quantity caught on the west side of these islands.

32,290. Are the tusk caught by the same fishermen who fish for cod and ling?—The tusk fishery is confined to a certain district of the islands.

32,291. Is it a considerable fishery here?—Yes.

32,292. Is it cured in the same way?—Yes.

32,293. And are the fish sent dried to market?—Yes.

32,294. Is there any lobster fishery here?—Yes.

32,295. Is that an increasing fishery?—I think it is.

32,296. Do you know if there are plenty of lobsters to be had round this coast?—Yes.

32,297. Might it be increased to a greater extent than it is at present?—I think so.

32,298. Is there any crab fishery here?—There is no crab fishery to any extent.

32,299. Are there any oysters?—I believe there are several beds of oysters.

32,300. Are they diligently fished?—I do not think they are fished at all.

32,301. Are the oysters found here good in quality?—Yes, I believe they are very good indeed.

32,302. Then would it not pay to fish oysters and send them from here to market?—Yes, I think it might.

32,303. Has that never been thought of?—It has never been made a trade of as far as I know.

32,304. Are the oysters found in particular localities known to the people here?—Yes.

32,305. Are they got occasionally by the dredge, as they are on the east coast?—I think they are.

32,306. Is not the bottom too hard for dredging?—They can get them without dredging at all in some districts.

32,307. Is that when the tide is out?—Yes.

32,308. Are there any regular oyster scarps on which the oysters breed largely?—I am not aware.

32,309. With regard to the question of a herring brand, do you use the Crown brand here?—No.

32,310. Are none of your herrings branded then?—None.

32,311. Do you send them to the foreign market?—We do.

32,312. Do they chiefly go into the foreign market?—Yes, the greater bulk goes to the foreign market.

32,313. How is it that you have no brand here when they have a brand on the east coast?—I cannot account for it; I think we are as much entitled to it as they are elsewhere.

32,314. Have you never sought for it?—No.

32,315. Do you think it would be of any advantage to you?—There is a diversity of opinion about that.

32,316. Then at present if you sell your herrings without a brand, and send them to the same markets as those to which the branded herrings go, you sell them solely upon your character as curers?—Yes.

32,317. Do you have foreign agents here?—Yes, there are foreign agents.

32,318. Do you consign principally?—Yes.

32,319. And sell abroad on your own account?—Yes.

32,320. And you never find any difficulty in disposing of your herrings in foreign markets on account of the want of a brand?—Not that I am aware of.

32,321. (*Prof. Huxley.*) What are your foreign markets?—Stettin, Dantzic, St. Petersburgh, Hamburgh, and other places.

32,322. Do you cure in the same way as the cures on the east coast?—Yes.

32,323. In fact, you compete with one another?—Our fish are a more delicate fish, requiring a more particular kind of cure.

32,324. But the general principle of the cure is the same?—Yes.

32,325. And you and the east coast fishermen compete in the same markets?—Yes.

32,326. There is not so much difference in the fish as to make you sell for a different market?—No, I do not think there is.

32,327. You were speaking about a close time?—Yes.

32,328. You recommended a close time to extend somewhat later?—Yes.

32,329. But I do not understand why you wish to have a close time here at all?—My reason is this, that the quality of the fish taken in the month of May is so inferior that it is neither fit for human food nor preservable.

32,330. Then why do they take the fish if it is neither fit for human food nor preservable?—The fishermen bring them to the market, and if one person will not take them another will.

32,331. Am I to understand that the competition among the curers to obtain the article is so great that they do not refuse to take whatever is brought to them?—They might refuse them, or not give such a high price for them.

32,332. Are they obliged to take them if they engage crews for a certain period?—Yes.

32,333. Why should they engage crews at a time when the fish is unfit for preserving; is it because there is so much competition?—Yes.

32,334. So that a close time would be a matter of convenience to the curers by restricting this competition?—Yes, it would be a matter of great convenience in enabling us to obtain the fish only when they were fit for food.

32,335. Is that what you regard as the convenience of a close time?—Yes.

32,336. It is not on account of the fish that you want a close time here?—It is on account of the quality of the fish.

32,337. Do you think that during those months when you say a close time ought to exist, the catching of fish would injure the supply afterwards?—No, I do not think it would.

32,338. Do you think that fish taken at that time are hurtful to the people who consume them; do they do them any harm?—I should not like to eat them.

32,339. Are you aware that there are people who do eat them?—Yes.

32,340. When you take them from the fishermen, you sell them again, I suppose?—Yes, we sell them in the market.

32,341. And they are bought?—Yes.

32,342. And you never heard of any inconvenience arising from it?—I have had complaints about the quality of the fish.

32,343. Still people buy them and eat them?—Yes.

32,344. If it were very injurious, they would hardly go on buying it?—No.

32,345. What is the condition of the fish here when you get them in July?—They are very good then.

32,346. Are they full fish?—They are generally mixed, sometimes full and sometimes thin.

32,347. Do you ever get spent fish here in January?—I am not aware of any.

32,348. Then they leave off catching the fish here before they become spent?—They leave off in July.

32,349. In order to go to the east coast?—Yes.

32,350. Is there any close time for lobsters here?—Yes, I think there are three months in the year.

32,351. Do you happen to know what months?—June, July, and August.

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32,352. Do you know under what authority that is?—I am not aware.

32,353. Are the oysters which are obtained here of good quality?—Very good.

32,354. Are they at all black in the gills?—No, I do not think they are.

32,355. Is there any thing about them, that would render them unsaleable?—I do not think there is.

32,356. Are you aware whether any of them are being sent for sale to the home market?—I am not aware.

32,357. Are oysters sent from here in any considerable quantity?—No.

32,358. (*Mr. Caird.*) What has been the range in the price of herrings within recent years; has it been increasing or diminishing?—Do you mean the price of the cran?

32,359. Yes?—In 1862, the price ranged from 15*s.* to 22*s.* with from 3*l.* to 5*l.* bounty. In 1863 it ranged from 15*s.* to 20*s.* with 3*l.* bounty.

32,360. Three pounds bounty to the men?—Yes, to the crew.

32,361. Is the price you are giving us now, the price you paid the fishermen for the herrings?—Yes.

32,362. What was it in 1864?—In 1864 it ranged from 12*s.* to 17*s.* with from 3*l.* to 10*l.* bounty.

32,363. There is a wide range there?—Yes.

32,364. What is the cause of that wider range than usual?—Several of the curers left off engaging crews in consequence of the Baltic blockade, and then the price got up in the course of the season.

32,365. Has the market price abroad increased in a similar proportion?—I believe some of the curers are discontented with the last season.

32,366. Have the fishermen of this country been making a good business of the fishing of recent years?—Yes, very good.

32,367. Is the price of cured and dried cod and ling on the increase?—Within the last few years it has increased.

32,368. And it was a remunerative price to all parties connected with it?—Yes.

32,369. Does the ling fetch a higher price than the cod?—Yes.

The witness withdrew.

Morison.

JOHN MORISON called and examined.

32,370. (*Mr. Caird.*) You have heard the evidence which has been given to us by Mr. Mackenzie?—Yes.

32,371. Is there any point on which you wish to offer further information?—No, I do not recollect any, except that I think the close time is too long.

32,372. What period would you desire to have for a close time?—From the 1st of April until the 24th of May.

32,373. Why do you exclude the month of March?—March is a good month for the cod and ling-fishery.

32,374. You would keep it open for bait?—Yes.

32,375. Is there any difficulty in getting bait here other than herring bait?—There is very great difficulty; they cannot get any fish without herring bait.

32,376. Will the codfish not take anything except herring?—Not with the same relish.

32,377. But in certain seasons are they not fished without herring?—Yes, but they always prefer the herring.

32,378. Does the cod and ling fishery continue during the month of March?—Yes.

32,379. Why do you say the 24th of May rather than the 1st of June; do you find the herrings in a good condition after the 24th of May?—They are not very good, but I am afraid that it would injure the fishermen to make the close time longer.

32,380. Do you think they might have a less quantity of the fish that would afterwards be caught?—Yes, I think if the fishermen were to have a portion of the month of May it would do no harm.

32,381. Do you think that the limitation of the close time in the way you have mentioned could be made without injury to the summer fishing?—Yes, I rather think it would be in its favour than otherwise. Since I commenced fishing we never had a June fishing until the close time commenced.

32,382. Have you found the close time of advantage to the June fishing?—Yes, a very great advantage. We have got herrings in more abundance in June since the close time than ever we did before.

32,383. When was the close time first established; was it two years ago?—No, more than three years ago, in 1860, I think.

32,384. Previous to that time was your summer fishing not as good as it is now?—Previous to that we got great quantities in May, but they were not fit for human food. Still we were obliged to take them from the fishermen.

32,385. Has the effect of making a close time up to the 20th of May been to enable you to get a better quality of fish in the month of June than formerly?—Yes, and to get more of them also.

32,386. That is after a very long close time?—Yes.

32,387. When does the present close time begin?—It lasts from the 1st of January until the 20th of May.

32,388. Do you think that the months of January, February, and March might be done away with from the close time without any injury to the fishing?—Yes, that is my opinion.

32,389. Do you not think that the fish caught in those months might injure the fishing in June?—They are not the same fish.

32,390 Are you quite sure they are not the same shoals of fish?—Yes, I am quite sure they are not the same. The fish we get then are more like the Caithness fish. Last year in particular they were like the Caithness fish in quality.

32,391. Have you anything to say to us in regard to the cod and ling-fishery?—Yes.

32,392. Are you engaged in it?—Yes.

32,393. Do you find it an increasing business?—I think so.

32,394. Do the fishermen make a good living by it?—Yes, I think they do.

32,395. Is it successfully followed in open boats?—Yes.

32,396. Have they never had occasion to use decked boats so that they might be able to keep at sea longer in bad weather?—No, not as far as I know.

32,397. The fishing grounds are near enough the harbour to which they can run with their open boats?—Yes.

32,398. Have you formed any opinion as to the advantage or disadvantage of the brand on herrings?—I am afraid the brand would not do for our herrings; they are a very delicate sort of herring, and if they were kept for a day in order to brand them, it would injure the cure.

32,399. Do you mean it would injure the cure if it had to be delayed on account of the brand?—Yes, they would have to be delayed ten days before they received the brand.

32,400. How is that?—They are delayed for ten days at Caithness before they are branded.

32,401. Is your process a more active and speedy one?—Yes.

32,402. If the brand were established here then it would very likely injure your herrings?—I am decidedly of that opinion.

32,403. Then of course you are not in favour of the brand?—No, I am not in favour of the brand.

32,404. I believe you find no difficulty in selling your herrings abroad without the brand?—No, not the least difficulty.

32,405. (*Prof. Huxley.*) Do you think that a winter fishing might be established here?—Yes.

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32,406. In the months of January and February?—Yes, I think so.

32,407. Might a great quantity of herrings be caught here then?—Yes, last year 60,000 or 70,000 barrels might have been caught.

32,408. Then was the close time injurious to the fishing here?—I think it was greatly in their favour, or rather I think a short close time would be greatly in their favour, but not a long one.

32,409. Do you think it would have done any harm to the summer fishing if the winter fish had been caught?—I do not think it would.

32,410. You mean a close time from the 1st of April?—Yes, until the end of May.

32,411. Your close time would allow of a winter fishing?—Yes, decidedly.

32,412. What condition were the fish in during the last winter?—They were very good.

32,413. Were they full fish?—Yes, full fish.

32,414. Did the fishermen altogether leave them alone?—No.

32,415. Was anything said about that?—Yes, a good deal.

32,416. Was there anything done in the matter?—Yes, a little.

32,417. But was anything done by the Fishery officer, for example?—Yes, he did what he could; he was a faithful servant, and he did all he could.

32,418. Did he do all he could to prohibit the fishing?—Yes, but the fishermen were too strong for him.

32,419. Was anybody prosecuted for a breach of the law?—I am not aware whether there was any prosecution or not.

32,420. Do you think you would have been aware if there had been?—There were several parcels of herrings seized and taken from the fishermen.

32,421. Were the fishermen themselves prosecuted under the Act?—I am not aware of it.

32,422. If the herrings were seized, it must have been known to whom they belonged?—I do not think they went to the utmost rigour of the law.

32,423. Do you know at what time the herrings were caught—what time of the year?—They were caught in January, February, and March.

32,424. All through the three months?—Yes, but perhaps there were fewer in March; they were getting poor then.

32,425. Were there any spent fish in March?—I am not aware.

32,426. Were the fish cured that were caught?—Yes, they were cured.

32,427. So that in fact the people here did not trouble themselves very much about the law?—They could have carried on the fishing to a greater extent if it had not been for the law. Those of the fish which were cured were ill cured, because they were afraid of the Fishery officer and of the law.

32,428. (*Mr. Caird.*) Was there any respect for the law?—Yes, for the letter of the law; but there was a strong temptation, the herrings were very plentiful, and the people wanted them for food.

32,429. (*Prof. Huxley.*) And you are of opinion that if the fishermen had been allowed to catch fish then it would not have had any effect upon the summer fishing?—Not the least.

32,430. Have you any difficulty of disposing of your cured herrings in the foreign market on account of their not having the brand?—No, we do not experience any difficulty.

32,431. Have you ever had them returned on your hands?—No; but I am sorry to say that we have got bad prices sometimes.

32,432. Do you pack your herrings in the same way as the branded herrings are packed?—Yes.

32,433. Do you put your own mark upon the barrels?—Yes; everyone has his own brand.

32,434. So that the foreign merchant would not be able to form a better judgment of your herrings than of the branded herrings; he must go by what he sees on the top of the cask?—Yes.

32,435. Does he take your herrings quite freely?—Yes; the foreigners would soon go against us unless the herrings were all right; they would soon find out whose herrings to take and upon whom they could depend.

32,436. Is there much difference in the quality of herrings cured here by one man and by another?—I am not prepared to say; sometimes some may take greater pains with them than others.

32,437. Has one man's brand a better sale in the foreign market than that of another?—Yes; some herrings will fetch a great deal higher price, perhaps double.

The witness withdrew.

KENNETH SMITH called and examined.

K. Smith.

32,438. (*Mr. Caird.*) Have you heard the evidence which has been given by the two previous witnesses?—Yes.

32,439. Do you concur generally in what they have stated to us in regard to a close time for the herring-fishing here?—Yes, pretty much; but I think that a close time from the month of April up to the 25th of May is very requisite, because the body of herrings caught on this coast in the summer time never make their appearance on the coast until the month of April; they are then seen in large bodies coming from the sea.

32,440. Coming from the north?—Yes, from the north, on the west side of the island. Perhaps they are very soon seen towards the southward on the west side. The same body are then seen 10 or 12 miles to the northward of that, and then they are seen finally at the Butt of Lewis. When the fishing begins here early in May that body of fish is frequently met by a million yards of net or so between the Butt of Lewis and Cape Wrath, and they were so caught up in consequence that we never had a good June fishing here. Since the close time has been established and this vast body of fish has been allowed to come into the Minch, there has been a good fishing both here and to the eastward.

32,441. Do you get your best fishing here in the Minch?—Yes.

32,442. That is the best summer fishing ground?—Yes.

32,443. Then is your objection to the early fishing that the shoals are broken by it?—Yes, before they come upon the proper fishing grounds.

32,444. Do you not agree with the previous witness, that the fish are inferior in quality in the beginning of May?—Yes.

32,445. What time are they of the best quality and fit for cure?—About the 28th of May.

32,446. What time would you recommend as a proper close time?—The 25th of May.

32,447. That is when the close time would end?—Yes.

32,448. When ought it to begin?—On the 1st of April.

32,449. That is the same close time as that recommended by the previous witness?—Yes.

32,450. Do you agree generally with the opinion expressed by both of the previous witnesses as to its being no advantage to you to have a Government brand for your herrings?—I do not think it would be an advantage to us; our herrings are of a more delicate nature than the east coast herrings; they could not bear the pressure; the quantity put into the barrels would destroy the fish.

32,451. You would rather be left to your own skill in packing the herrings?—Yes.

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32,452. You think that being compelled to effect your cure in a certain manner would be injurious to your fish?—Yes.

32,453. You consider that you are the best judge of your own interests?—Yes; we use a small Liverpool salt in curing the herrings and the Spanish salt for packing, which is not used on the east coast.

32,454. You are guided in that by your own experience?—Yes; our foreign agents tell us what sort of packing and curing they like, and every curer likes to pack to the best of his knowledge in order to obtain the best prices.

32,455. Is there much difference in the price of different curers' herrings?—The price fluctuates very much.

32,456. Putting aside the question of a general fluctuation of price, is there much difference in the price one curer secures for his herrings above another?—I do not think there is; some curers get equally as good prices as others. Very often east curers' herrings are sold heavier than others, and yet they do not fetch as good prices.

32,457. I am speaking now of the curers of Lewis and am not comparing them with the curers on the east coast. Does the brand of one curer here, in consequence of his character, skill, or known intelligence in conducting the cure, bring a higher price than that of another?—Yes, decidedly.

32,458. If a Government brand were established would you not bring them all to one uniform level?—It might have a beneficial effect in that way.

32,459. But would it be a beneficial effect?—Yes, if the Government brand would bring them all to that degree of perfection.

32,460. Would it not be rather a lowering of the best quality to bring them to one uniform level?—I understood you the other way. I thought you meant that the Government brand would have the effect of bringing them all up to the perfection of the best curers.

32,461. Are you engaged in the cure of cod, ling, and tusk?—Yes.

32,462. Is that an increasing fishery here?—Yes.

32,463. Is there a considerable amount of money coming into the country from that fishery?—A good deal; the prices have ranged for the last few years in the market from 16*l.* to 20*l.* and sometimes as high as 21*l.* for cod and ling.

32,464. For the dried fish?—Yes, after sending it to the market.

32,465. To what markets do they go?—Glasgow and Liverpool chiefly.

32,466. To the home markets?—Yes.

32,467. You do not send to the foreign markets at all?—No.

32,468. Is there no cod sent to the foreign market?—There has been one cargo sent within my recollection; it was shipped, a few years ago, to Spain, but they are very particular. We salt rather heavily for the Spanish market.

32,469. And you find sufficient sale in the home markets for all you cure?—Yes.

32,470. Is there any cod sent fresh to market from these islands?—No.

32,471. Is that because the markets are too distant?—Yes.

32,472. Have you had any experience with regard to haddock-fishing here?—I was never engaged in the haddock-fishing.

32,473. Are there any soles caught here?—A few, but very few indeed.

32,744. There is no beam-trawling on this coast?—No.

32,475. Is there no fishing of that kind for flat fish?—No.

32,476. Do you know whether the oyster fisheries might be increased here with advantage?—I believe they might.

32,477. Has anybody turned his attention to it?—I have heard of no one who has. I believe they would pay very well.

32,478. Do you catch them for your own consumption?—Yes.

32,479. Is the quality such as you have seen in the oysters sold in large towns?—Yes, the quality, I believe, would take the market very well.

32,480. Are they easily got?—Yes, and the ground is very suitable for dredging.

32,481. Whereabouts are the oyster beds?—Between here and the Shiant Isles and Loch Shell and Loch Broom on the west side.

32,482. (*Professor Huxley.*) Do you agree with the previous witness that a winter fishing might be established here with advantage?—Yes.

32,483. Do you think it would have any injurious effect on the summer fishing?—None whatever.

32,484. I think you stated that one of your great reasons for wishing a close time was that catching the fish too early tended to break the shoals?—Yes.

32,485. On the east coast there is no close time?—No.

32,486. The fishermen there fish as early as they please?—Yes.

32,487. And the shoals are not broken in consequence?—The east coast is quite open, but here they come in in a narrow passage between Cape Wrath and the Butt of Lewis, and the number of nets they used to meet with scattered them and did not allow them to go upon the proper fishing ground.

32,488. Do they not go upon the west side of Lewis?—No.

32,489. Do you get your great catch in the Minch?—Yes.

32,490. You look upon this as almost close water?—Yes.

32,491. Is there any other reason, in your opinion, why the catching of the herrings at that time is injurious?—No, I have no other reason. I believe that if the shoals were allowed to come in even the catching of them would not diminish the quantity of herrings. The quantity of herrings is very large.

32,492. Do you agree with the previous witness, that the herrings are in such a poor condition that they would be injurious for food?—I do not say that they would be injurious for food, but they would not make very good food. I do not believe that they are unwholesome, but they are very poor food at that season of the year.

32,493. And notwithstanding that they are poor food, and would fetch a worse price, the curers here are compelled by competition one with another to take the fish if the fishermen catch it?—Yes.

32,494. What is the system pursued in hiring fishermen here?—They get so much per cran, and the bounty. They are just hired in that way. The price here has ranged from 14*s.* per cran and 5*l.* bounty up to 20*s.* a cran for a crew of five.

32,495. Is the bargain made before the season begins?—Yes.

32,496. Do you say "I will give so much to you to fish for me only"?—Yes.

32,497. And you call that a bounty?—Yes.

32,498. Is there a fixed rate for the herrings that are brought in?—Yes.

32,499. And the bargain is adhered to on both sides?—Yes.

32,500. Is the competition among the curers so keen that they cannot exactly fix their own time when the catch of fish shall begin?—They have never done so. It might be done, but I do not believe that it could be very well established.

32,501. If no curer, for example, would take fish before the end of May the fishermen would not go to the fishing, would they?—No, and I believe the early fishing now practised is injurious. Since the close time was established our summer fishing has been more abundant than in any previous year, and it is followed now further to the southward towards Harris, where there was no summer fishing at all. When there was no close time they had to give that up. The average never exceeded 50 crans, whereas

for the last few years it has been more than double, and they have been enabled to get from 100 to 120 crans. That has only been the case since the fish have been allowed to come in and go to the islands southward of this.

32,502. I do not exactly understand you. Do you mean that after the fish attain a certain age and get a little older that they do not mind being intercepted by nets?—No, but they keep more upon their course, but if the body of fish were met out as they were in the early part of the summer I believe the effect would be the same, and that the shoals of fish would be scattered.

32,503. In the month of June do not the fishermen go so far northward?—No, the fish come into the harbour then.

32,504. Do they fish the herrings off the harbour here then?—Yes.

32,505. Then fishing them off the harbour does not prevent them going further south to Harris?—No. The fact is that the great body have passed, and have been passing and repassing, and when they get into the lochs and Minch they remain during the months of June and July until they are in good condition.

32,506. (*Mr. Caird.*) Is the great catch of herrings from all the western coast, including Loch Broom, Gairloch, and the other lochs in which there are fishermen, in the Minch?—Yes.

32,507. Both from the mainland and from these islands you go to the same fishing grounds?—Yes.

32,508. Then in getting your opinion here we, in point of fact, get the opinion of all who are engaged in fishing the same ground?—I fancy so.

32,509. They all frequent the same ground?—Yes.

32,510. Does that apply also to the Harris fishery?—Yes.

32,511. Do the Harris fishermen also come up to the Minch?—Yes, there is a man here now from Harris.

32,512. Are there any curers at Ullapool, in Loch Broom?—I am not aware.

32,513. Is there any other large fishery station on the west coast except this?—At Gairloch there are a number of fishing boats.

32,514. But there is no regular local curer there?—No.

33,515. Or at Portree?—Yes, they do cure at Portree.

32,516. Is there much line-fishing at Gairloch?—There is a little, but it is not carried on to the same extent that it ought to be. A very good cod-fishing might be established at Gairloch, for the quality of the fish is very fine there.

32,517. You think it is not followed as it might be?—No.

32,518. What is the important fishery in the Gairloch?—Cod-fishing is the principal fishing there.

32,519. Do they cure them in the same way that they do here?—Yes.

32,520 Are there many boats there?—Very few.

The witness withdrew.

ALEXANDER MORISON called and examined. *A. Morison.*

32,521. (*Mr. Caird.*) You are a curer here?—Yes.

32,522. Have you heard the evidence of the previous witnesses?—Yes.

32,523. Do you generally agree with the statements they have made?—Yes, generally.

32,524. Is there any point upon which you desire to offer an opinion to us on their evidence, or in addition to what they have stated?—No.

32,525. Is there within your knowledge any mode of fishing practised on this coast which is injurious to the brood and spawn of fish?—I am not aware of any.

32,526. One branch of our inquiry is, whether there are any legislative restrictions that interfere with the fishing. Is there any legislative restriction which you would desire to see removed? That of course would apply to the close time as it has been established here; do you think it would be desirable to alter that?—Yes, I think it occasions a serious loss. There might have been between 50,000 and 60,000 crans of herrings taken here last winter if there had been no close time. I think a close time from the 1st of April till the end of May would be quite sufficient.

32,527. You would have a close time to last about two months?—Yes.

32,528. Are there any regulations enforced here arising out of the present state of the law which, in your opinion, impede the fishermen in the exercise of their business?—No, only the close time.

32,529. There is nothing else?—Nothing more.

32,530. There is no interference on the part of any authority which injuriously affects the fishing?—No, the Fishery officer is the only one who interferes in any way, and he only interferes when we break the close time.

32,531. (*Professor Huxley.*) You do wish to have a close time from the 1st of April till the end of May?—Yes.

32,532. What is your reason for wishing to have that as a close time?—I think the fish are not fit to be taken during those two months.

32,533. They do not sell as well then?—They may be caught, but they are not fit to be cured then.

32,534. But when they are cured they have a certain sale, have they not?—It is scarcely possible to sell those fish now, and if they are sold they are sold at a serious loss to the curer.

32,535. If fish of this bad quality are unsaleable, why do the curers make arrangements for taking them?—That is occasioned by the great competition among the curers.

32,536. Then is the close time for the convenience of the curers?—Yes, it is very desirable that it should exist. It has also this effect, that since the close time nearly double the quantity of fish is taken that was taken in former years. In former years there was no fishing, or next to none, in June; the fishing then was in May, when the fish were bad in quality.

32,537. Why do you think a close time has improved the fishing?—It has allowed the shoals of fish to come in through the Minch and all through the islands, whereas before the close time was established the boats went out in the early part of May, broke the shoals and scattered them so that they never returned again.

32,538. (*Mr. Caird.*) Is there any trawling for herrings on this coast such as is practised in Loch Fyne?—That is never done here at all.

The witness withdrew.

PETER MACFARLANE called and examined. *P. Macfarlane.*

32,539. (*Mr. Caird.*) You are a fish-curer here?—Yes.

32,540. Do you generally agree with the evidence of the previous witnesses?—Yes.

32,541. Is there anything which you desire to add?—No, nothing in particular.

32,542. Do you wish to say anything in regard to a close time?—I agree with what has already been stated, that there ought to be a close time from the 1st of April till about the 25th of May.

The witness withdrew.

STORNOWAY.

J. Macdonald.

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JOHN MACDONALD called and examined.

32,543. (*Mr. Caird.*) You are a fish-curer here?—No, I belong to the other side of the country.

32,544. Are you a curer there?—Yes.

32,545. What is the name of the place?—Bernera.

32,546. What kinds of fish do you cure?—Cod, ling, and tusk, and nothing else.

32,547. Do you cure herrings at all?—No.

32,548. Is there any fishing ground near where you are?—Yes.

32,549. Do the men go and come every day?—Yes, in the winter. In the summer time they will be out for two nights together.

32,550. Do they bring the fish always on shore fresh?—Yes.

32,551. Without gutting them?—Yes, they are always brought in fresh, except when they get too many; in that case they will gut them outside, but not split them.

32,552. Do they frequent the same fishing grounds which they fished upon in former years?—No, they go 15 miles outside.

32,553. Do they use larger boats than they formerly employed?—Yes.

32,554. Are there any decked boats used in that fishing?—No.

32,555. Do you imagine that if they had decked boats it would be advantageous to the fishery?—I have seen them tried, but they did not do better.

32,556. There was no advantage derived from the men being enabled to stay out at sea at a greater distance?—Yes, but they could not have boats large enough; they were obliged to have them small so that they could hoist them on board in bad weather. The larger boats were not so fit for the long-line fishery.

32,557. Is it a long-line fishery?—Yes.

32,558. Not a hand-line?—No, the hand-line does not do so well. The London smacks have been there often, but they have gone away now; it did not pay them, and they have gone off to their own country.

32,558*a*. Is the number of fishermen engaged in that fishery on the increase?—Yes.

32,559. Is it found by the fishermen to be a remunerative business?—Yes.

32,560. Is it continued over a greater number of months than it was in former years?—No, it is just the same. From November till the end of June.

32,561. Is there a sufficient quantity of fish to admit of any great increase in the number of boats?—The quantity of fish caught is increasing, notwithstanding the increase of boats.

32,562. Is the take of each boat increasing?—Yes.

32,563. So that the fishing ground seems more prolific than formerly?—Yes.

32,564. What kind of bait is used?—They use haddock bait; they get haddock with the small lines, and bait the long-lines with it. Conger eels are the very best bait.

32,565. Can you get plenty of that bait?—Yes, and we could get herring if we were allowed; there are great shoals of herrings at all times. I believe they come round there first, and then go round to the Minch.

32,566. Do they come first on your side, and then go round into the Minch?—Yes.

32,567. From the west?—Yes, every kind of fish comes first from the west, from the ocean; we think they come direct from the Atlantic.

32,568. (*Professor Huxley.*) At what time do you get herrings on the west coast?—We see them plentifully in the month of May, when we are out with our long-lines.

32,569. Do you see them earlier, in the months of January and February?—I believe they see them in April.

32,570. Are there none in January or February?—They don't go so far out. There may be some shoals in the lochs, but they are not in the habit of trying for them.

32,571. Would it be a great advantage to the fishermen to be allowed to catch herrings for the purpose of bait in the month of May?—Yes, it would.

32,572. For bait or for sale?—They are not in the habit of getting herrings at all for bait. They begin with sand eels and limpets.

32,573. Would they use herrings if they were permitted to do so?—Yes.

32,574. Are herrings taken largely on the west coast?—Yes, principally for bait.

32,575. Simply for bait?—Yes, for nothing else.

32,576. Has the quantity of haddock remained pretty much the same during your fishing?—No, we don't get as many as we did some time ago.

32,577. Do you go further out to look for them?—No, we get them close on the land.

32,578. But the fish are not as plentiful?—No.

32,579. Are there many lobsters caught on that coast?—Yes.

32,580. Is there a considerable fishery there?—Yes.

32,581. How are they caught, in pots?—Yes, they gave up the iron hoops.

32,582. Do you find the pots pay best?—Yes.

32,583. They are less trouble?—Yes.

32,584. How many boats have you in the lobster fishing?—From 70 to 80 on our coast.

32,585. With how many pots would each boat be provided?—That is according to the size of the boat.

32,586. How many on the average?—On the average there would be a score, perhaps 30 or so, and sometimes 40.

32,587. Are you allowed to catch lobsters all the year round?—No.

32,588. During what months are you prohibited?—June, July, and August.

32,589. That is in accordance with the Act of George II.?—I believe so.

32,590. Does that prohibit fishing during these months on the Scotch coast only?—It is much in favour of the fishing whatever Act it is.

32,591. Do you think that it is a good Act for the fishing?—Yes.

32,592. Is it during that time that the lobsters breed?—Yes, and throw their jackets also.

32,593. They are not in such good condition then?—No.

32,594. They are not so good for the market then?—No.

32,595. If there was no close time would people get them?—Yes, but they would not live to go to the market. They would die on the way and would not pay the carriage.

32,596. Then the demand for them would soon cease?—Yes.

32,597. So that if there was no close time there would not be much demand for them?—No.

32,598. Is that the time the lobsters have the berry under them?—They have that every day in the year.

32,599. Do you sell those "berry hens" every day in the year?—Yes.

32,600. They bring the best price then?—Yes, in January and February.

32,601. Are they then full of berries?—Yes, but you will find them full of berries every day in the year.

32,602. Is there any sun-fishing on the west coast?—We see some of them.

32,603. Do you never get them?—No.

32,604. What time of the year do you see them?—In the summer, when we used to go to the Fern Islands. I have seen them following the boat for some time.

The witness withdrew.

DONALD SMITH called and examined.

32,605. (*Mr. Caird.*) You are a curer in Stornoway?—Yes.

32,606. Do you generally agree with the evidence which has been given by the previous witnesses?—Yes, I do generally.

32,607. Is there any point you wish to bring before us upon which you differ from them?—I have received a report from some of our foreign agents which I will hand in, in which they express an opinion as to our fishing season.

32,608. Foreign buyers seem to make objection to herrings caught in the first days of June?—Yes.

32,609. On what ground do they object?—They think that the fish up to the 5th of June are often not in a ripe state, but we would not wish to have a close time till that time for fear of hurting the fishermen. All we wish is to extend the close time until the 25th of May, and we would rather be sufferers ourselves than hurt the fishermen.

32,610. You would rather sell your early fish at a lower price?—Yes, than have a close time for all the time the foreign buyers want it.

32,611. They object to your herrings up to the 5th of June?—Yes, generally. They consider them not fit for human food.

32,612. They are not then of the best quality?—No.

32,613. But you yourselves, for the interests of the fishermen, would prefer that the close time should be extended to the 25th of May?—I think that to have it up to the 25th of May would be both for the interests of the fishermen and the curers. The close time should begin on the 1st of April and end on the 25th of May. I believe the fishermen would then get more fish, and that the curers also would be benefited.

32,614. Do you think that considerable loss arises to the fishermen of these islands from a close time existing during the months of January, February and March?—Yes.

32,615. Do you think a valuable fishery would be created if there was no such legislative restriction?—Yes.

32,616. (*Professor Huxley.*) Have you no market for fresh herrings here?—Yes.

32,617. Do you send away a large quantity of herrings fresh?—Some do.

32,618. What proportion of the catch goes away fresh to the market?—Perhaps one fourth.

32,619. Are those early herrings of which you have been talking, namely the herrings caught in the latter part of May, fit for consumption, fresh?—They are sent away for consumption fresh, but they are not fit for food.

32,620. Where are they sent to?—Principally to the home markets in Glasgow and Liverpool.

32,621. When you say that they are not fit for food, what is it that you mean?—They are eatable, but they are not good food.

32,622. Are the poor of Glasgow glad to get them?—Some of the poor are glad to get them at a very low price. The herrings are sold at a very low rate, and the poor are glad to get them then. I don't think they are at all injurious to them.

32,623. Is it not a great boon to the Glasgow poor to be able to get food like that?—No doubt it is.

32,624. Would the enforcement of a close time largely affect the supply of food to the poorer classes in large towns?—It would affect some of them, I admit.

32,625. Would it not cut them off to a certain extent from their supply of food?—Certainly, it must cut them off from the supply which they have been obtaining of early fish.

32,626. Do you think that the proportion of fresh fish, as compared with cured fish, has been becoming greater of late years?—I think so.

32,627. Is that on account of improved means of communication with Glasgow, for example?—I think that the quantity caught is larger.

32,628. I do not mean the quantity caught, but the quantity sent away fresh?—I don't think that. The facilities for getting them to market are certainly great; there are however a great many more prosecuting the fishing.

32,629. Are there no greater facilities for communication between this place and Glasgow than there were 10 years ago?—Yes, a great deal more.

32,630. How many steamers go in the summer time?—We have sometimes a daily steamer. The Hutchinsons send down two or three more than their ordinary number.

32,630*a*. Do they carry away with them large quantities of fresh herrings?—Yes.

32,631. Is there always a ready market for the fresh herrings that are caught?—Yes, there is always a ready market whatever our returns are.

32,632. Is this a report which you have handed in? No, it is a trade circular, issued in 1863 by some of our foreign merchants.

32,633. Have you found your foreign correspondents recommend that there should be a brand on the west coast?—No.

32,634. Do they not care about it at all?—No, every man cures to the best of his knowledge.

32,635. Are these the same people that buy branded herrings from the east coast?—Yes, they are the same people. We have a market different from the east coast; the St. Petersburg market, to which the east coast men send very few.

32,636. But as well as to St. Petersburg, you send to other markets where the east coast herrings go?—Yes.

32,637. And foreign merchants do not urge upon you the propriety of having a brand upon your herrings, in order to compete with the east coast herrings?—No, I don't think it would suit us, our fish are of so delicate a nature. When we have a large catch it would perhaps be a fortnight before the Fishery officer could complete his work, and we could not keep our fish during that time; whereas on the east coast the curers can keep them with the greatest safety for 12 months without injuring the fish in the least.

32,638. Does that arise from the peculiarity of the cure on the east coast?—No, it arises from the quality of the fish.

32,639. Could they not be inspected in time under such circumstances?—No, we could not keep them on hand.

32,640. Could that not be met by having an additional number of inspecting officers?—Yes, but we are not of opinion that it would add much value to the herrings.

32,641. What are the duties of the Fishery officer when there is no brand?—He is able to give statistics.

32,642. Is he chiefly a statistical officer?—Yes, exactly so; he also attends to the barrels, and sees that they are of the proper size, and so on.

32,643. Then so much of the regulations of the Fishery Board apply to you?—Yes.

32,644. Can the Fishery officer regulate the size of your barrel although he gives you no brand?—He always comes into our coopery and inspects our barrels.

32,645. Although you do not want the brand?—Yes.

32,646. Has the Fishery officer power to regulate the size of your barrels when he gives you no advantage in the brand?—He has interfered, but I have heard of no seizure. I am not sure whether he has any power to interfere, but nevertheless he always looks at the barrels.

32,647. Do you consider the Fishery officer to have power to regulate the size of the barrels, if you thought it convenient to use another sized barrel?—I am not sure whether he has the power or not. I never knew of any seizure. I have heard of no seizure.

32,648. (*Mr. Caird.*) Is the barrel an imperial measure of any kind?—There is a certain size fixed.

32,649. There is a legal sized herring barrel?—Yes.

The witness withdrew.

STORNOWAY.

GEORGE MACLEOD called and examined.

G. Macleod.

6 August 1864.

32,650. (*Mr. Caird.*) You can give us some information in reference to the lobster fishery on these islands?—Yes.

32,651. Is it an increasing fishery?—I believe it is.

32,652. On what part of the coast are lobsters found in great abundance?—On the west side of the island.

32,653. Are there many more boats engaged in it now than there were in former years?—Yes, a great many more.

32,654. Is it found a very remunerative fishery?—Yes.

32,655. Is it showing any signs of being overfished?—No.

32,656. It might be largely increased?—Yes.

32,657. Has the price of lobsters been increasing?—Well, the price of lobsters last season was lower than it was the year before last; but I believe that was all owing to the plentifulness of the fish.

32,658. The plentifulness of the fish here?—Yes, and in other places.

32,659. What market do you send them to?—The London market.

32,660. How do they go to London?—They go from here to Greenock, and from Greenock by rail to London.

53,661. Do they go from here to Greenock by steamer?—Yes.

35,662. Are they packed up in boxes?—Yes.

32,663. And are they repacked again at Greenock?—Yes.

32,664. Is there anything put into the boxes to keep them fresh?—No.

32,665. Nothing?—No.

32,666. Then are they again taken out and repacked at Greenock?—They are repacked and sent by rail to London.

32,667. Do they continue to live till they get to London?—Those which die are of no use.

32,668. Generally, they arrive fresh in the market?—Yes, particularly at certain seasons of the year.

32,669. Are any taken in wells?—Yes, those that can be taken in wells have three chances to one as compared with those we send in boxes and by steamer.

32,670. Is a large proportion sent by boxes?—Yes, the whole.

32,671. What then are sent in wells?—Those which go by the London smacks.

32,672. They go direct to London?—Yes.

32,673. Do men come with well-boats and fish off here?—There were two last season, and one was going occasionally with lobsters to London.

32,674. Are the smacks from London becoming greater in number?—I believe they are sweeping the coast and are going to Ireland in the same way.

32,675. Do they fish in the same mode that you do with lobster pots?—Yes.

32,676. When you talk of sweeping the coast, do you mean that they are clearing the lobsters away with them?—Yes, all they can get from the fishermen.

32,677. What do you mean by sweeping the coast?—They are coming round the coast and clearing all the stations where they have boats to get lobsters.

32,678. Are you acquainted with the salmon fishery on these islands?—Yes.

32,679. Is it increasing in productiveness?—That depends upon the season.

32,680. Does it fluctuate?—Yes; I came to this island 35 years ago, and the fishing in 1862 was the best I ever saw.

The witness withdrew.

M. Campbell.

MALCOLM CAMPBELL called and examined.

32,681. (*Mr. Caird.*) You are a curer in Harris?—Yes.

32,682. Has the herring fishery at your station been an improving one of late years?—Yes.

32,683. To what do you attribute that improvement; is it to any change in the law?—I attribute the increase of the fishing of late years to the close time. The fish are allowed to go south before they begin fishing hereabouts.

32,684. The shoals are not broken here at the earlier part of the season?—No.

32,685. During what months would you desire to have the close time?—From the 1st of April till the 25th of May.

32,686. Do you think there would be any winter fishing if the present close time were made an open time during the months of January, February, and March?—Yes, there would.

32,687. Are there many curers at Harris?—Two.

32,688. Is there a large quantity of fish caught at Harris?—We had 35 boats this summer with an average of about 80 crans.

32,689. Do you mean 80 crans to each boat?—Yes.

32,690. What might they have had about two years ago?—About the same quantity has been caught for the last three years.

32,691. How was it previous to that?—It was about 40 crans before then on the average.

32,692. Then the close time, such as it is, has been very beneficial to the fishing?—Yes.

32,693. But you think it would be more beneficial if it only existed in the months of April and May?—Yes.

32,694. Is there any cod, ling, and tusk fishery at Harris?—Yes.

32,695. Is it an increasing fishery?—No, I don't think it increases.

32,696. Is it not improving?—No, the principal fishing for that part of the country is saithe.

32,697. What is done with the saithe?—They cure them and send them to Ireland.

32,698. Are large quantities of saithe cured and sent to Ireland?—About 50 tons every year.

32,699. Is that an increasing trade?—No, I don't think it is.

32,700. Are there any oyster beds off Harris?—The oyster fishery is not prosecuted.

32,701. There are plenty of oysters, but the fishery is not prosecuted?—Yes.

32,702. Is there a lobster fishery there?—Yes, there is an abundant lobster-fishing.

32,703. Is it prosecuted?—Yes.

32,704. Is there a large lobster fishery in Harris?—Yes; they will have about 100 boats at the lobster fishery.

32,705. Is that on the east or west coast?—Harris comes to a narrow neck at Tarbet, and they fish on both sides.

32,706. Is that an increasing fishery?—Yes, of late years it has increased very much.

32,707. Is there plenty of cod to be found off Harris if it was diligently fished?—No, I don't think so.

32,708. Do you know if it is a good ground for the cod-fishing?—Neither for cod nor ling-fishing.

The witness withdrew.

N. Macleod.

NORMAN MACLEOD called and examined.

32,709. (*Prof. Huxley.*) In what part of Harris do you live?—In the village of Tarbet.

32,710. What is the principal fishing there?—I was born and bred there; I have lived there

since I was a boy, and have been at all sorts of fishing.

32,711. The herring-fishing ?—Yes ; herring, cod, ling, and lobsters. There are also oysters, but the fishery is not prosecuted.

32,712. You do not get oysters at all ?—There are plenty, but they are not taken.

32,713. Are they good oysters ?—Yes, first-rate oysters.

32,714. Is the bottom of such a nature that you could use a dredge ?—Yes.

32,715. It is not rocky ?—Only in one or two places.

32,716. Is there a lobster fishery ?—Yes, there is one smack which pays about 900*l.* every year in Tarbet for lobsters.

32,717. Does that smack come and buy the lobsters ?—Every week it comes and buys the lobsters, as there are gentlemen here who can certify ; they pay as high as 16*s.* or 18*s.* a dozen.

32,718. For the lobsters ?—Yes, for the dozen.

32,719. Is that the price the fishermen get for them ?—Yes, 16*s.* or 18*s.* a dozen.

32,720. Is that an increasing price ?—It is increasing according to the demand. When there is not much competition the fishermen get a less price, and when an opposition comes down they get a higher price for them.

32,721. Does there seem to be any sign of the lobsters being over-fished ?—No, there are plenty of them.

32,722. What time do you fish for herrings here ?—We used to fish at every time in the year until the close time commenced three years ago.

32,723. Did you fish for herrings all the year round ?—Yes, since I was a boy.

32,724. Did you fish for them in January and February ?—Yes, every day in the year.

32,725. In what sort of condition were the fish you got in January and February ?—In January they were beginning to get worse, and they commenced getting better again in May.

32,726. Did you get spent fish in February ?—Yes ; in February they began to spend, and a little more so in March, but they were not so bad until March.

32,727. Then did you get the herrings in abundance in July and August ?—We were not in the habit of getting herrings in July in the lochs at all.

32,728. You did not get herrings at all ?—They used to come in August, and then they were followed all the year round.

32,729. In what sort of condition were they in August ?—They were full fish in August.

32,730. Did you get spent fish in September again ?—Yes, of course.

32,731. Was it the practice four or five years ago to catch plenty of fish in the winter fishing ?—Yes.

32,732. Has the enforcement of a close time been injurious to your fishing ?—It made a loss to us last winter of many thousands of pounds.

32,733. That would be a great loss to the people of Harris ?—A great loss indeed ; as great a loss as I ever knew upon our coast.

32,734. Do you think the enforcement of the close time has done the summer fishing any good ?—I don't believe it has.

32,735. Has it made no difference ?—No.

32,736. The only difference it has made has been in your pockets ?—Yes.

32,737. Were the poor in the habit of depending much upon the winter-fishing for their supply of food ?—They are dependent all the days of the year on the sea coast ; they always depend upon the fishing ; they have no other source of support than that.

32,738. Do the poor people of Harris live largely on herrings ?—They live largely on fish of all sorts ; they depend altogether on fishing.

32,739. Were you allowed to catch herrings for bait in the winter months last year and the year before ?—Not unless we stole them and placed ourselves in the hands of the law, and of course we did that.

32,740. Then the close time did you harm in two ways ; in the first place it deprived the poor people of the herrings upon which they depended for food, in the next place it prevented you from obtaining herring as bait for catching cod ?—Of course it did.

32,741–2. Then it did you a double injury ?—Yes, it did a treble injury. There is a great call for the herrings all the year round, more than almost in any part of Scotland ; they were plentiful here, and we were not allowed to take them for bait for cod. Now the west coast of Harris and Lewis is quite different from the east coast. On the east coast they don't get any other bait except herrings, but on the west coast they can use haddocks, flounders, and eels, which are sufficient for catching cod and ling. On the east coast if we don't get herrings we can get no other bait, and therefore the fishing is very much injured. The ground is different from what it is on the west coast ; the herring is the only regular bait we have had since I have been here.

32,743. Then did stopping the herring-fishing on the east coast stop your supply of fish with it ?—Yes.

32,744. Whereas on the west coast it did not because they had other kinds of bait ?—Yes.

32,745. Then it was a more particular hardship upon you than upon any other people ?—Yes.

32,746. Was there much destitution among the people in consequence of the supply of fish being stopped ?—I cannot say that, because other persons were kind enough to supply them ; but of course the merchants are more out of pocket owing to the difficulty in obtaining bait than they would have been if we had been allowed to fish for herrings.

32,747. Do you mean by that, that in consequence of the state of things caused by the close time the poor fishermen were obliged to come upon the merchants for advances ?—Of course. That is what they do always ; they have done that for the last 28 years, ever since I commenced business.

32,748. Are you a merchant ?—Yes.

32,749. Have the advances since the close time was established been more than they were before ?—Yes, they have increased.

32,750. Have the people begun their fishing more in debt than formerly ?—Yes, from not being allowed to go to the fishing in the winter time. I think we should have the same law as that which exists on the east coast of Scotland ; we are in a free country and ought not to be more restricted in our fishing than they are.

32,751. You think it a somewhat hard case that the law on the east coast of Scotland should allow the fishermen there to catch herrings when you are prevented ?—That is my opinion and the opinion of most people here.

32,752. Do you think that the enactment of a close time has done any corresponding amount of good to the fishing ?—No, I believe that it has done no good.

32,753. You do not believe it has done any good ?—I do not know whether I am mistaken, but I do not believe it has. There were two stations in Harris this year, one from Wick and one from Leith, and they never got such a fishing as they did this year at Scalpa and at the mouth of Loch Tarbet.

32,754. What time of the year was that ?—In the early fishing.

32,755. Was it a particularly good fishing this year ?—Yes, first-rate ; we had an average of 80 crans for 35 or 40 boats, and if they had had more people and more curers they would have had more fish.

32,756. If there was a winter fishing permitted would the curers establish stations in the winter time ?—Of course they would.

32,757. Do you buy cod and ling ?—I buy every cod and ling I can get every day in the year and other kinds of fish as well.

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N. Macleod.

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32,758. If there was a winter fishing would you purchase largely during that winter fishing?—I would purchase every one I could get.

32,759. That would send a good deal of money into the country?—Yes, but they did not fish much at all last year owing to the restriction in regard to the bait.

32,760. Who looks to the enforcement of the close time?—There are policemen here, and whether they have authority or not they look after the fishermen very sharply sometimes. I think they put themselves in danger of their own lives in prohibiting people who wish to have full liberty. I believe, as far as I can learn, that they had no authority from the Fishery Board for what they did last year.

32,761. Has the number of police on the island been increased since the close time was enacted?—No, but they are looking after the fishermen very closely. Last year they set nets unknown to the policemen.

32,762. Have any fishermen ever been convicted of breaking the law?—They wanted to take a high hand with them, but the police could not manage them because the people thought the course they were taking unnatural and unlawful.

32,763. Have any fishermen been brought before the magistrates and convicted under the act?—No, it did not come to that extent. They were only taking a few herrings for bait.

32,764. There has been no case of conviction?—No, I have not heard of one. I believe they took the nets from the fishermen.

32,765. The nets were seized?—Yes.

32,766. Do you know of your own knowledge any case in which the nets were seized?—I believe that some of the nets were burnt.

32,767. Was that done after due process before the magistrates, or by simple authority of the police?—They drew up the nets, brought them to Tarbet and burned them.

32,768. Were any of the persons who had the nets in their possession summoned before the magistrates?—Yes, I believe they were.

32,769. And their nets were burned?—Yes.

32,770. Was there any large quantity of nets seized?—No, only a few. When they saw that it had been done in one or two instances they gave up putting themselves in danger.

32,771. How many nets were burned?—As far as I can recollect I think there were three that were burned.

32,772. Have you anything to say with regard to the branding of the herrings?—With regard to the brand I go very much against that.

32,773. You object to the brand?—Yes, I am against sending my herrings to the market with the brand.

32,774. (*Mr. Caird.*) Was it by order of the sheriff that the nets you spoke of were burned?—So it seems, but I don't know on what authority the policemen did it.

32,775. (*Professor Huxley.*) You say that you desire to have no brand?—Yes, I think the Fishery Board should give the same chance to the east coast and the west coast and to all parties who are engaged in the fishery.

32,776. Would you like to see the brand here?—I should like to see the same weight of fish in the barrels sent to the market. Of course the brand should not go upon a light barrel when a heavy one should be sent.

32,777. (*Mr. Caird.*) Do you get a good market for your herrings now?—Yes. I don't think it a right law that enables the brand to be put on a barrel half full while another person sends a full barrel without the brand.

32,778. Do you think that the brand being placed upon a barrel half full would make it sell?—The Fishery officer should see that the quantity was in the barrel before he put the brand upon it.

32,779. (*Professor Huxley.*) Would you not suffer in your business if you sent barrels light?—Yes.

32,780. If you sent a barrel half full would not the foreign dealer reject or refuse to buy it?—No doubt he would refuse it, but we would like to have the same chance with our barrels as they have in Wick and Caithness.

32,781. Do you think that branded herring has an advantage?—I don't know that it has.

The witness withdrew.

A. McClellan.

ANGUS MCCLELLAN called and examined.

32,782. (*Mr. Caird.*) You are a fisherman here on the west coast?—Yes, at Malista.

32,783. Do you fish all the different kinds of fish that are caught on these islands?—No.

32,784. What do you fish particularly?—Ling, cod, and tusk.

32,785. Then you do not go herring-fishing?—No.

32,786. What months of the year do you follow the ling, cod, and tusk fishery?—From November.

32,787. Until when?—Until July.

32,788. Do you find the fish upon the same ground as you did five or six years ago?—Yes, but not on the same ground that they were before that time. We have to go further from land now.

32,789. You have to go further to sea in order to find them?—Yes.

32,790. And when you do go do you find plenty of them?—Yes.

32,791. Are your boats larger than they used to be?—Yes.

32,792. Does that enable you to go further to sea?—Yes.

32,793. Do you use the same kind of bait that you were always in the habit of using?—Yes.

32,794. What is it?—Haddocks, conger eels, and flounders.

32,795. Do you use herrings?—No, whenever use herrings for bait.

32,796. Has the catch for every boat increased within recent years?—Yes, it has increased.

32,797. There is no sign upon the fishing ground that the fish are begining to get scarce?—No, not out on the fishing banks.

32,798. There is plenty of fish to be found there?—Yes, there is plenty of fish on the banks.

32,799. Is the number of boats that frequent those banks increasing?—Yes.

32,800. There are more boats?—Yes.

The witness withdrew.

J. Stewart.

JOHN STEWART called and examined.

32,801. (*Mr. Caird.*) You are a fisherman here?—Yes, at Bible.

32,802. Are you a fisherman on the west or the east coast of the island?—I belong just to this parish itself down at Bible.

32,803. What kinds of fish do you catch?—Cod and ling.

32,804. Do you not follow the herring-fishing?—No, I have not done so for two or three years. I dropped it two or three years ago.

32,805. Are the cod and ling on the ground you frequent got in an increasing quantity?—Yes, except this year, when they have taken most out from the middle bank in the Minch; ours is on the mainland.

32,806. Is that the best fishing you have here?—Yes, from the middle bank.

32,807. Are there more boats engaged in the fishery than there were in former years?—There are not less at any rate.

32,808. They are rather on the increase?—Yes.

32,809. Does every boat get more fish than it was in the habit of getting formerly?—At one time when we had herring bait we could get more fish with it.

32,810. Do you find the herring bait of great importance?—Yes.

32,811. Has it been a great hardship to you to be prevented from obtaining herring bait in the winter months?—Without the herring bait we cannot do anything with the fishing compared with what we did formerly.

32,812. Then being shut up by law from getting herrings in the winter operates injuriously on your cod fishing?—We cannot get enough for sale in the first two months of the year, but we get herrings for bait in the months of March and April. Unless we can get herring bait on our side of the island we can do nothing at all with the cod and ling.

32,813. Is the cod and ling-fishing followed in April?—Yes.

32,814. Is that a good month for cod and ling-fishing?—Yes, in our place at any rate.

32,815. If you have a complete close time then in the month of April, and are not allowed to catch herrings for bait in that month, would it injure you as a cod fisherman?—Yes, unless we can get herring bait we might just as well stick our boats on shore.

32,816. Then I presume you are against any close time at all in the herring-fishing?—Yes.

32,817. You would not like to be prevented from fishing herrings for bait in any month of the year?—No.

32,818. Is there no other bait to be had on the east coast except herrings?—Not on our side of the island. We used to get some haddock, but for two or three years we have got none at all, and even if we did get it the fish would not take it as well as they take the herring bait.

32,819. Although herrings at that time of the year might not be in good condition for human food are they very good for bait?—It is the best time for bait altogether, only the fish are poor.

32,820. Is that the general opinion of the fishermen on the east coast?—It is on our side at any rate.

32,821. It is the opinion of all the fishermen who fish in the Minch?—Yes, for the poorer the herrings are the more they will stick upon the hooks.

32,822. (*Professor Huxley.*) Are you a herring fisherman yourself?—Not just now.

32,823. But you have been?—Yes, but for the last three years I have dropped it.

32,824. Have you ever fished for herrings in the early part of May?—Yes.

32,825. With drift nets?—Yes.

32,826. Have you ever found when you were fishing at that time that your catching of the herrings has broken the shoal?—Are you speaking of the winter herrings?

32,827. No, the summer herrings in May?—No, it does not spoil the fishing at all.

32,828. Are you of opinion then that the fishing early in May does not break the shoal of fish?—No, it does not break the shoal of fish.

32,829. When you were fishing were a large number of boats employed at the same time?—Not so many as now.

32,830. I mean when you were fishing early in May were there a large number of boats fishing with you?—There were not such a large number in those times as there are now.

32,831. Did you ever find the fishing early in May do any harm to the fishing afterwards?—No.

32,832. Did you catch as many fish afterwards as if you had not been fishing early in May?—Yes, and even last year though we were taking herrings in the winter time we did not spoil the summer fishing at all.

32,833. Are your boats open boats?—Yes, open boats.

32,834. What tonnage are they?—They are only small boats.

32,835. Have you different kinds of boats?—Yes.

32,836 What are the different kinds?—We have them of 18 and 20 feet in length for cod and ling, and from 30 to 34 feet on the keel.

32,837. Have any of those boats a deck?—No; some of the herring boats have decks, some of the new ones, but the old ones have no decks at all.

32,838. Have the boats increased much in size since you began to fish?—No, they are about the same.

32,839. How do you rig your vessels?—With a lug sail.

32,840. Only with one?—One; the big ones have two.

32,841. What is the size of the mesh of your nets; how many meshes are there to the yard?—The size varies, some of the nets have 31 to the yard, others 32 and some 33 or thereabouts.

32,842. Does anybody look after your nets to see if the meshes are of the right size?—The Fishery officer used to do that.

32,843. If there were more meshes than 36 to the yard would the nets be seized?—Yes, that was what they did formerly.

32,844. Do you put any lights in your boats when you go out to fish?—No, not at all.

32,845. None at all?—Not on this coast in the short nights.

32,846. Is it a very short night when you are fishing here?—Yes.

32,847. But in the winter fishing have you no lights?—They set them then on anchors in the bay and leave them there all night.

32,848. Is that the way you prosecute your winter fishing?—Yes.

32,849. You do not go out into the bay?—No, we just shoot two or three nets and leave them anchored.

32,850. Do you know whether any of the fishermen have ever had their nets seized for fishing in the close time?—No, I do not think they have.

32,851. Was there a little fishing going on in the close time this last winter?—Yes, plenty; there was a good deal of it.

32,852. Are there any oyster beds along your shores?—No.

32,853. Is there no lobster fishery?—Yes, they are fishing lobsters, but there are no oysters; they are fishing lobsters down at our place.

32,854. Are they getting many lobsters?—Yes, there are many getting them; in December they get most of them.

32,855. Is there a good lobster fishery there?—Yes.

32,856. Is there increased attention paid to that fishery?—I cannot tell you, I have not been much connected with the lobster-fishing at all.

The witness withdrew.

JOHN MACKENZIE called and examined.

J. Mackenzie.

32,857. (*Mr. Caird.*) Upon what part of the coast do you fish?—Bible.

32,858. The same place as the last witness?—Yes.

32,859. What months of the year do you find best for fishing cod and ling?—March, April, and May.

32,860. Those three months?—Yes.

32,861. Then if there were a close time in the herring fishery during the months of April and May, would it injure you as a cod and ling fisherman?—Yes.

32,862. Is there any other bait you could use during the months of April and May?—None.

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32,863. Does that apply to all the fishermen who fish for cod in the Minch?—Yes, I have been for 40 years fishing. I know them all very well, and they are all of the same opinion.

32,864. Is there a great quantity of cod caught in the Minch in the months of April and May?—Yes.

32,865. Are there any means by which herrings might be fished for bait without being fished for sale for food?—They generally fish there with their nets simply to get bait for their long-lines, and not with the object of sending any up to the market.

32,866. Would it be possible to adopt a restriction by which you could be allowed to fish for bait and yet be prevented from selling any herrings you caught for food?—I do not know.

32,867. Why do you not fish the herrings for food in the month of May if you have leave to do so?—It would be useless then except for bait.

32,868. Would the quality be very inferior?—It would be useless except for bait.

32,869. Would it be useless in the view that the fish would not be good for food?—It would be quite good enough for the fishermen themselves to eat but it would not be fit for the market.

32,870. You would eat them yourselves but not send them to the market?—Yes, we would eat them with pleasure.

32,871. Then why would it be useless except for bait if it is good for food?—It would be useless for the market.

The witness withdrew.

J. Mackenzie.

JOHN MACKENZIE called and examined.

32,872. (*Mr. Caird.*) Where do you fish?—At Mervey in the parish of Lewis.

32,873. Is that on the east coast?—Yes.

32,874. Do you fish in the Minch?—Yes.

32,875. What kind of fish do you follow?—Cod and ling and herring.

32,876. What brings you in most money, the cod, ling, or herring?—The herring.

32,877. Have you only one season for fishing the herring, namely, in May, June, and July?—We formerly fished the herring in the winter. We got it for bait when we could.

32,878. Did you find the winter fishery a good fishery?—It was very good sometimes.

32,879. Was the quality of the fish very good?—Yes.

32,880. Did you sell the fish for consumption?—Yes.

32,881. How late did you continue to sell the fish you got in the early part of the season?—Every day throughout the year.

32,882. Is there always a sale for them?—Yes.

32,883. As a cod and ling fisherman can you get any bait except herrings?—No, we never use any other bait but herring.

32,884. Then does the cod and ling-fishery depend upon the supply of herring bait?—Yes, just so.

32,885. And if there is a close time which prevents you from fishing the herrings at all would you be obliged to cease fishing cod and ling?—We must drop it at that time of course if we do not get liberty to catch herrings.

32,886. But I suppose you really do catch herrings, because you carry on your fishery?—Yes.

32,887. Is there a very large cod and ling fishery in the Minch?—It is not very large.

32,888. Are there as many cod and ling caught in the Minch as on the west coast?—Not as many; it is only a small fishing where I am; we get very few.

32,889. Then is your whole cod and ling-fishery a small matter compared with the herring fishery? Comparing the time you continue to fish for cod and ling and the time you continue to fish for herrings, is the cod and ling fishery of much less importance to you than the herring fishery?—It is just about the same, I think.

32,890. Do the cod and ling bring you in more money than the herrings?—No such thing.

32,891. Do the herrings bring you in most money?—Yes.

32,892. Then anything that injures the herring fishery would be more injurious to you than anything that injured the cod fishery?—Yes.

32,893. (*Professor Huxley.*) Some three or four years ago was there not a memorial signed by the fishermen here sent up to the Government in favour of a close time?—No, it was sent up by the curers.

32,894. It professed to be from the fishermen as well, did it not?—I do not know anything about it.

32,895. It is a petition that was sent up three or four years ago?—I do not know anything about it.

The witness withdrew.

P. Macfarlane.

PETER MACFARLANE recalled and examined.

32,896. (*Prof. Huxley.*) There was a memorial sent up to the Government three or four years ago?—Yes.

32,897. In favour of a close time?—Yes.

32,898. Do you recollect the precise tenour of that memorial?—I do not remember the words of it, but I know the substance. They wanted to have a close time to prevent the fishermen from fishing herrings during a certain season of the year.

32,899. Did the fishermen in any way join in getting up that memorial?—No, they did not; they knew nothing about it.

32,900. But was it left to be supposed that the fishermen were in favour of a close time at all?—The fishermen knew nothing about it, as far as I know.

32,901. Do you think if they had known anything about it, and if they had known it would have prevented their winter fishing of herrings, that they would have signed it or been in favour of it?—They would never have signed it. The close time injures the fishing very much. The heaviest fishing I ever saw in Lewis was in the month of February.

32,902. Was there not a public meeting convened in order to get up the petition?—The curers were called together, but not the fishermen.

32,903. Did the fishermen take no part in that agitation?—No.

The witness withdrew.

A. Ross.

ALLAN ROSS called and examined.

32,904. (*Mr. Caird.*) I believe you wish to make some statement to the Commissioners?—Yes.

32,905. What is it you desire to state to the Commissioners with regard to the interests of the fisheries here?—I am not interested in the question at all, but I am inspector of the poor in the parish of Lewis. I have no direct interest in the matter, but I know what has passed under my own observation during the last 50 years at least.

32,906. Can you tell us what has been the effect of the adoption of a close time during the last two years upon the interests of the fishermen?—It has had the very worst effect, in my opinion.

32,907. In what way?—It has demoralised the

people and brought them in contact with the law of the land.

32,908. The people do not regard the law, but go on fishing irrespective of it?—They believe there is no Divine law to prevent their taking the fish, and they act on that principle as far as they can. My belief is that if there had been sufficient officers to put down the fishing for herrings in Lewis last year there would have been riots and loss of life to a considerable extent.

32,909. Then those riots and that loss of life were obviated by the people breaking the law as it at present exists?—It was obviated by their being allowed to prosecute the fishing without interruption.

32,910. Which, in fact, was setting aside the present state of the law?—Exactly so.

32,911. Did anybody attempt to enforce the law?—The Fishery officer went once to Lewis with two or three policemen belonging to the town here, but their proceedings there were a mere farce.

32,912. They found they could not contend against the general feeling of the neighbourhood?—They were one to a thousand men determined to oppose them tooth and nail.

32,913. So they withdrew?—Yes.

32,914. Then the law, in fact, is a dead letter?—Yes, it is a dead letter to be sure.

32,915. Did they seize any nets?—They were not allowed to do so.

32,916. Then they did nothing?—They took possession of a boat, but the people took it from them again.

32,917. And then they retired?—Yes, they took to their heels.

32,918. Would the enforcement of the law have led to great distress among the people?—Unquestionably it would.

32,919. And to the loss of a very valuable supply of food?—Yes, not only what they required themselves, but thousands of barrels which they were enabled to export.

32,920. Did they export them?—Yes, to a large extent, in an underhand way.

32,921. They were obliged to adopt underhand modes of doing that which they would otherwise have done openly if the law had not been changed as it has been lately?—Decidedly. I have seen scores of vessels coming from the Clyde to the fishing here, and carrying it on all the winter, and the same would be the case now but for the operation of this law.

32,922. Do strange vessels and fishermen come here to follow the fishing?—Yes, they always did.

32,923. Do they do so now?—No, there is not one now.

32,924. Is that in consequence of the change of the law?—Yes, exactly so.

32,925. Then the result has been that the fish have been caught and the law has been set at naught, and the people have been demoralised by the present state of the law to a certain extent?—That is my opinion.

32,926-7. (*Professor Huxley.*) You would sum up the whole operation of the Act in this way apparently: that it has deprived the people of a considerable portion of what otherwise would have been their wealth, and that it has created a new branch of smuggling?—Yes. I saw the Fishery officer and the police under him in contact with the fishermen. They took possession of a boat in which they found the scales of fish, and they met a woman with a creel of herrings and made her a prisoner, as it were, and brought the herrings into the boat. The report was then that they were about to bring the boat to the town here. I saw the people collecting like madmen. They launched a boat and took hold of the one which the Fishery officer had. They tied the boats together and allowed them to drift towards the Minch. The Fishery officer and the police got alarmed, and besought the people to land them, which they did, and the boat in which they had gone out was left with the people. I believe the people never heard a bit about it since.

32,928. Did they put the Fishery officer and the police adrift?—They tied the boats together and allowed the wind to drive them out towards the Minch.

32,929. Then the policemen and the Fishery officer, finding themselves in that dangerous position, asked the people to put them on shore again?—Yes, they besought them to land them.

32,930. And when the people had done that they left them alone?—Yes. I believe there were a few nets burnt here.

The witness withdrew.

PETER CLARK called and examined. *P. Clark.*

32,931. (*Mr. Caird.*) Do you wish to make a statement to us?—I am anxious to state that three years ago, when the bill for a close time was before Parliament, there was a large meeting of fishermen in the Masons' Hall; it was a very large and crowded meeting, and the object was to petition against the bill, at least so far as this, that it should not extend the close time beyond the 15th of May. There was a very unanimous and strong feeling expressed by the fishermen present that that should be so. Their opinion seemed decidedly that the close time should not extend beyond the 15th of May.

32,932. Was there any opinion expressed as to when it ought to begin?—It was considered that it might begin, except for the purposes of bait, on the 1st of March.

32,933. Was there any opinion expressed as to when the fishermen desired the close time to commence?—I think, as far as I can recollect, that the expression they used was that they should be allowed to fish until some time in February.

32,934. Did the fishermen in that memorial object to a close time in January and February?—Yes.

32,935. Are you aware whether that memorial was presented to Parliament?—Yes, it was presented to Parliament; it was sent to Sir James Matheson, and in his absence was presented by the honourable member for Inverness.

32,936. Had the Act been passed?—Yes, or otherwise we believe their opinions would have been listened to.

The witness withdrew.

KENNETH SMITH recalled and examined. *K. Smith.*

32,937. (*Professor Huxley.*) Can you tell us who it was who wished to have a close time in January and February?—It was not the Lewis curers at all; they were overruled. I think a correspondence which took place on the subject is still in existence between Mr. Morison and the late James Methuen of Leith. The Leith men said they would have no close time at all, unless they could get the month of January, and in order to get a close time we agreed to that.

32,938. Then all of you here, whether fishermen or curers, have a decided objection to a close time in January?—Yes.

32,939. But you want a close time in April and May?—Yes.

32,940. You have never entertained a wish to have a close time in January and February?—No, I believe that a good winter fishery could be established here without any injury to the summer fishery

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32,941. Then do you trace the injury which has been done to the fishery, entirely to Mr. Methuen and Mr. Morison?—Mr. Morison was not in favour of it, he was for having it open.

32,942. Then it comes down to Mr. Methuen only?—Yes, and the southern curers.

32,843. Do you mean the Glasgow curers?—The Glasgow and Leith curers.

32,944. (*Mr. Caird.*) You heard the evidence of one of the witnesses just now, that he would not be able to fish in March at all if he was not allowed to get herrings for bait?—In the month of April they give up the fishing and begin their farming. The quantity of ling and cod caught in the Minch altogether does not exceed 100 tons in the course of the year in the whole district beween the Lochs and the Point, whereas we get 70,000 or 80,000 barrels of herrings.

32,945. Of that 100 tons, how many do you suppose are caught in the months of April and May?—Perhaps one-fourth of it.

32,946. Then in point of fact the fishing in those months is nearly one-fourth of the whole cod-fishing in the Minch?—I think I go to an extreme, when I say as much as 25 tons are caught in April and May.

32,947. Then you hold the preservation of the cod-fishing in the Minch to be a minor affair compared to the advantage which accrues to the fishermen from the herring-fishing?—Yes.

32,948. (*Professor Huxley.*) Would you wish to have a close time for the herring fishery during those months?—On the west coast we never prosecute the herring-fishing at that time; we can get plenty of bait there, and we never try the herrings then. They are not fit for food, and there are plenty of other fish.

32,949. I understood there was some peculiarity with regard to the herrings entering the Minch?—They are never seen here until the middle of April; they come in large shoals to the west coast, and they come round and enter the Minch about the 15th of April.

32,950. Do they never go south and go up the other way?—They do go south; I am not prepared to say whether they leave the coast altogether or whether they circumnavigate the island.

The witness withdrew.

N. Campbell.

NAPIER CAMPBELL called and examined.

32,951. (*Mr. Caird.*) Can you give us any information about the general state of feeling in the island here in regard to a close time for herring fishing?—I was applied to in consequence of a disapproval existing with regard to the close time, owing to the length of time it lasted and its stringency.

32,952. Who applied to you?—Some persons from the parish of Lochs.

32,953. For what object did they apply to you?—They applied to me professionally, to try and get some alteration brought about by some means by an united movement if possible in the island.

32,954. Who were the parties who applied to you?—A Mr. Macdonald, a farmer of Crobeg, told me that he applied to me on behalf of a body of fishermen there.

32,955. Who felt themselves seriously injured in their business by the close time?—Yes.

32,956. Did he specify the particular part of the close time that was injurious to them?—He specified the months of January and February and the middle of March as very injurious.

32,957. Did you do anything upon that?—I had considerable correspondence about it, and being a stranger to the subject, and not anxious to go rashly into it, I wrote to the three ministers of the principal parishes here. I also corresponded with other ministers in other parts of the country in Skye and in different places, and I even wrote to the Fishery Board, and had some correspondence with the officials there.

32,958. What was the result of that correspondence, not with regard to the Board, but as to the feeling expressed by the different ministers within the island and in the neighbourhood, as to the injury sustained by the fishermen from the operation of the close time?—They were unanimous in stating that it was a serious injury, and they thought the close time ought not to be established before the middle of March; somewhere about the 25th, I think.

32,959. In what way was there a practical injury sustained to their fishing from the close time?—They put it upon a number of grounds, such as the demoralisation of the people, occasioned by the inauguration of a system of smuggling and taking the fish against the law. At this time there had also been some seizures, and some of the fishermen were afraid of a prosecution; they had the terror of the law over them and were evading it. On the other hand, the fishermen stated that they had been prevented from getting the large supply of cod which they would otherwise have obtained in the early period of the winter; they further stated that they could have got good curable herrings quite suitable for the food of the poorer people, and that to fish them they broke the law and set it at defiance.

32,960. Then they represented that there was an injury done, both by the demoralization of the people and also by the loss of food which the people would have obtained if the herrings had been caught?—Yes, certainly.

32,961. Did that represent correctly the general opinion in the different parishes of Lewis?—Yes. I put it in that way to the ministers, thinking they would have, naturally, the interests of the whole parishes at heart; they had large meetings in their parishes, and a public meeting was held at Stornoway in consequence.

32,962. When was that?—It was held on the 18th of February.

32,963. The 18th of February last?—Yes, a committee was appointed, some of whom have been examined to-day.

32,964. Can you tell us what resolutions were moved at that meeting?—One resolution was: "That "in the opinion of this meeting the experience of all "parties concerned in the herring-fishing on the "coast of Lewis has led to the conviction that the close "time fixed by the Act of 1860 has been found "adverse to the interests of all parties engaged in that "fishing."

32,965. Was that resolution carried unanimously?—Yes, it was carried unanimously; I have an account of the meeting as it appeared in the "Inverness Courier" of March the 3rd.

32,966. Were you present at the meeting?—Yes.

32,967. Is the report contained in that paper accurate?—Yes.

32,658. Then may we take it as part of your evidence?—Yes, it is as follows:—

A numerously attended meeting of those interested in the Lews herring-fishing was held in the Freemasons' Hall at Stornoway on Thursday the 18th February, at twelve o'clock, noon. Mr. James Mackenzie, jun., banker, magistrate, who was called to the chair, explained that the meeting had been called in consequence of the prevalent dissatisfaction with the present close time in the North.

The Rev. John Macrae, Lochs, as representing the views of about 3,500 people in his parish, all more or less interested in the fishing, and having ascertained the feeling in the parishes of Garrabost and Back, moved:—

That in the opinion of this meeting, the experience of all parties concerned in the herring-fishing on the coast of Lews has led to the conviction that the close time fixed by the Act of 1860 has been found adverse to the interests of all parties engaged in that fishery.

He warmly and eloquently supported this resolution. The Act, he said, was a snare. It demoralised the people,

who were living in open defiance of an unreasonable law. Providence sent shoals of excellent fish to their doors in winter, and he failed to see who would suffer by their being taken. The poor required food. The cod and ling fishery required bait. The curers might benefit by the law, but it was not all profit to them. The Act was not conceived in reason, nor did reason preside at its birth. He was almost tempted to condemn the law of close time altogether. It was, however, no wish of the fishermen to extend their interest to the loss of the curers. That would in the end hurt the fishermen. If the curers got good markets they could give good prices to the fishermen; this enabled the latter to pay their landlord and their merchant. He would, therefore, in conjunction with the curers, support a modification of close time.

John Macleod, fisherman, Lochs, seconded this motion, in Gaelic, and it was unanimously carried.

Mr. Malcolm Mackenzie, fish-curer, Stornoway, moved:—

That as regards the Lews fishing, on which a resident population of nearly 22,000 depends, the opinion is shared alike by fishermen, curers, and consumers, that too early operations in summer would be highly prejudicial to it, and to the herring fishery all along the coast, and therefore that some close time should be kept in force in the North, though it could safely be more limited than at present.

He said that he would not conclude from too short an experience that a close time should be condemned; but he admitted the pressure on other classes. He contended that the interest of fishermen and curers was identical, and that what was their real interest become indirectly the interest of the whole island, he might even say the nation. The consumer, also, had a right to be heard, and he quoted the report on the early caught Lews herrings from his agent at Stettin. From this report he demonstrated the effect which early operations had on the market, and thereby on the parties engaged in the fishing. It was ruin to the curer, and in the end a heavy loss to the fishermen. His belief was that if Parliament abolished close time altogether they would soon be called on, either by the people of Lews or elsewhere, to re-enforce it. If the close time were limited, however, to the time when herring were in the worst condition, it would no doubt be acknowleged as a great boon to the country, and less desire would be felt to break the law or disturb it. Great interests at stake would thus have some protection for the general good.

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Mr. John Fraser, baker, Stornoway, who, though no fisherman or curer, was a consumer, and indirectly interested, seconded the resolution, which was carried.

Mr. Kenneth Smith, merchant and curer, moved,—

That in the opinion of this meeting a close time from the 1st of April to the 25th of May would protect the herring while in a weak condition and unfit for market or human food, would otherwise operate beneficially on the herring-fishing, and would meet the views of all classes engaged therein of sufficient importance to claim a right of control.

He believed that it was of great practical importance rather to allow the fish to settle on the coast and get fairly into condition, than scare them away or scatter the shoals. The take throughout the season was steadier, and other parts of the coast would feel the benefit as well as the Lews. His experience as a curer was that it took the whole season to make up the loss of the early caught herrings, which he was compelled to buy and could not sell. Even a short close time would also clear the markets while protecting them from unsaleable fish, and with such protection he could afford a fair remunerative price, without loss. He read a letter from Mr. Munroe, chamberlain to Sir James Matheson, approving of the movement, and promising his influence.

Mr. Donald Macdonald, farmer, Crobeg, briefly seconded the resolution, and it was unanimously carried.

Mr. Alex. Morison, sen., ropemaker, moved, and Mr. Andrew Gibson, curer, seconded, the fourth resolution, viz.:

That this meeting do resolve to petition Parliament, memoralize the Board of Trade, and take such other steps as are best calculated to promote the above views, and that the following gentleman be appointed a committee, viz.—The Rev. Mr. Macrae, Lochs; Rev. D. Murray, Garrabost; Rev. D. Macniester, Bach; and Mr. D. Macdonald, Crobeg; and also Messrs. A. Morison, sen., Kenneth Smith, Andrew Gibson, and M. Mackenzie, fish-curers; and John Frazer, baker.

On being put to the meeting the motion was unanimously agreed to, and after a vote of thanks to the chairman the meeting separated.

32,969. Is there anything you wish to add to the evidence you have already given?—No, I think there is nothing further.

The witness withdrew, and the inquiry was adjourned until the 8th of August at Portree.

Portree, Isle of Skye, Monday, 8th August 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

THOMAS FRASER, Esq. called and examined.

PORTREE.

T. Fraser, Esq.

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32,970. (*Mr. Caird.*) You are the resident Sheriff of Skye?—Yes.

32,971. You have been for many years in Skye?—Yes; almost 20.

32,972. And you are therefore intimately acquainted with all its interests?—Yes; I think so. I have had occasion to pay very considerable attention to all matters connected with the social welfare of the people, arising from the peculiar circumstances they have been placed in.

32,973. You being the resident magistrate of this part of the country?—Yes.

32,974. You have prepared a paper, I believe, which you desire to put in, in which you give your impressions on the whole subject of the fishing interest of Skye?—I think it would shorten the matter if I were to put that paper in.

32,975. Will you be good enough to read it?—I begin by referring to the letter which the Commissioners who sat a year or two ago had before them on their inquiry.

32,976. (*Professor Huxley.*) And which is published in their report?—Yes. The paper which I have prepared is as follows:—

"I beg to refer to my letter of the 12th September 1862, to the Chairman of the Commissioners acting under the Royal Commission of 1862, for inquiring into the operation of the Acts relating to trawling for herrings, and which letter is printed in the report of that Commission. To the views stated in that letter I still adhere, and I may, perhaps, be permitted to add that I have since been in communication on the subject with many persons connected with the herring-fishing, but never met with one who considered the existing legal close time necessary or perceptibly beneficial to the fishing. I may also add that I have every reason to believe that there would have been a very general agitation from this island and the west coast generally for the repeal of the close time, were it not for the general expectation entertained since the publication of the Report of the Commission of 1862, that the observance of the close time was no longer to be enforced. In point of fact, there has been no prosecution in Skye for contravention of the statute since 1862.

"I earnestly hope that this general expectation of an abandonment of the close time may not prove ill-founded, for I think its enforcement would be found to involve at all times, but particularly in those periods of severe privation which, unfortunately, are of too frequent recurrence in Skye, not merely the disadvantages indicated in my letter above referred to, but moral consequences hardly less worthy of consideration.

"To interfere in the way of prohibition with the accustomed food of a people without any very obvious necessity for such interference, and where the benefit expected from it appears, at best, but problematical, must be regarded by those who suffer from the prohibition, as a measure of wanton oppression; and if the prohibition be arbitrarily applied to the inhabitants of those coasts in the kingdom in which the means of life are most scanty, while the inhabitants of more productive and fruitful districts are carefully exempted from its operation, the measure must

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also be regarded as partial and unjust. The people of Skye are quiet, orderly, and habitually submissive to the laws. Amongst them smuggling and even poaching are almost unknown. I should regard it as a serious evil that such a people should be led, if not reasonably at least naturally and plausibly, to look upon the law in its dealings with them as oppressive and unjust, and be exposed to the temptation, and no slight one it would be in time of dearth, to contravene if not to resist a regulation which interposed between their wants and the food which the bountiful provision of nature brought to their shores.

"I need not now revert to the injurious effect of the herring-fishing close time upon the long-line or cod and ling-fishing, by curtailing the supply of bait at the best season for the long-line fishing, but I may remark that serious as is the disadvantage referred to at present, it will become still more serious, should the formation of the proposed railway from Dingwall to Skye lead, as in every probability it will, to a more extended and energetic prosecution of the cod and ling-fishing in the Hebrides.

"I am not prepared, indeed am not qualified to offer any suggestion as to restrictions or regulations likely to benefit any of the sea fisheries. My impression certainly is, that any such interference with the fishing will be found of very doubtful expediency, especially where the habits of the fish have not been well ascertained.

"I believe that much might be done to extend and increase the value of the oyster beds, but this is perhaps a matter more for private enterprise and care than for legislative interference.

"Large quantities of whelks are collected and exported from Skye, and the lobster-fishing is considerable, though I have been told a good deal less than it was a few years ago. I am not able to give you any statistics of the fishing, but they can, I presume, readily be had from the steamer proprietors, Messrs. D. Hutcheson & Co., of Glasgow, and the dealers in Greenock. It may be interesting to ascertain whether there be a falling off not only in the number but in the size of the lobsters taken.

"When I first came to Skye, now almost 20 years ago, there was little if any lobster-fishing in the island, but about that time, or shortly after, boats from Ireland and the east coast of Scotland began to fish lobsters on the Skye coasts, and ere long, Skye men followed the example thus set to them, and gradually engrossed the fishing.

"I have remarked that within the last very few years haddocks and whitings have almost entirely disappeared from the list of fish caught at Portree. Not long ago, very excellent haddocks used to be got in and near the loch, though not, so far as I observed, in any great numbers, and the whitings were very abundant and of good size; but for the last two or three years I cannot remember that I have seen either haddock or whiting taken. It would be interesting to inquire whether this has been observed at other parts of Skye, and whether such disappearances of once familiar fish are to be explained by the fish, either capriciously or from a falling off of food, abandoning their usual haunts, or by their being exterminated by their enemies, human, feathered, or cold-blooded. In the former case, protective measures are clearly out of place, and even in the latter, any that may be suggested would be probably found of doubtful and certainly of very limited efficacy.

"Whether something may not be done to promote the propagation of fish in the Hebrides, may be well worthy of inquiry.

"Nothing further occurs to me to state on the subject of the present inquiry, but more valuable evidence than any that I can give may be had from Mr. Mackinnon, of Corry, who lives close to Broadford, and Mr. Daniel Fraser, merchant, at Isle Ornsay, both which places the "Salamis" will pass on its voyage southwards. I regret that the shortness of the Commissioners' stay on this coast will prevent the Commissioners examining Dr. Nicol Martin, of Glendale, and Captain Allan Macdonald, of Waternish, under whose auspices and by whose tenants the fishing of cod and ling is carried on on the coasts of the parish of Durinish, on the north-west of Skye."

That is all; and I have just written it without knowing what are exactly the points upon which you desire information.

32,977. (*Mr. Caird.*) I think you have given us very valuable information. In the statement which you have laid before us, I see that you recommend that no close time should be adopted?—Yes; I do not recommend any close time.

32,978. You think there ought to be no close time?—I am not prepared to recommend any close time. I speak negatively.

32,979. Are you not prepared to speak on the subject at all?—I am quite clear against the existing close time.

32,980. And against any close time?—Against any lengthened close time.

32,981. Is there any opinion in the island in favour of any close time whatever?—I rather think not. I rather think there would be a disposition on the part of the people of the island to have such a close time as to prevent the Stornoway people from taking to the early fishing. They have a notion that the Stornoway fishing occurring earlier, interferes with the fishing here.

32,982. Do they think that it breaks the shoal of fish, and prevents them from coming up?—Something of that kind.

32,983. You have not heard any precise month mentioned as a close time which the people of the Isle of Skye would favour?—No, I am not aware of their favouring any close time for close time purposes. I am not aware that there is any close time the people of Skye would recommend for close time purposes; but there might be a close time which they would prefer in order to prevent the Lewis people from carrying on the early fishing.

32,984. For the purpose of benefiting the breeding of fish they have no desire for a close time at all?—No.

32,985. They are of opinion that it is not necessary?—Yes.

32,986. Are you aware whether the people of Skye subsist much upon fish during the winter for their food?—Yes, a great deal.

32,987. Then it is really a matter of great importance to them looking at it as a food question?—There is no doubt of it.

32,988. They are of opinion that they should be left to follow the herring-fishing during the winter season?—No doubt of it, considering that the herring is direct food, and also that it is the means of procuring other fish.

32,989. You mean that it can be used as bait for other fish?—Yes. On both these considerations they think they should be left to follow the herring-fishing during the winter.

32,990. Are you aware whether any serious hardship has arisen among the people in Skye from the close time at present established by law?—I am inclined to think that it was the occasion of very considerable hardship in 1861.

32,991. But since then the law has been a dead letter?—Yes.

32,992. There has been no interference on the part of the authorities to enforce the law as it at present exists?—Not since 1862.

32,993. And the people, in fact, have fished as they thought proper without any regard to the law?—They have not been prevented from doing so.

32,994. Has that liberty which they have taken for themselves removed the hardship under which they were placed previous to the publication of the letter you sent to the Commission in 1862?—There can be no doubt of it.

32,995. There has not been a similar complaint among the fishermen that they could not obtain fish for food since they took the law into their own hands and have done as they thought proper?—There may have been complaints as to the storminess of the weather, but none with regard to any legislative obstacle against their fishing.

32,996. Can you give us any information as to the extent of the oyster beds round Skye?—No, I cannot. But there are oyster beds in the Sound of Scalpa, and Loch Snizort, and Loch Grishinish. My impression is that there are very few lochs in which there are not more or less oysters, but upon that subject no doubt Captain Otter will be able to tell you more than I can. With regard to the loch in Portree there are an immense number of the shells of oysters on the strand, although oysters are no longer taken in the loch.

32,997. Were there many oysters at any time taken in the loch within your recollection?—No, not within my recollection.

32,998. You say that the haddock and whiting of recent years have disappeared from the neighbourhood?—Yes.

32,999. Have you heard any reason alleged for that?—No.

33,000. Have they fished them with the same diligence as formerly?—It was not a fishing for sale; the boats went to fish for general purposes, and they caught at particular seasons a great number of whitings, but it was not an established herring or whiting-fishery, or anything of that description.

33,001. Has there been an important haddock or whiting-fishery that has disappeared in recent years?—They have never been fished as a matter of exclusive fishing for trade, as has been done in some places, and therefore in that way there has been no trade; but the circumstance remains, as I have stated. Formerly we used to catch a great number of whitings and a considerable number of haddocks, but of late years we do not get them at all.

33,002. (*Professor Huxley.*) Do you know whether they are to be had by going out further to sea?—I do not wish to state positively, but I rather think the waters in which the whitings were got were not deep ones.

33,003. What sort of bait did you use for the whiting and haddock then?—They did use bait for them.

33,004. But what sort was it?—I believe they used cockles and mussels and sometimes small bits of herrings.

33,005. Has that description of bait become scarce?—No.

33,006. Then it is not owing to the difficulty of procuring bait?—No.

33,007. Is there any beam-trawling on this coast—I mean the large beam-trawling—is that practised here?—I do not know exactly what it is.

33,008. There are large vessels using a large net with a beam at one end of it?—No, certainly not. There is nothing of that sort here.

33,009. Has there never been at any time?—No.

33,010. Have the people ever practised scringing, or circle-net fishing?—No.

33,011. There has been nothing of that kind?—No.

33,012. Has the number of boats increased here of late years?—I do not happen to know that.

33,013. Have you eaten oysters here?—Yes.

33,014. Are they of good quality?—Yes, and they are eaten in great numbers.

33,015. We were informed in Edinburgh that they had a black appearance and that they were not saleable in the market?—I have never observed any such appearance. They are smaller than the oysters you get in London and Edinburgh.

33,016. Rather smaller?—Yes, I think so. We are in the winter very well supplied with oysters, and particularly when there is a bad year other people come all the way from Stronsea up to Portree to get a shilling or two by them. If potatoes are plentiful they are not willing to come ten or a dozen miles for that purpose.

33,017. You mentioned two curing establishments in Skye?—Yes.

33,018. Are there more than that?—I do not know. I mentioned two people I am aware of who carry it on. I am not aware of any others who carry it on systematically. There are one or two who practise it regularly in Loch Dunvegan and another in Loch Pooltiel.

33,019. Do they carry it on for some central European market?—I am not aware.

33,020. Is it cod and ling or herring that they cure?—It is not herring; it is cod and ling.

33,021. They do not cure herring at all?—No.

33,022. I thought there was curing of herring there?—The curing of herring goes on all over the coast wherever it can be caught.

33,023. But for the purpose of exportation?—Yes. I have occasionally seen a hundred sail of boats in the bay at Portree, and there is a large collection of ships of one kind and another to the south of Scalpa. Great numbers of ships come here and purchase; others come here and fish as well as purchase, and there used generally to be one or two or perhaps more persons resident in Portree who purchased.

33,024. The curing goes on all round the Island of Skye?—Yes.

33,025. Do the people cure in their own houses or in the regular curing establishments?—Generally speaking the boats sell their takes to the curers, and those curers cure either on shore or in the ships as they can find convenient opportunities; but as regards the details of these matters there are persons who know them much better than I do.

33,026. (*Mr. Caird.*) Was there any representation made from persons in the Isle of Skye who were in favour of a close time at the time that question was agitated?—I understand there was a petition, or something of the kind, but I never saw it, and I remember that shortly after the establishment of the close time there was a meeting in Portree and among other subjects the close time was brought under consideration. It so happened that none of the gentleman present had seen the petition, but on inquiry I ascertained that the petition had been sent round and had obtained a great number of signatures, which signatures were obtained on the representation that the petition was a petition to put down the trawl nets.

33,027. (*Professor Huxley.*) That is to say, circle-nets?—Yes, and none signed under the impression, or at least the notion, that it had reference to close time.

33,028. (*Mr. Caird.*) Do you speak the general impression of all in Skye when you say that whatever petition was signed on the subject they are now universally against the present close time as established by law?—I think so. I have been in communication with persons connected with the fishing and interested in the country. I have frequently heard the question discussed and I never heard one in favour of the close time as now established by law.

33,029. You are not aware whether the petition emanated from the people here or was sent here to be signed?—I imagine it must have been sent here to be signed. If it had emanated from the people here it would have come under my observation. Any petition got up here is got up by calling a meeting of the gentry, and they consider the question, prepare the petition, and sign it. Everything is public here.

33,030. The opinions contained in the petition were not shared, I understand you to say, either by the gentry of the country or by the fishermen?—No.

33,031. (*Professor Huxley.*) The petition could not have been got up by the fishermen without your being aware of the fact?—I do not think it could.

33,032. You say that they signed that petition under the impression that it was against trawling; I presume that by that you mean the circle-net fishing as practised in Loch Fyne?—Yes.

33,033. If no such fishing were practised in this island, why did they feel such an antipathy to it?—I cannot tell; but I speak more by hearsay of the petition than anything else, because I never saw it or heard of its existence until the close time was established.

33,034. Do you think that the people here have any considerable objection to circle-net fishing?—I do not know, except those who leave the country to seek for fishing elsewhere, and I do not think they know much about it. There is, however, a large proportion of our fishermen who go off to the fishing elsewhere.

33,035. Do they go to Loch Fyne?—Some go to Loch Fyne, some to the coast of Ireland, and numbers to the east coast. The numbers who go to the fishing vary. This year there will be a considerable number, and last year the number was comparatively small. It depends on various circumstances. Last year there was abundant employment on the railroads

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at high wages, and many people went and availed themselves of that employment who would otherwise have gone fishing. This year employment of that description is not so abundant or so remunerative, and further, there has been a good deal of sickness in the south, together with considerable apprehensions about small-pox and other contagious diseases. That has made the people unwilling to go to the south, and has increased the number who have gone to the fishing. That observation will also apply to some extent to the diminution of the lobster-fishing, because if the people find that they can make more money on the railroads than they can make by going about attending to those lobster boxes they will naturally give the preference to it. Fishing, trenching, and road-making seem to be equally to their taste here.

The witness withdrew.

Captain Henry Charles Otter, R.N., called and examined.

Capt. H. C. Otter.

33,036. (*Mr. Caird.*) You have for some years been engaged in a survey of the Western Islands, I understand?—Yes, for 20 years.

33,037. Then you are intimately acquainted with all the coasts of these islands?—Yes.

33,038. In the course of your observations have you turned your attention much to the fishery interests of the islands?—Not to the details of the fishing.

33,039. But to the existence of different kinds of fishing and the different kinds of fish that are found on the coast?—Sometimes my attention has been directed to those matters when they have been occasionally brought before me.

33,040. Have you formed any opinion as to the much vexed question of a close time in the herring fishery?—Yes, I have.

33,041. What is the opinion which you have formed upon that point?—My opinion is that in all those small lochs such as there are in Skye and on the west coast of Scotland in general, there ought to be no close time. The fishing is carried on in such a small way comparatively, seeing the way in which it is carried on at Stornoway and Wick, that it is not injurious to the fish coming upon the coast.

33,042. Then do you exclude Stornoway from the range to which your answer applies?—Yes, the boats there take more in one night than they probably take in Skye during the whole of the winter months.

33,043. To what part of the coast then does your answer apply?—From the coast of Mull.

33,044. To where?—To Cape Wrath.

33,045. But not including part of Lewis?—No, beginning at the lochs to the south but including everything inside Lewis. There is a very large fishery at Stornoway. To the south of Stornoway there is very little fishing going on except at a place called Lochs. All the other places are denuded of inhabitants and there is no fishing going on, so that it is really of very little consequence whether there is a close time or not.

33,046. But the fishermen of Stornoway tell us that on the east coast those who fish in the Minch find it idle to fish unless they get herring bait?—Yes, I believe that is the case.

33,047. Then would not your answer that there should be no close time necessarily apply also to the east coast of Lewis?—Yes.

33,048. And to all the west coast of Inverness and Sutherlandshire and Ross-shire?—Yes.

33,049. Down as far as the Sound of Mull?—Yes.

33,050. Beyond that you do not offer an opinion?—No.

33,051. Because you do not know anything about it?—Yes.

33,052. Then outside of that do you establish a different principle?—Do you mean outside the Lewis?

33,053. Yes; you said you would follow the line inside?—That would be of very little consequence because there is no fishing on the long island except there may be a few boats from Loch Rona.

33,054. Have you turned your attention to the mode in which it is supposed the shoals of herrings enter the Minch from the North Sea and the west?—No, I have not.

33,055. Then you cannot say whether the allegation of the fishermen is true that the early fishing is apt to break the shoals and prevent them proceeding down the Minch?—No.

33,056. You are against any close time on any part of the west coast of Scotland down to Tobermory in Mull?—As far as concerns the present mode of fishing in this place the fishing of Stornoway is on a gigantic scale, the nets cross over the Minch entirely from one side to another. They are closely packed and doubled and trebled all over. If there is anything at all in nets being injurious to the progress of the fish it must be in such an extensive fishing as that. But I do not believe that the fishing in Skye and in the Lochs which is carried on, comparatively speaking, on a very small scale can be injurious; in addition to which it is of the utmost importance to the food of the poor people in the winter that they should have the opportunity of fishing if they have any shoals coming into the Minch and passing along the Western Islands.

33,057. But where it can be practised on a large scale you think there ought to be a close time?—Yes, I think so.

33,058. Have you considered the question of what that close time should be?—I cannot say that I have.

33,059. Are you aware whether the winter herring-fishing is at all likely to be a valuable one on the coast of these islands?—I should think not, I mean to say valuable in a mercantile point of view.

33,060. It is valuable, you believe, as an article of food to the people?—Yes, most important.

33,061. Do you know whether the cod and ling-fishery on the coast of these islands is a progressive one?—I should rather think to the contrary.

33,062. To what particular part of the coast do you refer now?—To Barra and Eriskay; I would not speak positively about Skye, but I think the long-line fishing on that island is on the retrograde altogether.

33,063. Do you know any reason for that?—I think that the speculation which was carried on some two years ago demoralized the people so much by getting them into debt that they did not care very much whether they fished or not.

33,064. What was the nature of that speculation?—They were provided with all manner of things that they had no necessity for as well as those things which they did require, such as nets and boats, and they were run so much into debt that the fishermen of Barra, Eriskay, and the west coast generally have not recovered themselves to this day.

33,065. Was that debt incurred by advances made by the curers to the fishermen?—Yes.

33,066. In order to secure their services in the fishing?—Yes.

33,067. Was it done under a particular company, or was it a general thing?—Under a company.

33,368. A joint stock company?—Yes.

33,069. And you think that those advances led to embarrassments among the fishermen, and in that way they have rather deteriorated than improved the fisheries?—Yes.

33,070. They have not fallen off from any want of fish on the coast?—No; I do not think they have fallen off from that.

33,071. There has been no appearance of a decline in the number of fish on the different fishing banks on the coasts where they are usually caught?—

Occasionally there has been. In 1858 there was scarcely a fish taken in this county, but that was in consequence of large shoals of the small dog-fish. In that year scarcely anything was done by the long-line fishing.

33,072. And since then has it improved ?—Yes ; it has improved since then.

33,073. Are there any flat-fish taken on this coast to any extent ?—No.

33,074. Is there no sole-fishing ?—Turbot are taken at the north of the Butt in large quantities.

33,075. Is there no net-fishing for flat-fish ?—No ; there is no trawling.

33,076. No beam-trawling ?—No ; I never saw any except what I have done myself, and that has been on a very small scale.

33,077. Were you successful when you did it on a small scale ?—We broke the beam.

33,078. Is it not a suitable bottom for trawling ?—No doubt it is in many places.

33,079. Do you know anything about the haddock-fishing ; is it a fishing that is likely to yield well ?—I do not know.

33,080. We have been told that there are some valuable oyster beds along the coast of Skye, and on the coasts of the islands ; can you give us any information as to their existence ?—I only know the loch Mr. Fraser was speaking of, Loch Sligachan, where there is an abundance of oysters, and Loch Hourn.

33,081. Loch Hourn is on the main land ?—Yes.

33,082. Are those oyster beds fished by anybody as a matter of business ?—At Sligachan, I think they are, and they bring them into the market occasionally, but the beds in Loch Hourn are kept as private property.

33,083. To whom do they belong ?—The upper part of the loch belongs to Mr. Ellice, I think.

33,084. Is that a bed of sufficient importance to be worth attention for the supply of oysters to the great markets of the country ?—I should think it is. The shores of the loch itself are covered here and there with oysters, not attached to the bottom, but attached to the rocks along the sides of the loch as well as in many places along the bottom in the shoal water.

33,085. We were told by a witness at Edinburgh that in many other parts of the Isle of Skye in almost every loch he entered he could find oysters. Have you found that to be the case ?—I cannot say that I have.

33,086. Have you examined the lochs in such a way as to be able to speak positively upon the point ?—No, not on the south and west of Skye.

33,087. Do you know anything of the quality of the oysters ; have you tasted them ?—Yes.

33,388. Are they good ?—They are particularly good on the Long Island, and the Sconce oysters are very good.

33,089. Are they similar in quality to the oysters we find in the southern markets ?—I am not able to speak decidedly upon that point.

33,090. Is there a good lobster fishery on the coast of Skye, or might there be ?—I do not know much about it in Skye.

33,091. Is there on any of these coasts ? —On the Long Island or the outer Hebrides there is excellent fishing.

33,092. Do you think the lobster fishery in the outer Hebrides capable of a great increase and development ?—Yes, I should think it is.

33,093. I suppose at present it is very imperfectly fished ?—It is more perfectly fished than it was ; foreigners used to come to us, that is to say, men from the south, from the Isle of Man, from Ireland, and other places. They were in the habit of coming here and fishing, particularly in the western part of the outer Hebrides. People constantly came from different parts and fished here, while the inhabitants did nothing in the lobster fishery themselves.

33,094. What is the case now ?—The inhabitants in the different parts are now taking more to fish for themselves.

33,095. There is an important fishing in Barra ?—Yes, most important.

33,096. What description of fishing is it ?—Chiefly long-line.

33,097. Cod and ling ?—Yes.

33,098. Is there an important herring fishery at Barra ?—No, I do not think there is.

33,099. Is the cod and ling-fishing improving there ?—No, it is deteriorating.

33,100. For the reasons you have already given ?—Yes.

33,101. Is it capable of being increased ?—Yes.

33,102. (*Professor Huxley.*) Have you seen any foreign vessels fishing in the Western Islands, French or Dutch ? — No, I have never seen one fishing here at all.

33,103. Have you ever had occasion to try for soles, or have you caught them on the western coast ?—No, I never used the means except once.

33,104. Have you seen any kind of scringing or circle-net fishing practised on any of the islands you have visited ?—No ; except for sillocks ; when fishing for sillocks they throw a net round them.

33,105. That is the ordinary shore seine ?—Yes ; it is fished along the shore from the rocks.

33,106. Have you never seen any circle-net fishing or scringing practised for herrings ?—No, never.

33,107. Is there any large fishery at Barra ?—Yes, long-line fishing.

33,108. How many boats are engaged there ?—I can hardly speak as to that, but I should say that on the island of Eriskay, which I consider to be part of Barra,—it is in the Sound of Barra,—there must be 30 boats.

33,109. Are they decked or undecked boats ?—They are just open boats.

33,110. They fish with long-lines, not the hand lines ?—Chiefly the long-line.

33,111. Is the quantity of fish they take very considerable ?—Yes it is. It has been very good this year.

33,112. Has the number of fishing boats at Barra increased within your recollection ?—I think it has decreased, but I cannot speak from any particular knowledge of them myself, I only speak from what I hear upon that point.

33,113. However, I gather that it is your opinion that the decrease in the fishery which may have taken place there has not arisen from any falling off in the quantity of fish, but simply from want of fishing ?—Yes.

33,114. When you spoke of catching sillocks, you described the method of taking them as being by a kind of shore seine ?—Yes; it is a circle-net stretched on a large hoop.

33,115. Not by a seine ?—No; they lower it down with pieces of broken crab and other stuff in it.

33,116. You have visited most of the islands on the western coast ?—Yes.

33,117. Then you know the mode of living adopted by the people pretty well ?—Yes.

33,118. Do you consider that the fish they catch enters very largely into their food and forms an important element in their support ?—I think in the spring time that seaweed and shell-fish are the principal maintenance of a vast number of them.

33,119. Seaweed ?—Yes, seaweed and shell-fish. I believe their existence is just eked out with that, with the assistance of a little meal and potatoes which they may have left. If the seaweed and the shell-fish and the sillocks were taken away from them most of these people would be obliged to emigrate or else to starve.

33,120. Sillocks are not shell-fish ?—No ; but they are caught from the rocks. They do not require a boat to catch them.

33,221. What do you mean by shell-fish ?—Limpets, cockles, and that sort of fish.

33,122. Do the winter haddock and the codfish enter at all largely into their food ?—I should think so.

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33,123. Is the catching of herrings a matter of importance to them in the winter?—I think it is.

33,124. Do they practice it on most of the islands?—Yes, in every loch, but to a small extent.

33,125. Only on a small scale?—Yes, to provide a few barrels for themselves, and that is of the greatest importance to them.

33,126. Would you look on any stoppage in the catch of these fish in the winter as depriving the people to a great extent of their food?—Yes.

33,127. Have you, on visiting the different islands, found any great discontent existing from the operation of the close time Acts?—No, because they are a people ready to suffer rather than show it by discontent and outrage, as they would in the south if the same thing were carried on there. When an Act of a similar tendency was put in force in reference to the Firth of Forth the law was broken and set openly at defiance, but the sheriff was obliged to put these poor people into gaol here even at the time that they were catching, selling, and eating illegal fish in Edinburgh.

33,128. (*Mr. Caird.*) Is there anything that occurs to you which you wish to offer to us as additional evidence in reference to the fisheries of these islands?—Do you mean in respect to improving the fisheries?

33,129. Yes?—It is very difficult to say what course one would adopt.

33,130. I suppose we may take it from the evidence you have given that there is a sufficient field for the employment of capital in the prosecution of the fishing in these islands, as far as is shown by the existence of the fish on the coast?—Yes.

33,131 We may take that to be the fact?—Yes.

33,132. Is there any mode of fishing at present practised which is injurious to the spawn of fish?—No, I do not know of any. The net fishing, in which the net is drawn ashore, and which is known as drag-net fishing, is so little practised here that I do not think the spawn is injured in that way.

33,133. Are there any fishing banks known to you as being prolific of fish which are not generally known to the fishermen?—I am not aware; there is the Shiant East Bank which a few years ago was not known generally to the fishermen.

33,134. Is that very prolific of fish?—Yes, at the proper season. During the season it is very prolific. It is a bank of a very large extent.

33,135. Looking at the map, what are the best fishing grounds for cod and ling?—I should say Kilda was one, 25 miles to the north of the Butt of Lewis, the Shiant East Bank, and the banks from South Uist, near Barra—those are the banks, I think, that are most prolific.

33,136. What average depth of water may there be on those banks?—From 14 fathoms to about 20, or perhaps in some cases from 10 fathoms to 25.

33,137. Are those banks mostly near the shore?—The banks at the Butt of Lewis are 25 miles off, the Shiant Bank is 12 miles off, and the Eriskay Bank is within a mile and a half of the shore.

33,138. Can most of those banks be fished to advantage by open boats?—Yes.

33,139. Would it be of advantage to the fisheries if there were decked boats placed upon any of them?—Not full decked boats certainly.

The witness withdrew.

W. Stewart.

William Stewart called and examined.

33,140. (*Mr. Caird.*) You are an agent for the purchase of shell-fish of different kinds in Skye?—I am not an agent, I buy myself.

33,141. You buy on your own account?—Yes, and I send them to market.

33,142. You are acquainted with the different kinds of fisheries which are carried on in the Island of Skye?—Yes.

33,143. And have been for many years?—Yes.

33,144. What kind of shell-fish do you export from here?—Nothing but whelks.

33,145. Where do you send them?—To London.

33,146. (*Professor Huxley.*) Do you mean periwinkles?—Yes.

33,147. (*Mr. Caird.*) Has that been an increasing trade?—Yes, but it has been getting scarce in consequence of so many people being engaged in catching them.

33,148. Do they all go through your hands?—No, there are many people who deal in them besides myself.

33,149. But do they all go through your hands?—No, they go from different places.

33,150. In the course of a season how many tons do you send off from here?—I may myself probably send away 300 bags or thereabouts in a season; that is exclusive of what others send.

33,151. Where do you send them?—To Glasgow and by rail from Glasgow to London.

33,152. You do not buy lobsters, do you?—Yes, sometimes, and herrings. Sometimes I deal in herrings, sometimes in lobsters, and sometimes in whelks.

33,153. Has the lobster fishery been increasing?—No, it is on the decline.

33,154. What is the cause of that?—It is my opinion that there are too many fishing them. There are more than there were formerly. At the commencement of the fishing there were too many fishing them, and the consequence is that the fishery now is on the decrease.

33,155. Where do they fish?—Round about the islands.

33,156. Are you speaking of the whole lobster fishery round the islands?—Yes.

33,157. And you think it is over-fished?—It is not over-fished, but the lobsters are a great deal smaller than they were 15 or 16 years ago.

33,158. Are there large quantities of them sent away every year?—Yes.

33,159. Does that fishery go on all through the year?—Not in the summer time.

33,160. Is there any crab or parton fishery here?—No.

33,161. Is the oyster fishery practised here at all?—No. There is a reason for that; the proprietors will not allow the people to touch them.

33,162. Is there no oyster bed open to the fishermen?—They do not prevent the poor people from lifting some for their own use, but they will not allow them to take them for the market.

33,163. Are there a good many oysters known to exist on different parts of the coast?—Yes, there are good lochs for oysters.

33,164. Would not the proprietors allow them to be fished on the payment of some lordship for the privilege of fishing?—I do not know anything about that. They are on the strand and they ought to be got on the shore in the spring tides; they can be got also at neap tides, but in the spring tides we can pick them off the shore.

33,165. Are they not dredged?—No, not one of them.

33,166. Is there no place where they could be dredged?—I dare say there is if it was tried, but I never saw it tried.

33,167. Is the quality of the oysters good?—They are not very big, but they are very nice.

33,168. Is there any objection to the colour of them?—I don't think there is.

33,169. Have you ever sent any to Glasgow?—Yes, but not many.

33,170. Was any objection made to them?—No.

33,171. If an arrangement could be made with the proprietors, could the oyster fishery be largely increased in the Island of Skye?—I dare say it could.

33,172. Do you think they are capable of forming a very large supply to the market if there were no obstacle to their being fished?—I suppose so. They

are like every other kind of fish, and you will find them spawning like other fish.

33,173. What opinion have you formed with regard to a close time for the herring fishery in Skye?—It is my opinion that there should be no close time at all, because it has injured the poor people greatly.

33,174. But practically they do not regard the law; they do not pay any attention to the state of the law, but go on fishing, do they not?—They do pay attention to the law.

33,174*a*. Then the law as it at present exists is observed to some extent?—Yes, to be sure it is.

33,175. If the law were altered, would it be a great matter for the poor people fishing here?—It would be greatly in their favour.

33,176. Would you have no law here at all in reference to a close time?—No, not in Skye, from Cape Wrath to the Mull of Cantire, would I have any close time because it is greatly injuring the poor people.

13,177. Are herrings found here in good condition in the beginning of May?—Not very good. They do not fish here in the beginning of May at all.

13,178. Even though there were no law against it, would they not fish in the beginning of May?—No; the herrings are poor then.

33,179. During what months are the herrings good in the winter time?—They are good all the winter.

33,180. Up to when?—All through the month of January. If we had a month longer to fish, it would do a great deal of good to the country.

33,181. It would be of advantage to you if you got leave to fish all through January?—Yes.

33,182. Would you not fish them longer?—No; the fishermen would have no desire to fish upon a bad system.

33,183. What objection have you to the herrings in November?—Their quality at that time is useless.

33,184. Do not people eat them then?—No; they are as poor as they can possibly be, and they can scarcely be used at all.

33,185. Is it for the interest of the people of Skye to have a close time extending from the beginning of February until the 25th of May?—I dare say it would be.

33,186. When would you propose to end it?—Well, the earliest they should be allowed to commence at Stornoway should be the 20th of May. If the fishing were put back there for some time that would be in favour of those lochs; for it is well known that since the Stornoway fishing commenced there has been no fishing here at all. I remember when the Stornoway fishing commenced they had a very good fishing here at that time. But there were not so many boats going to the Stornoway fishing then; and at first it did not hurt us here, but since the Stornoway fishing has so much improved, a great many more boats have gone there every year, and the fishing here has been much injured.

33,187. Have they collected at Stornoway from different parts of the coast?—Yes; so that there is no fish caught here at all now. The body of the herrings used to come this way, but the shoals now become broken in consequence of so many boats fishing amongst them and do not reach as far as this.

33,188. Have the fishermen of Skye come to any opinion as to what would be the most desirable time for a close time on the west coast?—As I said before, I think the 1st of February.

33,189. The 1st of February to begin with?—No; to close the fishing for Skye.

33,190. You would have the close time to commence on the 1st of February; you would have no fishing from the 1st of February?—No, up to the 30th of May, that would be the time I should fix.

33,191. Do you think that is the opinion generally of the fishermen of Skye?—I think so.

33,192. And you would take ten days in May in the hope of preventing the Stornoway fishermen from breaking the shoals as they are coming south?—Yes.

33,193. That is the reason you give for extending the close time throughout the whole of the month of May?—Yes; I do not think the fishing should be stopped altogether.

33,194. What time is your best herring-fishing here generally?—June, July, and August; but there has been nothing for the last five, six, or seven years.

33,195. Was there formerly a good deal more herring cured in Skye than now?—Yes, a hundred times more.

33,196. When did that great falling off commence?—It is five or six years since now.

33,197. Do you date it from the time the great fishing began in Stornoway?—Yes, I do.

33,198. And you attribute it to the shoals being broken as they enter the Minch?—I do, and it is the general opinion of competent fishermen. It does more harm than that also to the poor people who deal in them. The Stornoway herring gluts up the markets in every part of the south, from Glasgow down to London, and in every part of England all the markets are glutted up with Stornoway herring, and if I send herrings I shall not be able to get a market for them.

33,199. Are the Stornoway fish good fish?—No, they are not good fish, they are not half as good as the herrings caught here.

33,200. Do you mean the herrings caught early?—No, nor at any time. The quality is not as fine or as good.

33,201. Are they not rich fish that are caught at Stornoway?—Yes, but they are coarse fish compared with those which are caught here.

33,202. Can you tell us anything about the cod and ling fishery?—That is on the decline.

33,203. What is the reason of that?—It is more than I can say what the reason is.

33,204. Do the people find a better kind of business?—No, they are trying for the fish, and if the fish could be caught they would do very well, but the fish have failed and the people have had to give it up.

33,205. Are there not as many cod and ling to be caught if any person were to try it with perseverance?—I do not think there are. The fish are not to be caught, that is my opinion.

33,206. (*Professor Huxley.*) When you had winter fishing here before the close time was there much fishing?—Yes.

33,207. Was there much cod and ling caught then?—Yes.

33,208. Was there any quantity cured here then?—Yes.

33,209. Were there considerable quantities of fish caught in the winter before the close time Act came into operation?—Yes.

33,210. In what condition were the fish in January?—In very good condition.

33,211. Were they full fish?—Yes.

33,212. When did you get spent fish in the winter?—I never made any distinction.

33,213. You know what spent fish is?—Yes, a fish after it has spawned.

33,214. When did you get them?—In the spring if they were to be caught.

33,215. In what months?—February and March.

33,216. What time are the herrings full in the summer fishing?—In June generally.

33,217. As early as June?—Yes.

33,218. What time do you get spent herrings here in the summer fishing?—I never saw a spent herring in the summer time at all here.

33,219. Do you ever fish for herrings as late as August?—Yes, but I never saw a spent herring here then.

33,220. Do you understand the fishing for sillocks that is practised on this coast?—What sort of fish are they.

33,221. Young saithe?—Yes, I know them.

33,222. That is cuddy-fishing?—Yes.

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33,223. What sort of nets are used for cuddy-fishing ?—We have no nets at all.

33,224. How do you catch them ?—With a hook and bait on it.

33,225. You do not use any nets at all ?—No. We use sometimes a taaf net, that is the Gaelic word for it. It is a net with a hoop to it.

33,226. How big is the hoop ; how wide is it across ; is it a couple of feet ?—It is about that width (*measuring*).

33,227. That is about three feet ?—Yes, or I dare say four feet in diameter.

33,228. What is the size of the mesh of the net ?—About an inch, or scarcely an inch ; my thumb would go into it.

33,229. Is it half an inch ?—Perhaps.

33,230. How deep is the bag of the net ?—Some are deeper and some less ; perhaps about 2½ feet or thereabouts.

33,231. Is it worked from a boat ?—It is worked with a handle.

33,232. A handle ?—Yes, they stand on the quay and put it down in the water, and take it up again.

33,233. (*Mr. Caird.*) Are they able to take fish in that way ?—Yes, they put in some bait with it and they take it up with a spring or jerk ; they catch thousands in that way.

33,234. (*Prof. Huxley.*) Are they much eaten by the poor about here ?—Yes, and they are also very useful for light ; they extract oil from them.

33,235. Do they boil them down for the oil ?—Yes, they do.

The witness withdrew.

JOHN NICHOLSON called and examined.

J. Nicholson.

33,236. (*Mr. Caird.*) Are you a fisherman ?—I have not been fishing for more than 12 years ; I used to fish for about 30 years before that.

33,237. Then you are pretty well acquainted with all the fishing that is practised here ?—Yes, on the east coast.

33,238. Can you tell us whether the different kinds of fish caught here are on the increase or on the decline ; but in the first place can you tell us what are the fish caught here ?—Herrings, cod, and ling. There are herrings always here in the season beginning at the latter end of June.

33,239. Is the herring-fishing as productive here as it used to be in early times ?—It is not a hundredth part as good as it used to be.

33,240. What is the cause of that ?—As the other witnesses have told you, it is in consequence of what is caught in Stornoway, and on account of the Lewis fishing beginning so early and there being so large a fleet of boats engaged in it.

33,241. Would you desire that the Lewis fishermen should not commence so early ?—Yes.

33,242. When would it be for the interests of the people further south that the Lewis fishermen should begin ?—At the latter end of May or the beginning of June.

33,243. They do not begin until the 20th of May now ?—So I understand.

33,244. Do you think a great deal of harm is done in those ten days, from the 20th of May until the beginning of June ?—I think it has a tendency to break the body of the herring when they are using such a heavy fleet of boats. The fishing has been falling off every year, and it has been getting heavier in Lewis from that time.

33,245. Was the herring fishery a much better one seven years ago than it is now ?—Yes, it was a good deal better ; I may say that we got 100 crans then where we only get one now.

33,246. Were there more boats than there are now ?—Yes, there was a great fleet of boats here then.

33,247. Has that fleet gone now chiefly to the Stornoway fishing ?—Yes, it has gone off to the Lewis fishing.

33,248. The boats leave this and go away to the north to fish ?—Yes, they were coming here after leaving the Lewis fishing, but now they go the east coast fishing, and they get a great deal of fish.

33,249. Do they not come here at all now ?—No, there would be no use in their coming here.

33,250. Can you give us any opinion of your own as to the advantage or disadvantage of a close time for the herring-fishing ?—I know what the close time is.

33,251. Do you think it is injurious to the people here that it should be maintained for the whole winter from the 1st of January ?—I think it should be dropped until the beginning of February, but after spawning the fish get very poor.

33,252. Do you know anything of the cod and ling fishery, whether it is increasing or diminishing ?—I know the cause of some of its falling off has been since the close time was fixed at the beginning of January. There is a place they call Loo, and there was a person there who followed it, but he could not get bait because they were prevented from fishing for herring after the beginning of January.

33,253. He could not get herring bait ?—No.

33,254. Is that part of the cause of the falling off ?—Yes, I am sure and certain it is.

33,255. Are there plenty of cod and ling on the fishing grounds of these islands ?—I have heard, about January last, that they were getting hauls about here.

33,256. Can you tell us anything about the lobster fishery ; is the lobster fishery improving here or declining ?—It was very good last winter. There was a time when I saw them coming in with very good hauls. They were in the habit of coming in here with every one of the fish they caught, but since a boat has been running to the west of Skye there are not so many of them coming here as were in the habit of frequenting this place formerly.

33,257. Are the lobsters caught more on the west coast of Skye than on the east ?—Yes, they are at times.

33,258. Are oysters much fished on the coast of Skye ?—There are some about the Island of Scalpa.

33,259. Are they not dredged for in any way ?—No.

33,259*a*. Are they picked up at low water ?—Yes.

The witness withdrew

T. Fraser, Esq.

THOMAS FRASER, Esq. re-called and examined.

33,260. (*Mr. Caird.*) How many cases have been brought before you, as the resident magistrate, of persons accused of breaking the fishery law ?—I think about a dozen.

33,261. Who prosecuted ?—They were prosecuted at the instance of the procurator fiscal.

33,262. For the Crown ?—Yes, but generally speaking on the information of the Fishery officer.

33,263. Then they were prosecuted at the public expense ?—Certainly.

33,264. It was not the prosecution of any private persons believing that they were aggrieved in regard to any of their interests ?—No.

33,265. What was the result of those trials which took place before you on that information ?—Generally speaking there was a conviction. When I say a dozen, I mean a dozen individuals, but there may have been more than one included in the same charge. I think there were about three of the dozen against whom the charge was not successful ; the charge was

either abandoned by the procurator, or I found them not guilty.

33,266. Can you tell us what was the nature of the charge?—The nature of the charge was a contravention of the Act by fishing during close time.

33,267. What was the penalty inflicted upon those who were convicted of breaking the law?—The penalty inflicted was the smallest penalty I could impose by the law, being *5l.* with the *bonâ fide* expenses.

33,268. Was that inflicted upon each individual?—Yes.

33,269. Could they pay the money?—In two if not more of the cases the people went to gaol, and in one or two cases the fines were collected in some shape or other. I believe the money was borrowed, but it was paid. I only remember two individuals who went to gaol.

33,270. How long were those individuals kept in gaol for the non-payment of that penalty?—I can hardly say. If I had thought you would have required such information, I would have looked, and I could then have told you, because the number of days is specified. They are not to be confined till the fines can be recovered, if nothing is to be recovered from them, but they are to undergo a certain number of days imprisonment.

33,271. Did they take imprisonment in preference to paying the fine?—Yes, two of them.

33,272. Was the effect of the prosecutions against those twelve individuals to put a stop to fishing during close time?—Yes, at that time; that is to say, in the close time of 1861 there were, I think, about four prosecutions before me, and a conviction was obtained in most of the cases. That put another stop to the fishing in the close time of 1861. In 1862 there was not a single conviction, I think, or rather I think there was only one.

33,273. Were there several cases brought before you?—No, only two.

33,274. And in one of those there was a conviction?—Yes, those two cases were brought under a more recent Act. The first was a clear case that they had been fishing. In the second some signs of herrings had been found in their boats, and they could not give an account of how they came there; they were, therefore, held to have fished in the close time.

33,275. Was a penalty again inflicted?—Yes.

33,276. Were they poor people upon whom the penalty was inflicted?—Yes, they were very poor,—exceedingly poor.

33,277. Had that the effect of putting a stop to the fishing in the close time in the second year?—Yes. The fishing in 1861 was the first of the close time, beginning in January and ending in May.

33,278. Were those prosecutions really in the period of the close time?—Yes.

33,279. Do you know the date or thereabouts?—In January and February, and I believe the offences occurred within the first day or two of the year.

33,280. Is it within your knowledge that the penalty so inflicted has deterred the people from fishing during the close time, and that it was followed by any distress on the part of the people for lack of the food thereby lost to them?—I cannot add anything to what I have already stated on that subject. I think you will find, if you refer to my report, that I enter into that question. I know that the fines were generally paid by borrowing money.

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33,281. Leaving the people in a state of embarrassment?—Yes.

33,282. (*Professor Huxley.*) Was the minimum fine you could impose *5l.*?—Yes.

33,283. What, in the course of a year, would be the average earnings of a man in the position of a fisherman here?—I cannot say.

33,284. Have you any opinion of what he would be likely to earn?—No; I cannot tell you. Nothing can be more precarious than the earnings of a Skye fisherman; the earnings come from so many sources. They fish sometimes, and at others they can earn as much by going south to work on the land.

33,285. What would be the maximum sum?—You may take it for granted that *5l.* to the generality of Skye fishermen was the same as ruin. In one of the cases before me, they were men of a superior class that were tried, and the forfeiture of the boat was insisted upon. A Fishery officer was sent down here, not the one who was resident, but from a distance, to insist upon the forfeiture of the boat, on the ground that herrings were found in the boat. It turned out that the boat had been out at anchor, and that all the herring nets had been put ashore. A gale came up on the Sunday, and they were driven inshore, and before they put out on Monday fresh herrings were found in their boat. That was the ground of the prosecution, and the sole offence which had been committed. There was not only no evidence to show that the owner of the boat had any knowledge of the existence of the herrings in the boat or how they came there, but the evidence rather went the other way. They had evidently come there without the knowledge of the person owning the boat.

33,286. The wording of the Act is such, that in its strict construction, the boat under those circumstances was liable to be seized?—It was seized in fact, and brought up here.

33,287. From the mere fact of the herrings being there?—Yes; but the Fishery Act must be construed with something like reason, and if the owner of the boat brought evidence to show that it was in the last degree improbable that he could know anything of the matter, I thought that, considering that only three or four bits of herrings had been found in the boat when it was driven in by a storm, I was not bound to convict.

33,288. You stated in your former letter that the police force had been increased in order to enforce the close time more efficiently?—Yes.

33,289. Four additional policemen were added?—Yes; they are not additional to the police force of the country, otherwise than that four policemen from Argyleshire have been sent down for this special purpose. They are not policemen for all purposes in Skye, but they have been sent over for this special purpose, and they remain during the close time.

33,290. Who has paid the expenses of that police force?—I cannot tell. I can only guess that they have been paid by the Fishery Board.

The witness withdrew, and the inquiry was adjourned to Broadford.

Broadford, Isle of Skye, Monday, 8th August 1864.

PRESENT:

JAMES CAIRD Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

BROADFORD.

ALEXANDER KENNETH MACKINNON called and examined.

A. K. Mackinnon.

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33,291. (*Mr. Caird.*) You are a resident proprietor here?—No, not proprietor.

33,292. You have been long resident here?—Yes.

33,293. And you are agent for Lord Macdonald's estate?—Yes.

33,294. And therefore you have good opportunities of ascertaining the state of the fishing interest on the

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A. K. Machinnon.

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coast of Skye, and also the condition of the people?—Yes. My father was a great fish-curer for many years.

33,295. Have the various kinds of fish caught on the coast of Skye been on the increase of recent years, or have they been stationary or diminishing?—I do not know how I can answer that question. We may perhaps be 20 years without fishing and then a great fishing will strike up, just as now.

33,296. Are you referring to any particular kind of fishing?—Yes, to the herring-fishing.

33,297. Has the herring-fishing been heretofore the most valuable to the Skye fishermen?—Yes, entirely. There are only two parts of Skye where they fish for cod and ling—namely, Loch Dunvegan and Loch Dunwood.

33,298. Is it increasing?—Perhaps for eight or nine years we hardly see any and then there comes a good fishing.

33,299. Has there been any change in the appearance of the shoals of fish on your coast?—None that I am sensible of. Their coming here seems to be very uncertain.

33,300. Have you had occasion to consider the question of a close time in the herring fishery as applied to the west coast of Scotland?—Yes. It gave us great concern at one time here, when the poor people were prevented from catching herrings.

33,301. At what time do you consider that a close time should be held?—I hardly consider a close time necessary at all, because at the fall of the year when the herrings are prohibited from being fished here, they appear to be all clean, with no spawn in them.

33,302. Then you consider that a close time at all is unnecessary?—I do not see any use for it. Perhaps in the spring months—in April and May—a close time may be useful, but the herrings have spawn in them at various seasons of the year. Except upon one occasion I do not remember seeing herrings with spawn in them at Christmas.

33,303. Do you consider that a close time in January and February is injurious?—Yes.

33,304. Is it very injurious to the people of Skye?—Yes, very injurious.

33,305. If it were strictly enforced, would it be a serious loss to them?—It would be so serious a loss to them if the Board of Fisheries were obliged to abrogate the system. Last year we had as many boats fishing as we ever had before.

33,306. Even when the close time was strictly enforced in 1860 and 1861 did some of the boats go out fishing?—Yes, I think so. I think some of them went out in 1861 and 1862.

33,307. During those years, while the close time was enforced, was the summer fishing not so good as it had been formerly?—There were no herrings at all.

33,308. Then, so far as the close time was concerned, it appeared rather to injure your fishing than to benefit it?—Yes.

33,309. How has it been this year, since it was winked at?—Do you mean 1863 or 1864?

33,310-1. I mean last January or February?—The law then was not enforced. The people killed a good many fish then. They did it upon the sly.

33,312. But not with the same freedom as if the law had not been in existence?—No. It was a sort of half smuggling, but the officers winked at it. I suppose they had got a hint from the Fishery Board.

33,313. Were there a good many fish caught during the close time?—Yes.

33,314. Was there a good fishing?—Yes.

33,315. If the fishing had been permitted to be carried on fully, would there have been a good fishing?—Yes. I have no doubt there would have been.

33,316. During the time it was prohibited, did the people suffer from that prohibition in consequence of the want of the usual supply of food and of fish for bait?—Yes. It was felt by them as a very great grievance.

33,317. Had they for a long series of years been much dependent for a supply of food upon the winter herring-fishing?—For seven years or so there had not been so much as formerly. The railway and other works had been very brisk in the south, and numbers of the herring fishers went and worked there. They came home and would have fished in the close time after leaving the south if it had not been for the infringement of the law.

33,318. I ask you whether, in consequence of the close time being enforced for the last two years in the present state of the law, the people of Skye suffered severely from the want of the usual supply of fish at that season?—They did very much. It was a time of scarcity at any rate, and it made them feel the scarcity more than they otherwise would have done.

33,319. Is the herring used much for bait in the other fisheries here?—Yes.

33,320. Are the other fisheries of importance here?—From Gairloch they come here and buy bait from the people.

33,321. Are there no good fishing grounds for cod and ling on this coast of Skye?—I have no doubt there are good fishing grounds here if the fishing was prosecuted.

33,322. But the fishing is not prosecuted?—No.

33,323. Then, from your own knowledge of the coast, would you suppose that capital embarked in the business would be remunerative?—Yes, I think it would.

33,324. Do you think that if there was a scarcity of fish in other quarters, that still many fish might be found here?—I believe there are many banks in Rona and on the Applecross coast. It is very shallow water here.

33,325. Has the haddock-fishing ever been followed here?—No.

33,326. Nor fishing for whiting?—Haddock and whiting have come in shoals. It is at particular times.

33,327. Have you noticed if they have left the grounds upon which they used to be caught?—No, I have not noticed that.

33,328. I believe there is no beam-trawling here for flat-fish?—No, none whatever.

33,329. Have you any good oyster beds here?—There is a very good oyster bed in this neighbourhood.

33,330. Is it much fished?—No. Lord Macdonald preserves it. He works it, and he has his own people to take away the oysters from it, but he will not allow strangers to come and take them away.

33,331. Is it regularly fished?—No.

33,332. Then what is it preserved for?—Just for the use of the country, and the oysters are in great numbers. It was once let to a man from Gravesend on a lease of 15 years, with a break at the end of three years. He gave it up at the end of the three years. The oysters obtained from it are small and dark coloured, and they did not take the south country market.

33,333. Did he take many oysters away?—He would take away about 50 tons altogether.

33,334. Was that many years ago?—About 10 years ago.

33,335. Did he make any complaint as to the quality of the oysters?—Yes.

33,336. He said they were dark coloured?—Yes, and very small.

33,337. Have you yourself eaten the oysters obtained from those beds?—Yes.

33,338. Comparing them with the oysters you are in the habit of seeing in the southern towns, do you think they are of inferior quality?—No. I think they are of superior quality here; at all events we do not object to the quality here.

33,339. Have they that dark colour which was complained of?—Yes; but they are much finer oysters than I see anywhere else.

33,340. Have you extensive oyster beds which by the employment of capital in making them larger

might be made very profitable ?—I do not think we have. There is an oyster bed in Loch Snizort, but it does not pay, I think.

33,341. Are there oyster beds here ? — Yes ; there is one on the west of Skye.

33,342. Are the people of Skye generally much dependant upon the supply of fish for their food ?—Yes ; upon the herring principally, and then upon the small codling which they have no market for.

33,343. Do you catch them in most seasons of the year ?—Yes ; in point of fact they catch them in all seasons for bait.

33,344. Are they going more or less into the business of fishing as a business now ?—Less, I think.

33,345. Is that because they find other things more remunerative ?—Yes, the herring-fishing is so uncertain.

33,346. And the want of agricultural labourers has increased ?—Perhaps so at this time of the year. I believe a considerable number who go as fishermen to Ayrshire and the Irish coast hire themselves as fishermen, and come back and do a little for themselves in the winter time.

33,347. Then do you conceive that the fishing interests of Skye admit of a large development with benefit to the capital of those who embark in them?—I am not much acquainted with the subject myself but there are a number of people who possess capital who come here to fish from Campbeltown, Rothesay, Greenock, and other places.

33,348. (*Professor Huxley.*) Do you think that the Stornoway fisheries affect the fishing here ?—I do not think they do.

33,349. The people here have a notion that they do ?—Yes.

33,350. But you do not think so ?—No, we have not had so many herrings here for the last 20 years as we have had this year.

33,351. You have not had so good a herring-fishing for the last 20 years ?—No, from the Butt of Lewis to Barra we have had just one mass of herrings this last year, and anything that might have been killed must have been quite inappreciable.

33,352. How are the herrings on the west coast of Skye ; are they abundant ?—Sometimes.

33,353. But more particularly in the Minch ?—Yes ; sometimes in the lochs here we find great quantities of herrings and then we may not see one for 30 years. My father built large curing houses, but they have been allowed to fall to the ground in consequence of the want of fish, yet this year the fishermen could get as many fish as they chose.

33,354. How many years ago is it since your father built his curing houses ?—About 40 years.

33,355. Were they built on the strength of the herrings which were coming in then ?—Yes.

33,356. Did they come regularly ?—Yes.

33,357. Are there any regular fishing stations in Loch Slapin ?—Yes; I have seen 40 vessels there curing herrings.

33,358. Did the herrings cease to come suddenly ?—That is beyond my recollection. I can only just recollect seeing the thing going on.

33,359. (*Mr. Caird.*) Do you think that the shoals of herrings come in from the west by Barra as well as from the north by Stornoway ?—They appear to me all to come from the north to the south.

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33,360. Do you think they come in through the Minch or from the west ?—They all appear to come from the Minch ; they begin to come from Stornoway, then they are at Gairloch, then Portree, and they generally appear to be moving southward.

33,361. Then you do not think they come in by way of Barra ?—No.

33,362. Are you aware whether any mode of fishing is practised here which is injurious to the spawn or brood of fish ?—There is none that I am aware of ; there is no trawling here. The people are not allowed to use nets below a certain size, but I think that is a great mistake.

33,363. Is there a Fishery officer here ?—Yes. I consider it a great hardship that there should be extensive restrictions upon the fishing. A large herring is not known here at all, but only a fine small herring which can only be taken by nets with a small mesh.

33,364. The herrings you get here cannot be caught with a net with a large mesh ?—No.

33,365. You are not in favour of any legislative restriction upon the fishing ?—No, I think there should be free trade.

33,366. Do you think that everyone should be allowed to fish as he thinks best ?—Yes. Some four years ago the waters here from Cape Wrath to the Mull of Cantire were full of dog-fish. Where did they come from and where have they gone to ?

33,367. Was there a good herring-fishing that year ?—No, there was no fishing at all that year.

33,368. Do you think that the dog-fish injured the fishing ?—I have no doubt that they ate up the spawn ; but where are those fish gone to ? Why, they emigrate as regularly as the herring, and their coming and going are quite uncertain.

33,369. Are the herring in good condition in the winter when they are caught here ?—Sometimes they are in very good condition.

33,370. (*Professor Huxley.*) You were speaking of a small herring being found here ?—Yes.

33,371. In what lochs is it found ? — In Loch Hourn it is found in particular.

33,372. I have heard of this small herring before ; have you ever examined it?—Yes ; and I have some of them here now which you can see.

33,373. It used to be said that the Loch Broom herring was very small ?—I have seen small herring from there too. They are something like what we get here.

33,374. Have you ever seen this small herring full of spawn ?—Yes.

33,375. When they still retain their small size ?—Yes.

33,376. (*Mr. Caird.*) Are there any suggestions you wish to make to us in reference to the improvement or regulation of the fishing ?—No ; the subject is one that appears to me to be involved in a good deal of mystery.

The witness withdrew.

NEIL MCLEOD called and examined.

N. McLeod.

33,377. (*Mr. Caird.*) Have you long been a fisherman here ?—Yes.

33,378. Have you practised all the different kinds of fishing practised on the Island of Skye ?—Only after herrings, and some ling and small cods.

33,379. Do you agree with Mr. Mackinnon that the herring-fishing is a very fluctuating one ?—Yes. I suppose if I were to speak myself I could not speak differently from what he has done.

33,380. Has the cod fishery fallen off ?—It is just about the same ; some years it is better and some years worse.

33,381. Is the quality of the cod as good as it was in former years ?—Yes.

33,382. What bait do you use for catching them ?—Sometimes shelties and sometimes herrings.

33,383. What is the best kind for catching the fish ?—We catch them best with the herrings.

33,384. Have you been fishing for herrings during last year ?—Yes.

33,385. Do you fish them during the winter time ?—Yes.

33,386. Was there much fishing in the close time last year ?—Just a little.

33,387. Were the people afraid to go much into it ?—They did go into it.

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33,388. But not as much as if they had had full leave and there had been no close time ?—Not a third or a fourth part as much.

33,389. Do they suffer much loss by that ?—I think they do.

33,390. Do they feel it a great loss themselves ?—Yes ; they could not get food.

33,391. At what time are the fish not in good condition ?—In the months of April and May, or you may say March, April, and May. They get better just in May. It is June and July when they are in good order.

33,392. Is the size of the boats increasing since your time ?—Yes, a great deal.

33,393. What is the size of the boats ?—They are now three times larger than they were.

33,394. And have they larger nets ?—Yes, larger and deeper nets.

33,395. (*Professor Huxley.*) Do you find that the close time damages you as a fisherman ?—Yes.

33,396. Is that the case generally, do you know, with the fishermen ?—Yes, with the whole of them.

33,397. Had you anything to do with the petition in favour of close time ?—No.

33,398. Do you know anybody who had ?—No.

33,399. Did you hear of anyone who signed a petition in favour of the close time ?—I don't know who signed my name to it, but my own name was signed to it, I believe.

33,400. Were you told that it was ?—Yes, but I did not sign it.

33,401. Then you heard of the petition ?—I heard that there was such a thing.

33,402. And you heard that your own name was attached to it ?—Yes.

33,403. But yet you never signed it ?—No; I heard them speaking about the close time in my own house, but I never signed the petition.

33,404. Are those people who were speaking about it in favour of the close time ?—Yes.

33,405. (*Mr. Caird.*) Were they people from the south ?—Yes, and from the north too.

33,406. Then if your name was put to that petition it was done without your authority ?—Yes, it was.

33,407. Was that the case with any other fisherman in Skye ?—I do not know whether it was or not.

33,408. Do you think that many of them are of opinion that there should be a close time ?—I think not. Those who signed it have long since repented of it.

33,409. Is there a great quantity of oysters in the beds here ?—I do not know. The ground is full of holes, so that they cannot be dredged, but at spring tides we can gather them.

33,410. Can you only gather them when the tide is out ?—Yes.

33,411. You cannot dredge them at all ?—No, very few of them.

33,412. Is it stony or rocky ground ?—The oysters are the only things which are lying on the stones.

33,413. Are they tangled with seaweed ?—Yes.

33,414. Then there must be a great quantity of oysters that was never caught ?—Yes.

33,415. Are there not some places where oysters never leave the ground ?—Yes.

33,416. They go on breeding there ?—Yes.

33,417. Is there any large body of them ?—Yes. In some years I have noticed a good season, then a bad season, and next season as many as there were before.

33,418. Did an Englishman come here and take that oyster bed and work it for some time ?—Yes.

33,419. For three years ?—Yes.

33,420. Did he work it with dredges ?—He only went as far as the sea would go out at low water.

33,421. Did he only pick them off the ground when the tide ran out ?—Yes.

33,422. He did not use the dredge then ?—No.

33,423. Did he not propose to bring a dredge and dredge them ?—No.

33,424. Then he only gave so much to the people for picking them up ?—Yes.

33,425. Did he get as many as he wanted ?—He got a good number, but it got worse and worse, and at last he gave up.

33,426. Was that what made him give it up ?—Yes ; his reason was that the oysters were of a small bad quality, and that they would not take in the south.

The witness withdrew, and the inquiry was adjourned until August 9th at Tobermory.

Tobermory, Isle of Mull, Tuesday, 9th August 1864.

PRESENT :

JAMES CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

TOBERMORY.

C. Campbell.

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COLIN CAMPBELL called and examined.

33,427. (*Mr. Caird.*) You are the Collector of Customs here ?—Yes.

33,428. Are you well acquainted with the fishery interests of the Island of Mull and the coast ?—Yes, since I came here.

33,429. What is the principal fishery carried on at Tobermory ?—The most of the fishing carried on here is lobster-fishing.

33,430. Is there any important herring fishery here ?—No, only very little.

33,431. Has it declined within recent years ?—Yes.

33,432. Was it formerly of importance ?—There was a good deal of herring caught about Skye and about the north, and round about here at one time, but for the last few years there has been very little herring caught here at all.

33,433. Does your answer apply to the coast of the whole Island of Mull ?—Yes.

33,434. Then it has not been any recent decline, and has not been caused by any recent change in the law ?—No.

33,435. Is there any recent change in the law that you ascribe it to ?—No, I do not think so.

33,436. It is not a question of close time or the time when the Stornoway fishermen begin to fish ?—No, I cannot account for it, but the herring-fishing has fallen off.

33,437. Has it shown no signs of returning ?—No.

33,438. Are there very few herring fishermen here ?—There are some here, and most of the people here keep nets. If the fish come near the coast then they go out, but they do not go out to any other place as the herring fishermen do generally.

33,439. Do they fish for cod and ling here ?—Yes, but not a great deal.

33,440. Has that been a declining fishery here ?—No ; I think the cod and ling fishery has been increasing, but there are more boats looking after it. There are a number of east country boats which come here.

33,441. Do the people of the country not follow the cod and ling fishery much ?—There are some about Coll and to the south end of Mull, but there are very few about here.

43,442. The cod and ling fishery has never been much an object to them ?—I think it was better some years ago at the other end of Mull than it has been for the last few years.

33,443. And when did the strangers begin to come here ?—They began in January.

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33,444. Was January last the first time ?—No, they have been here for a number of years back, but they come at the beginning of January.

33,445. Have they decked vessels ?—No, large skiffs.

33,446. Where do they come from ?—From Peterhead, Banff, Buckie, and other places.

33,447. What part of the coast do they fish ?—Coll, Tiree, Lewis, and Barra.

33,448. Do they bring their fish ashore to be cured ?—Yes, they cure the fish ashore.

33,449. Is all the fish they catch caught for curing ?—Yes.

33,450. They are not sent fresh to market ?—No.

33,451. Is there no supply of fresh cod sent by steamer from here to Glasgow or the southern markets ?—I do not think there is.

33,452. But on the whole you think that the fishery is on the increase on these coasts ?—I think it is, but I think also that there are more looking after it now than in former years.

33,453. There is no want of fish, is there ?—I do not know ; they are complaining.

33,454. Do you know anything about the haddock fishery; has it ever been a matter of much importance here ?—Not a great deal hereabouts.

33,455. Is there any beam-trawling practised here ?—I do not think there is any of that.

33,456. Has there ever been any complaint with regard to the recent close time established by law in reference to the herring fishery ?—They have been complaining. What they want is to get the month of January, and they would like to keep the month of June. If they could get January they would like it. They complain as far as that goes.

33,457. With regard to the lobster fishery, you say it is increasing here ?—I cannot tell you much about it. I think the lobsters are getting smaller in size.

33,458. Are there any oyster banks here ?—There are a few.

33,459. Are they diligently fished ?—They are not fished at all, as far as I know. There are only the people round about who gather them, but there is no fishing.

33,460–2. Is there an important fishery of that kind ?—No, I do not think there is.

33,463. Do you think that the fishing interests of this coast might be properly developed by the application of capital to them ?—I do not know.

33,464. Do the fishermen complain of any legislative restrictions as affecting them injuriously ?—I did not hear of anything. They complain of nothing except that they are stopped too much from going to the herring fishery, and they want the month of January.

33,465. Is there any mode of fishing practised, which, in your opinion, is destructive of spawn or the brood of fish ?—No, I do not think there is.

33,466. (*Professor Huxley.*) What is the number of fishing boats ?—In this place ?

33,467. Yes, in Tobermory ?—I do not think there is a great number.

33,468. Are they registered by the Customs ?—There are 150 registered in the whole of my district, but a good many of those boats belong to crafters and merchants. If the herrings come off the shore they go out then with nets for them.

33,469. They are not large boats ?—No, only small skiffs.

33,470. Are there any decked fishing boats belonging to this place ?—There are some half-decked.

33,471. What will be the tonnage of the biggest ?—Eight or nine tons, and so on.

33,472. What time of the year do you get the herrings here ?—They commence early in June, when they do come into this bay.

33,473. They do not always come in here, do they ?—No.

33,474. Do they ever come in in the winter ?—They go to Lough Swilly in the winter, and the lochs round about there.

33,475. Is there any Fishery officer here ?—No.

33,476. Does anybody look after the size of the nets that are used here ?—The Fishery officer from the other places comes and takes a look round here sometimes.

33,477. Does he look after the size of the mesh of the nets, or do you do that ?—He does it.

33,478. Do the fishermen here ever try circle-net fishing—what they call trawling here—not beam-trawling, but the other kind of trawling ?—They try for saithe with scringe nets.

33,479. Are they used much along this coast ?—No, very seldom.

33,480. Have you ever heard complaints that they are destructive of fish—of the herring for example ?—They do not go near the herring. They have caught herring with them, but not since this new law came into force.

33,481. But it was formerly the practice ?—Yes.

33,482–4. Do the people complain of being prevented from fishing in that way ?—Those who keep nets do, but others do not ; they are against them.

33,485. Have you had any experience of that fishing before the new law came into force ?—Yes.

33,486. Do you think it a profitable or a good mode of fishing ?—No, I think it spoils the fishing.

33,487. How does it spoil it ?—A scringe net takes all kinds of fish, large and small. Before ever I entered the Customs or came to Mull, I was myself scringing, and I have taken the small fry, and frequently left them on the shore.

33,488. When you were scringing, did you draw the nets on shore ?—Yes.

33,489. Was that the practice of the people here ?—Yes.

33,490. You did not take them in boats ?—No.

33,491. Do you think that a disadvantageous mode of fishing ?—Yes.

33,492. Has it made any difference to the fishing here, your leaving off that mode of fishing ?—I do not know. It does no harm to the herring, because they do not go near them.

33,493. You have not been fishing then for herring in that way, but only for saithe ?—Yes.

The witness withdrew.

G. Ritchie.

George Ritchie called and examined.

33,494. (*Mr. Caird.*) Are you acquainted with the fishing interests on the coast of Mull in this neighbourhood ?—Yes.

33,495. Are you a curer of fish here ?—Yes.

33,496. And an owner of fishing boats ?—Yes.

33,497. What kind of fishing is principally practised here ?—Lobster-fishing is the sort of fishing that is followed more throughout the season, and herring-fishing.

33,498. Is the lobster-fishing the most important fishing to the fishermen of Tobermory ?—Yes.

33,499. From what part of the coast do they get the lobsters ?—All round the coast.

33,500–1. The coast of Mull ?—Yes; all round the harbour here and the adjacent islands.

33,502. On the opposite coast also ?—Yes.

33,503. Is the number of people employed in that fishery increasing ?—It has been increasing for some years back.

33,504. How many boats and men are engaged in it at present ?—I cannot tell.

33,505. Have you any idea at all ?—There are so many shifting backward and forward, and there are so many strangers coming and going, that I cannot state positively.

33,506. Can you give us any idea ?—Do you mean those who are engaged round the islands ?

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33,507. Yes?—Perhaps there may be 300 or 400 boats altogether.

33,508. Do they follow the fishing all the year except in the warm summer months?—They do not discontinue the fishing even then; they continue it all the year round here wherever it is convenient to a shipping place for the steamers.

33,509. How often have you a steamer from Glasgow?—Three or four times a week just now, but in the winter time only once, and twice a week in the spring.

33,510. Where do you send the bulk of your lobsters to?—To London.

33,511. By steamer to Greenock and thence by railway?—Yes.

33,512. Does the fishery show any signs of exhaustion?—The lobster fishery?

33,513. Yes.—It certainly shows that they are over-fished, they get so very small in the winter time. They are cleared up in the summer time, and although they migrate a good deal, no doubt, to a certain extent, they are over-fished along the coast, but the number of boats employed being greater than it was formerly the supply is still sufficient for the market, together with the fact that they have discovered other places where they can fish now.

33,514. Does the increased number of boats make up for any decreased catch of the lobsters themselves?—Yes; but I do not think it will continue to do so.

33,515. Do you extend your field of operations as you find the lobsters getting scarcer?—They have been doing so. I never knew the island tried and fished so much as in the last two years back.

33,516. Is the coast on the Isle of Skye fished for lobsters?—Yes.

33,517. And all the Long Island?—Yes.

33,518. And all the outer Hebrides?—Yes; all except St. Kilda. They are all fished at the present moment.

33,519. When you speak of 300 or 400 boats engaged in the fishery, do you mean fishing for lobsters in the whole of the western islands?—Yes; in the whole of the Western Hebrides. Perhaps there may be more than that. I give it as a rough guess.

33,520. Do most of the lobsters caught in the whole of the Hebrides come to this point to be sent south?—No; they go in the same steamer chiefly, but they are sent away from all the different stations the steamers call at.

33,521. What quantity of lobsters may there be sent away in one steamer?—I have seen 120 boxes sent away at one time.

33,522. Those 120 boxes have been collected from different stations?—Yes; that was a steamer I commanded myself, the "Islesman." Perhaps there would be another one coming in, and running within the Sound of Mull.

33,523. On the same day?—Yes. The lobsters I speak of were collected at Islay and at different places round about at the same time, but the quantity would not continue at 120 boxes a day; that is the greatest quantity I ever saw.

33,524. Can you give us the least notion of what the quantity sent daily may be on the average?—Sometimes twice a week there will be an average of 100 boxes, but for the whole season round perhaps 100 boxes a week will be an average.

33,525. That must be a source of considerable revenue to the fishermen engaged in the fishery?—It is certainly a good thing for them.

33,526. Has the price increased?—The price has not fallen off, but the quantity caught by each boat is not as great as it was at one time, in consequence of the fish not being so plentiful, and there being more boats engaged in catching them. What I mean is, that each boat is not getting as many as when there there were fewer boats and they had the coast more clear.

33,527. On the whole do you find that they can be sent fresh to the London market?—Yes.

33,528. And arrive in good order?—Yes; it is very hot in London just now, and heat is very much against them, but taking an average throughout the season they are sent in very good order.

33,529. Is there a demand for them at all seasons and in every month of the year in London?—Yes.

33,530–1. Do you pay any attention to the state of the fish, to their breeding or otherwise?—No attention is paid to that here.

33,532. Do you know anything about the oyster-fishing on this coast?—Not much. I never wrought much at them, but there are oyster beds around the island.

33,533. Are they not fished for the northern market?—They are not much fished by dredges; they are just lifted occasionally on the shore, and sent to Ulva down Loch na Keal.

33,534. Is there any complaint of their being dark in colour?—Very little, I think.

33,535. Is it a fishery which might be much increased?—I think so.

33,536. Are there plenty of oysters to be found if the people looked after them?—Not so much as if the beds were improved, and a system of improvement carried on. I consider that they have been very much abused for a long time back.

33,537. Are there oyster beds that can be dredged?—Yes.

33,538. But the dredge is never used at all?—I do not know that it is used at all. It may have been used more or less, but not to my knowledge.

33,539. (*Professor Huxley.*) Why do you not fish at St. Kilda, you say you fish everywhere else?—It is so far out from the land that it is no good bringing them for the steamers. It is very deep off there, 100 fathoms in some places, so that there is no salvation for the crew if anything happens to them. There might be some fishing followed there for cod and ling.

33,540. Cod and ling?—Yes, I never saw a finer quality than the fish which have been got from there, 16 on an average made a cwt.

33,541. Do you think there is as much haddock as there was formerly on this coast?—This coast was never worked much for haddock-fishing, but in places where they were considered to be plentiful they are not so plentiful now. This coast, however, was never considered to be a good place for them. To my own knowledge I never saw any considerable quantity of haddocks or whiting here.

33,542. Have you been much interested in the herring-fishing?—Yes.

33,543. What effect has the enactment of a close time had upon your fishing?—I do not see much difference; the fishing had fallen off for some years back. I do not think that is the cause of the falling off.

33,544. Do you think that the fishing has fallen off since the close time was enacted?—Yes, and before then too. I do not think that had anything to do with it.

33,545. Before the close time was enacted did you ever practise the winter fishing?—Yes.

33,546–7. But since the enactment of close time you have not been able to do so?—No.

33,548. Then has it been a damage or a loss to you?—Yes, it has been a loss.

33,549. Has there been a corresponding benefit to the summer fishing?—None whatever, I think.

33,550. Then it has been a dead loss to the fishermen without any good resulting to anybody else?—Quite so.

33,551. Has it been a source of injury to ordinary fishermen who catch fish for their own consumption?—I do not see that it has made much difference to them, but the great injury has been done to those who are fishermen throughout the year. It is very much against them to be stopped in their fishing at the end of the season. In Skye and the Long Island, there was a great number of fish caught before the close time was enacted. They were very good fish

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indeed, and those men had nothing else to depend upon during the winter.

33,552. On all these islands do the people depend on them in the winter?—Yes, in the Isle of Skye and the main land, but not so much in the outer islands.

33,553. Then being deprived of this portion of their food would affect them considerably?—Yes, and they have not been in as good and healthy a state as they were some years back; they have been reduced very much.

33,554. In what condition were the January fish here?—The fish are very good.

33,555. Were they full fish?—No, they are not full.

33,556. When are they full in the winter?—I suppose they are full in the month of March.

33,557. Do they get spent about then?—Yes, but there are no fish caught in the winter months, they are generally stopped from fishing about that time; generally we do not get fish in our part at that time.

33,558. Did you fish for them?—We always got herrings, but not full; they do not come in the lochs to spawn; we generally dropped fishing towards the end of February.

33,559. Were the fish getting pretty full about that time?—No, they were rather getting pretty lean. The fish were not getting full at all. I think there are banks away out towards the west where they spawn, and come in in the season again.

33,560–1. Did you ever fish in Loch Broom?—Yes.

33,562. What is the size of the herring that is got there?—It is generally a small herring, about 1,000 to the barrel.

33,563. That is not very small, is it?—It is not very small, but they have been smaller sometimes. I think they are about that size.

33,564. Did you ever see any small herrings there full?—No.

33,565. Have you had full herrings from Loch Broom?—No, I do not think I have.

33,566. (*Mr. Caird.*) Have you any suggestion to offer to us about the fishing here?—I would suggest whether it is not possible to alter the period with regard to the close time, and that they should be allowed to fish for bait around the island and along the coast.

33,567. You think they ought to be allowed to fish for bait?—Yes.

33,568. Bait for the long-lines?—Yes.

33,569. How could you distinguish between what was fished for bait and for sale?—The fact of the matter is, that those who would go out to fish for bait for long-lines would do so, and it would be well known whether they sold them or not. I think they would be quite content to get a barrel or two with their nets for bait, and fresh herrings for their own consumption.

33,570–2. Was the fishing followed chiefly for the purpose of bait during the months of February, March, and April?—Yes, if January were left as an open month, and they were allowed to fish for bait during February, March, and April, I think the 1st of June would be quite sufficient to open the regular fishing.

33,573. Do you think there is any absolute necessity for a close time at all?—I do not see that there is.

33,574. If there was none at all would it be injurious to the fishing?—Not at all.

33,575. Do you think the fish would be fished when they are out of season if there was no close time?—No, they would be fished if they could get a good market, or the fish were scarce, but if there was no demand they would not be fished.

33,576. Do you think that any injury could be done to the shoals of herrings which would be likely to come in the proper season?—None whatever, I believe.

The witness withdrew.

ARCHIBALD MCDONALD called and examined.

A. McDonald.

33,577. (*Mr. Caird.*) Are you a fish-curer here?—Sometimes I am fish-curing.

33,578. Are you an owner of boats?—Yes.

33,579. What fishery are you employed in here?—Lobster-fishing and herring-fishing.

33,580. Is the herring-fishing a matter of much importance?—I suppose so.

33,581. I mean is it a matter of much importance here?—Yes, sometimes.

33,582. Has it been increasing or diminishing in importance in recent years?—It was increasing five or six years ago, but it was not so good last year as it was before.

33,583. How many boats are there employed here in the herring-fishing, taking an average of seasons?—I suppose about 10 or 12 or so.

33,584. Have they increased or diminished in number?—They are increasing, I think.

33,585. Has there been any complaint on the part of the fishermen here with regard to the close time in the herring fishery as established by a recent Act?—Yes.

33,586. What is the nature of the complaint?—There is a complaint against the trawling.

33,587. What complaint is there about trawling?—They complain of trawling for herrings.

33,588. Do you practise trawling for herrings here?—Not just now.

33,589. But have you done so at any seasons?—No, not now.

33,590. I do not know what you mean then, if you complain of the present close time which has been established. Are you in favour of trawling for herrings or against it?—Do you mean the giving over of the herring-fishing in the winter?

33,591. Yes; the close time is the time when by law you are prevented from fishing herrings on the west coast.—There are no complaints against it from this place.

33,592. Do you not object to be excluded from fishing at all from the beginning of January until the 20th of May?—Yes.

33,593. Would you have the close time continued?—No, we would rather see it ended.

33,594. Is there any good fishing here in the month of January?—Yes, in some parts about here.

33,595. Are not the herrings in good condition then?—Yes, I have seen them in good condition sometimes.

33,596. Then, if the herrings are in good condition, would not the fishermen like to take them if they were allowed to do so?—Yes, they would.

33,597. But by the law as it is at present they are prevented from doing so?—Yes; I would rather see it ended for my own part.

33,598. For what reason?—That the poor might be able to earn something all the year round.

33,599. You wish that there should be no close time established?—Yes, that is my wish.

33,600. (*Professor Huxley.*) Do you know what trawling for herrings is?—Yes.

33,601. Do you mean circle-net fishing by trawling?—Yes.

33,602. Have you ever practised it?—No, never.

33,603-4. I mean before the Act was passed?—No.

33,605. Do you think it is a good mode of catching fish?—No, I do not.

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33,606. Have you ever bought fish which have been caught in that way?—No, I never had any herrings caught by trawling or scringing in that way at all.

33,607. Is there scringing practised on this coast now?—Yes; scringing cuddies and that kind of fish.

33,608. But not herrings?—No, not that I am aware of.

The witness withdrew.

A. M'Quarrie.

ARCHIBALD M'QUARRIE called and examined.

33,609. (*Mr. Caird.*) You are a fisherman here?—Yes.

33,610. What kind of fishing do you practise?—I do the most in lobster-fishing.

33,611. On what part of the coast do you follow the lobster-fishing?—When I am following them rightly it is on the Long Island and the Hebrides; but I have tried them all about here.

33,612. Where do you find the most lobsters?—We get most whenever we find a place where they have not been lifted before. They ought to have more time without being lifted; they should not be so clean fished.

33,613. You get most if you discover some place which nobody has found out before?—Yes; if we find such a place as that we can get plenty of them.

33,614. Are there plenty of such places to be found now?—No.

33,615. Is the fishery pretty closely followed?—Yes, it is very closely followed; there is a great number of boats at it now.

33,616. Are the lobsters beginning to get thin on the ground?—Yes, thin and small.

33,617. Is every part of the coast where the lobsters are to be found already known?—Yes, as far as the boats can go. We have tried them on the west of Barra and all round the west of these islands.

33,618. Do the fishermen make a good living by the lobster fishery?—They have not done so for a few years back.

33,619. Has it been falling off?—Yes, very much.

33,620. Has the catch of each boat been falling off?—Yes, and that must necessarily be the case when the number of boats is so many.

33,621. Have you ever tried the oyster-fishing?—I have often lifted a few, but not to make a trade of it.

33,622. Would it not pay to follow the oyster-fishing?—I do not know. I never tried to do so.

33,623. Have you been to the herring fishery?—Yes, I have been at it for some time.

33,624. Has the herring fishery increased or diminished within recent years?—I have seen it better six years ago; the last time I was at Skye following it was the best year we ever had.

33,625. Do the herrings not come into the Sound of Mull in any great quantity?—No, but they do go through the Sound of Mull and do not stop. There are some lochs on the west of Mull where they stop, Loch Scridain for instance.

33,626. Have you ever fished in January?—Yes, the year before the Act was passed.

33,627. Do the fishermen complain much of the present close time established by law on account of its preventing you fishing in January?—I do not think they do, but when I was away fishing one year at Loch Sunart I heard a little complaint then. They all approved of it as far as I know.

33,628. Approved of what?—Of stopping it, although they might at that time get a few more, if they were allowed.

33,629. Do you mean that all the fishermen here approve of not being allowed to fish in the month of January?—That is my opinion.

33,630. Were they never in the habit of fishing for herrings for their own food in the month of January?—They used to stop here in the month of January.

33,631. Do you mean the end of January?—Yes.

33,632. But now they are obliged to stop at the beginning of January?—I never saw much fish caught after January.

33,633. Did they not fish them for bait?—Do you mean for the big lines?

33,634. Yes.—There is no big-line fishing hereabouts, but in some of the lochs they did.

The witness withdrew.

J. M'Kay.

JAMES M'KAY called and examined.

33,635. (*Mr. Caird.*) Are you a fisherman here?—Yes.

33,636. What kind of fishing do you follow?—Lobster-fishing.

33,637. Have you fished on most of the coasts of the western islands?—Yes, I have fished on most of them.

33,638. Do you agree with the last witness that the fish are getting scarcer?—Yes, I do.

33,639. Do you think that scarcity will go on until it becomes a business that will not be worth following?—I do not know; but the fish will get fewer, I believe.

33,640. Do you think that the brood does not come on again?—Yes, I do. I believe the fishing will keep them down; it will keep them from becoming thick.

33,641. Have you followed the herring-fishing at all?—Not much; only for a few nights.

33,642. Then you do not know much about the state of the herring fishery here?—No.

33,643. (*Professor Huxley.*) In what depth of water do you get your lobsters here?—We do not go much deeper than 16 fathoms.

33,644. Sixteen fathoms?—Yes, we go about 16 fathoms to look after them.

33,645. Do you fish for lobsters with pots?—Yes, with creels.

33,646. Are they baited?—Yes.

33,647. Do you let them down in 16 fathoms of water in the lochs here?—Yes, according as the water is deep or shallow we put them in.

The witness withdrew, and the inquiry was adjourned until the 10th of August, at Campbeltown.

Campbeltown, Argyleshire, Wednesday, 10th August 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.

CAMPBELTOWN.

D. Macmillan.

10 Aug. 1864.

DUGALD MACMILLAN called and examined.

33,648. (*Mr. Caird.*) Have you long been a fisherman here?—I have been here I suppose for close upon 50 years engaged in fishing.

33,649. What kind of fishing have you followed here?—I went to the herring-fishing in the north islands when I was about 16 years old.

33,650. In the north isles?—Yes, north from this.

33,651. And have you also followed the cod and ling and other kinds of fishery as well as the herring fishery?—Yes.

33,652. Do you continue to do that now?—I don't work at anything but the herring fishery at present. I am getting old now and I have dropped the other things.

33,653. In your experience has the herring fishery been an improving or a declining business?—It has improved for the last two or three years.

33,654–5. Has the season for the herring fishery at all changed since you began to fish—I mean the time of the year when the herrings are taken?—We always fished here in the summer and winter just when we saw herrings on the coast. We were never stopped here from fishing.

33,656. At what time did you get them in the greatest abundance?—Just about this month.

33,657. The month of August?—Yes.

33,658. And in what month in the winter time did you get them in the greatest abundance?—In the months of January and February, and in March too.

33,659. Are they in good condition in the winter?—No, they are not near so good as they are in the summer. They are spent and poor herrings in the winter.

33,660. Are they not in good condition in the month of January?—Yes; in the month of January they are pretty good. I have seen very good herrings got in the month of January.

33,661. Do you continue to fish them here in the months of January and February now?—No; the close time has stopped us from doing that.

33,662. Has the close time been carefully observed here?—Yes; we dare not go fishing then, we should be punished if we did.

33,663. Do the fishermen approve of the close time?—No, they do not approve of it. There are a good many herrings required for the cod and ling-fishing, and also for catching eels, and skate, and turbot.

33,664. Do you mean for bait?—Yes.

33,665. You are not allowed to catch them for bait in the spring season?—No, we are deprived of that altogether.

33,666. Do the fishermen complain very much that they are deprived of this source of bait?—Yes, they complain greatly, because it has to a great extent injured the living of an immense number of people about here.

33,667. Then there has not been merely the loss of the fish for bait, but also the loss of the fish for food?—They do not use many of them for food here, but the great thing was to obtain them for the other fishing.

33,668. Did they send the fish they caught to the Glasgow or Greenock markets?—Yes.

33,669. Was there a good deal of money got by the winter fishery?—Yes.

33,670. Are you aware whether the opinion you express against the close time is the common opinion of the fishermen of Campbeltown?—It is the opinion of the great majority of them.

33,671. Are there some fishermen here who think it a good thing that there should be a close time?—I believe there are a few of the great and wealthy curers.

33,672. But not the fishermen?—No.

33,673. Have you found that there has been a better summer fishing since the close time was observed?—We think it is all owing to stopping the trawling that the summer fishing has revived here.

33,674. You do not think that it has anything to do with the close time?—No, I do not think it has.

33,675. But that it is owing to the stopping of the trawling?—Yes; we attribute it entirely to the stopping of the trawling.

33,676. Was there any trawling carried on in this neighbourhood?—Yes, a great deal when it was allowed.

33,677. In Campbeltown Loch?—No, not in the loch but outside.

33,678. On the same ground that you have your best herring-fishing now?—Yes, along the coast.

33,679. That has been entirely stopped?—Yes.

33,680. Have the fishermen who have been in the habit of trawling gone into the drift-net fishing now?—Yes; the whole of them had drift nets, but they would rather work at the trawling than the drift nets, because it was more beneficial to them. They get better hauls by trawling than by using the drift nets.

33,681. Were they not in the habit of trawling in the summer fishery?—No.

33,682. Then the summer trawling was never practised here?—No, it was never practised here.

33,683. Now, in consequence of the close time they can neither fish here with the trawl net nor the drift net?—No.

33,684. Is there any cod or ling-fishing off the coast?—There is a good deal in the season, in the spring of the year.

33,685. Is it much followed?—Yes, it is followed by all who can fit out boats for it. They come from Ireland to the cod-fishing here.

33,686. Is it an increasing fishery?—It was much better last season than it has been for some years back.

33,687. Is there a large quantity of cod caught here?—Yes, and of ling also.

33,688. Is it sent fresh to the market?—Yes, to Glasgow and other places.

33,689. Do you not cure any here?—No, none.

33,690. The whole of it is sent away fresh?—Yes.

33,691. Are there any haddocks got here?—Yes, a good many.

33,692. Is that fishery improving or falling off?—It has fallen off greatly for many years. Some years ago we had a good fishery for what we call white fish here.

33,693. Is it not as good now?—No.

33,694. Is there any fishery for soles here?—The beam-trawlers get a few of them but not many.

33,695. Are there beam-trawlers off this shore?—Yes, there are.

33,696. Where do they belong to?—They belong to this place.

33,697. Have they been long here?—Ever since I can remember they have been working at that work.

33,698. At what season of the year do they use the beam-trawl?—In the spring of the year.

33,699. What kind of fish do they catch in the trawl?—Flounders and flat-fish.

33,700. Do they catch any haddocks?—No; no round fish, they seldom get any round fish.

33,701. Do they get many soles?—No, not many, but flounders they get plentifully.

33,702. Are there many of these trawl-boats here?—I dare say that there are a dozen working at it here.

33,703. What is the length of the beam of the trawl?—I am not sure. I suppose it is about 40 feet or something like that.

33,704. Are they large decked vessels?—They are half-decked smacks. They have smacks which they work at the herring fishery.

33,705. You are surely mistaken in the length of the beam of a trawl-vessel of that size; they can scarcely carry such a long beam?—Yes, it is of that size.

33,706. Forty feet?—It is between 30 and 40 feet, I am sure; it is as long as the boat itself.

33,707. What is the tonnage of these boats?—About 20 tons, or even more than that; some of them are 25, and perhaps some of them will be 30 tons.

33,708. Are they increasing in number?—Yes, they are increasing greatly.

33,709. Do they make a good business of it?—Sometimes they do, but they did not do very much last season with them.

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33,710. Do the other fishermen—do the long-line fishermen complain of the trawl fishermen injuring them?—Yes, they do, and they always have done.

33,711. Do they injure them?—Yes, they do. The trawls are like so many harrows going over the ground tearing up everything; they do twice the harm that any other mode of fishing does; they tear up the ground and do not allow the spawn to be upon it; they harrow it all up.

33,712. Do they trawl close in-shore?—Yes, they do not go into the deep at all.

33,713. In what depth of water do they trawl?—In 6 or 7 fathoms, and sometimes in only 3 fathoms.

33,714. What distance from the shore do they keep out?—Not more than a gunshot, or a quarter of a mile.

33,715. Do they not go out to the stormy part of the sea?—No.

33,716. Then they do not interfere with the deep-sea fishing?—No.

33,717. The deep-sea fishing has not been injured at all by this trawling?—No; they do not go near the deep sea.

33,718. Have you any lobster fishery here?—Yes, a good deal.

33,719. Is it improving or declining?—It is declining. It is so much wrought upon the coast, that most of the fish have been cleared away; they have tried this kind of fishing along the shores everywhere.

33,720. And are they not doing as well as they did in former years?—They are not.

33,721. Are there more boats employed in the fishery than there were formerly?—No; but there are a great many who work at it constantly.

33,722. Is there a fishery here for crabs or partons?—No, there is none of that.

33,723. Is there any oyster fishery?—There are a few oysters got at low tides, and a few men go dredging them, but that trade is nothing to signify.

33,724. (*Professor Huxley.*) When there was a winter fishery here, in what condition were the fish? were they full herrings in January?—No; they were not full then.

33,725. Were they full in February?—No; they were not full in the spring of the year at all. If we got any full herrings, it would be from this time until January.

33,726. Did you get no spent herrings at all in February?—No; from this time of the year until January is the principal time for herrings to be upon this coast.

33,727. Are there many herrings cured here?—No; none at all. They are all boxed and sent away fresh.

33,728. Do you think the stoppage of the winter fishery has been a loss to the fishermen?—It has been a terrible loss to them in many ways.

33,729. Was the Glasgow market largely supplied in the winter?—A great deal goes from here in the winter time.

33,730. Is there any cod fishery here?—A great deal.

33,731. That goes on in the winter time, I suppose?—Yes; in the season; in the spring of the year.

33,732. Are there any oysters?—There are a few got, but not many; there are only very few.

33,733. Do any foreign boats come fishing here?—No.

33,734. None at all?—No, none.

The witness withdrew.

J. McCoag.

JOHN MCCOAG called and examined.

33,735. (*Mr. Caird.*) Are you a fisherman here?—I was, but I am not now. I dropped it about six years ago.

33,736. Are you acquainted with the different kinds of fishing practised here?—I have been a good while working at the fishery in my time.

33,737. Has the herring fishery improved or diminished of late years?—I think it is in the way of improving now.

33,738. What do you think is the cause of that?—Many of the people say that it is owing to the trawling being stopped that it is improved.

33,739. At what time of the year was that trawling followed here?—It has been followed during the winter season mostly; but farther south it has been followed at all seasons of the year.

33,740. Here it has only been practised during the winter season?—Yes; and a little in the harvest time.

33,741. Were there a great many herrings caught by the trawl?—Yes; they catch a great quantity when they do come across them.

33,742. They practised trawling in the winter time?—Yes.

33,743. There has been no longer any winter herring fishery here since the close time has been established?—No.

33,744. Has that been any loss to the fishermen here?—I do not suppose that it has been.

33,745. Were they not in the habit of catching any fish in the winter?—Yes; they were in the habit of catching them in all seasons.

33,746. Then why do you think it is no loss to get none now?—Because the herrings are not in season when the close time is in force.

33,747. Are not the herrings in season in January?—Yes; they are pretty good in January and February, but after the month of March they are not worth much.

33,748. The men are not allowed to fish in January now?—No; the close time commences on the 1st of January.

33,749. Then two months' fishing during which the herrings are good is entirely shut off from them?—Yes; the herrings are pretty good in those months, but they are not so good as they are during the harvest time. Some shoals of them will be better than others.

33,750. Then would you say as a fisherman that it has been no injury to you to be deprived of your two months fishing in January and February?—I do not think so.

33,751. In what way do you make it up?—The fish are not in proper season, and we did not get a good price for them, and if the weather was rough, we frequently lost a good deal of our materials.

33,752. Were they fished at that time chiefly for sale as food, or principally for bait?—For both. They used a good many of them as bait for the codfish.

33,753. How do you manage to obtain bait now that you are not permitted to fish for them?—They get here what they call buckies.

33,754. Is that a good bait for codfish at that time of the year?—It is a very good bait, but not so good as the herring. They can fish longer in the winter with them than with the herring.

33,755. Do the fishermen prefer buckies?—No, they prefer herrings if they can catch them.

33,756. Is the close time strictly observed here?—Yes; very strictly.

33,757. Are there more boats now engaged in the summer fishery than there were in former years?—Yes; there are a great many more.

33,758. And all the fish are sent fresh to the market?—Yes.

33,759. Can you tell us anything about the cod and ling fishery?—There are several men here who work at it during the winter season.

33,760. Is it an increasing fishery here?—It has not increased much for some time back. There are not nearly so many working at it now as there were in olden times.

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33,761. What do you think is the cause of that?—I believe that the fish are scarcer than they were.

33,762. Is the price of fish as good as it was?—Yes, it is.

33,763. Have the people something better and more profitable to do?—I don't know about that. Some work at one thing, and some at another.

33,764. Do the fishermen's sons here generally become fishermen?—Yes, a good many of them.

33,765. You have had a long experience of the fishery, and are well up in years now?—Yes.

33,766. Then comparing your early days with the present, would you say that the fishermen now are as well off in their circumstances as they were in your early times?—I don't think they are. They could make a better living out of fishing in early times. The fish were more plentiful, and there were fewer people engaged in the fishing. There are some of them making a good livelihood at it now, but not hereabouts.

33,767. Do you consider that the sea in this neighbourhood has been overfished?—I cannot say anything about that, but we have blamed the trawling for ruining the fishing altogether.

33,768. The herring fishery?—Yes.

33,769. But not the cod and ling fishery?—No, I do'nt suppose it has hurt that.

33,770. Has the beam-trawling been injurious to the white fishery?—I cannot say, but the people engaged in it allow that it has broken up the spawn upon the ground.

33,771. Have you ever been on board a trawl-boat when you were fishing?—No; I never was on board a trawl-boat.

33,772. (*Professor Huxley.*) Have you yourself caught herrings in the months of January and February?—Yes.

33,773. What condition were they in?—I have got them also in the month of April when I was a young man. They were not in very good condition.

33,774. Were they full fish?—No; they were spent fish.

33,775. Were they never full?—Yes, sometimes; but very few full fish come along the coast now at all.

33,776. In which of the two months, January or February, did you get the largest proportion of spent fish?—In February; they are always on the decline after that.

33,777. What is the size of the mesh you use here for your herring nets?—I don't know exactly, but some of the men who work at the fishing will tell you the size.

The witness withdrew.

D. Galbraith.

David Galbraith called and examined.

33,778. (*Mr. Caird.*) Are you a fisherman here?—Yes; I have been a fisherman.

33,779. Can you tell us whether the herring fishery here has been an improving or declining fishery during the last few years?—I think it is rather gaining. There are both better fish and more of them too.

33,780. From what period do you date that improvement?—I think the reason is that no trawling is going on now. If trawling were still allowed to be carried on, there would not be a fish in the sea at all. They take off both the large and the small herrings.

33,781. In what season of the year was the trawling carried on here when it was practised?—It was carried on about Tarbert most of the season round, but not much here in the winter time. It was carried on here from February until the months of March and April.

33,782. And now there is no winter fishing at all, either by trawling or drift net?—None. The winter fishing has been put a stop to. When it was allowed, our herrings were always in poor condition at that time. They were all spent fish.

33,783. Did you not get any good fish in the month of January?—No; they were very poor fish.

33,784. Do you and the fishermen now experience any loss from that want of the winter fishery?—They may experience a little loss. They might make a little money by it, but I think they get more game in another way, in consequence of the herrings having liberty to grow up.

33,785. Are they the same herrings that come in the summer time that also come here in the month of January?—Yes, and they are better herrings then. For some years back they have been both larger and better in quality by a great deal.

33,786. Then in your opinion since the close time was established the summer fishery has improved?—Yes, it has done so for the last two years back. This year we caught a good deal more than last year.

33,787. Are you speaking of the fishing in Loch Fyne or the fishing along the coast?—The fishing along the coast.

33,788. Whereabouts are the herrings caught by the Campbeltown fishermen?—Away down here at Carradale and Skipness, and sometimes towards the Arran side.

33,789. Do they go to the north-west of the Mull?—No, but they will go out to Sanda if they find the fish out there.

33,790. Have the fishermen not found any want of bait when they cannot get herrings in the winter time for baiting their cod lines?—Yes, they have found a great want of bait.

33,791. Is that not a matter of much importance?—They would get more codfish if they had herring bait. They could haul their lines in half the time they are able to do with buckies.

33,792. Do you mean that they would catch double the quantity of fish?—Yes, if the codfish were on the coast. The codfish take the herring bait very quickly.

33,793. Are there more boats engaged in the cod and ling fishery than there were 10 or 12 years ago?—Well, I don't think there are. But if the cod fishery would pay them, there would be plenty of boats at it. But it has not been paying them well lately.

33,794. What has been the cause of that?—Because the fish are not plentiful on the coast, and on that account many fishermen do not go to it.

33,795. Are the fish not so plentiful as they were formerly?—No, they are not near-hand as plentiful. I have seen them getting 20 and 30 score, and now it is very rarely they can get eight score.

33,796. What do you imagine is the cause of that?—I cannot say.

33,797. Does it arise from over-fishing?—I cannot say whether the trawling has swept the young cod away or not, but it appears that it has.

33,798. You mean the circle-net fishing, not the beam-trawling?—Both of them have injured it, I think; they have injured the spawn; they have cleaned the ground and taken the spawn up.

33,799. Have you ever been on board a beam-trawler?—No, but I have heard plenty of talk about them.

33,800. Do the beam-trawlers make a good business of it?—Sometimes they do, but it does not long continue.

33,801. (*Professor Huxley.*) Do you think the herrings that are spent in February are the same fish that are full again in August?—They are mostly spent altogether in January and February. We used to get a great deal of herrings then, but they were very poor.

33,802. Do you think that they are the same fish that are full again in August?—If they were let alone they would be. They go out in the spring of the year, but whether they are the same that come back again, I cannot say, but we think they are.

33,803-4. You were speaking just now of the winter fishing affecting the summer fishing, on the ground

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that the fish were not allowed to grow up into good fish?—The trawling I have no doubt would ruin the fishing, but I do not know that a few boats working with drift nets would do much harm.

33,805. Would they do any harm?—They would take a good deal of fish out of the water, and it is generally in the lochs here that we get them in the winter time.

33,806. For a good many years you were in the habit of having a winter as well as a summer fishery?—Yes.

33,807. Was it noticed then that the winter fishery did the summer fishery any harm?—We did not think much about it at that time, because it was only followde in January, and the boats only worked for a few weeks. When the herrings got scarce they dropped it again.

33,808. Is it your desire that the present close time should be continued?—Yes.

33,809. Throughout the whole extent of it?—Yes.

33,810. Why?—Because it allows the fish to become more plentiful, and they will be a better sort of fish. They would become full herrings bye and bye.

33,811. Did you not get full herrings in August when you had a winter fishery?—Yes, and a good many of them, but not when by trawling they were allowed to take them out of the sea.

33,812. I am not speaking of trawling, but of the close time, and the prohibition of fishing?—All that period in the winter time there were not many taken altogether. There were only a few small boats working then.

33,813. Has the herring fishery increased here very much of late years?—Yes, it has increased a good deal this season.

33,814. Are the boats larger than they were formerly?—Yes.

33,815. Do many of your boats go to the Isle of Man?—Yes, a good many.

33,816. Are there many of them there now?—Yes, a good many of the biggest boats.

33,817. What is the largest sized boat that is used here?—A boat of 40 feet keel.

33,818. Are they decked boats?—Half-decked boats, and they carry a good many nets too.

33,819. Are you aware whether any foreigners fish on this coast?—No.

33,820. Do the Irish boats come here at times?—They did come in old times since I can recollect. They came all along here, but they have got a better fishery at home now, and it is better followed up too. They have also better nets.

33,821. What is the size of the mesh you use in your nets?—When the net is new it is about $33\frac{1}{2}$ to the yard.

33,822. Does anybody look after your nets to see that the meshes are of the right size?—The Fishery officer is the man who ought to look after that.

33,823. Did you ever know of anybody's nets being seized because the meshes were not of the right size?—No.

33,824. You never heard of such a thing?—No.

33,825. Do you carry lights in your boats?—Yes.

33,826. What lights do you carry?—Lanterns and lamps.

33,827. Do you carry two lights or only one?—Only one, but they have a flambeau and lantern and they light the flambeau occasionally.

33,828-9. Is there any cruizer here to look after the fishermen?—None, except the steamer may come to Tarbert occasionally.

33,830. Do you mean the "Jackal"?—Yes.

33,831. Does she come down as far as this?—Yes, she comes some chance times, but not very often.

33,832. What does she do when she comes; does she look after the fishermen at all?—Yes, she gives a call among the fishing boats, and the police keep a good look-out among the fishermen too.

33,833. But the police do not go out to sea, do they?—I don't suppose that any of them go out to sea here.

33,834. (*Mr. Caird.*) Have you a very good harbour for running to?—Yes.

33,835. At all times of the tide?—Yes, at any time.

The witness withdrew.

W. Macmillan.

William Macmillan called and examined.

33,836. (*Mr. Caird.*) You are a fisherman here?—Yes.

33,837. Has the herring fishery improved or declined of recent years?—I should think it has rather improved.

33,838. What do you think is the cause of that?—It is allowed that the trawling in the spring of the year is helping it a great deal.

33,839. Stopping the trawling you mean?—Yes.

33,840. The Campbeltown men did not use the trawl in the summer time, did they?—No, it was only in the winter that they trawled.

33,841. Did the drift net-fishing in the winter do any harm, do you think?—I think not. When the close time was enforced, it stopped the people from getting bait, and prevented them from making wages, and the consequence was, that they were quite idle and could not support themselves.

33,842. Has that been an injury to the fishermen?—Yes, a great injury.

33,843. Do the people generally complain that they were prevented from fishing for herrings in any way in the winter?—Yes.

33,844. Are the herrings in full condition in the month of January?—By the month of January the herrings are rather declining, but they are fit for making into red herrings. The fishermen were able to get a very good market for them.

33,845. Are they used as food by the people themselves?—Yes.

33,846. And not for bait?—Yes.

33,847. For bait also?—Yes.

33,848. Are you against having a close time in the month of January?—Yes; I consider the best thing we could have is to have an open season the same as they have all round the east coast of Scotland and Ireland.

33,849. You are against having any restrictions whatever?—Yes; I would like to see them have an open season for the drift nets as before.

33,850. You would apply the law merely to prevent trawl nets being worked?—Yes.

33,851. Are you against trawl-fishing?—Yes, I am, and the principal part of the men standing here are against it also.

33,852. Your objection is not to fishing in the winter, but to fishing with the trawl?—Yes; just against the fishing with the trawl.

33,853. You wish to be allowed to fish in every other way throughout the whole of the season?—Just so.

33,854. In what way do you find that the trawling is destructive?—It kills a great number of the herrings which the drift net would not. They are destroyed or thrown away, not being fit for the market in any respect, and they are herrings which the drift net boats would not kill.

33,855. The trawl fishermen have no employment in the winter at all now?—No.

33,856. Do they not go to the white-fishing?—They go to the white-fishing, and they are making money the best way they can.

33,857. At the same time if they had an open season for fishing with the drift nets like what other

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fishermen have they could work at it if there was no close time; when the herrings appear on the coast, they could go out and take them?—Just so.

33,858. Is it generally the opinion of the fishermen of Campbeltown, that it is a great hardship that they should be deprived of that right?—It is.

33,858*a*. Is it a great loss to them of their means of sustenance?—Yes; it is a great loss to them.

33,859. Did they get a good deal of money from the winter fishing?—Sometimes they made more money out of their winter fishing than they did out of the summer fishing.

33,860. And they are entirely deprived of that now?—Yes.

33,861. If that were restored and you were allowed to fish with the drift nets in the winter, do you think it would do any harm to your summer fishing?—I don't think it would. The herrings would be taken too, fit to eat. They would not be shovelled out of the boats good for nothing. Our drift nets only catch fish that are fit to be used, because the meshes are wide enough to let those unfit for use escape.

33,862. Have you been a cod fisherman?—Yes.

33,863 Is that fishery improving or declining now?—We cannot get fish as we did in former years; we dare not go to catch the bait now.

33,864. Has that been a great loss here?—Yes; a great loss indeed.

33,865. Has it caused the cod fishery to decrease?—I don't know. We cannot get bait. It is not every man who is able to get a lot of buckie creels for the purpose of catching bait. Where a man was formerly able to go out and get a few herrings that would enable him to earn a day's wages, he is now obliged to lay at home because he cannot get bait.

33,866. Would they make as good a fishing with buckie bait, as if they had herrings?—No.

33,867. Then the fishermen have not only lost the herrings, but to a great extent they have lost the means of catching codfish?—Yes.

33,868. Or white fish?—They used to get cod, ling, skate, haddock, and eels with herring bait, whereas they can only catch cod or ling with buckie bait now.

33,869. Is the haddock fishery declining here now?—No.

33,870. Is it a good fishery?—Three years back it was.

33,871. Then is there any sign of the sea having been over-fished with regard to any kind of fish here?—No.

33,872. (*Professor Huxley.*) Have any of the fishermen here been convicted under the close time Act?—There are some who have been imprisoned here for a mere trifle. It may be that they had a few herrings or herring scales in their boats. I have known them to be convicted even on that ground.

33,873. When was that done? Can you tell us a particular case?—Last year and the year before last, and for three years back that has been the case here.

33,874. Fishermen have been convicted for having herring scales in their boats?—Yes.

33,875. Can you tell us the name of any person who was convicted upon that ground?—Yes; there are two of them here now, John Carmichael and Peter Carmichael.

33,876. You were speaking about buckie creels just now, what are they like?—They are partly made of rods, and they are let down with ballast in them and some sort of bait to coax the buckies into them.

33,877. Do you catch the buckies readily in those creels?—Yes; we get them in from 10 to 20 fathoms water.

The witness withdrew.

PETER CARMICHAEL called and examined.

P. Carmichael.

33,878. (*Mr. Caird.*) You are a fisherman here?—Yes.

33,879. A herring fisherman?—Yes.

33,880. Do you follow any other kind of fishing also?—Yes.

33,881. Has the herring fishery improved within the last year or two?—It has improved within two or three years back.

33,882. What do you think is the cause of that?—I attribute it to the stopping of the trawling.

33,883. Is that your opinion?—Yes.

33,884. There never was any trawling in the summer season?—Very seldom.

33,885. Is it your opinion that the doing away of the winter fishing by the Act which caused a close time to begin at the commencement of January has been injurious to you as a fisherman here?—Well, I think so.

33,886. Do you find that the herrings are in good condition in the month of January?—No; they are in a bad state then. The herrings have fallen off then.

33,887. Would you desire to catch them when they are in that state?—We cannot get a market for them.

33,888. Has the want of bait during that season been much loss to you as fishermen?—Yes.

33,889. And also for food for your families?—Yes.

33,890. Have you yourself been prosecuted under the recent Act for infringing it in any way?—Yes, for catching bait for the big lines.

33,890*a*. Did you use a net for catching bait for the big lines?—Yes, a small net.

33,891. What time of the year was that?—About March, I think.

33,892. Will you tell us what happened?—We were seized for having herring scales in the boat.

33,893. Were there no herrings in the boat?—No.

33,894. Was there any proof that you had herrings?—Nothing but the sign of scales.

33,895. And you were convicted of having broken a law by the proof afforded by the presence of scales in your boats?—Yes.

33,896. What was the penalty inflicted upon you?—Thirty days imprisonment.

33,897. You were imprisoned for 30 days?—Yes.

33,898. With hard labour?—No.

33,899. There was no fine?—There was a fine of 20*l*., but we got clear of that.

33,900. You preferred imprisonment?—Yes.

33,900*a*. At what time were you imprisoned?—It was in the middle of the year. We went in on the 4th of May, and were let out on the 4th of June.

33,901. Then you missed that month's fishing?—Yes.

33,902. Would that be the first of the summer fishing?—Yes.

33,903. Was it a great loss to you?—Yes, I had a boat of my own, and she was ashore.

33,904. Was it a greater loss than the payment of the fine would have been?—I am not sure of that.

33,905. Had it the effect of preventing you and others from fishing for bait again?—Yes, we might have been out with the fleet on the 1st of June, but in consequence of being imprisoned we were kept from that.

33,906. Did it prevent you from fishing for bait in the spring time again during the close time?—Yes.

33,907. Were other people prosecuted in addition to yourself?—Yes, there were several.

33,908. How many?—I don't know.

33,909. How many were imprisoned?—There were a dozen or more from Tarbert.

33,909*a*. Were there many men from Campbeltown?—No, not many. There were a great many Tarbert men.

33,910. Did they all go to prison rather than pay the fine?—Yes.

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33,911. (*Professor Huxley.*) Were the Tarbert men imprisoned for trawling?—Yes.

33,912. (*Mr. Caird.*) Was it the same accusation against them as against you?—Yes, something of the same sort. They had scales, and had been catching herrings in their boats.

33,913. You had not been trawling, had you?—Yes.

33,914. You used the trawl for catching bait?—It was a wee bit of a trawl, and we only used it for bait.

33,915. (*Professor Huxley.*) Was the trawl net seized at the time the boat was seized?—Yes.

33,916. The trawl then was in the boat?—Yes.

33,917. Then it was for trawling in point of fact that you were seized?—We went out for bait for our long-lines.

33,918. You caught it with a trawl?—Yes.

33,919. It was circle net fishing in point of fact?—Yes.

33,920. You did not catch herrings for sale?—No, just for bait to keep ourselves in employment.

33,921. Where did you catch them, up in the lochs here?—No, down in the bays.

33,922. Can you tell us if any of the men engaged in trawling in that way were endeavouring to catch herrings for the market, or only for bait for their lines?—Just for bait for their lines; I never heard of them selling their herrings.

33,923. They don't sell them in the winter time?—No.

33,924. Are you aware that in the summer time the Tarbert men were in the habit of trawling?—I know they were in the habit of selling them in the summer time.

33,925. But in the winter time they do not catch them for sale?—No, just for bait only.

33,926. These convictions took place, you said, last year?—Yes.

33,927. Were there any in the year before?—Yes, and there were a few the year before that.

33,928. So that there have been convictions each year?—Yes.

33,929. Yet they do not seem to have put a stop to the practice altogether?—No, the fishermen are like to have bait; there are many men idle in the spring of the year.

33,929*a*. I suppose if you had had no bait your boat would have been laid up as effectually as when you were in prison?—We should have been idle and we wanted employment.

33,930. Is there a considerable number of fishermen thrown out of employment in consequence of being prevented from taking bait in the winter time?—Yes.

33,931. Does that lead to any distress?—Yes, their families are a good many of them in a state of starvation in consequence of it.

33,932. Have you any notion of the total number of line men fishing here?—No, I have not.

33,933. (*Mr. Caird.*) Has the line fishing been much decreased in consequence of the difficulty of getting the bait in the winter time?—Yes.

33,934. Was there formerly a good line fishing here for cod in the winter?—Yes, in the spring of the year.

33,935. Are there fewer cod caught now in consequence of the want of bait?—Yes, if there was more bait to be had, there would be more men working at it.

33,936. Then you have lost both the herring and the cod in that way?—Yes, we are kept in and cannot go out after them.

33,937. Is there any means of catching the herring for bait, except by using the trawl?—Yes, we could use drift nets.

33,938. Would that be quite as effectual?—Yes, it would do quite well.

33,939. In that way you would not catch any small fish?—No.

33,940. By using the trawl in the winter do you kill a great number of young immature herring?—Yes, all that come into the net.

33,941. Is a large proportion of them young of that sort?—Yes, if the net is narrow a good many of them will be young fish.

33,942. What do you do with the young fish?—We heave them overboard again.

33,943. Are they alive when you do that?—Some of them are and the others are dead.

33,944. Do you use them for food?—No.

33,945. Or for bait, or sell them?—No.

33,946. Will the one half of the catch be of that kind?—Sometimes it will.

33,947. Sometimes will more than one half of it be of that kind?—Yes.

33,948. Then do you think it is a proper thing that the trawl should be entirely put a stop to?—Yes, I think so. I think the trawl ought to be stopped, but we should have an open season all the year through for the drift nets.

33,949. Would you think it advisable to have a close time at all for the drift nets?—No, I don't think there should be; the men should be employed all through the season with drift nets.

33,949*a*. Are fish to be had during most of the season?—Herrings are plentiful in the spring of the year.

33,950. At what time?—In March, April, and May.

33,951. Are they not in inferior condition then?—Yes, but there are a good deal of fish among them that are large. They are in a poor state, but we always find large herrings in the spring of the year.

33,952. Can you get a ready market for them here?—Yes, formerly we did very well in the spring time.

33,953. If that fishing were restored to you, do you think it would injure the summer fishing?—Not if it was followed with drift nets. Trawl nets might be of injury to it.

The witness withdrew.

J. Martin.

JOHN MARTIN called and examined.

33,954. (*Mr. Caird.*) You are a fisherman here?—Yes.

33,955. Are you in favour of the close time for the herring fishery as at present established by law?—No, not by any means.

33,956. Do you think it is injurious to the interests of the fishermen here?—I think it is, because hundreds of families have their children emaciated, distressed, impoverished, and reduced to mere beggary.

33,957. Then you are in favour of doing away with the close time during the whole of its existence from the month of January till the month of May?—You know that the law was established by the Honourable Commissioners of the Fishery Board, and each part of Scotland has different laws with regard to the time at which the season opens.

33,958. There is no close time at all on the east coast?—No. It would be a great convenience to the west coast if there was none there either.

33,959. You think you should be placed on the same footing as the east coast?—Yes, I think so, we are loyal British subjects on the west coast as well as on the east. We are quite as good and humble subjects on the west as on the east coast, and we ought to have the same privileges.

33,960. Do you think it is for the benefit of the fisheries that a close time should be established?—No. It is very much against them because it keeps many of the fishermen idle. It is not even a close time against the fishermen as regards the herrings, but it closes them up from catching any other kind of fish as well as herrings.

33,961. Is that owing to the want of bait?—Yes, not being allowed to use their nets.

33,962. Has that led to great distress?—Yes, I am certain that every man will state that it has been injurious both to the fishermen and their families.

in catching herrings?—I don't say much with regard to the use of it. I have been trawling myself and have been convicted of trawling and breaking the law. I would not say much for the use of the trawl, but it would be greatly to the advantage of the fisheries if the season was open as we had it formerly.

33,964. Have you no objection to the trawl system being done away with?—I rather think it should be done away with.

33,965. Is it injurious when it is practised in the summer fishing?—There is no mistake that it is. That is well known.

33,966. Why is that?—It takes the fish in great abundance at one time, and that is a great advantage to the party who gets the hauls of fish, but it impoverishes scores of other people. It breaks the eye of the shoal.

33,967. Have you observed that it had that effect, namely, breaking the eye of the shoal?—Yes, there is not a fisherman in Scotland who has not observed that to be the effect.

33,968. In what way does it do that?—The fish come in a sort of ball closely packed up together, and when the sweep of a large trawl net gets round them, it takes one third of the whole body of the fish.

33,969. Are the fish then in good condition?—Yes, in splendid condition, much before anything we can catch with our drift nets. They catch large fish by trawling that we should not get during the whole of the season, but perhaps we ought not to take them. I think they are the mother fish.

33,970. At that time, namely, the summer time, speaking of the August fisheries, is there any large proportion of all the fish that are caught by the trawl immature fish?—No.

33,971. They are all good fish?—Yes, I have been trawling myself for four or five years and never caught one fish that we did not take to market.

33,972. With the trawl?—Yes, I never caught any that I could not take to market. They always sold and went off both in summer and winter.

33,973. Then what harm did you do by catching fish in that way if they were always ready for the market?—I committed no harm at all; but the voice of the whole people of Scotland rose up against it. The fishermen never raised their voices against it, because there would be plenty of fishing if they were allowed to follow their business as they themselves think best. My own opinion is that they ought not to be restricted at all.

33,974. You think they ought not to be restricted?—No, it is a great grievance.

33,975. I thought you said a little while ago that you considered trawling injurious because it broke the eye of the shoal?—Yes.

33,976. But if it is injurious only by catching marketable fish is not that the general object of fishing?—It is injurious to the progeny of fish. It takes the large mother fish.

33,977. Do you not desire to get as large fish in the sea as you can?—Decidedly so.

33,978. Then you would not refuse the mother fish in the drift nets?—No, but we cannot get them there.

33,979. Nobody would refuse them there?—No, not one.

33,980. Then why should they refuse them in the trawl?—The trawl takes boatloads of them at one time. There would frequently be more in a single trawl than would be dispersed over 150 trains of drift nets.

33,981. The result seems to be that by trawling you can effect the object of catching fish at a much less cost than you can by drift nets. Is not that the result of it? Do you not tell us that a few men with trawl nets can catch as many as a great number of men with drift nets?—One person with a trawl net will catch as many as 300 drift nets will catch.

33,982. Then the trawl net fishing seems a more economical mode of catching fish?—There is no mistake about it.

33,983. And a more profitable mode of fishing?—Yes, much more profitable.

33,984. Then your objection is that men should not be allowed to use the most economical and profitable mode of fishing?—It always has been the opinion here. Our fishermen have a strong objection to fishing with the trawl in the summer season. They do not object altogether to those who are actually fishermen, but there are a great many people who sit at their homes all the winter and have other businesses to follow and who can go into this trade when the herrings are on the coast, whereas the regular fishermen must go to sea all the year round.

33,985. Where are the fishermen you speak of?—More than two thirds of the fishermen are in the Sound of Kilbrennan.

33,986. Do you think the winter fishing might be followed by the drift nets without any disadvantage to the summer fishing?—I think it might. The fishermen, who are actually fishermen, require to have summer and winter or they will be placed at a disadvantage. They are fishermen who have no other line of life, and if they are to follow their business properly they require to have the winter open.

33,987. (*Professor Huxley.*) Are you a Tarbert man?—No.

33,988. What do you think of the condition of the fish that are taken in the trawl?—I think they were just as good as when they were taken in any other way. I have used them cured and in every way, and I have seen them in as good condition as ever I saw herrings caught by the drift net and quite as fit for use.

33,989. You said just now that the trawl would catch fish which the drift net cannot catch?—Yes.

33,990. Do you mean very large and fine fish?—Yes.

33,991. Are they not as good for eating purposes as the others?—Yes.

33,992. Then if the fishing is restricted to the drift net alone, a great many fish cannot be caught at all?—Yes.

33,993. What is the total cost of a trawl net?—A trawl net will cost about from 20*l.* to 25*l.*

33,994–5. And you work it with two boats?—Yes; with four men to each boat.

33,996. What will the two boats cost?—The two boats will cost about 24*l.*

33,997. And there is no rigging worth speaking of?—No.

33,998. They are worked with oars commonly?—Yes, with oars, and occasionally with sails.

33,999. What will be the cost here of a drift net boat?—With drift nets?

34,000. Yes; the whole boat fitted up ready for fishing?—A boat, new and all fitted up, would cost about 200*l.*, or between that and 400*l.*, according to the size.

34,001. So that you may fit up a trawler for 60*l.* or 70*l.*?—Yes.

34,002. And a drift net boat with the fleet of nets will cost about 200*l.*?—Yes, from 200*l.* to 400*l.*, according to the size.

34,003. Then in that way you can set up a trawler with much less capital than you can set up a drift-net boat?—Yes, much less.

34,004. And yet the trawler would catch more fish?—Yes.

34,005. Then would it not be of great advantage to allow men to trawl?—Yes, there are no two ways about it; but this is a locality that is not adapted for trawling in the summer season. March, April, and May are the only months adapted here for trawling.

34,006. Can you practise trawling outside; there is no circle-net fishing in the sea, is there?—Yes, in deep water.

34,007. You cannot practise it in coarse weather as you can drift-net fishing?—No.

33,963. Do you object to the use of the trawl net

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34,008. You must have pretty fine weather?—Yes; we are restricted to fine weather unless along the coast when the wind is off the land and it is smooth water.

34,009. When you practised trawling and got a good deal of money by it, did it not often happen that a good deal of that money went in drinking, and that the men stopped on shore till they got rid of it?—That is the case with the drift-net men as well as the trawlers.

34,010. But is it not more the case in trawling than in drift-net-fishing?—I do not think it is; there are some places more given up to drinking than others; I do not think Campbeltown is amongst them.

34,011. You do not think it is more the reproach of the trawlers than of the drift-net fishermen?—The trawlers are in a great way subject to getting very wet and draggled with dragging the herrings and nets, whereas the drift-net fisherman can put on a suit of oil cloth and can keep himself almost dry; no doubt they very frequently take a glass of spirits or whatever they choose when they come in.

34,012. But you do not think they get rid of their money readier than the drift-net men?—No, I do not think so.

34,013. That has been charged against the trawlers, has it not?—I do not believe it has; those who speak of it can take it whether they are drift-net fishermen or trawlers.

34,014. Which mode of fishing requires the more skilful and active men; the drift-net fishing or trawling?—The trawling.

34,015. It is rather hard work, is it not?—It is hard work and it requires practice and strong able men to go through with it, whereas in the drift-net-fishing there is not much work, especially early in the season; there is also only one time to shoot your nets.

34,016. Do the drift-net fishermen shoot their nets and go to sleep?—They do not always all go to sleep, there are one or two watching. It requires more exertion and more strength to follow the trawling than the drift-net fishing.

34,017–8. Then the trawl-fishing is a good deal more precarious than the drift-net fishing. Although the trawlers get a good haul now and then, are they not apt to go for a long time without getting a good haul?—Yes, that is often the case. I have often seen when the trawling has been carried on to the greatest possible extent, the drift-net fishermen making a better livelihood than the trawlers could, although they prosecuted their business with the greatest vigour.

34,019. Is not trawling apt to interfere a good deal with the drift-net fishing?—Yes.

34,020. If trawling is carried on in any part of the sea, drift-net fishing cannot be carried on there at the same time?—No.

34,021. Are the trawlers apt to get in the way of the drift-net fishermen?—Yes, if the trawling is carried on where the drift-net men are at work; it would not be so very injurious here, where the trawlers could go out and take a sweep and in half an hour be clear of the drift-nets; but it does great injury further north to the drift-net men to allow the trawlers in the very place where they are fishing.

34,022. Sometimes it is alleged against the trawlers that they, having light boats that will pull very readily, are not apt to trouble themselves whether they are clear or not, but if they fall in with the shoal they will cut away the drift-nets?—I have heard that reported.

34,023. Have you ever seen it done?—I never saw it done. I do not think it was the trawlers who did it; at the same time it may have been done, and I have heard it said so, but I never saw it.

34,024. Does it sometimes happen that the drift-net men cut away one another's nets and buoys?—Yes.

34,025. If they get foul of each other?—Yes. Since trawling has been stopped we have lost more nets and buoys than ever we lost before.

34,026. (*Mr. Caird.*) Were you prosecuted under the present Act?—Yes.

34,027. Did you also suffer imprisonment?—Yes.

34,028. For 30 days?—No, for eight days; it was the first case ever taken into consideration with regard to the trawling.

34,029. You got off with eight days?—Yes.

34,030. You did not revive the trawl-fishing after that, did you?—No.

The witness withdrew.

D. McInnis.

DONALD MCINNIS called and examined.

34,031. (*Mr. Caird.*) You are a fisherman here?—Yes.

34,032. Have you practised both the drift-net fishing and the trawl-fishing?—Only a little of the trawl-fishing.

34,033. Do you think the present law is advantageous to the general interests of the fishing?—Yes.

34,034. Do you approve of the close time?—No; I think we should have no more close time than other places; we ought to be placed on the same level as the eastern country.

34,035. Then you would have no close time at all?—Is there no close time there?

34,036. No.—I thought there was from the 12th of March.

34,037. No; there is no close time there?—Then we ought to have none here; we desire to be placed on the same level with them.

34,038. You do not think that the close time is of advantage to the herring-fishing?—I think it is of some advantage, but we should have the same liberty as the fishermen on the eastern coast.

34,039. It would not be of advantage to allow you to injure your fishing?—It would be a bad job to do it with the trawl.

34,040. Then what do you think is the disadvantage of the present state of the law?—I always thought there was a close time on the eastern coast, from the 12th of March.

34,041. Would you desire to have a close time here from the 12th of March?—Yes.

34,042. Until when?—Until the 1st of June.

34,043. Do you think that would be advantageous to the herring-fishing?—Yes.

34,044. Were you ever in the habit of fishing at that time?—Yes, I have fished through the month of March, sometimes with drift-nets.

34,045. Did you catch any valuable fish at that time?—No, they were in a poor state.

34,046. Did you ever fish in April or May with drift nets?—No.

34,047. Then, if there were a law in existence or not there would be little fishing with drift nets?—No, very little; there would be only a little, just for bait and such as that.

34,048. Do you desire that you should have the privilege of catching herrings for bait?—Yes.

34,049. Is it a loss to the fishermen that they are entirely deprived of that privilege now?—Yes, it is a great loss to them.

34,050. Do you disapprove of the system of trawl-net fishing for herrings?—Yes, very much.

34,051. Are you referring to the Campbeltown fishing only at this moment?—No, to all the fisheries along the coast.

34,052. But in regard to the Campbeltown system of trawling, it was only practised in the winter, was it?—Yes, in the winter time only.

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34,053. Is that injurious then ?—Yes.

34,054. Is it impossible that the two modes of fishing, the trawl net-fishing, and the drift-net fishing, can be carried on together ?—Yes, they cannot.

34,055. Why is that ?—Because if the trawlers get foul of you, they will haul up your nets and cut them away.

34,056. Are the trawl-boats better manned than the drift-boats ?—There are four men to each boat, and they have two boats.

34,057. And how many are there in the drift-boats ?—Four.

34,058. Do the drift-boats never go in company together ?—No.

34,059. Are they generally alone ?—Yes.

34,060. If they go in the bay to fish will there only be one drift-boat fishing ?—Of course that would be different, but they are not handy alongside of one another; they are generally lying on to their nets, and cannot go to help one another.

34,061. Do the trawl fishermen interfere with the drift-fishermen in the way you mention ?—Yes. I should have to haul up my nets if they came across me, or they would cut them away.

34,062. Have you ever done that ?—Yes.

34,063. You have had to haul up your nets ?—Yes, to let them have room.

34,064. Where did you move ?—I moved further out.

34,065. Has that happened to you often ?—No, not very often.

34,066. Speaking from your own experience and with consideration of what you are saying, is that a thing that does often happen between the two classes of fishermen ?—It does happen at times, but not very often ; it has happened to myself.

34,067. Is it really the case that the trawlers try to frighten the drift-fishermen from the place they are occupying ?—It was done once with me.

34,068. How many years have you been a fisherman ?—I have been a fisherman since the year 1832.

34,069. And during all that time this happened to you only once ?—Yes.

34,070. Were they fishing in the bay at that particular time when you went into it, or were you the first there ?—I was the first there.

34,071. And they came and told you to leave the ground ?—Yes, to leave the ground.

34,072. Supposing that that sort of interference were put a stop to, is there any other difficulty that would make the two kinds of fishing impossible to be carried on together ? Supposing the trawl-net fishermen were prevented from interfering with the drift-net fishermen in the way you speak of, is there any other way in which they could injure your mode of fishing ?—They could take away our nets, as some of them have done to myself ; I blame no person but the trawlers for that.

34,073. Do you think they disturb the shoals in any way ?—I think they do very much.

33,074. Do they catch more fish than you do in the drift nets ?—Yes, of course, they catch double as much as the drift nets.

34,075. Then they take a different way to attain the same end that you are anxious to attain ?—Yes, they take a different way, they haul them ashore, and take what they like, and leave the rest on the ground.

34,076. Do they leave good herrings on the ground ?—Yes, plenty of them.

34,077. Then would it not be worth your while to lift them ?—We could not. They fill their boats, and leave the rest on the ground.

34,078. Does that happen very often ?—It happens occasionally.

34,079. You say that you yourself have practised the trawl-fishing ?—Yes, a little.

34,080. Why did you give it up ?—I thought it was very grievous, and there were so many working at it, and we were making nothing of it. One might make a good fishing, and another nothing. There was also another thing, I had a boat and drift-nets.

34,081. Was it a more precarious mode of fishing than drift-net fishing ?—Yes, I might go for a month and get nothing, and then get a good haul in a short time.

34,082. (*Professor Huxley.*) I suppose the trawlers interfere with you only when you are fishing in towards the bay ?—I have seen them interfere with us outside also.

34,083. Outside the Mull ?—No, outside in the Channel.

34,084. In the Firth ?—Yes, in the Channel, a mile or two from the shore.

34,085. If you were further distant from the shore would they injure you ?—They are not so apt to interfere with you there.

34,086. If you were four or five miles from the shore, would the trawlers ever go as far out as that ?—No, but if we come within one or two miles of the shore then they interfere with us.

34,087. Did you ever see the trawling fishers outside the Mull in the open sea ?—No.

34,088. That would not suit their operations ?—No.

34,089. Their operations must be confined to narrow waters ?—Yes, pretty near the shore.

34,090. What distance from the shore does your drift-net fishing take place generally ?—Perhaps half a mile or a mile, or perhaps three quarters of a mile, or from that to a mile and a half and two miles.

34,091. When you are outside, how far off the shore will that be ?—Do you mean outside here ?

34,092. Outside the Mull ?—We do not go outside the Mull at all, but we generally go outside here.

34,093. Do you not go outside the Mull herring-fishing ?—No.

The witness withdrew.

WILLIAM COOK called and examined.

W. Cook.

34,094. (*Mr. Caird.*) Are you a fisherman here ?—Yes.

34,095. What is your opinion with regard to the trawling; do you consider it injurious or otherwise to the herring-fishing ?—I think it would be a great help to the whole fleet on the west of Scotland if the trawling was stopped.

34,096. Do you approve of having a close time during the whole of the winter by which you are prevented from fishing for herrings by any means ?—I approve of the close time, but I think the fishermen ought not to be prevented from getting bait.

34,097. How could the fishermen manage to get bait if there is to be no herring-fishing during the time they wish to get bait ?—They might make an allowance for a small net in order to catch a few herrings for bait.

34,098. A small drift net ?—A drift net or a trammel net or anything.

34,099. Would you allow a trawl net to be used ?—I would allow a small net but not a large one ; but they could be taken in trammels, which are set nets.

34,100. What size is the mesh of the trammels ?—It is about the same size as that of the other nets.

34,101. Could only full-sized herrings be meshed in the trammels ?—Yes, none but those could.

34,102. Could there be no immature fish caught ?—No.

34,103. Would it be a benefit to the fishermen ?—It would be of so much benefit that it would keep them from starving in the winter.

34,104. Has the establishment of a close season had the effect of causing a great deal of hardship to

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the fishermen here?—I have known men who have not had a bite for three days together this winter.

34,105. On account of that?—Yes.

34,106. There were fish to be caught at that time?—Yes, if they could have got bait.

34,107. Then it has injured the cod-fishing as well as the herring-fishing?—Yes, a great deal.

34,108. Then you are against having a close time in the winter season?—I am in favour of the close time so far as sending fish to market is concerned.

34,109. But you are against it so far as it affects obtaining fish for bait and food?—I object to it so far as it interferes with obtaining bait for codfish.

34,110. Do you not desire to have the fish then for food?—When we can get bait we can get plenty of other fish.

34,111. Then is it only for bait that you require it?—Yes.

34,112. Has the summer fishing been improved by the establishment of a winter close time?—Yes, I am sure of it.

34,113. Has that resulted from the close time or from putting down the trawl-net fishing?—From both. There is not a fisherman in the place who could not give evidence that the fishing has been better for the last three years than it was before when trawling was allowed to be carried on.

34,114. Cannot trawling and drift-net fishing be carried on together?—They could be, but they will always be quarrelling one with another.

34,115. Is there anything in fishing by trawls that is injurious to the drift-net fishing?—Not if they would leave the drift nets alone. It is injurious however in this way, that they break the ball of the herrings with the trawl.

34,116. Did the trawl fishermen make more money in the course of a season in the summer than the drift-net fishermen?—Sometimes they did.

34,117. (*Professor Huxley.*) One of the reasons for which you approve of the stopping of trawling is that it breaks the shoal of fish?—Yes.

34,118. Have you ever seen that take place?—Yes, I have.

34,119. You have seen the shoal broken owing to the fact of fishermen having trawled among it?—Yes.

34,120. When was it that you saw that take place?—I have seen it every winter when the trawling was carried on. I have seen the water stinking with herrings they had left after they could take no more in their boats, and I have see the fish flying away from the place.

34,121. Were those herrings in-shore that were left?—Yes, in about four or five fathoms of water. At one time you might have felt the stench of the herrings for a month or two afterwards. More herrings were destroyed than were taken. They were killed and left to lie stinking on the ground.

34,122. Did they drive the herrings away?—Yes.

34,123. Did you get no fishing at all afterwards?—No.

34,124. Did they drive them out of the loch altogether?—Yes, from that part of it.

34,125. But not from the loch altogether?—No. They wrought up and down, but they went away from that part of the loch; and that has been done often and often.

34,126. What is the good of a close time apart from trawling?—I think the fish from January until the end of June are not in proper order for food.

34,127. But are there not plenty of people who will eat them?—Yes, plenty; but they are not good for food.

34,128. If people like to get fish of an inferior description, why should they not have it?—They might if the law allowed it, of course.

34,129. If a person preferred to get inferior herrings, why should he not have liberty to do so?—There is hardly anybody who eats them.

34,130. But you always get a good market for them?—Yes, as good a market as there is now.

34,131. Somebody eats them then?—Yes.

34,132. So that there was, at any rate, somebody who was glad to pay the price asked for them, and to eat them?—That was the case, but I never found them good for food.

34,133. You yourself?—No.

34,134. Have you any other reason for wishing for a close time than that?—I think it is a great hurt to this town: the want of bait during the close time.

34,135. That is the only reason you have against the close time?—That is the only objection I have against it.

34,136. But I ask you now for your reasons in favour of it?—My opinion is that it is a good plan.

34,137. And the principal use of it you think is to prevent inferior herrings from being taken?—Yes, just that.

34,138. Have you any reason except that?—I should only like to be allowed a little for bait, and if we got 200 a boat or the like of that, we should get three times more fish.

The witness withdrew.

N. Macmillan.

NEIL MACMILLAN called and examined.

34,139. (*Mr. Caird.*) You are a buyer of fish here?—Yes.

34,140. What kinds of fish do you buy?—All kinds I can get hold of: herrings, skate, turbot, and all I can get hold of.

34,141. Do you send them all fresh to the market?—Yes, they all go away fresh.

34,142. Is there no curing carried on here?—I may almost say none.

34,143. Have you been engaged for many years as a buyer?—Yes.

34,144. Is the number of fish you can get and send to the market on the increase?—Yes, of net herrings.

34,145. And of cod and other white fish?—The cod have diminished greatly. For some years there was a kind of scarcity of herrings on the coast, but they have increased within the last two years.

34,146. Are there as many people engaged in the cod-fishing now as there were formerly?—Yes.

34,147. And in all other kinds of fishing here?—They have rather decreased. But with regard to the scarcity of whitings, that cannot be attributed to the herrings in any respect.

34,148. What is it attributed to?—I cannot account for it. I just think they have taken some other course.

34,149. Do you get many lobsters here?—They are not very plentiful.

34,150. Is the quantity increasing or diminishing?—I cannot tell. I never dealt in them.

34,151. What have you to say with regard to the close time for the herring-fishing?—During the close season the herrings are of a very inferior quality.

34,152. Have you ever bought them in January?—Yes, from January until May and June.

34,153. What condition were they in in January?—Whatever time they were caught in the winter fishing they were inferior spent herrings.

34,154. Was there any difference in the quality according to the month of the year they were caught in?—I cannot say.

34,155. When did you find the quality improving?—They improve in quality from the latter end of May.

34,156. Does that improvement go on progressing?—Yes, we consider it does because we get them better in June, and in the middle of June they are better again; we then consider them in their prime.

34,157. When does the summer fishing cease here?—Do you mean about Campbeltown?

34,158. Yes?—The boats leave us before the herrings leave us; there are still a good many herrings

on the coast at present; we consider the fish to be on the coast until October.

34,159. From the beginning of June until October?—Yes.

34,160. Have you any desire to commence the fishing earlier than the beginning of June?—No, not for my part, but the fishermen are the best judges of that.

34,161. What do you think of the close time?—I think the close time must be beneficial both to the fishermen and the inhabitants, because the fish caught during the spring months are of inferior quality, and on the other hand there are always curers who wish to get their stocks cleared out, so that they can give an advanced price for the new herrings when they come in.

34,162. Do you consider it is of great advantage to diminish the supply?—Yes; during the spring months only it is of great advantage, because the herrings are of inferior quality; I have got herrings here for 1*s.* 3*d.* a 100 in the winter season, which I may have to give 12 shillings for in June.

34,163. Have you as a buyer spent much money in the winter months in payments to the fishermen for herrings?—Sometimes I have spent a good deal and have made very little by it.

34,164. But have the fishermen made a good deal by it?—They were always making something and now they are making nothing, unless they are making it by other fishing.

34,165. Is there a difficulty in getting bait?—When they cannot get bait here the general run of our fishermen are in a state of starvation in consequence of the want of it.

34,166. What kind of bait?—A few herrings.

34,167. If the close time is rigidly observed they cannot get bait?—Yes; I think a clause ought to be inserted in the Act to give a little liberty, so as to enable the fishermen to catch herrings for bait; they ought to be punished if they took them for any other purpose.

34,168. You would let them get them for bait?—Yes; because without that they are very destitute.

34,169. Then the strict observance of the close time has been prejudicial to the fishermen here with regard to obtaining bait?—Yes.

34,170. And also in preventing them from obtaining cod, which fish might otherwise have been caught?—Not codfish alone, but turbot for the gentry and skate for the poor people. They have been deprived of all those fish from the want of herring bait in the close season. It would be just as well if they and their families were put into prison all the time, when they cannot get herring bait. That at any rate would keep them from starving.

34,171. You think it would be better to put them in prison?—Yes, they would not starve then.

34,172. It would be better to do that than that they should starve?—Yes; the want of herring bait is half starving them in the winter season.

34,173. Do you think it would be for the general advantage that there should be a relaxation in the close time with regard to procuring herrings for bait?—I know it is desired by them unanimously.

34,174. To be allowed to fish herrings for bait?—Yes.

34,175. Did the herrings form any great article of subsistence for the fishermen in the winter time?—The herrings alone?

34,176. Yes.—No, I do not think they did.

34,177. You do not think they used the herrings they caught at that time for food?—I think they scarcely used them at all.

34,178. (*Professor Huxley.*) When there was a winter fishing, did you get a ready sale for the fish you bought of the fishermen?—I sent them off to Glasgow and let them do the best they could with them.

34,179. Did they sell them there?—I expect they did.

34,180. Were the poor glad to get what fish they could?—Yes, it was the same as in Campbeltown.

34,181. Then was the supply of winter fish a benefit to them?—I cannot tell.

34,182. But you sold them?—Yes; and if they got any quantity at all they used them I believe as red herrings.

34,183. Did you get a ready market for your January and February fish?—Yes, and for the March and April fish; we took them at all times.

34,184. Then why do you wish to be prevented from having that advantage now?—I earned very little money by it, and persons ought to look to their neighbours a little.

34,185. What benefit is it to your neighbours to put a stop to it?—It would be depriving my neighbours of a benefit to go on with it.

34,186. Was it not a benefit to yourself to have the market open to your fish in January and February?—Yes, and in the spring months, March and April likewise.

34,187. Was it not an advantage to you to be able to sell fish in the Glasgow market at that time?—Yes.

34,188. Then on what public grounds do you wish to have that privilege taken from you?—Because I know that I should sell rather more in the summer.

34,189. Do you think they are the same fish that come in the summer?—They are of the same quality. They are all the same fish that come down from the lochs and swim round the coast with the strong tides.

34,190. Do you think that the winter fishing injures the summer fishing?—I certainly do; I suppose there is hardly room to dispute that.

34,191. On the east coast are there two fishings, a winter and a summer fishing?—Yes.

34,192. Neither of those fishings hurts the other, does it?—It is considered that they come in different shoals from what they come in here.

The witness withdrew.

ROBERT HICKS called and examined.

R. Hicks.

34,193. (*Mr. Caird.*) Can you give us the number and tonnage of the boats employed in the fishery here?—I can give you the number only; the tonnage is not taken.

34,194. Can you give us the number of men in each?—Not the number of men, only the number of vessels.

34,195. Can you give us the number for several years?—From 1860.

34,196. Then will you give us the number of vessels employed in the fishery from 1860 to the present time?—In 1860 there were only 25; in 1861 there were 143; in 1862 there were 161; in 1863 there were 179, and in 1864 there were 200.

34,197. There are now altogether 200?—Yes.

34,198. Then there has been an addition each year of about from 20 to 25 per cent.?—Yes.

34,199. Can you give us any further information with regard to the fishing here?—I can only make the same remarks which have already been made. It has been reported here constantly that there is great complaint along my district that the fishermen are not allowed to take herrings for bait. The fishing operations in point of fact have almost entirely ceased on account of that difficulty. They do not seem here to be discontented with the operation of the close time so far as it has put a stop to trawling. On the contrary, they think it rather beneficial in that respect, and that it tends to improve the fishing, but they complain of all their other fishing operations being stopped on account of the want of herring bait.

34,200. According to your own observation and your own knowledge, is that a great complaint among the fishermen here?—Yes, and in a great part of the

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district there are not even buckies to be got, so that there is no bait at all.

34,201. Then is the white-fishing stopped entirely?—Yes, it ceases entirely.

34,202. Do these returns include other ports besides Campbeltown?—There is no other port. It only includes the port of Campbeltown, but it includes an extensive district.

34,203. Name the other places which it includes?—I can give you a list of the places and also the number of boats at each.

34,204. Will you be good enough to do so?—The return is as follows:—

	Half-decked.	Open Boats.
At Campbeltown - - -	75	34
Carradale, Saddell, and Torrisdale	16	16
Skipness - - - -	17	22
Gigha - - - -	6	6
Muasdale - - - -	1	0
Ballachontie - - -	1	2
Pans - - - -	2	0
Southend and Island of Sanda -	2	0
	120	80

Total 200.

34,205. Is there any other matter connected with the interests of the fisheries on this coast which you desire to mention to the Commission?—Nothing more than you have already heard. You have put one or two questions as regards the lobster fishery. That fishery I believe has really very much decreased along the whole district, and as far as I can learn I understand that it is in consequence of fishing the lobsters throughout the whole of the year. They are fished in this district principally in the close season, because in the winter season, when lobsters are generally taken, the weather is so bad that it is impossible to work it to any great extent.

34,206. Then do you attribute the falling off in the lobster-fishing to their being fished in an improper season?—Yes, they admit that themselves; they fish them in the breeding season.

34,207. (*Professor Huxley.*) What time of the year is the breeding season for lobsters here?—During the summer season.

34,208. Do they observe no close time here?—None at all.

34,209. Not for lobsters?—No, they fish them all the year round.

34,210. Is not the hen lobster very much in request when she is full of eggs?—Yes.

34,211. If a close time were enacted to prevent the fishermen from catching them when in that state, they would not get as good a market for their fish?—The hen lobster is at all times the best fish, and fetches a proportionately large price.

34,212. There was something said a short time ago about a fishery police here; can you tell us what that means?—The police are formed under the Fishery Convention Act, and they go through the whole district.

34,213. Do you mean the Convention Act or the Close Time Act?—The Herring Fishery Act, the Close Time Act.

34,214. How many police are there in this district in consequence of that?—Two are stationed here. I cannot tell where else they are stationed. The two stationed here take a considerable district, and go through it constantly.

34,215. Who pays those police?—The Fishery Board at Edinburgh.

34,216. And is it their sole duty to see that the Act of 1861-2 is not broken?—Yes.

34,217. And that the close time is duly enforced?—Yes.

34,218. And that trawling is put down?—Yes, it is their duty to detect it if it is carried on.

The witness withdrew.

E. Munro.

EDWARD MUNRO called and examined.

34,219. (*Mr. Caird.*) Do you belong to the county police?—I belong to the fishery police.

34,220. Are you not connected with the county police?—We are under the same control as the county police.

34,221. You are under the superintendence of the county police?—Yes.

34,222. And under their orders?—Yes.

34,223. Do you take your instructions from them?—Yes, at times; but we have a Fishery officer here along with us, and we act under his instructions.

34,224. Have you any other duty to attend to than the regulation of the fishermen?—No, except anything happens in our district when we may perhaps go to it.

34,225. Then you act as criminal officers as well as fishery police?—Yes, we assist the rest at any time we are asked.

34,226. Are you stationed at certain places?—Yes.

34,227. What is the nature of your instructions as a fishery police?—We are stationed to look after the fishing, to see that no trawling is carried on in the open season or in the close time. We also look after the boats to see that they are properly numbered, both on the bows and mainsails.

34,228. Have you any instructions with regard to the size of the mesh of the nets?—Yes.

34,229. And you look after the strict observance of the close time as fixed by law?—Yes.

34,230. Have you been on this station for some time?—Yes, I have been backward and forward on this station for some years. I have been also in Loch Fyne, and I was in the Kyles of Bute last year.

34,231. Have you had occasion frequently to interfere with the fishermen in pursuance of your instructions?—With nothing but their numbers, and if they were fishing out of season.

34,232. Has there been any attempt this season, either to fish in the close time, or to fish with the trawl net?—There were two smacks seized for having fresh herrings on board in the close time.

34,233. Were they fishing with drift nets?—I believe they were fishing with the trawl net. We found a trawl net on board one of the smacks.

34,234. What was done upon that occasion?—They have not been tried yet. They got their smacks out for the fishing under security.

34,235. They have gone to the fishing?—Yes.

34,236. And the trial has been postponed?—Yes.

34,237. Was it postponed at their desire, or by the desire of the Fishery Board?—I cannot tell you, but the Inspector of the Fisheries was down, and when they gave security, he allowed them to have their boats until the case could come on. The case has not come on yet.

34,238. Has there been any seizure for attempting to fish with the trawl net hereabouts?—Not since the fishing has been carried on.

The witness withdrew.

A. McCann.

ARCHIBALD MCCANN called and examined.

34,239. (*Mr. Caird.*) Are you a fisherman here?—Not in the town of Campbeltown.

34,240. But in the neighbourhood?—Yes.

34,241. What kind of fishing do you follow?—Herring-fishing.

34,242. What is your opinion with regard to the close time, its advantages and disadvantages?—It is my opinion that it is an advantage.

34,243. What is the advantage?—The advantage is that the fish are out of season altogether in the

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spring months of the year, and yet at that time they were scattered about by the trawlers, and all the country was running after them. In the spring of the year they lie very close into the land occasionally, but they got at them with their trawls, and dispersed them altogether.

34,244. Suppose there was an end put to the trawl-fishing, would there be the same objection to the winter fishing then?—I do not approve of winter fishing here.

34,245. Not at all?—No.

34,246. Has it not been a loss to you that you have not been allowed to fish for bait or for food in the winter time?—I say nothing about that. I do not follow any other kind of fishing except herring-fishing.

34,247. Then is the loss of bait no loss to you?—No.

34,248. You are not a regular fisherman all the year round?—No.

34,249. Do you follow some other business?—Yes.

34,250. Have you anything to bring before us in addition to what has already been stated to us by the other witnesses?—I have to state that I am very much against trawling altogether.

34,251. What is your reason for being against it?—Because I think it destroys the drift-net fishing.

34,252. Does the summer trawling in your opinion destroy the drift-net fishing?—Yes; in more than one way it does so.

34,253. Will you tell us the different ways?—There is one thing it does, and that is, it chokes up the market. If they get a heavy haul with their trawls, I may be fishing away with my drift nets, and when I get into the market, I shall only be able to get a few pence a hundred for the fish I have brought, in consequence of the market being choked up with trawled herrings. They can sell them much cheaper, because they catch them in a much greater abundance.

34,254. Are theirs as good herrings as yours?—Their herring is sometimes a better herring.

34,255. Are they ever worse?—Yes, they are, because they catch them both small and great; they get all sorts in the trawl.

34,256. Are there small herrings to any great extent caught in the trawls in the summer season?—I have seen them caught small and great. I have seen them too small to be sold in the market, and smaller than any drift net would catch them.

34,257. What are your other reasons for objecting to trawling?—I think it is altogether disadvantageous to the fishing, I think it disperses the fish and scatters them abroad. They do not get the slightest rest; they have no peace. They are not allowed to go along the channel, and when they do come in a bay, the drift men dare not go near hand to them, because the trawl men will cut their nets away or play some mischief with them. All the trawlers I have had to deal with I have found to be very unreasonable men.

34,258. The trawl net cannot be used except where the fish pass along the coast? Does the drift net in any way disperse the shoal?—There is no mistake that it does.

34,259. Then it has the same effect?—Not the same effect; the drift-net gives the fish fair play; it is a different thing to shoot a bird sitting, and to give him liberty to go on his wing; no regular sportsman would fire at a bird asleep.

34,260. Have you any other objection?—That is all I have to state.

34,261. (*Professor Huxley.*) What time do you shoot your drift nets here, is it before sunset?—Not at all, the regular time is when the cutter takes down the flag, then we shoot our nets, but at home there is no such thing, we shoot when we think the herrings will go into the nets.

34,262. Do you ever shoot an hour or two before sunset?—We do actually spoil ourselves some nights, when the fleet is too heavy, by doing so. For instance, if you have a good fishing in a limited spot one night, the fleet will gather there next night, and will not have room to fish. Every man will wish to have the first shot, and frequently by shooting their nets too early, they spoil the fishing for that night totally.

34,263. If you were inclined to shoot your nets two hours before sunset would you do so?—Not at all.

34,264. Why not?—I do not approve of it.

34,265. But there are other fishermen who do it?—Yes, I have seen them do it.

34,266. Did nobody interfere with them for doing it?—I never interfered with them.

34,267. Did you ever know of any one interfering; does the commander of the cutter interfere; is there a Revenue cutter down here?—It is not down here early in the season, but it is up about Loch Fyne, further north.

34,268. Is there anything to prevent a man from shooting his net when he likes?—There is a steamer up in Loch Fyne, well manned, I believe.

34,269. Did you ever know anybody interfere with you down here for shooting your nets when you pleased?—No, I never knew of anybody.

34,270. The trawl nets are always used late at night are they not?—Late at night and in dark weather. In moonlight they are seldom of any use, I believe.

34,271–2. They are never used by daylight?—I do not think they are, they have never been used in daylight to my knowledge.

The witness withdrew, and the inquiry was adjourned until the 13th of August at Peel, in the Isle of Man.

Peel, Isle of Man, Saturday, 13th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

LESLIE LOCKHART called and examined.

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34,273. (*Professor Huxley.*) You are Collector of Customs here?—I am principal coast officer. I do the duties of Collector of Customs here.

34,274. Are all the fishing boats registered in the Customs?—They are not all registered.

34,275. What rules are observed by you for registering the boats?—All vessels carrying cargoes are obliged to be registered, but fishing boats do not register in all cases.

34,276. Are not the boats numbered by the Customs?—They are all numbered in the port but they are not all registered. All the vessels that carry cargo are obliged to have registers. The fishing boats do not all register because they do not take cargoes; they simply fish.

34,277. Still they are all numbered?—Yes.

34,278. So that you are able to give a notion of the total number employed?—Yes.

34,279. How many fishing boats are there here?—170. There are a few old boats that are not numbered, in fact they are useless, but there are 170 boats belonging to the port.

34,280. And can you give us the number of boats belonging to the other ports in the Isle of Man?—Fishing boats?

34,281. Yes.—I am not able to give that accurately. I believe there are none at Douglas or Ramsey to my knowledge.

34,282. How many are there at Castletown?—About 120.

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34,283. How many at Port Erin?—They are included in the return for Castletown.

34,284. And Port St. Mary?—They are included also.

34,285-6. Then are there altogether under 300 boats in the island?—I should say that about 300 will be near the number; that is of boats from 15 tons and upwards—fishing boats. There are a great number of four-oared boats, but they are under 15 tons, and the law does not require them to register under 15 tons.

34,287. Do the small boats have no numbers?—No; they are merely four and two-oared boats, but they go out and fish with long-lines during the winter months.

34,288. Are all the boats engaged in the herring-fishing numbered?—Yes.

34,289. So that you can form a notion of the number of boats employed in the herring-fishing?—Yes.

34,290. Apart from those employed in the long-line fishing?—Yes.

34,291. What is the average tonnage of those boats?—From 16 up to 30 tons.

34,292. Are they decked boats?—There are some which are decked, but the decks are sometimes taken off. They put on decks when they are going to carry cargo during the winter months, but when they fish they take them off. All the fishing boats are half-decked boats. They have a forecastle deck. The crew are under the forecastle, which is simply a shelter for the crew.

34,293. Do the boats carry any particular kind of vane at the masthead?—No, nothing of that sort that I am aware of in particular.

34,294. Do foreign boats fish off the coast of the Isle of Man—French or Dutch boats?—No.

34,295. Do you never see any foreign boats here? No, I never saw any foreign boats.

34,296. Have you long known the Isle of Man?—For about 17 years I have been connected with the Customs.

34,297. Has the number of herring boats increased much within your knowledge?—They have increased at Peel.

34,298. Have they increased in other ports?—I think they have increased in Port St. Mary also.

34,299. Has the tonnage of the vessels increased too?—The boats are of a larger class than they were formerly.

34,300. And are they more expensive?—Yes, they are more expensive.

34,301. What is the average cost of a herring vessel now, with all her nets and fittings?—I am not aware.

34,302. Perhaps some of the fishermen will be able to tell us better?—Yes.

34,303. Are you aware whether the length of the fleets of nets has increased or diminished of late years?—I believe it has increased but I cannot say to what extent.

34,304. Still it has increased?—I believe so.

34,305. Do the Customs pay attention to the size of the meshes of the nets here?—No.

34,306. Does anybody?—There is a Fishery officer who resides in Douglas and attends to those matters.

34,307. He is not in Douglas now?—No, he has gone down to Scotland to attend to a fishing station there.

34,308. Are you aware whether there are any local regulations about the fisheries here—any laws proper to the Isle of Man?—No; I never heard of any particular regulations that affect the fisheries.

34,309. I presume you are not yourself practically acquainted with the fishing?—No.

34,310. (*Mr. Lefevre.*) Is there not an admiral appointed here by the local government?—Yes.

34,311. And paid by the local government?—I believe he is paid out of the harbour fund by the government 5*l.* a-year.

34,312. Does he go out with the fleet of boats every night?—He is master of a fishing-boat, and he generally goes out with them. I have frequently seen him going out.

34,313. Does he give the order for shooting the nets?—Yes. He is in attendance now.

The witness withdrew.

R. Corrin.

Robert Corrin called and examined.

34,314. (*Professor Huxley.*) You are a boat owner here, Mr. Corrin?—Yes, I am.

34,315. And a net manufacturer also?—Yes.

34,316. Have you been long employed in that way?—Yes, for a good number of years.

34,317. How many?—Twenty years as a boat owner and net manufacturer.

34,318. Have you paid any attention to the fisheries?—Yes; I have paid some attention to them.

34,319. Can you tell us what the average cost of a herring-boat is with all its fittings?—With nets included?

34,320. Yes, with everything included so that it might be ready for work?—The cost of a fishing-boat at present would probably be about 240*l.* or 250*l.*, and of the nets about 150*l.*

34,321. A little under 400*l.* for all?—Yes, about 400*l.*

34,322. So as to be ready for sea?—Yes.

34,323. Is that a greater sum than was invested in a boat and nets 20 years ago?—Yes, it is nearly 100 per cent. greater.

34,324. And the capital invested in boats and nets is now double what it was 20 years ago?—Yes.

34,324*a*. And have the boats increased in value?—Yes. Our fleet at present, compared with what it was 20 years ago, including materials, is considerably more than double in value. It is nearly three times more valuable. I should say it has increased three-fold in value at the very least.

34,325. Can you tell me if there are any local regulations here respecting the fisheries?—The only local regulation I know of is, that we have an admiral here and another at Port St. Mary. They are subordinate, I believe, to the water-bailiff, who resides on the island; and if any dispute arises between the fishermen, it is their duty to refer it to the water-bailiff. Beyond that I am not aware of any regulation. I think formerly, the year before the Crimean war broke out, we were favoured with the visits of the Fishery cutter, which attended every year, but since then it has not paid us a visit at all. Perhaps its presence may have been convenient in preventing disputes that might arise from time to time.

34,326. Is there any close-time enforced here?—No.

34,327. What time does the fishing begin here?—About the 1st of June or perhaps the 20th of May.

34,328. What condition are the fish commonly in then?—They are very inferior.

34,329. Are they poor and thin?—Yes, thin and small.

34,330. Where do they get a market for them?—The few that are caught so early are chiefly sold on the island. Very few are exported at that time.

34,331. Is there any large number of boats employed then?—No; there are not so many then. The fleet does not generally go to the fishing until the commencement of June.

34,332. But a sufficient market is obtained for the

fish to make it worth the fishermen's while to catch them ?—I do not think it is of any advantage to them.

34,333. Do you think it is of no advantage ?—Well, these men live on the island and they are poor. They have nothing to do, and when they get into their boats they have a comfortable home and plenty to supply the necessaries of life.

34,334. They must earn that then by what they catch ?—Yes, they must.

34,335. Then it is a certain advantage to them to be able to go to the fishing ?—It is an advantage in one respect, but a disadvantage in another. My own opinion is it would be better for them if they only went after and took the herrings in their prime, but as there is no law to restrain them they will go.

34,336. Do you not think that the fact of their going shows that there must be a certain demand for the fish at that time ?—But if they were got in any quantity they would hardly be saleable at all. If they were sent to the English market they would scarcely pay the carriage.

34,337. Will not the fact that they are not worth anything in the English market operate as a natural check ?—Yes, but only small quantities are taken, and they are able to dispose of them on the island at a comparatively low price. The fish caught later in the season are worth much more money, nearly 150 per cent. more, and the fishing to which I refer has this bad effect : that when the early fish are sent into the market in a bad condition the gentlemen who get them on their tables are so disgusted with them that the result is, when the good fish come in they are not saleable. The consumers have not been pleased with the bad fish, and they think the good fish are as inferior as those which they have had before. The result is that the market is not as good as it ought to be. We are of opinion that the early fishing has a bad tendency in that way.

34,338. (*Mr. Lefevre.*) Have you found the market falling off for the good fish ?—At first we have.

34,339. (*Professor Huxley.*) Is it not the case with regard to all other commodities that the people depend on the quality of the things sent to secure a market ?—Very true ; but if this fishing was not proceeded with so early, but was allowed to rest until the 1st of June, when the fish were caught, they would be much more valuable and would be likely to produce 2*s.* instead of 1*s.*

34,340. Are you in favour then of some close-time being enforced ?—I am, at the commencement of the season.

34,341-5. If you had a close-time enacted what do you think would be the proper limit for it ?—Our late fishing ends about October. It should be a close-time then from October until the 15th or 20th of June.

34,346. Would you prevent all catching of herrings between October and the 15th and 20th of June ?—We have not found it profitable to follow them from October until June.

34,347. If it is not found profitable to practise the fishing does not that operate as a sufficient check without any legislative interference ?—It does to a great extent, but from the middle of May until the 15th of June there is a certain amount of temptation which some of the fishermen cannot resist. There are a few hundreds of fish to be caught of inferior quality, and the boats go out to sea in order to catch them, and although it does not pay them, yet they are well fed in the boats, the stores being taken out of the gross earnings. They are employed during that time and they are well fed, and there is, therefore, a strong feeling which induces them to go earlier than it is profitable for them to go.

34,348. How are the arrangements made between the fishermen and their employers; are the boats the property of the fishermen, or are they generally the property of employers ?—Both.

34,349. Do you know what kind of bargain is made between the employers and the fishermen ?—Most of the boats are on shares ; there may be eight owners or only one, and the fishermen may own two, three, four, or five, or even the whole out of the eight. They have 20 pieces of net which count as 10 shares ; each man has one share—has his own share. There are seven men and a boy, which make seven and a half shares. Then the boat takes two shares and a half ; that, with 10 shares for the net, makes altogether 20 shares ; that is about the rule, there may be a few over or a few under. The earnings are divided into 20 shares.

34,350. That is the gross earnings ?—Yes.

34,351. Are the stores first taken out of the gross earnings ?—Yes, the nets then get 10 parts, the crew seven and a half, and the boat two and a half.

34,352. If the men commence too early do they diminish their own profits ?—Yes, I think they do.

34,353. But they get the benefit of it nevertheless ?—They get some slight benefit, but if the earnings are not equal to the expenditure for the time being, there must be a loss.

34,354. Then would you have the close-time from the beginning of October until the middle of June, or somewhere thereabouts ?—What I should like to see is this, that none of our boats should be allowed to proceed to the sea for the herring-fishing until the 15th or 20th of June. I would allow the winter fishing to guard itself, but I think it would be to the interests of the fishermen themselves if they did not go to sea to the herring-fishing earlier than the 15th or 20th of June.

34,355. But suppose the herrings should make their appearance in large quantities on the coasts of the Isle of Man, as they do in other parts of the British Islands in January and February, would you prevent them from going out ? There are many parts of the British Islands where they appear in large shoals at that time. Would you think it proper to stop them from fishing then ?—By no means.

34,356. You would not wish to have any close-time that would prevent that ?—No.

34,357. In what condition are the herrings when they are first taken here ?—They are very inferior.

34,358-9. Are they fat fish ?—No, they are very thin.

34,360. What time do they become fat ?—About the middle of June.

34,361. When do you get them full ?—From the month of September on to October ; they go on to the banks then in a full state to spawn.

34,362. Whereabouts on the coasts of the island do these fish spawn ?—I believe the fish that are off here spawn off this district. My own idea is this, that there are different shoals of fish about the island which localize themselves in different districts in the water. There is a shoal of fish that inhabits the waters of the bay here and we find that class of fish every year ; we go round the island to the Tower and we find a different class of fish. A few miles to seaward and on towards the Calf of Man, we have the largest class of fish that frequents this part ; they are found along the different reefs of coral, and we believe that they go on those beds of coral and spawn there. When we go round to the Douglas fishing, at the commencement of September, we get another description of fish, different in flavour, colour, and size.

34,363. Do you get any fish off Douglas now ?—We are commencing to get them there now.

34,364. But you do not get them as early as you do here ?—No, those fish come in from extreme points off the mainland from St. Bees on the one side and Holyhead on the other. There is little or no coral to be found in all that district, and they come in to the coral at Douglas being the nearest beds for them. Nature has given them sufficient instinct

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to teach them that that is the place to go to for spawning, and as I have already told you there are a far larger class of fish there, but it is difficult to get at them in consequence of the coral.

34,365. The fishing you practice is drifting on the surface principally ?—Yes.

34,366. When they begin to spawn do you sink your nets ?—Not always; they do sometimes to fathom the bottom.

34,367. Do they do that on the other side ?—At Douglas, but they do not do it here.

34,368. Do you get spent fish on both sides of the island ?—I dare say they do; but as soon as they fail to get first here they go round to Douglas. The water is very deep here, there are few places where they spawn in this locality. They spawn off Douglas on the large coral reefs, and I think that is all our fishermen know about them.

34,369. Has there never been any winter fishing here for herrings ?—No.

34,370. Nor any signs or appearance of herring at that time ?—Frequently in those months we get herrings out of the belly of the cod and other fish.

34,371. Do you see any flights of gulls or gannets after the fish ?—We do see gulls here; they breed here.

34,372. But they are not after the fish as they are when the herrings come ?—No.

34,373. Is it a matter of fact that nobody has practised the winter fishing here ?—Yes.

34,374. What becomes of the herrings which are taken on this part of the coast at the summer fishing? —They are chiefly sent off to England.

34,375. Do they go fresh or are they cured ?—Some are sent away in a fresh state, and some with a little sprinkling of salt over them.

34,376. How are they conveyed ?—By steam vessels and by sailing cutters.

34,377. What is the chief market to which you send them ?—To Liverpool.

34,378. Is there a market in Liverpool for any quantity that can be caught ?—Yes, I think there is.

34,379. Are any of them cured?—Only very few of them.

34,380. Are they similar in quality to the Loch Fyne herrings ?—Yes, they are very similar.

34,381. What becomes of those which are caught at Douglas ?—They are chiefly cured.

34,382. Are they made into red herrings or cured? —Both.

34,383. Is it by reason of that that you have a Fishery officer here ?—I think so.

34,384. Have you ever cured herrings yourself ?—No.

34,385. Is the brand given here ?—No. It is used at Douglas, I think.

34,386. Is there much line-fishing practised here ? —There is a great deal.

34,387–8. In the winter time ?—No; in the spring of the year, commencing at the latter part of January. There is line-fishing also here by small boats during the entire winter. As soon as the herring-fishing season is over they put their long-lines on board and go out to sea and they follow that fishing until January. It is what our men call the low-sea fishing. By the end of that time they draw their small boats up and go out to the deep-sea fishing—cod-fishing—with larger boats.

34,389. What do they catch principally in the long-line fishing ?—Cod.

34,390. Any haddocks ?—Not many haddocks, but they do catch a few.

34,391. Was there ever much haddock-fishing here ? —Some years there has been, but it has been chiefly carried on with hand-lines.

34,392. Have you any reason to believe that the haddocks have fallen off here ?—Yes, and the cod-fishing for many years. We have not had much for a dozen years or so. In former times, in some years, we had great quantities of them.

34,393. Is there any trawling off the coast here ?—Not immediately off this coast.

34,394. Is it a bad bottom,—a rocky bottom ?—Yes.

34,395. (*Mr. Lefevre.*) Is there any trawling off Douglas ?—Yes, a good deal from Liverpool.

34,396. (*Professor Huxley.*) Where do the trawlers come from ?—Liverpool chiefly, and also from Whitehaven.

34,397. (*Mr. Lefevre.*) You recollect the fishing here for 20 years ?—Yes.

34,398. Has the quantity of fish taken increased ? —I do not think it has.

34,399. You do not think that the whole quantity of fish taken has increased ?—I doubt if it has. If you take the average of 20 years I do not think it has increased.

34,400. Then does each boat catch a smaller quantity than a boat would catch 20 years ago ?—No, I think not.

34,401. The whole bulk is not greater than it was ? —I think not.

34,402. When did the spring fishing commence ?— The cod-fishing do you mean ?

34,403. No, the herring-fishing. When did they begin to fish, was it in May ?—They did not begin to do that until about 14 years ago. There was a close-time many years ago. I think about 35 years ago. Then the fishing did not commence until the 15th of July, I think.

34,404. Was that by law ?—Yes.

34,405. Was that law repealed ?—I do not know, but it was obsolete at any rate.

34,406. Does the law still exist, but has become obsolete in practice ?—Yes.

34,407. Has there been any petition from the seamen to the Tynwald to enforce that law ?—Not that I am aware of.

34,408. Until 12 years ago was it fairly enforced ? —I am not sure that it was. I am rather inclined to believe that it has not been enforced during my memory.

34,409. I think you said that the admiral was appointed by the water bailiff ?—Yes, I think he is.

34,410. Is he paid out of the funds of the Island ? —I believe he is.

34,411. Then in former times did he give instructions to the fishermen to prevent them from going out before the time fixed for commencing the fishing ?— The regulations respecting the admiral are all embraced in the statute which now lies before you. The admiral receives the small sum of 5*l.*, and the vice-admiral 3*l.* The admiral is appointed over the Peel district, and the vice-admiral over the south district. Their duties are almost nominal, but the regulations are derived from that statute.

34,412. I see there is a clause in this Act of the Tynwald to this effect: "And lest that some person "should be too forward to fish before the fish well "ground about the land, and so might frighten it "away, it was also provided that no person or persons "whatsoever should attempt to shoot for the fish till "after the 16th of July, which then was propounded to "be the season for such fishing." Is that the clause to which you refer ?—Yes.

34,413. You say that regulation has now become obsolete ?—Yes; but that date, the 16th of July, is the old style; it is now the 5th of July.

34,414. The fishing begins now three weeks sooner than that ?—Five or six weeks sooner.

34,415. Do any boats come from a distance before the 5th of July ?—Yes, but not before the earlier

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period, the middle of May. The Cornish fishermen come down on the 9th or 10th of June.

34,416. Then those who commence before June are not confined to the island?—No, the whole fleet commence before that time.

34,417. Can you tell us at all what the authority of the Tynwald is over the sea adjoining the coast?—I am not prepared to say what it is, but I suppose the statute will explain it.

34,418. Has it any effect over the fishermen who come from England?—I am not prepared to say. A difficulty has arisen, and I believe that is the reason that the statute is inoperative.

34,419. How long is it since boats came from a distance to this island to fish?—Do you mean the Cornish boats and the Scotch boats?

34,420. Yes.—Before my time, 30 or 40 years ago.

34,421. Have they much increased of late years?—Yes. We have now 200 sail down the Channel.

34,422. Twelve or 14 years ago were there a considerable number fishing?—Yes; perhaps 100 or 150 sail.

34,423. Have they increased relatively more than the boats of the island?—I do not think they have. I think the increase is about the same.

34,424. Do you think the fact of the law becoming obsolete has had any effect upon the number of boats which come from a distance to fish here?—I think it has.

34,425. Namely, the difficulty of enforcing it?—Yes.

34,426. Enforcing it against strangers?—Yes.

34,427. Do the boats coming from a distance pay attention to the orders of the admiral with regard to shooting the nets at night?—They are supposed to do so.

34,428–9. But do they in fact?—I am not able to say. I am not often on the fishing-ground, and I am not prepared to answer the question.

34,430. Is there any regulation as to the size of the mesh?—There is.

34,431. Is that regulation attended to here by the fishermen?—Yes, it is.

34,432. Have you found that there has been any falling off in the size of the mesh of late years?—I am not aware that there has been.

34,433. You are a manufacturer of nets yourself?—Yes.

34,434. Are they all of the same size as formerly?—Yes.

34,435. What is the size they are ordered?—About 32 rows to the yard, but they gradually shrink to 33, 34, or 35, according to age.

34,436. Is there any demand for herrings early in the season for bait for catching the cod?—No, not here.

34,437. Do they not use the herring for bait?—No, they do not.

34,438. Is there any increase in the price you get for the fish now compared with what it was 20 years ago?—I am not sure that there is any difference; I think they are rather lower.

34,439. They are rather lower?—Yes, I fancy so; but it depends on circumstances. If there is a great take for two or three days in succession the market becomes depressed, but if the fishing is more slight then the fish are more valuable.

34,440. Since the introduction of steam is the supply more regular than it was?—Yes.

34,441. How do you account for the fact that, a considerably larger capital being invested in the fishing and the price having fallen, the quantity of fish taken is not greater than it was?—The presumption is that the fish are scarcer than they were 20 years ago.

34,442. Are the wages paid to the men the same as they were formerly?—They chiefly work on shares.

34,443. But on the average do the men make as much as they did?—I do not think there will be much difference. There is a great deal more nets used. Twice the number of nets are used that were used 20 years ago.

34,444. I understand you to say the whole capital invested has nearly trebled in the course of 20 years?—Yes.

34,445. And the number of foreign boats has doubled?—Yes.

34,446. And the price of fish is lower?—Yes, if anything, but there is not much difference.

The witness withdrew.

ROBERT JOHN MOORE called and examined.

R. J. Moore.

34,449. (*Professor Huxley.*) You are the chief authority here, I think?—I am high bailiff or chief magistrate of the town.

34,450. What are the limits of the authority of the Tynwald at sea—how far does it extend?—I think three leagues from the land.

34,451. Three leagues?—Yes, nine miles.

34,452. Then is that authority exclusively confined to natives of the soil of the Isle of Man, or does it extend over other British subjects fishing within these waters?—It ought to extend to all, but the difficulty is to bring it home to them. That Act to which you have referred is inoperative in consequence of the difficulty of bringing the question home to foreign vessels.

34,453. (*Mr. Lefevre.*) A question of jurisdiction has arisen, I presume?—Yes.

34,454. (*Professor Huxley.*) There is this difficulty, the Act of the Tynwald enforces a close-time up to the 16th of July?—Yes.

34,455. Now, I hold in my hand an Act of Parliament to carry into effect a Convention between Her Majesty and the King of the French which affects all British subjects, and the 27th article states, that "the fishing is free all the year round"?—Yes.

34,456. I do not know if this particular difficulty has ever arisen, but it clearly might arise. If under the Convention a French fishing vessel came and fished in your waters at the time the Act of the Tynwald forbids your own fishermen to fish, what authority would the Tynwald have to carry out that regulation?—No doubt there would be great awkwardness if such a case did arise. The Act of Parliament would override the insular act, provided the Isle of Man is named in it.

34,457. (*Mr. Lefevre.*) Not otherwise?—No.

34,458. (*Professor Huxley.*) Then unless the Isle of Man were specially named in the Act you think the authority of the Tynwald would predominate?—We hold in the Isle of Man that unless the Isle of Man is specially named in an Act of Parliament we are not bound by it; that has been held over and over again.

34,459. Is it your impression that under the authority of the Tynwald you could expel a foreign fisherman and prevent him from fishing within three leagues of your coast?—We should be glad to do so, but there is great difficulty and doubt whether we could do so.

34,460. Would the difficulty and doubt be so great?—Yes, so great that no authority in the Isle of Man would attempt to enforce the regulation.

34,461. (*Mr. Lefevre.*) Is the water bailiff here?—No, he resides at Ramsey. He is the sole judge of the Admiralty Court.

34,462. Does he appoint the admiral and the vice-admiral?—Yes.

34,463. Have any penalties under this Act been enforced against the fishermen?—Yes.

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34,464. In the Water Bailiff's Court ?—Yes.

34,465. With regard to the time of shooting the nets ?—Not in my time with respect to the time of shooting the nets.

34,466. But with respect to disputes among the fishermen ?—Yes.

34,467. Cutting away one another's nets, and so forth ?—Yes, constantly.

34,468. Do you recollect any case of a penalty having been enforced 12 or 14 years ago, before this Act became obsolete, with regard to close-time ?—No, I do not. It was not in my time. I think there were two suits, though, two years ago before the water bailiff by the admiral for shooting before sundown.

34,469-70. Where was that ?—At Port St. Mary.

34,471. Has there been any petition on the part of the fishermen with regard to close-time ?—There has been no petition that I am aware of, but the general impression is it would be very desirable and beneficial if they were prevented from going until about the time mentioned by Mr. Corrin.

34,472. Do you think the 5th of July too late ?—Yes.

34,473-4. Would considerable hardship be inflicted by enforcing that ?—Decidedly, there would be a great loss ; but I think there ought to be a time limited, and I think the most intelligent fishermen are of that opinion, namely, that they ought to be restricted.

34,475. There is a regulation as to not fishing from Saturday morning until Sunday night observed here ?—Yes.

34,476. Is it observed by foreign boats ?—Yes.

34,477. Do the foreign boats pay attention to the regulation as to shooting at sunset ?—I think they do.

34,478. Do you know whether any question has arisen with respect to them before the water bailiff ?—I am not personally aware that any question has arisen. The admiral will be able to answer that question.

34,479. (*Professor Huxley.*) I suppose that this regulation about not fishing before the 5th of July must have been made by the Tynwald after careful consideration ?—Yes.

34,480. And after the interests of everybody had been considered ?—Yes, but it is 250 years ago.

34,481. Then it is to be assumed that at that time it was considered by practical men to be an exceedingly necessary resolution, and that, therefore, it was made law ?—Yes.

34,482. Nevertheless it turns out either that matters have so much changed, or else that the necessity of the case was so much mistaken, that such a regulation would be injurious ?—It would be injurious certainly.

34,483. I will put this case to you. Suppose that legislation were to take place now, based in the same way, upon the best opinion of persons practically engaged, is there not a possible risk that they might be as far wrong 100 years hence as those who framed this law were ?—Yes.

34,484. Is that not one of the great dangers of legislating on matters of this kind ?—Yes, it is.

34,485. It is quite clear that in this case it would be extremely injurious to enforce the law ?—Yes, there cannot be two opinions on that subject.

The witness withdrew.

T. Quirk.

THOMAS QUIRK called and examined.

34,486. (*Professor Huxley.*) You are admiral of the fleet at Peel ?—Yes.

34,487. Is your jurisdiction confined to Peel or does it extend to the rest of the Isle of Man ?—It extends all round the island, wherever the fish are to be got.

34,488. Your jurisdiction extends over the whole fishing of the Isle of Man ?—Yes.

34,489. Will you tell us what your duties are ?—When there is any notice necessary to be given to the fishermen, as there was three or four weeks ago, I send the bellman round to give such notice, so as to let them know how they are to fish.

34,490. The first thing you do is to give notice to the fishermen ?—Yes.

34,491. When it is a proper time to fish ?—I do not do that, but I let them know when is the time for shooting their nets. They have to shoot their nets about sunset, and my commission is not to let any man shoot his nets across the nets of another man, or to cut the nets, or do any harm. I also require them to give civil answers at sea.

34,492. Do you regulate the arrangements for the fishing ?—I have been a long time fishing myself.

34,493. Do you give orders to the fleet under you as to when they shall begin to fish ?—No, I cannot do that.

34,494. How long before sunset do you allow them by your authority to shoot their nets ?—Just at sunset I hoist a flag, and lower it when the time has arrived for shooting the nets.

34,495. Do you keep your flag up until it is sunset ?—Yes.

34,496. And then you haul it down ?—Yes.

34,497. And after it is hauled down they are allowed to shoot their nets ?—Yes.

34,498. If any man shoots his nets before your flag is hauled down what do you do with him ?—I can punish him if I like.

34,499. In what way can you punish him ; can you fine him ?—I can summon him before the water bailiff.

34,500. And make a complaint against him ?—Yes.

34,501. After you have made a complaint what does the Water Bailiff do ?—He gives judgment against the fisherman.

34,502. Does he fine him ?—Yes.

34,503. Can he seize his boats and nets ?—I am not sure of that, but if the men do shoot their nets before sunset they are the cause of all the damage that is done.

34,504. Is it an injurious practice to shoot nets before sunset ; do you think that it hurts the fishing ?—Yes, I do think so.

34,505. Do any of the fishermen wish to shoot their nets before sunset ?—Yes, some of them.

34,506. How long before sunset ?—If there is not anyone there they will shoot their nets an hour or half an hour before sunset.

34,507. How long have you been admiral of the fleet ?—For 30 years.

34,508. How many people have you brought before the water bailiff during that time for shooting their nets before sunset ?—I am not sure how many.

34,509. Half a dozen ?—I dare say I have.

34,510. Have you had occasion to bring up people for other misdemeanours, such as fouling each other's nets ?—If they did that I should bring them before the water bailiff.

34,511. How do you find out who does the damage ; do you ply about in a small boat among the fleet ?—No.

34,512. Do you engage in fishing yourself ?—Yes.

34,513. Then you cannot tell who does the damage ?—No ; but they can tell themselves.

34,514. Do you prefer their complaints to the water bailiff ; they could do that themselves if they liked, could they not ?—Yes ; but I bring them before the water bailiff.

34,515. You do not seem to have very much to do in your office of admiral ?—Sometimes I have.

34,516. You are not a very severe commander ?—No.

34,517. Is your office a paid office ?—Yes.

34,518. What is the pay attached to it ?—*5l.* a-year.

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34,519–20. (*Mr. Lefevre.*) Have you ever summoned any of the fishermen coming from a distance?—No; some of them were taken up when there was a cutter here.

34,521. A Revenue cutter?—Yes.

34,522. But you yourself never summoned any fisherman from a distance?—No; they come here sometimes and shoot before the Manx fishermen, but they go away again and we can hardly get up with them. They are Scotch boats and boats from other places.

34,523. Do many Irish boats come here?—Sometimes they do.

34,524. Are those boats larger than the Manx boats?—Yes, and larger than the Scotch boats.

34,525. Are the Scotch boats larger than yours?—About the same size; some of them are not so large as the Manx boats.

34,526. Are the people that come from a distance troublesome, do you get any trouble from them?—Some of them are and others are not.

34,527. You have not proceeded against them?—It is hard to get up with them. Perhaps they will be off to Ireland or some other part next day, and we cannot take them.

34,528. You have been engaged for 30 years in the fishing?—I have been for more than 30 years fishing; I have been about 50 years fishing.

34,529. Do you agree with the last witness that the whole quantity of fish taken is not larger than it was?—It is just about the same I think only at the beginning of the season the fish are not as large in size.

34,530. I mean the quantity, not the size; do you think there are more fish caught on the whole now than were caught 20 or 30 years ago?—Some years back, but it is a good while ago; there was a very good fishing about the Isle of Man and Peel, in the big bay as we call it.

34,531. But taking one year with another are there more fish caught now than there were in your early days?—I daresay there are; there are more boats now and the nets are better adapted for fishing.

34,532. Do you work more nets than you were in the habit of working formerly?—Yes, a good deal more.

34,533. Do you agree with the last witness that the price of the fish is not larger than it was?—I have seen the price larger and sometimes less, the price goes up and down.

34,534. But taking the average, is it not larger than it was?—No.

34,535. (*Professor Huxley.*) Do you agree with what was stated to us by Mr. Corrin, that the size of the boats has become greater and the fittings of them more expensive?—Yes.

34,536. What was the class of boat when you began fishing, 50 years ago?—There were no such boats then as we have now going to the fishing; they were smacks with one mast.

34,537. Were they smaller boats?—Yes, they were not as long on the keel as they are now.

34,538. And how was it with regard to the length of the fleet of nets?—We use three times the quantity now.

34,539. And is the number of fishermen greater than it was 50 years ago?—Yes, there are more now.

34,540. Is it a customary thing for fishermen to begin as boys on board fishing-boats and gradually to become the owners of fishing-boats?—Yes, the fishermen become owners of boats.

34,541. They become owners themselves?—Yes.

34,542. So that the capital which has been formed for the increasing quantity of fishing-boats has come out of the fishing in some way or other?—Yes.

34,543. Are you engaged in the long-line fishing at all?—No.

34,544. Not at all?—No.

The witness withdrew.

B. Gregor.

Benjamin Gregor called and examined.

34,545. (*Professor Huxley.*) Are you a fisherman belonging to this place?—Yes.

34,546. How many years have you been fishing here?—I suppose about 28 years.

34,547. Is there anything about the fishing that you wish to remark upon?—I do not know that there is very much. I have nothing to say further than I think that about the 5th of June would be a fair time for the boats to go to the herring-fishing.

34,548. Do you think it would be a good thing to have a restriction as to the commencement of the fishing, and that the fishermen should not be allowed to begin to fish until a certain time?—It would be better in one sense.

34,549. In what sense?—It would be better for them when they began to take any quantity of fish. They would then have a better market for them and a better price; what they have been getting a few years back early in the season has only been doing harm to the market, and getting the fish a bad name.

34,550. The fishermen catch them I suppose because they get some price for them?—Yes, they get some kind of price, that is to say, some do, but others get nothing at all.

34,551. Then why do they go on fishing?—Well you see the way is this, some begin sooner and others do not think it worth while to go after them, the fish are so small then that they go through the nets.

34,552. But surely they would not fish if it did not pay?—I can only say that it does not pay.

34,553. Then do not all the fishermen do it now?—There are two or three boats that do it, but if the whole fleet went out at the same time when those two or three go, there would be nothing at all for anybody.

34,554. Then is it not pretty sure that they will not practise the fishing without any special law on the subject?—I do not know about that.

34,555. What time do you go out yourself?—I went out this year about the 29th of May; I was out with the rest.

34,556. Would you like to see some law or regulation established to prevent the people from fishing before the 5th of June?—Yes, I think it would be better for the fishermen, that is what my judgment is.

34,557. If it would be to your interest to do that, why do you not agree among yourselves not to go out before the 5th of June? You do not find it necessary to make laws to prevent people killing their pigs before they are fat?—No, it would do very well as far as that is concerned, but then there are strange boats that would come here and they would be entitled to go out at any time among the fish; it would be very hard under such circumstances for our boats to be kept in the harbour while the strange boats are all going out receiving the benefit of anything they can get.

34,558. But would they do it if it did not pay them?—It is not likely; I should think not. I have seen at the first of the season, about seven years ago, all the vessels going out and then being obliged to come back again and take their nets on shore and abstain from fishing for another fortnight.

34,559–60. Have you ever seen the fish in May in such a good condition that they would fetch a good price?—No.

34,561. What do you think about the price of the fish, is it the same now as when you began fishing, or is it higher?—Yes, it is about the same; it fluctuates, but it is pretty much the same; it is sometimes more and at other times less, just according to the markets

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34,562. But, on the average, taking one year with another, do you get as much for your fish as when you commenced fishing?—Yes, just about the same.

34,563. On the whole, are there more or less fish caught?—As to more fish being caught I do not think there are.

34,564. And yet there are a great many more boats employed?—Yes.

34,565. And the fishing materials are much improved?—Yes, I went myself to sea not very long since and if I had had the same kind of gear which was used by the fishermen years ago, I need hardly have gone at all. We should hardly get as much as would pay our expenses if we used the old gear. The nets formerly were about 200 meshes deep and 72 yards long.

34,566. Is that each net?—Yes, that is what it used to be.

34,567. And now what is the length?—From 200 meshes deep it has increased to 300 and 400.

34,568. And at the same time the fleets of nets are much larger?—Yes, but at the same time I have seen more fish at one time in one of the smaller nets than I ever saw in one of the big nets.

34,569. If the fish remain at the same price and you get no more, where did the money come from that has gone to pay for the larger boats and larger nets?—Formerly the nets used to run three shares of nets to one man and now there are only two. The net now is half a share and a man is twice as much as a net, while it used to be three nets against a man.

34,570. The point I put to you is this, that if the total quantity of fish taken has not increased, and if the fish has remained at the same price, the total amount of money the fishermen have received year after year must have remained the same?—I cannot say that there is much difference, because the nets we used to have were 72 yards long but there were three of them against a man, but I have had as much fish in one of them as I could get now in the ones we are now using.

34,571. That is to say that the proportion of fish per man has really diminished?—Yes.

34,572. If that has been the case, and the total quantity caught has not increased, and the price has not increased, where has the money come from which has gone into your larger boats and larger nets. That is a difficulty I have at present. I think you must have taken more fish than you think, or otherwise if the fish has always been at the same price one cannot see where the money has come from?—I do not think that any boat has made more money at the latter end of the season for a share then used to be made in former times.

34,573. Has not the whole quantity taken been considerably more?—The nets and men have no larger share, but the number of boats has considerably increased.

34,574. Do you go long-line fishing at all in the winter?—Yes, I have been cod-fishing, but I have not been cod-fishing for the last five or six years.

34,575. What sort of bait do you use?—What we call mud lugs. They are a kind of whelk, or buckie as they call them here.

34,576. Do you get that bait in plenty?—Yes.

34,577. Is it better than herring bait?—We have no herrings at the time of the codfish.

34,578. Do you never use herrings then?—No.

34,579. Is the bait you use better than mussels?—Yes.

34,580. Do you ever use mussels for cod bait?—Yes.

34,581. Do you think that whelk is better than mussel?—We could not supply ourselves with a quarter of the quantity of mussels we should require here.

34,582. Is there any oyster-fishing off this coast? No.

34,583. None at all?—We have sometimes got some when we have been out here dredging for scollops when the haddocks were here. Sometimes then a man would dredge for oysters, and would perhaps get a dozen, or fifty, or something like that, of big oysters.

34,584. Did you use the scollops for bait?—Yes, for haddock bait.

34,585. Were they better than anything else?—Yes.

34,586. Has the haddock disappeared?—Yes, for a good many years now.

34,587. Was it ever found in great quantity off this island?—Yes.

34,588. How many years is it since it disappeared?—I suppose it would be in the teens of years now, 12 or 15.

34,589. Have they gone further out to sea, or what has become of them?—They have gone off the coast altogether.

34,590. You cannot get them now?—It is five or six years since we got any great quantity at the south of the Maughold Head Edge, but there are not many got here at all. Formerly I have seen great quantities here.

34,591. Is there any lobster-fishing about the coast here?—Yes.

34,592. Is there any considerable quantity of lobsters obtained?—No; they do not follow it up.

34,593. Do they catch the lobsters with lobster pots?—Yes, with cages.

34,594. Do you think it would be a productive fishery if it were followed up?—No, I do not think so.

34,595. Why not?—They are not very plentiful. Sometimes they get five or six, and sometimes only one or two.

34,596. Is there any crab-fishing?—Yes.

34,597. Is there much of it?—Not very much.

34,598. Then the great fishing here is the herring-fishing?—Yes; herring and cod.

34,599. Where do you get the cod in the greatest abundance?—We begin first to shoot half a mile and from that to two or three miles off.

34,600. On this side of the island?—Yes; that is for the small codfish, then when we commence the large cod-fishing we go about five or six miles off.

34,601. In what months do you follow that fishing?—In the months of February, March, and April.

34,602. Do you fish for them with long-lines or hand-lines?—Long-lines.

34,603. Has the length of those lines increased since you were first acquainted with the fishing?—Yes.

34,604. And also the number of hooks?—Yes.

34,605. Do you catch about the same quantity of cod or more?—Some years they do and in other years they do not get so much.

34,606. Taking one year with another has the cod fallen off on the whole?—It has not been so plentiful for the last two or three years as I have known it.

34,607. How many boats go to the cod-fishing?—Sometimes seven go out from here.

34,608. Not more than that?—No, and there are five big boats. Perhaps a dozen of the small boats will go.

34,609. Out of the port of Peel?—Yes.

34,610. How many go from the other ports?—From the other ports sometimes a score may be going after the big fish.

34,611. Are they large boats?—Yes.

34,612. So that there may be as many as 60 or 70 boats fishing?—No, not so many as that; perhaps between 20 and 30.

34,613. (*Mr. Lefevre.*) Is there any mackerel-fishing here?—No, there is not much mackerel-fishing; there is only what they catch in the nets sometimes.

34,614. In the herring-nets?—Yes.

34,615. Have you no boats that go out fishing for mackerel?—No further than that the fishermen may go out to catch some for bait.

34,616. For what do they use them as bait?—They use them to catch what we call carp.

34,617. Is that in the spring of the year?—In June, July, and August.

34,618. (*Professor Huxley.*) Have you noticed that a good herring season is followed by a good cod season?—No, I never noticed that.

34,619. Can you tell me what it is they call here the "veeskaddin"?—Some make it out that it is a herring or rather the herring fry.

34,620. Is it a smaller fish?—I have seen two kinds of that fry; there are some small and others four or five inches long. They are in shape like a herring. I have seen them tangled in one of the slack threads that may be found in a new net.

34,621. Some of them are four or five inches long?—Yes.

34,622. Did you ever find them in the stomachs of the herring?—No I cannot say that I ever did.

34,623. (*Mr. Lefevre.*) Where do you find the herring early in the season?—Out off here.

34,624. Just off this port?—Yes.

34,625. And later on in the season do you find them further down the coast?—No, we find them much on the same ground, but they shift according to the times of the tide.

34,626. Do the two tides meet here?—No. I mean the spring and the neap tides. We have them at the full and at the change here.

34,627. Do not the two tides coming down the Channel meet off here?—Yes, at the Contrary Head, about a mile from here.

34,628. Does that affect the fish?—I do not think it does.

34,629. Do you lose many nets from bad weather?—Yes.

34,630. Where do you run to when you have a north-westerly wind?—Sometimes we have to run to the other side of the island.

34,631. To Port St. Mary?—Yes.

34,632. And when you are at Port St. Mary do you find a strong tide against you and a difficulty in getting back?—Yes, I have seen some of the boats lost in trying to go forward.

34,633. Going round the Calf of Man?—Yes, one or two have been lost in some years.

34,634. Would it be a great advantage to the fishermen here to have the harbour at Port Erin improved?—Yes it would.

34,635. They would not be obliged then to run down by Port St. Mary?—No.

34,636. The harbour here is hardly large enough? No, it is difficult to come here in a gale of wind.

34,637. And Port St. Mary is much exposed?—Yes.

34,638. Are they going to improve the harbour here?—Yes.

34,639. Do you think you could take more fish if you had better harbours for your vessels?—Yes, we could get to sea more nights, whereas now we are obliged to remain in port.

34,640. Do you think the fish are here in great quantities if you could only get out to catch them?—Generally there are more fish on the other side than there are out here, and they are closer to the land.

34,641. Where is that?—At Port Erin; they may be got within a mile or two miles of the coast.

34,642. What time do you go round to the other side of the island:—In September.

34,643. After September do you not fish on this side at all?—No. Some years they fish here until October. I saw a very good fishing here on the 10th of October not very long since. It was as heavy a fishing as there was in the whole year.

34,644. On the 10th of October?—Yes, a few years ago.

34,645. But as a general rule you find it more advantageous to fish on the other side late in the year?—Yes, we generally go there to fish then and we find spawn fish. It is ground fish we find there.

34,646. Taking one year with another, do you make as much in wages now as you did formerly by fishing?—Well I think not, in a general way.

34,647. Do you yourself fish all the year round at one kind of fishing or another?—Not now, I did at one time.

34,648. Do you confine yourself now to the herring-fishing?—Yes.

34,649-50. Do you make as much now in the herring season as you did formerly?—Well I do not think that I do make altogether as much.

34,651. What is the difference?—We have more expenses to bear now.

34,652. Do you yourself own any nets?—Yes.

34,653. Do you own a boat?—No, not the whole of a boat, but I own part of one.

34,654. Have many of the fishermen here shares in the boats?—Yes, a good many of them.

34,655. Most of them?—Yes, most have got shares now.

34,656. Do many of the boats belong to the capitalists or do most belong to the fishermen?—I can hardly say, but I think the fishermen have as heavy a share in them as anybody else.

34,657. Twenty years ago do you think that the fishermen mostly owned the boats?—No

34,658. Were they owned by capitalists?—Some of them were.

34,659. Have any changes taken place in that respect during the last 20 years. Do you think the fishermen own more shares in the boats now than they did?—I think there are more fishermen who have shares in the boats than there were when I first went fishing.

34,660. Has this been a good season for the herrings?—No.

34,661. Did it begin early this year?—Yes, it did.

34,662. (*Professor Huxley.*) There are a good many trawlers off the Douglas coast, are there not?—Yes.

34,663. Do any of them put out from Douglas?—Yes.

34,664. How many sail?—I think there are two or three.

34,665. Are they large vessels?—About 40 tons I suppose.

34,666. When you are fishing off the Douglas coast do you ever find yourself interfered with by the trawlers?—Yes.

34,667. In what way?—They come with their trawl ropes across our nets.

34,668. Have you ever suffered any damage from that?—No, but I was with two boats last year and a trawler came right down between two trains of nets but he did not touch them as it happened.

34,669. How do you light your boats at night?—We have a lantern and a man on deck watching.

34,670. Have you only one light or two?—Only one.

34,671. Do you keep it burning all night?—Yes.

34,672. Then the trawlers could see where you were?—Yes; in the case I just mentioned the trawlers went down before dark.

34,673. And he did not get out of your way?—No, that trawl-boat belonged to Douglas.

34,674. Does it often happen that drift-nets are carried away by trawlers in the night-time?—No, not at Douglas; there are not so many of them fishing then.

34,675. But the trawlers that come from the English coast, do they get much in your way?—No, not very often.

34,676. What is the character of the bottom where you are fishing for herrings; is it a soft bottom fit for trawling?—It is a gravelly bottom and there are coral reefs.

34,677. Can the trawlers work over the coral ground?—Yes, it is a warty coral ground.

34,678. Do the trawlers do you any other mischief?—Some persons say that they break up the coral and disturb the beds at the time the fish are spawning.

34,679. Has there been much increase in the number of trawlers of late years?—No.

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34,680. Have you been able to trace any failure of the fisheries to trawling?—No.

34,681. Do you think that the fishery has not failed?—No.

34,682. There is no evidence that they do much harm?—No further than when they trawl on the ground in the spawning season. They do harm then because they fill their bags full of the spawn.

34,683. Have you ever seen that?—No, but I have heard the men say so.

34,684. Do you think it was herring-spawn they took?—It was fish-spawn.

34,685. But you have not seen it yourself?—No, but I have heard some of the men who have been trawling state that when they were on the beds they had the bags full of spawn.

The witness withdrew.

W. Kelly.

WILLIAM KELLY called and examined.

34,686. (*Professor Huxley.*) Are you a fisherman here?—Yes.

34,687. How long have you been fishing?—For about 20 years.

34,688. What kinds of fishing have you practised; line-fishing?—No, herring-fishing.

34,689. Only herring-fishing?—Yes.

34,690. Do you not fish all the year round?—No.

34,691. Is it usual for fishermen to cultivate land during part of the year and go fishing the rest?—Some of them do.

34,692. Is that your case?—No.

34,693. What do you do when you are not engaged in the fishing?—I am a carpenter by trade.

34,694. But do a good many cultivate land during part of the year?—Yes.

34,695. You heard what the previous witnesses stated with regard to the fishing here?—Yes.

34,696. Do you agree with what they have said?—Yes, what they have told you is near about the truth.

34,697. Have you anything you can tell us in addition?—I don't think I have.

34,698. What do you think about a close-time?—I think it would be good to have a close-time, but all the fishermen should be obliged to observe it. I would not let one fish and close the fishing to others. There are some men who come and fish within eight or nine miles of the place, and I don't think it would be right to allow those fishermen to continue fishing at the time when we are prevented from going to it.

34,699. Would you like to see a close-time?—Yes, but I would not like to have it too close.

34,700. What is your notion of a close-time?—Until about the 10th or 12th of June. That would be time enough to begin.

34,701. What do you think is the use of a close-time?—To enable the fish to grow bigger.

34,702. Why do you take fish if they are not in such good condition and you can get a better price for them afterwards?—Some men will not hold back and then we are all obliged to go.

34,703. Do you compete with one another?—Some wish to go and others do not.

34,704. Do you think that those who go do much harm to those who remain behind?—I can't say; they fish in other parts very early; in Orkney they fish in May, and all round the coast within 60 or 70 miles of here they fish in the month of June.

34,705. (*Mr. Lefevre.*) What time do you yourself begin the fishing?—The 1st of June.

34,706. (*Professor Huxley.*) For how many years have you begun at that time?—Within the last two or three years, that has been the earliest time with me. Formerly we never went before the 7th or 8th, and sometimes the 12th or 13th, until within the last couple of years.

34,706*a*. But the last two years you have been out on the 1st of June?—Yes.

34,707. What was your reason for going earlier?—I went out with the others to catch fish.

34,708. Did you catch fish at that time?—Yes, we did.

34,709. Did you get a fair price for it?—We got from 25*s*. to 30*s*.

34,710. Where were you fishing then?—Off Howth.

34,711. You got that fish not off the coast here but off Howth?—Yes, off that coast, 10 or 15 miles from Howth.

34,712. What time do you come here?—About the latter end of July.

34,713. What time does the fishing begin off Howth?—I don't know; whenever they think they can get fish.

34,714-5. Then as a rule it begins earlier there than it does here?—There is no rule there, each man goes when he likes.

34,716. Do you think that a wasteful destruction of spawn is going on in the bays and creeks around the island?—I don't think there is.

34,717. Is there much seining practised here?—No, I never saw any here.

34,718. Are there any small trawls used in the bays?—No, not about here; they have them in Douglas I believe.

34,719. I am speaking now of trawling here for fish?—No, I never saw any further than the trawl-boats at Douglas.

34,720. Do you mean large trawl-boats?—Yes.

34,721. Do you think they do you any harm?—No, the only harm they do is by taking the young of the herring.

34,722. Have you ever been on board a trawler when the trawl was hauled up?—No.

34,723. (*Mr. Lefevre.*) Do you use seine-nets in the bays?—Yes, I have seen small nets just for trawling on the beach.

34,724. In the bays on this side of the island?—On both sides.

34,725. Do they catch many small fish in them?—I have seen them catch blockins.

34,726. Are they fish large enough for the market?—They would be but they are caught too small; they are six or seven inches long.

34,727. Are there any young turbot?—No, nothing of that sort.

34,728. No mullet?—No.

34,729. Then what other fish?—Blockins, gilpins, flukes, and flounders.

The witness withdrew.

R. Quirk.

RICHARD QUIRK called and examined.

34,730. (*Professor Huxley.*) Have you been fishing here for many years?—I am a fisherman all the year round.

34,731. How many years have you been fishing?—For 27 years.

34,732. Do you do nothing but fishing?—Not a ha'porth.

34,733. Then you maintain yourself entirely by that?—Yes.

34,734. Do you fish for herrings in the summer?—Yes, and for codfish, conger eels, and all kinds of fish.

34,735. What do you think about a close-time; do you wish to have a close-time for herrings?—No,

not at all, I would rather leave every man to his own chance as it is now.

34,736. What is the earliest time you begin herring-fishing ?—I have been out on the 29th of May.

34,737. Have you ever been earlier than that ?—No.

34,738. Do you ever want to go earlier than that ?—That is just according to how we find the fish. If we are out with our long-lines fishing in the deep sea, we have nine or 10 men in a boat who want something to do, and if we see the fish jumping out of the water it is natural that we should go after them. Of course we want to go as early as we can get a fishing.

34,739. What is the earliest date in May that you have seen the herrings in good condition ?—I have seen very good herrings on the 1st of June.

34,740. But I was asking you about May ; what is the earliest date in May that you have seen herrings in good condition ?—We don't see very many of them good in May.

34,741. Then do you not go to the fishing in May as it is ?—We don't make a regular practice of it, but some men go a little earlier than others.

34,742. You go according as you see fish ?—Yes.

34,743-5. But it appears there are some people who fish the herrings earlier ?—Yes, there are some who fish them earlier than others.

34,746. Do you know any fishing as early as the 15th of May ?—I have fished earlier than that, but it is a good many years ago; once I fished on the 12th of May.

34,747. But that is not done generally now ?—No.

34,748. Was there any fishing last season as early as the 15th of May ?—No, I think not. About the 25th or 27th was the earliest.

34,749. If there is no sign of the fish do they not begin as early as that ?—No, they begin as early as they can because they think that a shilling or two earned is as good then as now.

34,750. (*Mr. Lefevre.*) Was your boat one of the earliest out this year ?—No, we were not the earliest. It was about the 1st of June that we went. There were others earlier.

34,751. (*Professor Huxley.*) Do you think that if the fishermen looked to themselves they would not fish too early ?—Yes. The fishermen know when to go to fish. They are not altogether so stupid as not to know what is best for their own interest. I think they ought to know best ; there is no mistake about that. If you were following a trade you would know better what to do than others who were not following it.

34,752. You would rather let things be as they are ?—Yes.

34,753. You would rather let everybody have their chance ?—Yes.

34,754. Is that the general opinion among fishermen ?—Yes ; we should like to have the fishing in our own hands.

34,755. Are you of opinion that if the fish are not in good condition and will not fetch a good price that they would not be worth catching ?—If the fish are good the markets are good, and if the fish are small the markets are not good.

34,756. Is there anything else you wish to bring before us ?—No, except that the trawl-boats in Douglas frequently work over our long-lines.

34,757. Do you fish on the Douglas side ?—Yes; 14 or 15 miles off from the light ship at Douglas.

34,758. What sort of bottom is it there ?—A sandy bottom.

34,759. Do you get cod on the sandy bottom ?—Yes, any amount of cod. Sometimes we fish as far as St. Bees Head.

34,760. Do the codfish generally like a rocky bottom ?—No, a sandy bottom. I think they come to spawn upon the coral beds in January and we begin to fish for them then.

34,761. Is it good ground for trawling over ?—Yes ; the trawlers do us a great deal of harm. One of our linescosts about 2*l.* and we have 10 men in a boat, and they take the lines away as well as annoy the crew.

34,762. Do they carry away anything besides the long-lines ?—Yes, the long-line buoys also.

34,762*a*. The lines are properly buoyed ?—Yes.

34,763. Cannot the trawlers see the buoys ?—Yes, but they take no notice of them. They don't trouble themselves about the buoys. They will not take the trouble to look out, and they will pass over our lines and break them all.

34,764. Cannot you find out who does that ?—We could find them out but it is of no use to do so.

34,765. Have you no means of getting the number ; could you not bring him up ?—That would be of no use.

34,766. Surely if you could bring it home to him you would get a remedy ?—All you would get would be a lot of jaw.

34,767. What do they catch in trawling on that ground ?—Ray, flukes, and several kinds of fish.

34,768. Flat-fish generally ?—Yes.

34,769. Do they get much cod ?—No, them chaps are too wide-a-wake for them.

34,770. Do they get out of the way again ?—I don't know if they get out after they get in.

34,771. At any rate they do not catch much cod ?—No, they got a deal of haddocks formerly ; they have thrown away tons of them.

34,771*a*. Was not the haddock a good fish for them ?—Yes.

34,772. Why did they not take them to port as they caught them ?—They did.

34,773. I thought you said they threw them back again ?—No, bless you. If they get plenty of haddocks they do well.

34,774. Do you get as many as you used to do ?—No, not for years.

34,775-6. How many years is it since they have fallen off ?—About seven years ago, in the month of September, after our boats came home from Douglas.

34,777. What is the reason of that falling off ?—I cannot tell.

34,778. Has the quantity of cod fallen off on the cod banks ?—Yes, they are not as plentiful as they used to be.

34,779. To what do you ascribe that falling off ?—I don't understand it. I cannot tell.

34,780. Is the damage done by the trawlers confined to sweeping away your lines ?—Yes ; they do much mischief in that way.

34,781. Do they damage the bottom ?—Yes, they break the coral beds where the cod and herring go to spawn. They break it all up and tear it away.

34,782. Have you ever seen the contents of a trawl net as it was hauled up ?—I have never been close to them, but I have seen them hauled up from a distance.

34,783. Did you ever see spawn in them ?—No.

34,784. Then what makes you think that they take the spawn ?—They have a beam, perhaps, 50 feet in length, and there is no mistake that that takes up the spawn. It goes across the coral beds and brings the spawn up ; it tears it all away. I have seen plenty of young fish and herring spawn myself.

34,785-6. Is there anything else you wish to tell us ?—I cannot tell you anything else with regard to the long-line or the herrings.

34,787. (*Mr. Lefevre.*) Do you fish for congers ?—Yes.

34,788. Where ?—About the middle of the Channel.

34,789. When do you fish for them ?—Four weeks after we finish the cod-fishing.

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34,790. Are they in great abundance?—Yes, some get good shots and others have them light enough; it is according to the tides.

34,791–2. What bait do you use for the conger?—Bits of himself.

34,793. How many boats go after the conger?—Six or seven.

34,794. How many after the cod?—Seven boats go from Peel, and 14 or 15 from Port St. Mary. They don't come to fish on this side; they go to the Douglas side.

34,795. Have you lost lines?—Yes.

34,796. How often?—Several times.

34,797. What amount of damage has been sustained in that way; how much would they be worth?—About 2*l.* a piece. There are 10 men in a boat and each has a line which costs about 2*l.*

34,798. Have you tried to get the names of the trawlers that have taken away your lines?—As I told you before it would be of no use. I believe they are the biggest blackguards in the world.

34,799. Are they Liverpool boats?—They are English boats.

34,800. Are they numbered?—Yes.

34,800*a*. Have you not tried to take their numbers?—I could not be bothered with them; it is of no use at all.

34,801. How many herring-boats do you think go out as early as the 15th of May?—I don't know of any who go out as early as that. I did not say that they were going out then. Some go out between then and the 29th, but their regular time is from the 1st to the 20th of June.

34,802. I thought you said that you yourself went out this year on the 29th of May?—Yes.

34,803. How many boats went out then?—Very few; two or three. They don't make much of it and most of the fleet remains in.

34,804. Then the quantity of fish taken by them is very small?—They are not so small. There are some marketable and some not.

34,805-9. They do not make a regular practice of it until the proper time?—No, they just go out for a shot or two for trial. The fleet does not go out until about the right time, namely, from the 1st of June until the 20th. Then you will see them all out.

34,810-1. (*Professor Huxley.*) At what time do you generally shoot your nets?—At sunset. There is one thing in connexion with that that I should like to see done away with; some of the fishermen shoot much too early in the night, and frighten away the fish.

34,812. Do you not wait for the admiral?—We wait for the admiral, but there are a good many others who do not.

34,813. Do you think it does harm to shoot your nets before sunset?—I believe that many hundreds of pounds are lost by that.

34,814. How does it do harm?—If you shoot your nets by daylight don't you think the fish would leave the place?

34,815. We want to know what you think?—That is what I think. If you shoot your nets early in the daytime you will find no fish in the water.

34,816. Do you think it breaks the shoal?—I can't say that.

34,817. Are there many persons in the habit of shooting their nets before sunset?—Yes, there is no mistake about that.

34,818. You would not allow them to shoot their nets until half-an-hour before sunset?—No, not if I had anything to say in the matter.

34,819. How long before sunset would you allow them to be shot?—I would not allow one net to be shot until the time that every boat according to the present practice has shot its nets.

34,820. You would not allow them to be shot before dark?—Yes; at sunset, but not before.

34,821. (*Mr. Lefevre.*) I suppose the persons who are damaged by shooting their nets before sunset are the fishermen themselves?—Yes, I believe that they lose a good deal of money by it. Fishermen are anxious to get their fleets of nets into the water, but I believe we lose more than we gain by departing from the rule.

34,822. Would you prefer shooting at sunset?—Yes.

34,823. You do not think it is advantageous to you as fishermen to shoot before sunset?—No.

34,824. Are there others who think that it is more advantageous to them to shoot before sunset?—Yes; I think there are. You don't seem to have a bad idea of it.

The witness withdrew.

F. L. M. Gelling.

FREDERICK LA MOTTE GELLING called and examined.

34,825. (*Professor Huxley.*) Have you been a practical fisherman?—I have not. I am an advocate, but I have been paying attention to the fisheries for some time back, and have been endeavouring to direct public attention to them.

34,826. How many years have you been paying attention to the fisheries?—All my lifetime. I was brought up partly in this town, where I was accustomed as a little boy to fish in a small way. I have paid attention all my time to the fisheries.

34,827. Is it your opinion that the fisheries are falling off; is the yield diminishing?—There are some seasons in which it has been bad indeed. I attribute that to the fisheries not being properly protected.

34,828. What mode of protection would you suggest?—I would have a close-season.

34,829. For all kinds of fish?—Yes; when in certain stages of spawning they should have protection. I have a letter here which I published in the "Manx Sun" on that very subject.

34,830. Would you apply that rule to the herrings?—Yes; I would enact a close-time for the herrings at least until the 14th of June.

34,831. On what ground would you do that?—On the ground that when the fish come here they are not in a state of perfection. In fishing them much at that time you would be apt to startle the fish and cause them to leave the coast.

34,832. Would you protect the fish during the time they are spawning?—Yes.

34,833. Are you aware that the herrings are not spawning then?—Yes, I am quite aware of that. They are only young fish not come to maturity.

34,834. If it is necessary to protect the fish when they are spawning would it not be necessary to enact a close-time which should be in operation when they are spawning?—Yes.

34,835. Then you would have another close-time in August?—Yes, when the season of spawning is on. When they are caught in August they are full of spawn; the spawn falls from them. It is not raised up with the fish but detaches from them.

34,836. Are you aware that fish are caught in Scotland in enormous numbers in that very spawning season, and that that is the condition upon which the full Crown brand is attached to them?—I may be wrong, but I attribute the falling off to that.

34,837. What I wish to put to you is, whether you consider that there is evidence that the catching of fish in that state does any harm to the fisheries, seeing that it has been going on the east coast of Scotland for a great number of years?—Yes, on the same principle that killing a laying hen would destroy the brood. I attribute the diminution here to that cause. I cannot say anything about Scotland; I am not acquainted with the fisheries there.

34,839. You heard the statements of the fishermen who have been called before us?—Yes, I heard their evidence.

34,840. They do not speak of any falling off; they say that the average catch is about the same?—I think a few years ago the catch was larger.

34,841. But taking one year with another the herring-fishing is very variable everywhere?—Yes.

34,842. But the average catch here has remained pretty much the same for some years?—That may certainly be, and yet the average catch might have been greater if the fish were protected at the proper time.

34,843. It has been stated to us that the fisheries have fallen off, and if such be the case we must endeavour to ascertain what the cause of the decrease is; but the evidence brought before us does not seem to show that the fishery has fallen off. You have heard the evidence which has already been given?—Yes.

34,844. As a matter of fact it does not show that there has been a falling off?—It stands to reason that if you destroy the spawn you diminish the quantity of fish.

34,845. Whatever may stand to reason it seems to be the fact that the fishery has not fallen off?—Yes, I believe so.

34,846. It is rather premature to seek the cause of a falling off when the falling off does not seem to exist?—Yes. Do you limit your inquiries to the herring-fishing alone?

34,847. No, it extends to all kinds of sea fisheries?—Then there is a salmon fishery.

34,848. We have nothing to do with the salmon fishery?—There is also an oyster fishery.

34,849. Are you of opinion that the other fisheries have fallen off?—Yes; the haddocks have very much decreased, but I don't know the cause of that. I remember that not many years ago, perhaps seven or 10 years ago, there were excellent takes of haddock, and most excellent fish they were, next to the whiting. There is another circumstance of great importance to the fisheries. A breakwater is now being constructed at Douglas, and greater takes of whiting have been got there than we have ever known before. Everybody says that that is owing to the breaking up of the ground which enables the fish to get the little animalculæ there.

34,850. Do you think that trawling is injurious?—Yes.

34,851. On what ground do you think that it is so?—On the ground that it is injurious to the young fish. I have seen a trawl-net hung up to dry. I have seen a number of small worthless fish and small flukes not worth collecting lying under the nets. They were so small that they would not be worth taking home. They were left there to waste.

34,852. Has trawling been going on in the bay of Douglas for any length of time?—Yes.

34,853. Is there the same number of trawlers there now that there was in former times?—I don't know. I have lived in Castletown for many years.

34,854. Is there any trawling on that side of the island?—No, I think not.

34,855. (*Mr. Lefevre.*) Is there any ground for trawling on this side of the island?—No, the trawling is principally at Douglas.

34,856. You are aware that soles are supplied mainly by the trawlers?—Yes.

34,857. Would there be any other method of supplying the market with soles if trawling were stopped?—I think not.

34,858. Is that a considerable article of consumption in this island?—Yes, they always fetch a high price.

34,859. Do you think the destruction of other fish is so great as to counterbalance that advantage?—I think so. They destroy quantities of small fish and I think they are sold by the measure.

34,860. Do the poor buy them?—Even the poor will scarcely buy them; I have seen them almost altogether wasted for want of a purchaser. They were so small that they were sold by measure. I have seen quantities of such fish brought to the market, but how they had been caught I am not certain.

34,861. When you used the word trawling just now did you mean the seine-nets or beam-trawl?—I don't think that there are any seine-nets here.

34,862. Then you spoke of beam-trawling?—Yes, I mean trawling on the beach.

34,863. Then what you mean is not beam-trawling?—What I refer to is trawling in the bay. They take a lot of small fish on shore which are considered almost worthless.

34,864. Is that largely practised in the bay of Douglas?—I cannot say; I was never out with a trawler at all.

34,865. Then what you object to is in reality shore seining; is that largely practised here?—Not very much; but I know that it is practised.

34,866. Do you think that in the limited extent to which it is practised it has done harm?—Yes, I do. I have heard fishermen complain of it in Castletown In that town you will be able to get a good deal of evidence on that subject from experienced fishermen. I will hand you in a newspaper published in May 1849, which gives a report of an inquiry on that very subject.

34,867. Did any legislation take place in consequence of that report?—No, it was never followed up.

34,868. This inquiry was as far back as the year 1849?—Yes.

34,869. Was it not followed up because the legislature did not think a case had been made out?—No, it was not pressed; it fell through in some way.

34,870. Has nobody taken it up since?—Nobody that I am aware of.

34,871. Then the fishermen themselves do not seem to be aware that their interests are so much damaged by it?—It is very difficult to get a fisherman to complain.

34,872. The fishermen here to-day have not brought forward that as a matter of complaint?—I think the fishermen on that side are more likely to go into it.

34,873. Are there any Castletown fishermen here?—No, I could bring before you many who would give you valuable information on the subject. May I ask if the lobster-fishing comes under your notice?

34,874. Yes; notice has been sent to different places that we were to hold a meeting here, so that it is the fault of the fishermen themselves if they have not attended?—I am aware that notice has been given.

34,875. (*Professor Huxley.*) Did you give evidence yourself in 1849?—No, the inquiry did not come under my notice at all at that time. A gentleman sent me that paper, finding I took an interest in the fisheries, and I have retained it ever since.

34,876. Can we take this report in the "Manx Sun" as an account of what took place?—Yes.

34,877. Will you put it in?—Yes, I will read it if you think it necessary. I believe it to be perfectly correct.

34,877*a*. That is not necessary.

The following report was then handed in:

We whose names ensue being a Committee appointed by the Tynwald Court on the 10th April 1847, to inquire into and report upon a Bill pending before the said Court, ntituled, "An Act for the better Preservation of the

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"Spawn and Fry of Fish, and to prevent the taking of young "and unsizeable Fish:" and having taken the opinion of several of the oldest and most intelligent fishermen, beg leave to report. That the using of any seine, trawl, or drag-net in any of the bays, harbours, creeks, or inlets upon the coast of this island, or in the fresh water portion of any river within this island, is most injurious to the spawn and fry of fish; and that the placing or setting pots, creels, or baskets upon the fishing banks contiguous to the sea coast of this island, or within the distance of four miles of the coasts thereof, for the purpose of catching whelkes or buckies, is most injurious and destructive to the hand-line and long-line fishing upon those banks; and that the only description of net which appears to them unobjectionable is the stake-net, with meshes of not less than two inches between knot and knot, to be measured on each side of the square, allowing four knots to each mesh.

That this Committee also beg leave to report, that there ought to be some restriction as to the times and seasons of taking lobsters; and they would suggest that they should not be taken during the summer months, when they come into shoal water and in the holes of rocks.

This 18th April 1849.

JOHN MOORE.
JOHN KELLY.
R. HARRISON.

At Castle Rushen, the 20th May, 1847.

Present,—WATER BAILIFF, HIGH BAILIFF of Castletown, HIGH BAILIFF of Peel.

MINUTES OF EVIDENCE taken under a Resolution of the Governor, Council, and Keys, dated the 10th April 1847, with regard to the enactments of a Bill pending before the Legislature, intituled "An Act for the "better Preservation of the Spawn and Fry of Fish, "and to prevent the taking of young and unsizeable "Fish."

HENRY KERMODE, of Port Erin, in the Parish of Rushen.—He has followed the hand-line fishing and trawling for thirty-five years, in the bay of Erin and upon the coast adjoining. He has caught all kinds of fish—mullet, blockin, cod, fluke, and turbot, of all size; sometimes he has taken turbot and fluke not larger than the size of his hand. He has caught also in the trawl cartloads of gilpins or carwhites, which are principally young "kellegs" and "blockins," (whiting pollock); the young fish were sold by the kishen for the price of fourpence or sixpence. There is no trawling now, nor for the three years past on Port Erin Sands, in consequence of the farmers having carted away the sand, which has also prevented the fishermen getting sand-eels and lug (a kind of worm for bait). The net he used was formed of very small meshes, considerably smaller than the mesh of a herring-net; and he has not seen sand-eels caught in it. Trawling commenced in the harvest, and ceased before the winter set in. The hand-line fishing is not so good as it used to be; and on the bank of Miln-e-Killey, near the Calf, where turbot some years ago were very plentiful, there are none to be got. Witness has been engaged in fishing lobsters for upwards of thirty years. He has taken them the whole year round when the weather was fit. Lobsters come near the shore and into shallow water in the summer season, and into holes in the rocks. He has caught them full of pea or roe at all times and seasons. He has heard old fishermen say that lobsters were always scarce in the month of May, because they then went into the holes of the rocks to change their shell. He has no idea where they lay their spawn; but he is sure that lobsters are male and female, and he knows the distinctive marks; the cock lobster has larger claws, and the hen lobster has a broader tail; the pea is also a certain mark.

The HIGH BAILIFF of Peel suggests that trawling on banks inside of the Heads ought to be prevented. Also, a regulation to prevent dead shell-fish, used for bait, being thrown into the sea.

Mr. JOHN KELLY, of Derbyhaven.—He has been a lessee of the salmon fishery at Derbyhaven, and the coast and shore adjoining, for nearly thirty years; and he has been engaged in trawling at the proper seasons during that period, and is still a lessee of the Crown of the said fishery. He is owner of a trawl-net by which salmon are taken; the net is 120 yards long, and its depth at the centre of the net is 4½ yards; the mesh is not larger than the mesh of a herring-net, except at the ends of the net for about 20 yards where the mesh is 1½ inches or thereabouts, This net will take and has caught fish of all kinds and every size; thousands of flukes not larger than a penny, and other fish the size of exceedingly small trout, commonly called "Jack Sharps," or "Breck Fiddher." Meases of "gilpins," which were sold by the kishen, have been left on the shore, which the men employed in trawling did not think worth their time to carry away. There was great destruction of the small fish at all times of drawing the net. Complaints have frequently been made by the hand-line fishermen of the bad effects of trawling; and the witness knows that the hand-line fishing is very much diminished, not only in the bays but also upon banks without the Heads. Within the period of 20 years, 10 boats and 40 men were employed at Derbyhaven in hand-line fishing, and it afforded to them and their families sufficient employment and maintenance, but it is not now worth following. Witness thinks that a mesh of 2½ inches would be a very good measure, the small fry would thereby escape, and sizeable fish would be caught. In his opinion it would be a great public benefit if the trawl-net was not allowed to be used. The Scotch mode of fishing salmon, introduced by Cowan, lessee of the fishery at Douglas, is the best mode of fishing with nets in the bays, not only for salmon but also for other fish. With regard to lobsters, the witness is of opinion that there ought to be some restriction as to the times and seasons of taking them; and his experience enables him to say that lobsters should not be taken during the months of summer when they come into shoal water and in the holes of rocks near the shore, where he has caught hundreds of them.

MARK FAYLE, of Castletown.—He has followed the hand-line fishing 35 years. When he commenced fishing it was as good an employment as a poor man could wish to follow. The fishing has been gradually getting worse; and it is now so bad that it is with great difficulty and labour that a man can maintain himself alone, without a wife and family. In the opinion of the witness, this decrease is to be attributed to the destructive mode of trawling upon the shores. He thinks that a trawl-net with a mesh of 2½ inches would draw a very small fish on shore; and he thinks the mesh of a trawl-net ought to be larger; and it would be much better if they were not used at all. He has followed the lobster-fishing 30 years; they have decreased in number since they commenced fishing; but for the last 10 or 12 years the quantity has continued pretty much on an average. In the summer and harvest there are not many pea-lobsters caught; but from the middle of October to about Christmas the pea-lobsters are much more numerous, and he thinks in the proportion of five or six to one, than in the preceding months, from which he concludes that the period from October to Christmas is the time of spawning, and that during that time (if protection is necessary) protection ought to be given. Small lobsters are caught, but those under eight inches are thrown back into the sea. He takes lobsters during all seasons of the year. The distinctive marks of the male and female lobster are well known to witness; the male has larger claws, and the tail is much narrower, and also the body, than that of the female; and from the inside of the tail part where it joins the body there are two small horny protections that are not in the female fish. Turbot-fishing, which was very profitable, is now nearly extinct.

THOMAS DINWOODY, of Castletown, roper.—He is owner of a trawl-net, which is 120 yards long and six yards deep: the mesh is 1¼ to 1½ inch from knot to knot, and all the meshes of the net are the same size. Some years ago he used a net the meshes of which were much smaller, especially near the centre of the net. The net he uses has taken fish of all kinds and all sizes; it has drawn to the shore gilpins and very small fluke, the fluke much smaller than his hand. The net was turned over when drawn upon the sand, and the small fish left on the sand to give them a chance of escaping.

JOHN KELLY, of Castletown.—He has followed the hand-line fishing for 30 years. A man might at that time (30 years ago) earn a good living by fishing in the bays; it has been getting worse every year, and now scarcely worth following. Four or five four-oared well appointed fishing-boats belonged to Castletown harbour within 20 years, and now there is not one. The fishermen go to fish singly and solitary in Norway skiffs. This change of things is attributed by him and others to the destructive mode of trawling in the bays. On the ground where the trawl-nets were spread to dry the witness has seen large quantities of different kinds of fish, so small as to be utterly useless, even needle-fish among them. He thinks a mesh of 2½ inches too small, the drawing of the net would shut a mesh of 2½ inches. He thinks that trawling should be done away with altogether, as a mesh of even a very large size would be no protection. He was present when a kishen of gilpins, which were caught in a trawl, were purchased for fourpence; they were counted out, and the kishen contained 200 fish. He has been catching lobsters upwards of 30 years. From his experience he has come to the same conclusion, and formed the same opinion respecting the protection of lobsters and theseason for catching them, as mentioned by Mark Fayle, who has been examined by the Committee.

Mr. William Bell, of Surby, in Rushen Parish.—He lives upon and farms his own land; has been engaged in all kinds of fishing for 24 years, especially in the fishing for lobsters. Two boats are employed by him occasionally, and always one. His cleeves (creels or baskets) are made of osier, black sally, and the currant tree. He sets his creels along the shore from Fleshwick to Glenmeigh during all seasons of the year, except from the middle of May to the middle of August; he believes that lobsters cast their shells at all seasons, but chiefly in the month of May, and during the summer, when they crawl into shoal water and into the holes of rocks; and he thinks that if any protection be necessary, that protection should be given from May until August. He hopes there will be no interference to hurt the poor man's earnings. He knows it is not worth following the lobster-fishing in the months of June and July, on the coast where he is accustomed to place his creels; at the present time and generally his boats are employed from May until August in fishing for crabs, which are large and abundant. Restrictions from fishing in June and July would not hurt the poor man; there being no regulation or prevention as to the season, some persons fish all the year through. In the summer the pea of the lobster becomes red, and at that time the lobster loses the pea, and, he supposes, deposits its spawn. He has seen the same process occur in the winter season also. Small lobsters, or lobsters that would not weigh more than half a pound, are, when taken, thrown back into the sea; this is a practice strictly observed by witness. He takes on an average about six dozen in each week, during the season, which he sells for the price of 9*s.* a dozen; the purchaser sends them to the Liverpool market. He finds lobsters to be more plentiful every alternate season. There ought to be some regulation to prevent the taking of young fish of any kind, which the fishermen themselves might adopt, if they would, and if they were careful. He has never been engaged in trawling, but is of opinion, with many others, that it is a most injurious mode of taking fish. Much damage is done to the hand-line and long-line fishermen by the farmers, by their carting away to their farms the sand from the shore at Port Erin, and at the chapel shore near Port St. Mary, whereby the fishermen are deprived of bait; those sands abounded some years since in sand worms and sand eels. Herrings are now used for bait when they can be got. A kind of shellfish commonly called buckies (whelks) are taken up at sea by creels, and used as bait in the cod fishery; and the witness has to complain that the persons who are employed to catch those fish carry to the shore the small as well as the large, those fit and unfit for bait, whereas he would desire to have some regulation by which the fishermen may be compelled to throw the small shellfish which cannot be used for bait back into the sea, to give them the chance of coming to maturity. The distinctive marks of the female lobster are as well known to him as those of the crab, about which there can be no mistake.

At Peel, the 12th December 1848.

Present:

Mr. Moore, Mr. Harrison.

Further Minutes of Evidence taken under a Resolution of the Governor, Council, and Keys.

Henry W. Burn, Esq., of Peel.—He has followed the hand-line fishing as an amusement for 20 years. That fish were much more plentiful some years ago in Peel Bay and along the coast than they are at present. That the system of trawling or dragging a seine along the shore is decidedly injurious to the small fry of all kinds of fish; and he is clearly of opinion that trawling ought to be done away with altogether, as a mesh of 2½ inches if craftily dragged would enclose very small fish; and he thinks it would be more beneficial to the interest of the fishermen and to the public generally if the system of fishing with a seine were abolished. That the buckie creels, placed on the low banks along the coast are a perfect nuisance and most detrimental to the hand-line fishing, as the smell is the most acute sense possessed by fish, and consequently any impure or offensive matter placed upon those banks has the effect of banishing fish from their usual feeding ground. Placing long-lines upon the low banks will also have the same effect. The witness suggests that the in-shore banks along the coasts should be preserved.

H. W. Burn.

John Quilliam of Peel.—Has followed the hand-line fishing for upwards of 30 years. Fish were much more plentiful than they are now. That the system of trawling on the beach is utter destruction to the fry of all kinds of fish, and he is clearly of opinion that the system ought to be abolished altogether. That the witness is clearly of opinion that buckie creels left on the inner banks along the coast are most injurious to the hand-line fishing, and shooting long-lines on the said banks has nearly the same effect. That he suggests that all the banks within four miles ought to be protected from the injurious effects of buckie creels, or shooting long-lines thereon.

John Joughin.—Has been a hand-line fisherman for about twenty-five years. That in his opinion the system of trawling upon the beach is most destructive to the fry of all kinds of fish, and the system ought to be abolished altogether. That the system of setting buckie creels on the inner banks is very injurious to the fishing, as the smell frightens the fish from off the banks. That witness suggests that all within four miles from the coast ought to be protected from the injurious effects of the buckie creels.

Edward Bailey. — That a year this last summer the witness was present shortly after a seine had been drawn ashore, and there were thousands of flukes and soles about the size of a penny lying on the beach; and he is quite sure the system of trawling is most detrimental to all kinds of fish. That there are not now one-third the number of flukes in Peel Bay that there were a few years ago.

34,878. (*Mr. Lefevre.*) Do you know anything about the oyster fishery in the island?—I believe they have never been properly attended to.

34,878*a*. Has there not been some recent attempt to cultivate oysters here?—There has not been anything except a little attempt I have been making myself here.

34,879. Where?—In Castletown.

34,880. With what result?—I cannot tell until next month.

34,881. Have you laid down any oysters?—Yes.

34,882. Have you a lease of the ground?—I applied for one and they told me that my claim would be considered.

34,883. Does it belong to the Crown?—Yes.

34,884. Are they ready to grant leases?—There is some difficulty about granting leases. No leases have been granted yet, but they have been applied for. Leases have been granted for the salmon-fishing only, but I do not believe any leases of this description have been granted.

34,885. Are there no natural beds around the island?—There are none cultivated. There are situations well suited for beds. I know of several myself. I am trying one just now in reference to which I intend to apply for a licence. There are several gentlemen who have agreed with me to do so.

34,886. Within what distance of the shore is your bed?—It is between high and low water. It is rocky, and completely sheltered on all sides.

34,887. Is it adapted for dredging oysters?—No.

34,888. Only for fattening them?—For breeding and fattening them too. I am not, however, very experienced in the matter.

34,889. Are there no natural beds on the island which have been fished of late years?—There is one off Laxey where there are very large oysters.

34,890. Is it fished?—The large oysters are brought into Douglas from that bed and they are taken off with the dredge.

34,891. Where do they dredge them?—At Laxey, about half way between Douglas and Ramsey. There is a large bed there I am told.

34,892. But you do not know yourself?—No; I have seen specimens of large oysters brought into Douglas which they told me came from there.

34,893. When do you consider that the spawning season for herring commences?—At the latter end of September or the beginning of October.

34,894. Is it on this side of the island or the other that they spawn?—The fish generally go to the other side of the island to spawn. They are not to be found at any other place except off Douglas where there are coral beds.

34,895. Is it the result of your observation that the fish go there to spawn?—The boats follow them there.

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34,896. But are the fish on that side of the island the same shoals which you see on this side?—I am not aware. I have only noticed the fishermen following the fish.

34,897. Your observation is only drawn from that?—Yes, from the boats coming into Douglas harbour frequently loaded with the spawn of the fish.

34,898. Then you cannot say whether it is a different kind of fish on this side of the island as compared with that which is found on the other side?—My own impression is that when the fish are about to spawn they go to the localities where there are coral beds.

34,899. Then would you enforce a close-time from the end of October?—Yes, as far as I am myself concerned, I would enforce a close-time from the period when the fish are in full spawning season up to the time when they have ceased to spawn.

34,900. What do you consider to be that time?—The fishermen will tell you that better than I can do.

34,901. Have you not paid any particular attention to the time of spawning?—No.

34,902. Then you do not know what effect the enforcement of a close-time would have on the fishing?—No, but my impression is that it would increase the number of the fish.

34,903. You speak as a theoretical man, and not as a practical man?—Yes, of course.

34,904. You have not given much attention to fishing?—No; I have occasionally been out with the boats, that is all.

34,905. (*Professor Huxley.*) Would you permit the taking of spent fish?—That is questionable. I don't think spent fish do any harm.

34,906. Would it not be awkward to arrange your close-time?—I admit it would. Fish are apt to become spent at different seasons. I have known good fish taken in October.

34,907–8. Would it not be rather difficult to legislate on a matter of that sort?—Yes; I have known good fish taken at the end of October.

The witness withdrew.

J. Higgins.

Joseph Higgins called and examined.

34,909. (*Professor Huxley.*) Are you interested in the fisheries?—Only as a tradesman in the town. From my observation of the fisheries during the last 15 or 20 years I should suppose that the fishing must have increased amazingly.

34,910. You are a tradesman in the town?—Yes.

34,911. What induces you to arrive at that conclusion?—I arrive at it from the fact that there are boats and property here to a large extent in the town, now, which was quite unknown 20 or 30 years ago.

34,912–3. I put several questions to the fishermen upon that point, but they all say that the fish have not increased?—I imagine that they are quite mistaken. They may not have more cash in their hands but they have been continually buying boats and building houses. They are now living in their own houses, where 30 years ago they had no houses at all. The men themselves are gentlemen in comparison with what they were at the time I speak of. That evidently shows that the fish must have increased, and that the money derived from the fishing must also have increased, although it may have been so imperceptibly as not to be known to themselves. I am connected with a society here.

34,914. What society?—A loan society in the town, and a short time ago we had 80 sovereigns brought down to us as a deposit by a fisherman. I know that many of the fishermen here would be perfectly amazed if I were to disclose the name.

34,915. Was that the deposit of one man?—Yes, and the deposit is still there.

34,916. Was it the result of one season's fishing?—I do not know that, but as a tradesman well acquainted with the fishermen I must say that the fish must have increased from the comfortable circumstances in which the men are now placed.

34,917. That is the result of your observation extending over a large number of years?—Yes, for 15 or 16 years I have been intimately acquainted with them as a draper in the town, and I know the position both of themselves and their families. I believe their improved circumstances have arisen from the employment of a superior class of boats and nets, and also from the higher moral standard which the men themselves have attained. They are now sober and industrious.

34,918. We have no desire to pry into the circumstances of the fishermen, and we asked these questions merely to solve the question whether the quantity of fish has increased. Your impression is that the quantity of fish must have increased?—Yes. Perhaps they have earned no more, but at any rate they have spent less. If it is within your scope I should be glad to notice that there is one thing we should like here in reference to the fishermen. They are often detained and prevented from going to sea in consequence of bad weather, and in this town there is not a single institution to encourage reading or provident habits.

The witness withdrew.

T. J. Greaves.

Thomas Joshua Greaves called and examined.

34,919. (*Professor Huxley.*) You are a boat owner here?—Yes.

34,920. Is it your opinion that the capital invested in boats, and the fittings of boats, has largely increased of late years?—Yes, very much indeed.

34,921. You say that from your experience as a boat owner?—Yes.

34,922. Are you a boat builder?—No. I am not a carpenter by trade but I have built boats sometimes, or got them built.

34,923. To what do you ascribe that surplus capital?—It is my opinion that the take is greater from the fact of a much better class of boats and nets being used here now. I think if the fishing had been falling off we should not have seen so much improvement.

34,924. Has the increased disposable capital arisen from absolutely greater earnings or from more economical and prudent habits on the part of the men?—From both.

34,925. Both?—Yes, both combined.

34,926. Are the fishermen now more temperate in their habits than they were?—Yes, very much more so indeed.

34,927. Does that enable them to put more money into the business?—Yes.

34,928. But do you ascribe the whole of the increased disposable capital to that cause; do you consider in addition to the temperate habits that they have had better earnings?—Yes, they have had a greater number of nets to catch the herrings, and it is my opinion that there is a greater quantity caught now and that prices also are better.

34,929. Is there any account kept here of the quantity of herrings exported to England?—The Fishery officer at Douglas is supposed to keep the account.

34,930. Can he give us a return for the last ten years?—Yes, they are published by the Scotch Fishery Board annually.

34,931. (*Mr. Lefevre.*) I suppose that the prosperity of the town mainly depends upon fishing?—Yes.

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34,932. Has it increased of late years ?—Yes, very much indeed.

34,933. Are the tradesmen generally well to do ?—Yes, I think they are much better off than formerly.

34,934. (*Professor Huxley.*) Do you know anything about the price given by the buyers of fish to the men ?—Yes.

34,935. Has it remained stationary or has it increased or diminished ?—I think it has increased.

34,936. It has somewhat increased ?—Yes, I think so.

34,937. Has it increased largely ?—Yes.

34,938. Within the last 20 years do you think the fish have become dearer ?—Yes, I think so.

34,939. Dearer to the buyer ?—Yes.

34,940. Is that on account of the better communication with the markets ?—I think it is. They find better markets on the other side; there is better railway communication.

34,941. Is that increase in the price sufficient to account for the increased earnings of the fishermen without supposing that the catch has been larger ?—I think it is.

34,942. And according to that you do not seem to think that the catch has been large ?—The catch has been large.

34,943. It has been large as well ?—Yes.

34,944. (*Mr. Lefevre.*) Are the fish bought and sold on the beach ?—They are bought on the beach, and sometimes sold to vessels in the bay; they are put on the vessels in the bay, and sometimes they are brought ashore to be shipped off by land by the steamers.

34,945. Are they taken by smacks direct to Liverpool ?—Yes, to Liverpool and Whitehaven.

34,946. Would those fish be included in the return from Douglas ?—He requires from each vessel in the trade the quantity of fish taken.

34,947. The Fishery officer does that?—Yes, he gives them a printed form to fill up every year.

34,948. Is there a large quantity of fish sold on the beach to be distributed in the country round about?—Yes, there are great quantities.

34,949. Is that trade increasing do you think ?—I think it is.

34,950. Do the people round about live mainly during the season upon herrings ?—Yes, solely, and a close-time would in my opinion be very advisable.

34,951. A close-time at the beginning of the year?—Yes.

34,952. That would be advisable ?—Yes.

34,953. Do you agree with some of the witnesses that only two or three boats go out before the 1st of June ?—No, a great number go out, far too many.

34,954. How many ?—Fifteen or 20 and sometimes 30 or 40.

34,955. That is only a small proportion of the whole number that fish is it not ?—Yes, it is.

34,956. It cannot much affect the whole take of fish ?—The only thing is, that the fish are caught before they are worth anything. They are not eatable sometimes, they are so small.

The witness withdrew.

HENRY WILSON BURN called and examined.

H. W. Burn.

34,957. (*Professor Huxley.*) Have you been resident here long ?—Yes, since 1832.

34,958. Have you paid much attention to the fisheries here ?—I have been an amateur; I have gone out to the herring-fishing, to the cod-fishing, to the haddock and whiting-fishing, and I have also gone to the carp-fishing.

34,959. Do you wish to add anything to the evidence which has been given to-day; have you heard it ?—Yes.

34,960. Is there anything you wish to add to it ?—I think there are one or two points about the nets. I heard it stated that the nets now are very much finer than they were formerly. Formerly the weight of the nets was very great. It is far less now, even with regard to the nets carried by the larger boats.

34,961. They are made now of cotton ?—Yes.

34,962. They were formerly made of twine?—Yes, cotton has superseded both flax and twine.

34,963. Are they made of cotton now since the cotton famine ?—Yes.

34,964. Then the price has increased ?—Yes, very much.

34,965. In consequence of the cotton being finer more fish are caught, is that not so ?—I should say so.

34,966. The fishermen have set up nets of that sort because they consider them more advantageous ?—That is not so clear. Some of them were for keeping the old nets. They were of a very heavy class formerly, and I do not think the fish would face them now; but the fine nets they use now have done wonders.

34,967. We have heard that that is the same on other parts of the coast ?—Yes, it is so.

34,968. What do you think about the close-time ?—I think that what Mr. Corrin stated is reasonable, namely, that there should be a close-time until the 1st or the 5th of June. The fish are small previous to that and the complaint is that fishing them then breaks up the shoal; it drives the fish to and fro and frightens them off.

34,969. We have not heard that from the fishermen here ?—I believe it has been the custom of the Tynwald when it assembled on the 5th of June to take a number of the leading men from each of the herring boats and form them into a sort of jubilee ; the date at which the fishing should commence was then fixed.

34,970. Here is the Act which fixes it at the 16th of July ?—That is too late.

34,971. Would it not practically put an end to the fishing here ?—It would create great commotion.

34,972. You think that Act could not be carried out ?—No, it would be broken at once.

34,973. Is there much harm done by in-shore seining ?—Yes, that is the very point which is touched upon in the evidence in 1849.

34,974. You state, I see, in that evidence that the system of trawling or dragging a seine along the shore is decidedly injurious to the fry of all kinds of fish ?—Yes.

34,975. You are clearly of opinion that trawling should be done away with altogether, as a mesh of $2\frac{1}{2}$ inches if craftily dragged would inclose very small fish ?—Yes.

34,976. You think it would be more beneficial to the interests of the fishermen and to the public generally if that system of fishing were totally abolished ?—Yes.

34,977. You are of opinion that the buckie creels placed on the low banks along the coast are a great nuisance and most detrimental to the hand-line fishing ?—Yes.

34,978. And that as the smell is the most acute sense possessed by fish, consequently any impure or offensive matter placed upon those banks has the effect of driving the fish from their usual feeding ground?—Yes.

34,979. You think that placing long-lines upon the low banks will also have the same effect ?—Yes.

34,980. You further suggested that the in-shore banks along the coast should be preserved ?—Yes.

34,981. These were your opinions in 1849 ?—Yes.

34,982. Are they your opinions still ?—Yes, I think now just as I did then.

34,983. Nothing came of the movement that was made at that time ?—No, there is a tale hangs thereby. The legislature found that they had made a premature move. The bill was made compulsory in the whole island, whereas it ought only to have affected certain localities, such as Castletown. The fishing in the bay there had been all destroyed by seines—

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there were bushels and bushels of gilpins and small blockins taken.

34,984. What fish is that?—It is the coal pollack—the black pollack or coal fish; that is the Manx name for it; these same fish when they are taken are about as long as my finger, and they were sold by tinsfull for so many pence, whereas good pollacks will make good fish if allowed to grow up. At Castletown the pollack-fishing merely kept a parcel of poor men and boys employed. They were brought up as boys to it, then they were converted into fishermen, and then when they get old men past their work and unable to go to the herring-fishing they take again to the in-shore fishing in order to maintain themselves.

34,985. That fishing was carried on so generally that the Castletown fishermen complained?—No, the legislature was moved, and if the measure had been permissive instead of compulsory it would have been carried out. It was the Jurby people who applied for a re-hearing, and ultimately the bill fell through.

34,986. What people?—The Jurby people. They got a lot of mackerel and other fish at the same time; but in those bays the in-shore fishing has broken up the best fishing.

34,987. You would have passed the Act leaving it to the local authorities to enforce it or not?—I should make it a permissive bill. If any one applied for it, let him have it in that district, and if they were disinclined to have it then it should not be operative.

34,988. As a matter of fact it did not come into force?—No, the one neutralised the other—the after-Commission destroyed the first.

34,989. Is there any blockin-fishing going on here?—Not that I am aware of, none except the sea-coast fishing outside; that is the young blockin which follows the herrings, and is taken with the hake and ling. A very good steak-fish they make.

34,990. Was the blockin-fishing ever very important here?—Not more than the ling or the hake.

34,991. (*Mr. Lefevre.*) Do they continue to use the seine-nets in the bay here?—It is not much followed, but that kind of fishing is so worthless that it could not be continued.

34,992. How many seine-nets are there used here? There are only a seine-net or two.

34,993. How many are there at Castletown?—I do not know the place very well now. At Kirby-Haven there is a seine-net occasionally used.

34,994. (*Professor Huxley.*) Is there any further point you wish to bring under our notice?—Have you any wish for information as to the hand-line fishing? It brings out our boys and makes them fishermen, and the old men support themselves by it when they can go to no other fishing. It is, therefore, of consequence to the people here. Therefore, I think that there should be no lobster-pots or things of that sort put upon what we call the marks here. If lobster-pots or creels or nets are set over the marks, you only obstruct other kinds of fishing; you take very little yourself and destroy the living of others who I think ought to have a preference.

34,995-6. Would it not be a very difficult matter to organise any police to regulate that?—Strictly speaking, we have no police of the seas here.

34,997. It would be difficult to enforce any restrictions that might be made?—Yes. The law here is almost the law of common sense, and it is generally speaking sufficient.

34,998. What law obtains with regard to the fishing here?—There is no statute or common law that I know of; it is merely custom.

34,999. (*Mr. Lefevre.*) Was the bill you speak of which was prepared by this Commission intended to prohibit seine-fishing altogether?—It was in certain localities, but they swept the whole island with it as it were. Persons who found it to their interest to take mackerel on the coast between this and the parish of Ayre, when the fish came in in great bodies to the shore, applied for an alteration.

35,000. Was it proposed to prohibit it altogether or to make some regulation with regard to it?—The bill broke down because it swept all the island. It would have been a very good bill and would have shown why the decay of such and such fishings had occurred if it had not been compulsory and so extensive.

35,001. Would it not be possible to continue the use of the seine-net, and at the same time to prohibit the catch of small fish?—I do not know what other fish they could catch; they go for them.

35,002. Do they only fish for small fish?—That is the principal thing they catch.

35,003. Do the mackerel ever come into the bay here?—Yes, they are in the bay now.

35,004. Do they catch the mackerel in the seine-nets?—No, they are too far out for that, but they sweep the beach.

35,005. Do they come in near enough every night?—Sometimes they do.

35,006. They do this on the other side and not here?—Yes.

35,007. Do they take large catches of mackerel?—Yes, and that is the reason they protested against the bill.

35,008. The opposition from the other part of the island was too strong for you?—Yes, it has neutralised the whole matter. It should have been a permissive bill; it would then have taken effect where it would have been of use. I gave evidence before both Commissions. Mr. Heywood was on the after Commission.

35,009. Upon the first Commission the evidence appears to be all one way?—It appeared to me to be so.

35,010. There is no evidence of damage having been done by enforcing such regulations in other parts of the island?—No.

35,011. The only evidence produced was the evidence from this place and Castletown?—Yes.

35,012. And was there a subsequent Commission which brought forth the evidence on the other side?—Yes. It interfered with the rights of others, it was found to be too sweeping and it broke through. The Deemster was at the head of it. It was open to me to give evidence, but I declined doing so; I merely made a statement. There is one point in connexion with the herrings I wish to mention. We sometimes get the pock gut herring here. The gut falls away and you cannot cure it.

35,013. That is what they call on the Scotch coast gut pock?—Yes.

35,014. The French have another name for it?—Yes. We have occasionally a shoal of that sort of fish, but not often.

The witness withdrew.

R. Corrin.

ROBERT CORRIN recalled and examined.

35,015. (*Professor Huxley.*) You are anxious to make a further statement to us?—Yes; there seems to be an impression that more fish are caught now than formerly, but there are 300 boats now engaged in prosecuting the fisheries about these islands; they are also supplied with more nets than they formerly had, and of a much superior quality, better adapted for catching fish. I apprehend the question you want to arrive at is, whether the absolute quantity of fish caught on this coast is greater than it was. For the last four or five years we have had but few strangers; there has been here occasionally a Cornish fleet of 200 boats, and 100 Arklow boats as well, so that there have been 400 or 500 boats fishing at one time. Taking into account the quantity of fish they have caught in conjunction with the quantity caught by the Manx boats,

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and comparing it with the quantity caught by the Manx boats now, the evidence will not be in favour of an increase. I mean this by way of explanation.

35,016. (*Mr. Lefevre.*) Do you refer to foreign boats which have come here only casually, or generally to the island?—They used to come generally to the island in the season. There was our Manx fleet, the Irish fleet, and the English fleet, amounting altogether perhaps to about 600 boats; but you have had evidence to-day only of 300. They have told you that half the fleet catch more than they were in the habit of doing. That I admit, but I think you ought also to take into account the quantity caught by the Irish and English boats, which have not been here for the last four or five years. What I say is, that 10 or 15 years ago there was a much larger quantity of fish caught than has been caught within the last four or five years. The Fishery officer however will give you the precise returns.

35,017. The returns of the Fishery officer will probably verify what you say?—Yes.

35,018–19. (*Professor Huxley.*) If there are 1,000 boats in a given area and they are catching a certain quantity of fish, 500 boats would not be able to catch as many?—No.

35,020. The fact that 500 boats did not catch as many as 1,000 would not show that there had been any falling off in the total quantity of the fish?—No, but it shows when 600 boats were prosecuting the fishery there were more caught than now that there are only 300 boats following it.

35,021. Are there not as many boats fishing here as can get into the harbour?—Yes.

35,022. More could not be accommodated?—That is so far as Peel is concerned, but it is not true with regard to Castletown; 20 years back every Saturday there were 100 or 200 sail of Cornish boats in Castletown harbour, and four or five years ago there were very few indeed. It has been the same with the Arklow boats.

35,023. Do the Campbeltown boats come here?—They are chiefly at Howth, and the reason they do not come here now is that the fishing during the last four or five years has been much better at Howth.

35,024. The fishing is better on their own coast?—Yes.

35,025. (*Mr. Lefevre.*) Is it not within your knowledge that there has been a representation made to the Government that if a harbour were made at Port Erin the fishing would be vastly increased owing to the time that is now lost in rough weather?—I am not prepared to say much about Port Erin. I do not hold as high an opinion as some do in reference to that port and I am not prepared to say much about it. I think the improvement in the moral standard of the fishermen has been the chief means which has enabled them to increase their wealth. Twenty years ago every fisherman spent nearly every shilling he earned in the public-house, his family was in a state of destitution, and he himself was in the same condition. Since then many of our men have become teetotalers, and as a matter of course they have become more saving in their habits. They have more money to save and if they do spend they spend in a more prudent manner. The result is they have acquired for themselves houses and furniture and a reasonable amount of domestic comfort, and they have better boats and nets.

35,026. They did not go out every night in the week in the days you speak of did they?—Yes, I suppose they did; but when they came in on the Saturday and each man got his share they went into a public-house and spent it.

35,027. (*Professor Huxley.*) Is there any reason to suppose that the quantity of herrings visiting this coast has fallen off?—I think it has decidedly.

35,028. What is your ground for that opinion?—In the first place the nets we used 15 years ago were inferior and the catch was greater.

35,029. You base your judgment on the catch?—Yes.

35,030. That is rather a complex matter; is there any more direct evidence than that?—I am afraid not. It would be a difficult thing to arrive at, for although the catch has not been particularly good for one year it might be very good the next. But I think if you were to try an average of 10 years you would be able to take that as a fair test.

35,031. The amount of additional capital invested in the boats and gear of late years is a very large sum indeed; yet you look upon it as being absolutely the result of smaller takes, but say that the yield of those takes has been economised by the better habits of the people?—I think so.

35,032. All we wish is to get accurately at what is the real state of the matter?—It is my own impression that the quantity of fish in the Channel is less than it was 20, 30, or 40 years ago. We begin to believe that the fish are local. We rather disbelieve the old theory, and have disbelieved it for 12 years or more.

35,033. The migration theory?—Yes; I quite disagree with Mr. Mitchell in his book.

35,034. (*Mr. Lefevre.*) Do you think there is a different class of fish caught on this side of the island from that which is caught on the other side?—Yes.

35,035. Do you think the time for spawning is different too?—Yes, I believe the fish here spawn several times in the season. I am not sure whether the same fish spawn more than once in the year, but some fish spawn here during several months. We have had full fish and prime fish together, one ready to spawn and the other in the best condition, not ready to spawn for a month or six weeks.

35,036. Is the spawning early here?—Yes, I believe it is. I believe the fish spawned some months ago.

35,037. Do any of them spawn in February?—I am not aware. It may be so.

The witness withdrew, and the inquiry was adjourned until the 15th August, at Port St. Mary.

Port St. Mary, Isle of Man, Monday, 15th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

PORT ST. MARY.

W. Bell.

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WILLIAM BELL called and examined.

35,038. (*Professor Huxley.*) You are a Custom-house officer here?—Yes.

35,039. Have you been long in that position?—About eight years here but altogether about 14 years in the island.

35,040. Do you see to the numbering of the boats?—It is the Collector at Castletown who numbers them, but I have the numbers in a book here of all between this and Castletown.

35,041. Are all the herring-boats numbered?—Yes.

35,042. Then you will be able to tell us pretty well what the number of herring-boats has been during the past summer?—Yes, I have had as high as 77 here.

35,043–4. Seventy-seven boats?—Yes, but there are a dozen that belong to Castletown which I know nothing about.

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35,045. Is that a larger number than you had 10 years ago?—The fishermen say that they think the boats have not increased.

35,046. Have you a record extending back as far as eight years?—I have not the numbers as far back as eight years. It is only latterly that the boats have been numbered.

35,047. How many years have they been numbered?—Only two years. There was an application from some of the Irish ports to the Government to have these boats numbered. There is no law in the island which compels them to be numbered, excepting when they are fishing on the Irish coast.

35,048. From your observation do you think that the number of boats has increased?—I think not.

35,049. How is it about the quantity of fish; is it greater than it was in former years, or less, or how is it?—This year it has been rather under the average.

35,050. But taking one year with another has there been much alteration?—There have not been so many fish here for the last four or five years. About seven years ago we had a good market. More fish were sold here then than in any port about here.

35,051. (*Mr. Lefevre.*) More than at Peel?—Yes, there generally have been more here than at Peel, although they have a larger number of boats. They have somewhere about 150 there.

35,052. What time do they begin the fishing here?—They commence about the 20th of May.

35,053. Do they think that that is the best time to begin the fishing?—They have been rather soon.

35,054. What sort of condition are the fish in when they catch them then?—They are rather small.

35,055. Do they find a good market for them of that size?—Yes.

35,056. They are sold principally, I suppose, in Liverpool?—Yes.

35,057. And do the fishermen find a ready sale for them?—Yes.

35,058. Would it be an improvement to the fishing to prevent them being taken so early as May?—Yes, I think so, and that is the cause of the fishing having been so backward for the last four or five years. When I came here first they did not leave for the fishing till somewhere about the 12th of June.

35,059. Do you think the early fishing has done harm?—Yes, and I have heard some of the old fishermen say so.

35,060. How does it do harm, do you suppose?—I think they are disturbed before they come to maturity.

35,061. Do you hear the fishermen here complain of anything?—Yes.

35,062. What do they complain of?—They complain that they go too soon to the fishing.

35,063. That is in their own hands; they need not go unless they like?—Yes, but if one goes all will go.

35,064. Would they go if they had not got a ready market for their fish?—Yes.

35,065. What would be the good of giving themselves the trouble if they could not sell their fish?—They have never so much as thought that about it.

35,066. If they cannot get a good market for the fish, what is the use of their going to get them?—They generally can get a market for their fish at any time.

35,067. They can readily sell the fish?—Yes.

35,068. It is that they can get a price for them in the market that is an inducement for them to go out?—Yes.

35,069. So that there is somebody who is glad to get the fish?—Yes.

35,070. Has the size of the boats increased here since you have known the place?—Yes, a great deal.

35,071. Are they larger in the measurement?—Yes.

35,072. And of greater tonnage?—Yes, of greater tonnage.

35,073. Is the fleet of nets larger?—I believe it is. It is a great deal larger, three or four times I believe.

35,074. Is it within your recollection of the place that the capital invested in the fishing has increased very much?—I think so. I can tell you the date when the first boat went out fishing here.

35,075. The date it went out this year?—Yes, I find that they were out as early as the 23rd of May.

35,076. How many boats went out then?—Only three at that date.

35,077. (*Mr. Lefevre.*) Take a week later, how many went out then; take the 30th of May?—On the 24th some more went out.

35,078. (*Professor Huxley.*) What went out then?—There was only one.

35,079. When did the great mass of them go out?—On the 27th, 30th, and 31st of May. There were five that went out on the 30th.

35,080. So that the boats did not go out in any considerable number until the beginning of June?—No.

35,081. You are clear that the tonnage of the boats, their size and capabilities, have increased of late years?—Yes.

35,082. (*Mr. Lefevre.*) Has the number of men in each boat increased?—I think not.

35,083. Do they fish over the same ground as the Peel boats?—Generally.

35,084. Do they join the Peel boats?—Sometimes.

35,085. In the early part of the season do they take their fish to Peel, or here?—They bring them here.

35,086. Do they have to come round the Calf of Man in the early part of the season?—Yes, it is off the Calf they catch them.

35,087. We were told at Peel that the boats were off Peel now?—Yes.

35,088. Do the boats from here join them off Peel?—Yes, between the Calf and Peel; they are not confined to a few miles for distance.

35,089. Does the fishery extend from Peel down south as far as the Calf?—Yes.

35,090. What do they do in the latter part of the season?—The fishing vessels go down as the fish come along the coast.

35,091. In the latter part of the season do the Peel boats come round the Calf and bring their fish here?—That depends on the weather.

35,092. Have any boats from Ireland or Cornwall come here within the last few years?—Yes.

35,093. Are there many boats here now?—No.

35,094. What time of the season do they come?—About this time.

35,095. They have not been here yet?—Yes, I have seen some. The Irish boats have been coming during the season.

35,096. Have there been increased numbers coming within the last few years?—No.

35,097. Are there any seine-nets used in the bay?—No.

35,098. Are there any trawlers?—No, none.

35,099. Do the men make as good earnings by the fishing as they used to?—I think so.

35,100. Do they make as good earnings as they did eight years ago, when you first came here?—No, there was a better fishing at that time than there is now.

35,101. Do you think the men made more in the season than they do now?—I think so.

35,102. Do you think the price of fish has increased?—The price of fish has I think increased, but the quality has not increased.

The witness withdrew.

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T. Qualtrough.

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THOMAS QUALTROUGH called and examined.

35,103. (*Professor Huxley.*) Have you been harbour master here for many years?—I have been harbour master here for 10 years.

35,104. What do you think is the condition of the yield of fish now compared with what it used to be?—The yield is greater, generally speaking. Last year it was pretty good, but for three years previous to that the yield was not very good. Last season, however, was a pretty good season.

35,105. Do you think the falling off observed before last year was owing to the weather, or to what cause was it attributable; was the weather bad?—No, not particularly bad.

35,106. Do you think there was a less quantity of fish to be caught?—I can hardly tell you. It depends a good deal upon the shoals of fish on the coast and how they are followed up. Some years the fish are better than in other years. There is no particular cause I can assign for the scarcity previous to last year. Generally speaking, for the last few years it has been as good as it was 15 years ago. I believe the yield is on the increase, and that a greater number of fish are taken.

35,107. Do you agree with the previous witness, that the tonnage and size of the vessels have increased?—Yes, they have much increased.

35,108. And the length of the fleets of nets?—Yes, that has much increased.

35,109. How much larger are the fleets of nets than they were 10 years ago?—Eighteen yards formed the piece at that time, and it will have increased one-half. Now, I suppose, taking the last 50 years or even 30 years, there are two-thirds more nets used.

35,110. Has the depth of the nets increased?—Yes, both the depth and the length.

35,111. What is the length of a fleet now for each boat?—Each will be 40 fathoms long and there will be eighteen forties.

35,112. That will be 720?—Yes, that is the average length at present.

35,113. 720 fathoms?—Yes, that is the back—the sling.

35,114. Are the fishermen here exclusively engaged in fishing, or are they employed in any other manner in the course of the year?—A few of them are employed in other ways, but the great bulk of them are solely engaged in fishing.

35,115. After the herring-fishing is over, do they go to the long-line fishing?—After the herring-fishing is over here they go to the Irish coast.

35,116. To fish for herrings there?—Yes, in November and December.

35,117. Do they catch herrings on the Irish coast as late as that?—Yes.

35,118. When the herring-fishing is over what do they do?—When it is over they repair and mend their nets and go out on the 1st of February to the cod-fishing.

35,119. Is the cod-fishing practised off here?—Yes.

35,120. Are there cod-banks off here?—The principal are off Douglas.

35,121. Do they fish with hand-lines or long-lines?—With long-lines.

35,122. Do they catch many haddock?—No.

35,123. Did they ever catch much haddock here?—The small boats got particularly good takes for a time, but not generally.

35,124. Have there been as many haddocks taken as were taken formerly?—The last few years there have been scarcely any taken.

35,125. Have you any reason to think that there are less fish on the coast?—It is not followed up as it was formerly.

35,126. Is the take of cod as good as it used to be?—It is rather on the decrease, I think.

35,127. Is it sent fresh to the market?—Yes.

35,128. Do you send most of the fish fresh to the market?—Yes, except for the home consumption here.

35,129. Is there any large home consumption here?—Yes, there is a quantity of fish consumed in Ireland. The Manx people are also fond of fish, and a great many are stored up for families. They will take a thousand maze and make them up for the winter season.

35,130. Is there no winter fishing for herrings here?—No, our fishing commences at the beginning of June; this year they commenced a little earlier.

35,131. Have you ever seen herrings here in January and February?—A few have been seen, and they have been taken accidentally.

35,132. But you have never seen any great shoals?—No.

35,133. What condition are the herrings in at this time of the year?—The condition of the herrings is good from the 1st of June till about the 1st of September; then they begin to get heavy, and they commence spawning.

35,134. They commence spawning in September?—Yes.

35,135. When do you find spent fish?—In October.

35,136. As late as October?—Yes.

35,137. Do the shoals remain here until October?—The fishing commences here to the northward of Peel and goes towards the south of the Calf from the 1st of June till September, and then on to a week or two in October. They go then to the eastward and the herring moves away on to the coral banks; that is the spawning ground.

35,138. Previous to that time do they drift on the surface?—Yes.

35,139. And in the beginning of September they sink their nets?—Yes.

35,140. Do they catch the fish when they are spawning?—Yes, there are fish taken with the deep nets when they are spawning.

35,141. How do you sink them; what depth of water are those banks in?—Perhaps from 13 to 15 fathoms.

35,142. Do the herrings lie packed close to the bottom?—Yes, and they want to get the net as deep as they can to clear the ground.

35,143. Has it been the practice to catch fish every year when they are spawning on the banks in that way?—Yes.

35,144. For how many years?—A good many years. According to history I believe I may say for many hundreds of years. There was at one time here a great deal of export to the Mediterranean, and the fishing was carried on then more than it is now.

35,145. Are there not old records of the fishing in this place?—No, except Mills' Statute Laws of the Island. Some information is to be obtained out of that. I believe the landed proprietors had to prepare the nets in those days; the fishermen had not money to buy them. Flax was grown, spun, and twisted; that was used in the manufacture of the nets, but of late years the cotton mesh has been introduced. In those days the farmers, according to the land they held, were expected to supply so many nets.

35,146. Were there at any time any considerable curing establishments here?—Not in my day.

35,147. Is there no curing now in any way?—No, the fish mostly go away fresh.

35,148. Is there any lobster-fishing about here?—Yes.

35,149. Is there much of it?—No, it is not followed up closely; there are only a few boats.

35,150. Is that because it is not worth while to follow it?—No, I think not.

35,151. Are there many boats that follow it?—Perhaps there may be a dozen boats here on the coast.

35,152. Is there any complaint that the lobsters have fallen off?—No. It is a fishing that there is

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not much notice taken of with regard to its increase or falling off.

35,153. Do the trawlers work off here?—Not much on this ground.

35,154. Is there no complaint with regard to them here?—No, except by our fishermen who go to the eastward to fish off Douglas. They say it is destructive to the coral banks and to their nets. Their assertion is that the trawling breaks up the coral and destroys the beds for spawning. They also say that there is a great deal of spawn destroyed as well.

35,155. Are there any oyster beds about here?—No, I believe not. I have heard it said that there was a small oyster bed, but oyster-fishing is not followed up.

35,156. There is no fishery?—No.

35,157. Do you fish whelks or buckies?—Yes, buckies.

35,158. For bait?—Yes.

35,159. Do they use herring bait for cod?—No, the cod-fishing is not followed up at the same time as the herring-fishing.

35,160. Then you do not find that the cod require to be fished with herring-bait?—No, but the cod would take herring bait. We use it on the hand-lines and get cod and conger.

35,161. Is not the herring-bait found a particularly good bait for cod; is it not a very killing bait?—I do not know that it is. We do not get the cod in the same season as the herring.

35,162. (*Mr. Lefevre.*) What do you use for cod?—Buckies or whelks.

35,163. How many men go in a herring-boat?—Six men and a boy, or seven men.

35,164. And there are 77 boats here?—About that number.

35,165. And that will be between 400 and 500 men?—Yes.

35,166. How many of those men are fishermen, and spend their whole time in fishing all the year round?—Perhaps two-thirds; but they are not following the fishing all the year round. They may be employed, some of them, in repairing their nets at home. There are only about two-thirds of them you can call fishermen.

35,167–8. Is the other third employed in agricultural pursuits when the fishing season is over?—Yes.

35,169–70. How many boats go out in the cod season?—About 20 boats; that is of the larger class of boats; there are many other small boats as well.

35,171. Do any boats go to the Irish mackerel fishery early in the season?—Yes.

35,172. How many?—Five of them.

35,173. Do any go for the herring-fishing before the season sets in here?—Some of them have been going off to Lewis and Stornoway.

35,174. Before the season commences here?—Yes; but this year none have been down.

35,175. Do you find, in the latter part of the season, that the herrings fetch as good a price as in the early part?—In the early part of the season, in the months of July and August, the quality of the fish is poor.

35,176. When they are full of spawn do they not fetch as good a price?—That is no drawback with regard to the price of the fish; but I believe the greatest drawback is the number caught then.

35,177. Is there any account kept of the number of fish caught?—Yes, by the Fishery officer.

35,178. Does that include the quantity got in the bay?—Yes.

35,179. By foreign vessels from a distance as well as by vessels belonging to the place?—Yes, the total quantity.

35,180. Has the condition of the fishermen here much improved?—Yes, very much; in their circumstances as well as in their character.

35,181. Is that due to their making more money?—Yes, and the men have become more civilized, and do not take so much drink.

35,182. Is that due in part to better earnings?—Yes. In early times the boats did not belong to the fishermen; they had no particular interest in the fishing. Now, the boats and nets are almost wholly owned by fishermen.

35,183. Was there not in former times some law which enforced the ownership of nets by the farmers, with the view of benefitting the fishing?—Yes.

35,184. That is not the case now?—No, it is not the case now. They are all anxious to get nets now. It is a strife between the owners of the vessels and the fishermen who shall have most nets. The nets pay best in respect to the shares.

35,185. Are the fishermen getting more money now?—Yes, they are earning more than they did many years ago.

35,186. Do you think the number of fishermen has increased of late years?—I do not know as to that. I do not think there is any great difference in our island.

35,187. But has the number of people who devote themselves wholly to fishing increased?—Yes.

35,188. There are more men who devote themselves exclusively to fishing?—Yes; formerly they followed it on the coast of the island only, but now they follow it up both north and south.

The witness withdrew.

T. Karran.

THOMAS KARRAN called and examined.

35,189. (*Professor Huxley.*) Have you been a fisherman here?—Yes, I have been sometimes fishing and sometimes buying for the last 25 years or so.

35,190. Then you know pretty well what the state of the fishery is here?—Yes, but I do not look into those things as much as I did.

35,191. Do you think the amount of fish has remained stationary, has increased, or fallen off?—I cannot say anything about that. There were good seasons many years ago.

35,192. But how has it been, taking one season with another?—It has been as good for the last two years as ever I recollect it.

35,193. How has the price of fish been; has that remained the same or has it increased?—I think the price is as good too.

35,194. Has it not increased?—I cannot say. That is all according to the take.

35,195. Does it vary very much?—Yes, very much.

35,196. But, taking one year with another, would the average of five years be the same as it was 20 years ago, or would it be more or less?—It is as good now as ever it was within my recollection.

35,197. You do not think it has increased?—I should not say that it has taking the season through.

35,198. Is there anything here that the fishermen have to complain of; are there any regulations that interfere with them?—I have heard a good many complaints made about their shooting their nets too early in the evening.

35,199. Before sunset?—Yes.

35,200. How much before sunset do they shoot their nets?—About half an hour or three-quarters of an hour.

35,201. Three-quarters of an hour?—Yes.

35,202. Do you think that an injurious practice?—Yes, I have heard it said so. I have heard the fishermen upbraiding one another about it.

35,203. It there not a Manx law against it?—I believe they brought some parties up about it, but they did nothing in the court with it.

35,204. Was that the admiral we saw at Peel?—Yes.

35,205. Is there an admiral belonging to this place?—No, there is an admiral and vice-admiral from Peel.

35,206. Did the admiral find that he had no authority?—According to the Manx law they are not to go out shooting their nets before sunset. The admiral carries his flag and he dips it whenever the boats are to shoot. A jury should be sworn in the early part of the season, and all cases should be brought before that jury; but for a few years past there have been no cases brought before the court. Last year there was a case and no jury having been sworn they could not proceed with it. This year a jury has been sworn, but there has been no case. The men last year were imprisoned, but they were dismissed.

35,207. Then the law was not carried into effect, not because it could not be enforced, but because there was a technical difficulty?—Yes, there was a want of regularity in the proceedings. It was much complained of at the time.

35,208. What was complained of?—Their fishing before sunset.

35,209. Is there anything else the fishermen have to bring forward as a matter of complaint?—I cannot say that there is.

35,210. What do they think about beginning the herring-fishing before June; do they want a close-time here?—They did talk about that some time ago, but I heard them say that the fish were as good as ever they had seen them early in the season.

35,211. In that case it would be a disadvantage to have a close-time enforced?—Yes.

35,212. Were the fish in a good condition on the 1st and 2d of June this year?—They were the best that ever I saw so early in the season.

35,213. Were they good marketable fish?—Yes, and they sold well in the Liverpool market.

35,214. Would it have been a great injury to the fishermen if they had been prevented from taking fish this year before the 9th or 10th of June?—Yes, it would have been a great deal of loss.

35,215. It does not appear that a great majority of the boats begin their fishing earlier than June?—No. In my recollection they did not begin before the 9th and 10th of June, but just now the fish have begun to come a little earlier, and the fishing earlier has done very well for the fishermen for the last two years.

35,216. From what you know of the fishing and of the fishermen here, you do not think it is necessary to have a close-time enforced?—No. It would have been a great loss both to the buyers and to the fishermen if there had been a close-time until the 20th of June.

35,217. According to the old Manx law they were not allowed to fish until the 5th of July?—I have heard about that, but that would never do. I think the reason they fixed upon the 20th of June was that the herrings had been rather small for some years, then the herrings began to get larger, and it would have been a pity if the fishermen had been prevented from going after them.

35,218. If they had made a regulation prohibiting them from fishing before the 20th of June, do you think they would have repented of it?—Yes.

35,219. What is the size of the herring-mesh used here?—It is an inch mesh.

35,220. Does anybody look after that?—There was a man who did; the Fishery officer. He is the only person who is expected to do that.

35,221. (*Mr. Lefevre.*) But does he look after it?—Yes.

35,222. (*Professor Huxley.*) Are the boats lighted in any particular way when they go out; do they carry lights?—They never carry more than one show of a lantern.

35,223. One lantern?—Yes.

35,224. Where do they put the lantern?—They set it on a stand on the forecastle-deck.

35,225. Do the boats carry any vanes?—No.

35,226. Nobody ever troubles you about that?—No.

35,227. Are there any Frenchmen ever fishing off here?—I never saw any.

35,228. (*Mr. Lefevre.*) How many seasons have you been purchasing fish?—About eight seasons, taking one time and another.

35,229. Do you give as good a price in the early part of the season as you do throughout the year?—Yes.

35,230. Do the Castletown boats bring their fish here early in the season?—Yes, and principally throughout the year.

35,231. Do any Peel boats bring their fish here during the season?—Yes, if there is a northerly wind.

35,232. And do they find any difficulty in getting into this port from the fishing-ground?—Yes, sometimes. The tides flowing at ebb-tide or flood-tide in the evening will stop them.

35,233. Are there any fishing-boats belonging to Port Erin?—Not in that harbour; they come here.

35,234. Will it be a great convenience to the fishermen of Port St. Mary when there is a harbour there?—Yes.

35,235. Do you think it will enable them to catch a larger quantity of fish?—They will be able to get out many a night when they are obliged to be in harbour now.

35,236. (*Professor Huxley.*) Is there anything else you wish to suggest to us?—No. Some say that the boats carry too large a train of nets, and others would have them carry as much as they can, so that I do not know what to say about that.

35,237. Cannot they regulate that according to their own interests?—I suppose there is about a quarter of the nets which go down lost every year.

35,238. Why do they wish to restrict the length of the train of nets?—There is a power of nets lost now. When they come across a heavy quantity of fish they lose a good deal.

35,239. But why do they take so much if they lose it?—One man might bring in the whole of his fish, and a very large quantity too, while another man might lose half his nets.

35,240. They do not want the Government to step in and interfere in that matter?—I think some would like an interference.

35,241. (*Mr. Lefevre.*) One man does not like to see another boat with longer nets than he has?—No, and the consequence is that if they get among a great quantity of fish they lose their nets. The nets lie with the buoys to them, when another boat will come and drag across the buoys; in that way the nets are torn and sunk; a power of nets is destroyed in that way.

35,242. (*Professor Huxley.*) The people who lose their nets in that way must pay a heavy penalty for it?—Yes, they are at the loss of their nets.

35,243. That is a tolerably heavy fine is it not?—Yes.

35,244. (*Mr. Lefevre.*) Are any of the boats that come to fish here from a distance larger than the Manx boats?—No; I think the Manx boats are the largest going now.

35,245. Has the number of fish buyers here increased of late years?—Yes, there is a greater number.

35,246. Can you tell us how many there are?—They are principally vessels taking fish to market. They buy on speculation; there will be about 100 vessels engaged in taking fish to the market.

35,247. A hundred smacks?—Yes.

35,248. Ten years ago how many were there?—For the last 10 years there has not been a great deal of difference in the number.

35,249. When did the increase you speak of take place?—I think a few years ago the number was

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hardly as great. Last year they took the number and calculated it at 100 vessels.

35,250. All from Port St. Mary ?—No, they were English, Irish, Scotch, and Welsh boats; none of them were from here.

35,251. But do they come and take their fish from this place ?—Yes, and they will be as often here as at home.

35,252. Do they mostly go to Liverpool ?—Yes, and a great many of them to Wales.

35,253. As compared with 15 years ago, what has been the increase ?—There were not as many then. I do not think there were then one-half what the number at present is.

35,254. (*Professor Huxley.*) Would it not pay to have a steamer to take the fish more quickly in a fresh state ?—No, it would not answer. The expense is very great, and for a few days there may be no fish.

35,255. (*Mr. Lefevre.*) Do the smacks take the fish in fresh ?—Yes.

35,256. (*Professor Huxley.*) Do they just scatter salt over them ?—Yes.

35,257. (*Mr. Lefevre.*) They salt the fish then ?—Yes.

35,258. Is there any curing here ?—Sometimes there are a few barrels cured.

35,259. In former years was there more curing than there is now ?—Yes, a great deal.

35,260. Was it exported or sold in the island ?—Exported principally.

35,261. Is there no export of cured herrings now ?—No, it goes all fresh to the market.

The witness withdrew, and the inquiry was adjourned until the 17th of August, at Dublin.

Dublin, Wednesday, 17th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

Mr. EDWARD HORNSBY called and examined.

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35,261*a*. (*Professor Huxley.*) You are, I believe, Secretary of the Board of Commissioners of Public Works here ?—Yes.

35,262. That Board, I think, was constituted in 1831 or 1832 ?—In 1830 or 1832.

35,263. By an Act of William the Fourth, the 1st and 2nd of William the Fourth ?—The Act was passed on the 15th of October 1831.

35,264. Among the other duties of the Board was included the superintendence of the Irish fisheries ?—Yes.

35,265. Those duties having been formerly under the superintendence of the Director General of Inland Navigation ?—Yes.

35,266. How long have you been Secretary to the Board ?—I was appointed Assistant Secretary August 1846, and Secretary May 1849.

35,267. The superintendence over the fisheries first exercised by the Board consisted in aiding in the erection of piers ?—Yes.

35,268. And nothing further ?—No.

35,269. There were no fishery regulations, properly so called, made by them ?—No.

35,270. The report of the Board for 1835 states, that the whole business of the fisheries in Ireland was practically without regulation ?—Yes.

35,271. Then in the year 1836 it appears that a Committee was appointed to inquire into the fisheries, which was added to the Board ?—I believe that that is correct, although I was not at that time connected with the Board.

35,272. That Committee reported in 1837 or thereabouts ?—Yes.

35,273. Have you a copy of their report in your office ?—Yes; I can obtain a copy for you.

35,274. Are you aware whether the Act of 1842, the 5th and 6th of Victoria, was based upon that report ?—I am not quite sure as to the date of that report, but the Act will recite it.

35,275. All the previous Acts relating to the Irish fisheries, with some specially named exceptions, were repealed by the Act 5th and 6th Victoria ?—Yes.

35,276. That Act was passed in the year 1842 ?—Yes.

35,277. Under the second section powers were given to the Commissioners of Public Works to appoint officers and to fix their salaries ?—Yes.

35,278. Can you state what officers were then appointed ?—The two Inspectors of Fisheries.

35,279. Were any other officers appointed ?—None that I am aware of.

35,280. At what salaries were those Inspectors appointed ?—First at 300*l*. a year, and subsequently it was increased to 600*l*., at dates with which I can supply you.

35,281. Has the organization of those offices remained the same from that time to this ?—The duties have remained the same, but the name was altered by the 2nd section of the 11th and 12th of Victoria, chapter 92, which enacts, that the two existing Inspectors of Fisheries are to be Inspecting Commissioners.

35,282. Did that give them an increased salary ?—Their salary was increased after that.

35,283. And the authority of the Inspectors then became co-ordinate with that of the Commissioners ?—Yes, as far as the fisheries are concerned.

35,284. They had no voice in other matters ?—No.

35,285. Previously their reports had been made to the Commissioners ?—Yes, and so they are now. The Inspectors reported to the Commissioners, and now the Inspecting Commissioners also give a report of their proceedings and investigations during the year to the Board, which appears as an appendix.

35,286. (*Mr. Lefevre.*) That is so; and then they draw up a joint report with the Board ?—Yes.

35,287. There is now only one Inspecting Commissioner ?—Yes.

35,288. Since when has that been the case ?—Since Mr. Ffennell was appointed the English Inspector.

35,289. His place has not been filled up in the Board ?—No.

35,290. (*Professor Huxley.*) The practical result of the change of name was that the Inspector acquired a voice in the action of the Board ?—Yes.

35,291. Not only the power of advising, but the power of voting ?—Yes, certainly. I may mention that for some time after Mr. Ffennell was removed to England Mr. Brady was appointed specially as Acting Inspector. He exercised all the duties of the office, and visited all the localities in which his presence was required. He further reported to the Board as Acting Inspector. He filled that post until he was appointed Secretary of the Special Commission for Salmon Fisheries under the Act which passed in August last. He was never a Commissioner, but he was the Acting Inspector of the Fisheries.

35,292. Was that an additional office that did not exist before ?—It was to supply the deficiency created by Mr. Fennell's retirement, or removal to England. That left only one Inspecting Commissioner, and Mr. Brady was appointed to discharge the duties of Acting Inspector.

35,293. But not with the power of sitting at the Board?—No.

35,294. Nor with the same salary?—No.

35,295. Has the office Mr. Brady held been filled up?—No.

35,296. What is the reason the office has not been filled up?—It was not considered necessary to fill it up, the salmon fishery business being transferred to a Special Commission, by the Act 26 & 27 Vict., c. 114.

35,297. How long has it been vacant?—It has been vacant since last November, when he was transferred.

35,298. The powers of the Board appear to be very extensive. I will not trouble you with the details of all the special Acts, but there is one particular clause in the 5th and 6th of Victoria which I will read, and then ask what has been the general action of the Commissioners with regard to it. The 91st section says:—"And be it enacted that it shall be lawful for the said "Commissioners, from time to time as may become "necessary, to make and ordain such byelaws, rules, "orders, and regulations (in addition to those herein "specifically required to be made) as to them the said "Commissioners shall seem expedient for the more "effectual government, management, protection, and "improvement of the fisheries of Ireland, and the "registry of all boats engaged therein, and from time "to time to repeal, rescind, or vary the same, and "substitute others in lieu thereof, and to impose and "prescribe any conditions and restrictions for the "regulation of the said fisheries, and the preservation "of good order among the persons engaged therein, "and in relation to the times and seasons at which "the taking the several species of fish shall commence "and cease, or the times and places or the manner "at and in which any trammel, trawl, or other net "or nets, engine or engines to be employed in the "said fisheries shall be used, and also as to the "description and form of nets to be used in the "said fisheries, and the size of the meshes thereof or "to the prohibition thereof, or of any practice what-"soever, tending in the opinion of the said Commis-"sioners to impede the taking of fish, or to be in any "manner detrimental to the said fisheries, or as to "any other matter or thing which shall in any "manner relate to the government and protection of "the said fisheries; and it shall be lawful for the "said Commissioners to impose any penalty not ex-"ceeding 5*l.* in all cases where any penalty is not "fixed by this Act for any breach of such byelaws, "rules, orders, and regulations, and to direct that all "nets, engines, or other instruments whatsoever used "contrary to any of such byelaws, rules, orders, or "regulations shall be forfeited, destroyed, or removed, "as the case may require: Provided always, that all "such byelaws, rules, orders, and regulations be not "repugnant to any law or statute in force in Ireland, "and shall not injure the effective working power of "any mill or factory, and shall be approved of and "confirmed by the Lord Lieutenant or other Chief "Governor or Governors of Ireland, for the time "being in Council, and all the said byelaws, rules, "orders, and regulations, when so approved and con-"firmed, shall be binding and conclusive on all per-"sons as if the same had been contained in and "enacted by this Act." It is obvious that that clause gives exceedingly large powers to the Board?—Yes.

35,299. In fact, it would be almost difficult to say what they might not do under that clause. Having these large powers, can you tell us what has been the practical policy of the Board in exercising them?—The best mode of explaining that policy will be to read extracts from the annual reports of the Board. The first passage I will read is contained in the first annual report of the Commissioners. Speaking of the Act 5 & 6 Victoria, chapter 106, they say, "By a reference to the Act it will be per-"ceived that the principle adopted has been one of "non-interference by Government; to make the pro-"visions as definite as possible, to the effect that the "public in general might have the power of causing "it to be enforced, the intervention of the Com-"missioners being only admitted as an authority for "deciding matters that are of a nature varying "according to localities or circumstances, and that "consequently could not be defined in the Act." Upon the next page the Commissioners say, "The "introduction of trawls and trammel nets has for "years been regarded with great jealousy by the "fishermen along the coast of Ireland, who felt "inclined to continue their long established habits, "or were unable to pursue the new system. Pre-"ceding Acts of Parliament so far conceded to their "views as to admit of trawls and trammels, to be "used as an exception, that is, in such places only as "might be formally authorized. The present Act, "however, is founded on a different principle, and "makes the restriction on any mode of fishing in the "sea the exception, and consequently admits of these "implements being used everywhere, excepting "where they shall be formally prohibited by a bye-"law. The consequence has been applications to "the Commissioners from several of the principal "fishery communities on the coast to apply restric-"tions to their employment, or rather to prohibit "them altogether in those several localities. Thus "there have been applications against trawls from "Dublin and Galway, and against trammels and "trawls from Kinsale and Dungarvan. In all these "cases we have, by ourselves or our inspectors, "made every necessary inquiry on the spot, usually "calling a meeting by public notice for the pur-"pose of obtaining information, and having the "matters discussed; and the general result we "have come to from the information so collected, "and from printed documents, and more parti-"cularly from the Report of the Commissioners of "Inquiry into the State of the Fisheries in 1836, "from whose opinion on this subject we see no "reason to dissent, is:—1. That the greatest cau-"tion should be used in applying restrictions on "any mode of fishing in so vast a field as the "open sea, and that it should only be done on very "certain grounds; 2. That the extent to which "the trawls and trammels are used prove that they "are productive and profitable modes of fishing, and "consequently should meet with encouragement on "public grounds; 3. That the arguments put forward "for an absolute prohibition of them are founded on "prejudices and vague theories, not by any means "confirmed by facts; 4. That, although it would "be greatly to be regretted that the extension of "the use of these or any other improved modes of "fishing should injure the interests of any other "class, by increasing the produce and lowering prices, "particularly if that should be a poorer class, such "reason cannot be admitted as an argument for "their being suppressed. At the same time, there "are cases where we have considered that a certain "degree of restriction ought to be applied, such as "of small bays of comparatively shallow water, or "the narrow entrances of deep inlets; the indis-"criminate use of trawls or trammels in such confined "spots might tend to prevent the fish from congre-"gating in these sheltered spots (where they can be "most easily followed), and partially from entering "them; it would be therefore tantamount to reducing "by so much the available extent of coast, while at "the same time a restriction in such places is of no "great consequence to the parties using those im-"plements, and has a great incidental advantage of "protecting, for a great extent, the poorer class of "line fishermen, who have only small boats, from "the injurious effect of trawls on their lines. The "use of trawls in Dublin Bay has been restricted on "this principle by byelaw, which, having been made "the subject of appeal to the Privy Council, was "confirmed. Arrangements are making for fixing "the limits for trawls and trammels at Galway, "Kinsale, and Dungarvan, in a similar manner." In the second annual report of the Commissioners, they say:—"We have been frequently urged to "restrain particular modes of fishing, on the plea of "their being injurious, whereas, in general, it was "their effective results and novelty that occasioned

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"the complaints against them; the objections chiefly "arising from the competing interests of persons or "communities who had habitually pursued different "and probably inferior systems; and occasionally "originating in some old established prejudices or "assumed peculiar rights." Then again, at page 5 of the same report, the Commissioners say, in reference to trawling and trammel nets, "We have still "had occasion to resist the opposition to trawling and "trammel nets; but the applications against them "are much less frequent, arising from a wearing "away, in consequence of the discussions that have "taken place, of the impressions against them, even "in the minds of the fishermen themselves, and from "a growing experience that they are really a valuable "resource, and do not effect the injuries imputed to "them. To show how far prejudice against a novelty "may be carried, we received the most pressing "remonstrances from the fishermen in the Bay of "Galway, because a single yacht had occasionally "fished with a trawl in those extensive waters; "drawing an inference that because the ordinary "fishing season happened to be bad during the year "of the introduction of this trawl, the evil was "created by it. We hope to see these modes in-"creased, with every confidence that it would be "attended with the same success as in other coun-"tries, where experience proves them to be advan-"tageous to the undertakers, and in no degree "injurious to the breed of fish. We have thought it "right, however, to apply limits to the trawling, in "some cases, on application, confining it in bays to "the outer parts; so that the numerous class of the "poorer fishermen, with small boats, who cannot go "far from land, or to the open sea, may follow their "business without the risk of having their lines "carried away by the trawls, a frequent cause of "ill-blood in this country."

35,300. The restrictions which have been applied are wholly in the nature of police regulations?—Yes.

35,301. Every year something of the same kind is done?—Yes. In the Third Annual Report, at page 4, under the head of "Trawl net fishing," the Commissioners say:—"There has heretofore existed a strong "feeling of hostility against this mode of fishing, as "well as against that with trammel nets but it is on "the decline, and is now chiefly confined to localities "where the superior efficiency of the engine appears, "to the poorer class of fishermen, to give an undue "advantage to those using it, they not being at "present in a position to avail themselves of its "advantages. This is more especially the case on "the western coast, where the remoteness from good "markets brings the abundant produce of the trawl "net into injurious competition in the immediate "locality with the more scanty supply obtained by "the hook and line."

35,302–3. Again, there is a passage in the Report of the Commissioners for 1849, in which they say, in reference to trawling:—"We have exercised the "restrictive powers entrusted to us very sparingly, "and chiefly in cases where, without real detriment "to these modes of fishing, it proved desirable for the "preservation of peace and order that limits between "conflicting parties should be defined. In questions "of this and a similar nature connected with the "fisheries, where the array of facts upon which to "found just conclusions is very limited or little known, "and, consequently, ample scope is afforded for con-"jecture and imagination, we find a proportional "diversity of opinion, and a degree of heat and deter-"mination, so that it is very difficult for a body acting "impartially on general principles to preserve con-"sistency and resist the impetuous claims of contend-"ing parties in different localities. But we have been "supported in the course we have adopted, apart from "the natural history portion of the question, by a con-"sideration of the vast extent and illimitable supply of "the ocean, and by the experience attained in all "fishing communities for a number of years, at the "same time that there is a total absence of proof of a "reduction of fish taken, but, on the contrary, evidence "of its positive increase, in proportion as these de-"structive modes of capture are more used." Do the passages which have been read express the opinion of the Board as contained in successive reports?—Yes.

35,304. What have been the steps which have been taken in reference to making byelaws?—No byelaw is made except upon the application of parties interested in the fisheries of the locality to which the byelaw is to refer. Upon such application, a meeting is called by public notice, an inquiry held, and the evidence of all parties taken,—this is the voluntary act of the Commissioners. If the byelaw is deemed necessary or advisable upon this public inquiry, it is framed according to the circumstances, printed, and copies deposited with the Clerks of the Peace for each county in which the byelaw is proposed to be enforced, and also with the Clerks of Petty Sessions for each district in which it is proposed to be enforced, and a notice of such lodgment is posted at the usual places for posting notices in each such Petty Sessions district. This lodgment and notice must be one month, at least, before the byelaw is submitted to the Lord Lieutenant for approval. During that time any party feeling aggrieved by the intended byelaw can appeal to the Lord Lieutenant in Council. If there be such appeal, the case is heard and determined by the Lord Lieutenant in Council, both parties, the Commissioners and the appellants, being represented. If there be no appeal, the byelaw is approved as a matter of course. When the byelaw has been approved by the Lord Lieutenant in Council, either upon appeal or without it, it is printed, and a copy is deposited with the Clerks of the Peace of the county or counties where it is proposed to be enforced, with all the Coast guard officers at the different stations, and with the Clerks of Petty Sessions in each district where it is proposed to be enforced; and printed copies are reserved for parties applying for them; and notice of this publication, and of the place or places where the byelaw may be obtained, is given for three successive months, in such local papers as the Commissioners may select, and for the purpose of convicting under the byelaw, after the expiration of these three months a printed copy obtained from the Clerk of the Peace, or the Clerk of Petty Sessions, must be taken as conclusive evidence of the existence and due publication of the byelaw.

35,305. Then, as far as we understand you, the Board has always endeavoured to legislate in accordance with local objects and desires?—Yes, in accordance with what has been proved to be, or what they consider, best for the interests of all parties.

35,306. And at the same time it has exercised a judgment of its own as to whether the local requirements were reasonable or not?—Yes.

35,307. The Board would not feel it necessary to frame a byelaw at all unless it was satisfied that the desire for regulations was based upon satisfactory grounds?—No; but if it considered the application reasonable, it would frame a byelaw to meet the requirements of the case.

35,308. Has the Board in any case, made its byelaws of its own motion, or has it always waited until it received an application from the locality requiring regulations?—The Board has been put in motion by applications from the locality; either a complaint on the part of one side or the other.

35,309. Is there any case you can mention, since the Board has had that power, in which it has exercised it without being put in motion by a petition from the locality?—No.

35,310. Is there not a list of the byelaws contained in one of the reports?—There is.

35,311. (*Mr. Lefevre.*) The last report contains a list, and also a list of all the licences?—It does.

35,312. (*Professor Huxley.*) The Board has promulgated no scheme of regulations, in virtue of this power, for the regulation of the whole fisheries of Ireland?—I think they have decided only in accordance with the requirements of the locality, those requirements differing very much in one place as contrasted with another.

35,313. Has the Board thought it advisable to abstain as much as possible from interfering?—I think so, as little as possible in a restrictive sense.

35,314. The next Act, the 7th & 8th Vict. cap. 108, gives in the 5th section a special power to the Commissioners to suspend for a fixed period the oyster fishery in any particular locality, for any period not exceeding three years. Do you know why that special power was given?—I believe it was in consequence of information having been received that a great number of the beds had been exhausted and fished out, but you will see by the section referred to that the Commissioners could only act upon an application being made to them.

35,315. Has that been acted upon?—No order has been made prohibiting the fishing for oysters for an entire year, but an extension of the close season has been made at Carlingford and other places, and regulations framed to prevent exhaustion by over dredging and the capture of small oysters. These orders and regulations relate to Carlingford Lough, where the close season was fixed from the 1st March to 1st November, and the capture of oysters of less dimensions than $2\frac{1}{2}$ inches at the greatest diameter was prohibited; to Tralee Bay where the close season was fixed from 1st April to 1st November, and the same regulation made as to the size of the oysters; to Clew Bay, Achill Sound, and Blacksod Bay, where the close season was made from the 1st April to 1st October with the same limit as to the size of the oysters taken in the open time and prohibiting dredging at night; to Cork harbour, fixing the same dimensions and prohibiting dredging by night; and to the Wexford coast where the least dimensions were fixed at three inches diameter. These orders also contained provisions as to throwing ballast upon oyster beds, and to returning to the water all gravel and shells raised by the dredge.

35,316. Can you tell us whether the Board would act upon the report of its Inspector? Suppose, for example, that one of the Inspecting Commissioners reported that, in the course of his observations, he had noticed particular oyster beds to be overfished would the Board, upon receiving such a report, suspend the fishing or dredging there?—No; they would cause a public inquiry to be held and take the evidence of the parties, but before doing so an application should come from some person or persons interested.

35,317. Are you aware whether anything of the kind has taken place; has any fishing or dredging been suspended?—No. There has been no total suspension, but the close season has been extended and other regulations made to remedy or prevent exhaustion.

35,318. The 7th section of the same Act permits the use of the seine net for herrings; can you say why that clause was inserted?—That section gives permission for fishing for herrings by daylight with seines except in such places as should be prohibited by the Commissioners, and the section says that such permission was found expedient.

35,319. You are doubtless aware that the use of the seine net for catching herrings has been a matter of great controversy upon the coast of Scotland?—Yes.

35,320. It would appear as if there had been a discussion of the same kind in Ireland, and that this special clause had been inserted in the Act as the result of the judgment of some persons that the use of the seine net is not injurious?—It would appear so; but I cannot at the present moment say how it was that that clause was inserted in the Act.

35,321. Can you obtain information upon that head; it has a very important general bearing upon the whole question of the fisheries in this country?—In the appendix to the report on the subject of trawling for herrings on the coasts of Scotland, page 35, this information is supplied by Mr. Barry, who says, "The 7th section of the 5th and 6th Vict. c. 106, inter- "dicting the capture of herrings between sunrise and "sunset, rendered the seine net for herrings utterly "illegal by day, but the complaints against this "restraint from persons who could only use them by "day were so numerous that it was judged expedient "to relax the regulation, and the use of the seine net "for herrings was permitted by day by the 7th section "of the 7th and 8th Vict. c. 108.

35,322. The next Act is the 8th and 9th Vict. cap. 108. The 15th clause states, that the Commissioners may permit the use of trammel or other nets during the day time; that is a case of the like kind to the use of the seine net for herrings. The question has evidently been discussed, and whoever was the framer of this Act came to the conclusion that this practice was permissible and not injurious?—This section was to empower the Fishery Commissioners to allow the use of the trammel net during the day, when, in their opinion, it can be employed without injury to the fisheries, the object being principally to allow these nets to remain out during the day off islands and remote portions of the coast, away from harbours or ports which, on short days of winter or or of strong weather, could not be safely reached.

35,323. The 17th, 18th and 19th clauses all relate to a power given to the Board to license the making of oyster beds; they provide that persons stealing from such beds shall be guilty of larceny, and they give power to dredge during part of the close time for oysters to supply the beds. Can you tell us upon what grounds those clauses were inserted?—The only reason I can give for the clause, is the desire to afford encouragement to the artificial formation of oyster beds, and to enforce the close season prescribed by law for the prevention of over-fishing or of fishing at improper times, and the punishment of the offender.

35,324. Was not the Board of Works here largely consulted about these Acts by the Government?—Yes, they were, but some of the clauses may have been brought in by private members, and in such cases, unless a clause was felt to be injurious in its tendency, the Board would hardly have made a representation to the Government without being called upon.

35,325. Then the Acts relating to the fisheries of Ireland have not been the result of the movement of the Board here?—Most of them have been, and they have been altered and amended according as it has been found necessary to introduce alterations.

35,326. You perceive that on the face of the matter the Government, having empowered a Board to look after the interests of the fisheries here, it would seem natural that they should consult the official body, intrusted with looking after the fisheries, in reference to any new legislation that might be desirable?—Just so.

35,327. Therefore I imagine that all these clauses were brought forward after consultation with the Board?—The Board made representations either directly or by their Inspectors, and subsequently by their Inspecting Commissioners, in regard to the details of these clauses, as to the effect of seine nets or trammel nets. The officers of the Board whose whole attention was directed to the subject would supply more reliable information than I can. Of course, in my capacity, it is impossible for me to give you details, or enter into the reasons why some of these clauses were proposed.

35,328. The Board, I believe, has granted a number of licences?—Yes.

35,329. (*Mr. Lefevre.*) Are not all those licences given in the annual reports?—They are detailed in the annual reports.

35,330. And the Report for 1863, which has not yet been presented to Parliament, will contain all that have been granted up to the end of last year?—Yes.

35,331. Have there been many granted during this last year?—Yes, several.

35,332. (*Professor Huxley.*) Under what section of the Act does the Board consider itself entitled to suspend or disallow trawling? Is it under section 9 of the 5th and 6th Victoria?—Yes; the 9th clause says, "Be it enacted that any person who shall use any "trawl or trammel net, at any season or any place, or "within the tideway in any estuary, when or where "the use of the same shall have been prohibited by

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"any byelaw to be made as herein-after mentioned, "shall forfeit every such net so used, and shall for "every such offence also forfeit and pay any sum not "exceeding 20*l.*"

35,333. It may also arise from the 6th section of the Act, which enacts that no net by which unsizeable and young fish may be taken or destroyed shall be used?—I suppose that both clauses will have a bearing one upon the other.

35,334. (*Mr. Lefevre.*) But the power to make regulations is given, I think, by the 91st clause?—Yes; by the 91st clause the Commissioners are empowered to make byelaws for the protection and improvement of the fisheries, and the powers under that are very general.

35,335. (*Professor Huxley.*) The 7th clause provides that no herring or other nets, save those specially mentioned, shall be shot or left floating in the day time. That amounts to a prohibition against shooting the nets before sunset?—Yes.

35,336. That question is practically answered in the Third Annual Report of the Commissioners of Fisheries, under the head of "Daylight fishing with seine nets?"—Yes, they say, "The grievance complained "of and alluded to in our last report, under this head, "has been remedied by the 7th section of the Act "7th and 8th Vict., cap. 108, to the general satisfac- "tion of those engaged in the seine fishery."

35,337. Are you aware whether the Board has ever fined any person for shooting herring nets before sunset?—No, I am not aware.

35,338. Would the Inspecting Commissioners look to a point of that kind?—Yes, I think they would, if their attention was called to it.

35,339. (*Mr. Lefevre.*) Has any question arisen before the Board as to a conflict of jurisdiction between the law of England and Ireland in regard to that point?—No, not that I am aware of. When the English fishermen come over here they conform to our laws. I am not aware that the question has ever arisen.

35,340. (*Professor Huxley.*) How far does your authority extend out at sea?—I believe that that is all defined by the byelaws. For instance, we prohibit trawling within certain marks. This, however, is a question more for our solicitor than for me.

35,341. You are aware that, according to the ordinary law in England, the jurisdiction is limited to three miles beyond the coast line?—Yes.

35,342. But in the case of foreign fishermen fishing here what would you consider to be your authority over them? Would you have any authority at all under your Acts?—Do you mean at a certain distance out at sea.

35,343–5. No; anywhere?—Certainly, upon the coast we should. Suppose we say, as an illustration, that a fisherman here commits some breach of the law; we cannot punish him or lay hold of him until he comes into port. Then he would have to be summoned before a bench of magistrates, and whatever he had done would be set forth, and decided upon evidence *pro* and *con*.

35,346. Suppose that herring-fishing is going on 10 miles from the land, does your authority extend as far as that?—There is no statutory enactment fixing the limit of our authority.

35,347. No case of that kind seems to have arisen?—No; not within my recollection.

35,348. The Convention Act does not apply, I think, to Ireland as long as any foreign boats are not fishing here?—I think not. I have never heard it quoted, or known it to be relied upon in any case which has come under the notice of the Board.

35,349. We find no evidence in the reports of the Commissioners of a close time for herrings ever having been enacted for Ireland. Was that ever the case?—No; I think not.

35,350. There has been nothing of the kind here?—No.

35,351. And you seem to have nothing here analogous to the brand system in Scotland?—No.

35,352. Is there any considerable export of cured herrings from Ireland?—There is an export of herrings from Howth in the season, but I believe they are not cured, merely salted.

35,353. I mean regular curing, such as they have on the east coast of Scotland?—No; there is none here, that I know of.

35,354. I think the Board, at one time, did specially encourage the curing of herrings on the west coast?—Yes; the curing of all fish.

35,355. And they went so far as to advance funds for the establishment of curing stations?—Yes; they established curing stations at,—

Baltimore,	opened	March	1847,	closed	May 1848.
Castletown	„	May	„	„	Nov. „
Inniscoe	„	Sept.	„	„	June „
Valentia	„	May	„	„	Feb. 1849.
Belmullet	„	Jan.	„	„	Jan. „
Killybegs	„	Jan.	„	„	Feb. „

A sum of 8,000*l.* was advanced by the Treasury for these establishments,—full details are given in our 17th Report.

35,356. (*Mr. Lefevre.*) I think there was some return to the Treasury?—Yes; 800*l.*

35,357. (*Professor Huxley.*) Was the business found un-remunerative?—The time had arrived when it was thought right that Government should close those establishments. They were brought into operation when it was considered necessary, to afford employment and provide food, that the plan should be tried as an experiment.

35,358. (*Mr. Lefevre.*) Was it considered that they had been a success?—They were successful, to a certain extent.

35,359. In promoting the formation of similar curing establishments?—Yes, for a time; they were followed by establishments for fish-curing at other places.

35,360. In the report of the Inspecting Commissioners there are a good many statistical details. What is the method by which they are obtained?—Do you mean, in what way?

35,361. For example, you give the number of boats, the number of fishermen, and the quantity of fish caught. How is all that arrived at?—As regards the boats, they are all registered. That is done by us, through the Coastguard. We issue certain forms of registry, and they are supplied by the Coastguard officers in every district to the fishermen. They send up to us returns of the number of boats, and the number of men and boys employed, each boat being numbered.

35,362. What persons are returned as fishermen? The number struck us as being exceedingly large. Who would be registered as a fisherman? How much time given to the employment would make a man a fisherman?—I expect that every man whose calling is that of catching fish, and who goes out with a boat, would be called a fisherman.

35,363. But I presume that many of these persons only fish during part of the year, and employ themselves in cultivating the land during the remainder?—I think that is so in certain parts of Ireland.

35,364. What fraction of a year would make a man a fisherman?—That is difficult to say.

35,365. I see in the report of the Commissioners that they themselves seem to have some doubt as to whether the number is to be relied upon?—We take the best means we can to obtain the information, but we cannot always vouch for its accuracy.

35,366. Are the Coastguard officers paid for these services?—No.

35,367. (*Professor Huxley.*) There are no resident Fishery officers in Ireland?—No, none.

35,368. Not at the different ports?—None.

35,369. Then the persons from whom these details as to the yield of the fisheries are obtained must be fishermen themselves?—As regards the quantity of fish caught, we ascertain that from the railway and steam companies, who supply us every year with the number of tons of fish they bring from the various localities.

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35,370. (*Mr. Lefevre.*) Are those statistics given in the reports presented to Parliament?—Yes, they are.

35,371. Are there any statistics with regard to the whole quantity of fish exported from Ireland?—No; I do not know exactly how we could get at that.

35,372. Has it been the duty of the Fishery Inspectors to make tours round the coast?—Yes.

35,373. Every year?—Yes.

35,374. Each year going round the whole coast, or only taking a part of it?—Taking such parts of the coast as they consider necessary, in order to obtain information for their reports.

35,375. They have made reports every year to the Commissioners?—Yes.

35,376. And upon those reports the Commissioners have drawn up a report for the House of Commons?—Yes; upon those reports, and other information of their own.

35,377. Since the appointment of the Fishery Inspector as Commissioner, he has also presided at all meetings held in the country preliminary to the making of byelaws?—Yes; but sometimes it has been considered necessary for other members of the Board to preside with him.

35,378. By whom were their reports generally drawn up?—They either drew up a joint report or each of them draw up a separate report.

35,379. They drew up the report mainly upon the report of the Inspector?—Yes, upon his report and the evidence taken at the inquiry by the reporter.

35,380. I see that it has also been usual for the Inspecting Commanders of the Coastguard to send up short reports every year from their several districts?—Yes, in respect to certain information required of them by the Board.

35,381. A series of questions are asked of them every year?—Yes.

35,382. I think it was in the year 1845 that power was first granted to the Commissioners to set apart oyster beds. That would be the 8 & 9 Vict. c. 108, and there was a proviso that that power should no be exercised in cases where the public themselves had been in the habit of fishing for oysters?—Yes.

35,383. Was there any proviso in the licence that in case of the right not being used it should cease to exist?—Lately there has been a proviso added, that if the object for which the licence was granted was not carried out within a certain time, fixed according to circumstances, the licence should be withdrawn.

35,384. When was that proviso first included in the licence?—Recently.

35,385. Was it found necessary in consequence of licences having been granted and no action taken upon them?—Yes.

35,386. Have many of the beds which have been formed in pursuance of the Act been successful?—I believe they have, and I think I can give you some information upon that point.

35,387. Before the Act of 1845 was passed was not the law in Ireland, relating to public and private oyster beds, the same as in England?—I am not sure.

35,388. I see that the same Act also gave power to suspend the law with regard to the close time for oysters, for the purpose of replenishing and supplying private beds with oysters during the close time?—Yes.

35,389. Have there been many cases in which that power has been granted by the Board?—There has been a case at Arklow, where the month of May was opened in the year 1846. Owing to the excessive quantity taken for exportation to France and to Wales Mr. Barry visited the place from time to time, and he felt himself obliged to recommend the shutting up of May again, but the question was a very difficult one to deal with. The fishery gave an enormous amount of employment to the Arklow fishermen, who got a great price for these oysters.

35,390. Was any action taken by the Commissioners upon that report?—There was not; the remedy seemed to be a very difficult one to arrive at.

35,391. Was it a case of oysters exported from Arklow to foreign beds?—Yes, to France, Wales and England.

35,392. Not to private beds in this country?—No; it was to supply beds in England, Wales and France.

35,393. In that case had the Commissioners given a licence to remove the oysters during the close time?—Yes; there is a clause in one of the Acts which enables them to do that for the purpose of supplying and replenishing private beds.

35,394. And they had in this case granted a licence under that power?—Yes, they made an order opening the month of May.

35,395. Have many applications been made to the Board which have not been granted for regulations, byelaws, and licences?—I can give you a list of the applications which have been made.

35,396. Have there been many inquiries held by order of the Commissioners which have resulted in refusing the applications which have been made?—There have been some, and I will give a list of them as an answer to the question.

The witness withdrew, and the inquiry was adjourned until the 18th of August, at Kingstown.

Kingstown, Dublin, Thursday, 18th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman.) | G. SHAW LEFEVRE, Esq., M.P.

KINGSTOWN.

Capt. W. Hutchinson, R.N.

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Captain WILLIAM HUTCHINSON, R.N., called and examined.

35,397. (*Professor Huxley.*) You are harbour master here?—I am.

35,398. Have you been harbour master here for many years?—Since 1823.

35,399. Then you have, doubtless, been acquainted during that time with the condition of the fishery at Kingstown?—Yes, I have.

35,400. What is the present number of fishing vessels from this port?—There are 15 or 20 hand-line fishing boats.

35,401. About 15 or 20 sail of hand-line boats?—They do not sail; they are only four-oared skiffs.

35,402. How many trawlers are there from Kingstown?—About a dozen. There is that number of trawlers here constantly. About nine fish out of this port.

35,403. The line-boats are open boats and rowing boats?—Yes.

35,404. Of what tonnage are the trawl-boats?—From 40 to 60 tons.

35,405. When you were first acquainted with Kingstown, was the number of boats as great as it is now?—No. There were no trawlers here whatever; they were all hand-line fishing boats.

35,406. Was the number of hand-line fishermen greater than it is now?—I think there were more then.

35,407. Has the number shown any marked difference?—I think they were more numerous.

35,408. Was the number strikingly greater?—No. I should say there were more, but I could not exactly say how many more.

35,409. Was the number of men the same in each boat?—Yes; four men in each boat.

35,410. And was the equipment of each the same?—Yes.

35,411. Do you remember when trawling began in this harbour?—Trawling first began in Dublin. My uncle was one of the originators of it. He brought over a trawler from Cornwall to this place.

35,412. How many years is it since trawling com-

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menced here?—I cannot say exactly the year it commenced, but it is more than a quarter of a century ago. Perhaps between 40, 50 and 60 years ago. There was a company formed, and before that there was no trawling in the Bay of Dublin. Trawling was confined to the Skerries and Balbriggan. The fish were then so high in price that six gentlemen clubbed together, and brought over six trawlers. They commenced trawling. The Company effected their purpose in bringing over those trawlers, and others followed. The Company then sold their vessels, and a general trawl fishery took place.

35,413. Then the considerable trawling in Dublin Bay here is only a matter of recent standing?—About 25 years. I think it was in 1818 when the Company was first formed.

35,414. In 1818?—Yes.

35,415-6. At that time, did the trawlers work in Dublin Bay or outside of it?—Off the Skerries and Balbriggan. It was all carried on in wherries.

35,417. Of what size were these vessels?—Forty-five tons. They were large cumbersome ugly looking craft, with schooner sails.

35,418. Were they open vessels?—No; they were decked vessels.

35,419. Where did they trawl—over what ground?—Not in the Bay of Dublin, but along the coast.

35,420. Why did they not trawl in the Bay of Dublin at that time?—They were not allowed.

35,421. Has the tonnage of the trawlers increased since you first knew the practice to be carried on here?—The boats, certainly, are larger, and they are a finer class of vessels.

35,422. Do they cost more money than they did?—I am not aware of the cost.

35,423. You do not recollect what may have been the cost of a trawler when they first began to work here?—They were brought from Cornwall, and they followed the example of the Cornish fishermen. The vessels have since increased in tonnage and symmetry.

35,424. After the example set here by the Company, did other people take it up?—Yes. The men who purchased the boats from the Company were masters and others interested in the fishery.

35,425. Did they purchase the boats out of their earnings?—Yes.

35,426. Has the number of trawlers gone on increasing?—They have, until we have now 50 or 60 boats out of Dublin.

35,427. Is there any complaint that the supply of fish by trawling is falling off?—I understand that the trawlers cannot get the quantity of fish they formerly did.

35,428. What is the market for that fish?—Dublin.

35,429. Does it all go to Dublin?—Yes.

35,430. With respect to the line-boats, their number is not changed, or if anything has fallen off?—The haddocks have disappeared altogether.

35,431. But how is it with regard to the boats?—There is about the same. They also fish and ply sometimes.

35,432. Has the equipment of those boats become more expensive?—No; it is about the same. They have a better description of boat. The carpenters build very nice boats now; they are somewhat in the form of the Norway yawl.

35,433. Is there any complaint as to the falling off of the yield of fish by line-fishing?—I think there is a great falling off. The haddocks have disappeared.

35,434. When did they disappear?—Five or six years ago. The only fish these men catch now are flat-fish, soles, plaice, and flounders, and sometimes they get a few cod.

35,435. Do you hear any complaint against the trawlers for working over the long-lines?—There have been some complaints.

35,436. Do they complain that the trawlers carry away the long-lines?—There have been some complaints; but I do not think the trawlers go much into the bay now. The Revenue cruiser keeps a sharp look out for them. I have, however, seen them trawling in the bay.

35,437. How long ago was that?—I was on the West Pier one day when a fleet of trawlers went out, and they shook a stick at me. Whether they knew me or not I do not know; but they went out in the bay, and trawled in spite of everything. I was pilot master then. I tried to get some of the Dunleary fishermen to go out in a pilot-boat with me, and take the numbers of the boats, but they would not.

35,438. (*Mr. Lefevre.*) Was there no Revenue cutter here then?—No.

35,439. (*Professor Huxley.*) Do you hear many complaints from the line fishermen about the trawlers?—There have been complaints, but I think they have subsided. They do not persevere now in trawling in the bay, because there was a clause inserted in an Act since passed that no vessel is to trawl between the Bailey Lighthouse at Howth and Mugglins and Dalkey. Mr. Watt, the late Queen's Proctor, consulted me and got a clause put into the Act to prevent trawling inside the headlands.

35,440. Does that appear to be satisfactory to the fishermen?—It was at that time.

35,441. They do not complain of trawling outside the limits?—No.

35,442. Is the cod-fishing in the winter by hand-lines or long-lines?—By long-lines.

35,443. How does the supply of cod keep up?—I was speaking to some fishermen of Blackrock Castle, and they say it has fallen off. When I lived at Blackrock Castle, I could get a good cod for 1*s.* 6*d.* Now, that is not the case.

35,444. Is that because it has fallen off?—Yes.

35,445. May it not have been on account of a much readier communication with the interior of the country, by means of railways, carrying away the fish?—I believe the codfish are all sent to Dublin. The haddocks were formerly sent to Liverpool. There was an immense quantity caught here and sent off to Liverpool as fast as it was caught. The hand-line men made a great deal of money in that way.

35,446. What other fisheries are there here; are there any lobsters caught?—They catch a few about Blackrock, but it is only a small quantity. I think they destroy the brood by catching the small things. People come down in the summer time to fish, and they get a small description of crab for bait, which must destroy the entire brood.

35,447. Are the lobsters diminishing here?—I do not think they catch as many as formerly. Formerly there used to be a great quantity of boats coming from Wexford to Blackrock, and they went away with a large store of lobsters to supply the market of Dublin, but now they do not come.

35,448. Is there any herring-fishing from Kingstown?—Yes; it is now commencing.

35,449. Are there many boats employed?—Several. I do not know exactly what the number is, but the Cornish fishermen, by coming here, have induced our men to turn to that business. They have done a great deal of good. Last winter, there was a man named Lacey, who bought a boat. He paid 190*l.* for her. He went out this season, and in one week caught 200*l.* worth of fish.

35,450. Do you happen to know how many fishing boats there are here?—About six of them.

35,451. Is there any mackerel-fishing here?—The mackerel do not visit this bay very frequently. Sometimes they come in in large quantities, but not often. They come in great quantities, but do not visit the bay regularly.

35,452. Are they caught by the hook and line, or by the seine?—By the hook and line.

35,453. Is there any seining in Dublin Bay?—Yes, there is.

35,454. Ground seining?—Yes, by drag nets.

35,455. Is it habitually practised?—No; sometimes when the mackerel come in they take advantage of the circumstance and get some in the seine nets. There is only one seine-boat in the bay.

35,456. Do sprats ever visit this bay?—No, not any.

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35,457. (*Mr. Lefevre.*) Do the fishermen go from here to Howth for the herring season?—They go from this place along the coast to any place where the herrings are.

35,458. Do they habitually go from here for the season at Howth?—They follow the herrings.

35,459. Are most of the fishermen here fishermen throughout the year, or do they turn to other employments?—During the summer a great number of them enter the yachts.

35,460. Do they take to the long-line fishing during the winter?—Yes.

35,461. Can you tell us what the number of fishermen is here?—I cannot tell you exactly; there are at least 50 or 60.

35,462. Are there not more?—Perhaps 80 men.

35,463. How many of those are employed in fishing all the year round?—Very few now; about 15 all the year round.

35,464. Do they mostly fish with the long-line in the bay, or do they go outside?—They go outside towards Lambay and towards Bray Head.

35,465. I suppose the haddock was the principal source of profit here formerly?—There were none such haddock as were caught here for years; they were not large haddock, but they were very excellent in quality.

35,466. Before the disappearance of the haddock, was it the principal source of profit to the fishermen here?—Yes.

35,467. What has been the principal source of profit to the fishermen since their disappearance?—I think they make very little in any way now; they catch the flat-fish and bring them in in the morning, but it is merely existing.

35,468. Can you give any reason for the disappearance of the haddock?—No, I cannot.

35,469. Are there any oysters in the bay?—There are, but there is no regular catch of them.

35,470. (*Professor Huxley.*) Are there any oysters off this port?—There used to be capital oysters in Dalkey Sound; we used to catch large quantities there, and very fine oysters too, but I do not see any boats there now.

35,471. Are there no oyster dredgers from this port?—There is only one man named Godden who makes it a trade; I believe he catches a good deal of large oysters.

35,472. Is there not the same quantity of oysters that there was formerly?—Yes, I think there must be.

The witness withdrew.

JOSEPH EDWARDS called and examined.

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35,473. (*Professor Huxley.*) Are you a trawl owner here?—Yes.

35,474. How long have you been in that capacity here?—For 30 years.

35,475. Have you yourself ever been engaged in trawling?—Yes.

35,476. Do you trawl now?—No.

35,477. Were you acquainted with trawl fishing here when it first commenced?—I was rather young then, but I recollect it ever since I have been to sea.

35,478. How long is that?—For the last 30 years.

35,479. Has trawling been going on for the last 30 years?—Yes.

35,480. How many trawl-vessels were there here when it first began; I am speaking of the boats at this port?—Do you mean the boats that stop here?

35,481. Yes, the boats trawling from this port.—I don't think there are more than one or two hailing from the port, but there are more belonging to this place, because the owners live here.

35,482. How many belong to this place?—About 30.

35,483. Over what grounds did you trawl when you first commenced?—We trawled from the mountain's foot off Carlingford down to Helvick Head, off Dungarvan.

35,484. About what distance is that in miles?—I suppose about 180 or 200 miles.

34,485. Is it all soft ground along there?—No, it is not.

35,486. You cannot, then, trawl over the whole length of it?—No, we cannot.

35,487. Suppose you put together the ground you can trawl over, how much will it be,—not as much as 200 miles, of course?—No.

35,488. Will it be one half of that?—I should not wonder if it would be about one half of that.

35,489. What breadth of bottom can you trawl over right and left, from east to west?—On this ground, from the mountain's foot, we can trawl 30 miles.

35,490. From east to west?—Yes.

35,491. Will that be the breadth everywhere?—It is not as wide down to the southward.

35,492. On the average, would you get a breadth of 20 miles?—I dare say we should.

35,493–4. Then we should not be very far wrong in assuming that the ground you trawl over is 100 miles long, and 20 miles broad?—Yes, taking all parts of the ground right through.

35,494–5. What is the length of the beam you have to your trawl?—About 40 or 42 feet.

35,496. Do you find that the most convenient size?—Yes.

35,497. It depends upon the length of your vessel?—Yes, partly.

35,498. Do you haul your trawl in with every tide?—No, not every tide. Sometimes we go two tides, and sometimes nine hours, which is a tide and a half.

35,499. Has there been trawling constantly on this coast for the last 30 years?—Yes.

35,500. Is the quantity of fish you can get now, as great as when you first began?—No.

35,501. It is not as great?—No.

35,502. Has it fallen off much?—It has fallen off a great deal.

35,503. What is the proportion caught now, compared with what you were formerly in the habit of catching?—Not above one half.

35,504. Has the number of trawlers very much increased since you first began?—It has.

35,505. How many are now working here?—We count above 50 boats.

35,506. When you began, 30 years ago, how many were there?—About 30.

35,507. The number has not doubled, then?—No, it has not.

35,508. When was it that you first observed the diminution you speak of in the quantity of fish caught?—It has been greatly diminishing for the last six or seven years. The haddocks went away all at once.

35,509. Were you in the habit of catching large quantities of haddock with the trawl?—Yes, we did.

35,510. What other fish did you catch in great quantities?—Cod and plaice.

35,511. Did you catch much cod in the trawl?—Yes.

35,512. Did you catch any turbot?—Yes; but there is not a great deal of difference in the quantity of turbot caught.

35,513. How is it with regard to soles?—They are not as plentiful as they were.

35,514. Do you catch many skate?—Yes, we do.

35,515. Do you find any falling off in other fish except haddock?—Sometimes in the season we do, and sometimes we do not. Sometimes we catch a good quantity at this time of the year.

35,516. Taking the average at one time of the year, and comparing it with another, do you think, leaving haddock out of the question, that you can catch as much other fish as you could catch in former times, or not?—No, we do not.

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35,517. Then the whole catch of every kind of fish has fallen off?—Yes.

35,518. Do you think that is the experience of all trawlers?—I am sure it is.

35,519. Did the falling off commence six years ago?—Yes; that is, the falling off in the haddock.

35,520. How has it been with regard to the falling off in the other kinds of fish?—They have been getting scarcer by degrees. Down at Dunmore, off Waterford, there is another trawling ground, where there used to be as much fish as we could catch. We used to go down there about the month of January, and there would be as much fish as we could catch; but in the course of a few weeks all the fish would go away. Then we go off Dungarvan, and if there were no trawling there at all the fish would go away in a few weeks.

35,221. The fish seem to be capricious?—The fish come and go in the season.

35,522. Do you recollect, during the first 10 years you were fishing,—between 20 and 30 years ago,—any complaint of the same kind, of a falling off in the fish?—No. The fish are always plentiful and scarce at different times of the year, but they have been scarcer for a few years back.

35,523. Then the scarcity in the supply commenced about six years ago?—Yes; of haddock.

35,524. Not of other fish?—No.

35,525. The other fish have had a slower decrease, apparently?—Yes.

35,526. To what do you ascribe that falling off,—what is the cause of it?—That I cannot say. What we think occasioned the falling off of the haddocks was a gale of westerly wind setting in.

35,527. For how long in the season do you trawl,—for how many weeks?—All the year round.

35,528. Without intermission?—Yes.

35,529. Do you find that you take less fish at one particular period of the year than another?—No; there is a general fishing right through. At different periods of the year we go to different grounds.

35,330. Do you leave one ground and go to another because the fish leave it?—Yes.

35,531. Have you any reason to believe that a large number of trawlers engaged in fishing have fished out any particular place?—Not to my knowledge; I never found it so.

35,532. How long altogether do you work in one place?—Sometimes six weeks, sometimes a month, and sometimes two months. It is just according to the manner in which we find the fish. From the month of November till January we fish more to the northward. Then, at this time, we go off Lambay, and then we go off the light ship, Dunmore, Wexford Bay, and wherever we think we can get most fish.

35,533. Do the whole of the 30 generally work over one patch of ground?—No; some in one place, and some in another.

35,534. How many sail will be working over one patch of ground?—Sometimes 20, and sometimes 30, at odd times, but not often. Sometimes we have some of them working off the light ship, others off Lambay, and others off the Skerries. They are not all together; they are very seldom all together.

35,535. If you have been fishing together for a week or a fortnight over one patch of ground, do you find the fish get scarce?—No.

35,536. Do they seem to take off suddenly?—Yes; when they go away, they go away altogether.

35,637. All at once?—Yes.

35,538. You can go on for three, four, or five weeks fishing, and get the same quantity of fish day after day?—Yes; perhaps in the last week we may get more than in the first.

35,539. Then they suddenly go away?—Yes.

35,540. Does that apply to all fish, soles and everything else?—No, not to all.

35,541. Do they generally go in one night?—Sometimes we may catch some, but, generally speaking, they all go away.

35,542. Have you any notion of the causes which lead the fish to desert the grounds in that way?—No. With regard to the haddocks, they went away in one night, and we have never found them there since. That was after a westerly gale of wind, and the other fish followed after the same gale; but we have found all the others come back again, but not the haddock.

35,543. What quantity of fish will you catch in a day?—Sometimes not more than two baskets in a week; at other times, 25 or 26 baskets in a week.

35,544. What is the most you get in a day's fishing?—We have sometimes got more than 20 baskets in a day's fishing.

35,545. How much will the whole of that weigh?—More than two tons.

35,546. What is the smallest quantity?—We don't get more, sometimes, than a quarter of a basket.

35,547. Would it be a fair estimate to say that the catch was half a ton a day, taking one day with another?—No.

35 548. Is that too much?—Yes.

35,549. Would a quarter of a ton be too much?—A quarter of a ton a day would be a fair average. It may be over the mark; I cannot say, exactly.

35,550. We are speaking now of a rough estimate. You think you will not be far wrong in giving that as an estimate of the quantity you catch? Each vessel averages a quarter of a ton in a day's fishing?—No; I hardly think we catch as much as that.

35,551. Will you say three hundredweight?—Yes; I think we catch that.

35,552. Then, as you have 30 or 40 sail of trawlers working off here—We have 50.

35,553. Then, in that case, there is a considerable supply of fish every day to the Dublin market by trawlers?—Yes.

35,554. (*Mr. Lefevre.*) Do you send your fish in every day?—Mostly every day, especially in the summer time, when it is an object to get it in fresh.

35,555. Do smacks come out to you?—No; we go in ourselves.

35,556. You come in and go out again?—Yes.

35,557. (*Professor Huxley.*) In that case, it will not be over the mark to say that seven or eight tons of fish come in every day to the Dublin market from the trawlers?—Yes, on the average.

35,558. Do you take many young fish in your trawl?—Yes, we do.

35,559. What do you think is the proportion, on a rough average?—Mostly the sort of fish we catch of a small kind is small flukes, about half the size of my hand. There are no other kinds of small fish scarcely.

35,560. Do you catch small turbot or small haddocks?—No, very seldom.

35,561. Small soles?—Yes we do catch small soles.

35,562. What becomes of these small fish?—The small flukes we heave overboard again.

35,563. Are they of no good to you?—No.

35,564. You have no sale for them?—No.

35,565. What do you do with the other kinds of small fish?—They are all saleable fish.

35,566. Have the whiting disappeared?—They have. The whiting went away at the same time, but I think they got scarcer before then.

35,567. Do you ever take up spawn in your trawl?—I never saw any kind of spawn but whelk spawn and squid spawn.

35,568. You get squid spawn sometimes?—Yes; it all hangs in bunches. I have got two or three tons at a haul at certain times of the year.

35,569. Did you ever see herring spawn in your trawl?—I never did.

35,570. What size of mesh do you use in your trawl net?—The smallest mesh is a three-inch mesh.

35,571. Is it the result of your experience that small fish can get easily through that mesh or not?—I don't think they can go through it.

35,572. You don't think they can?—No.

35,573. Not as you bring them up along with the larger fish?—There may be a quantity of small fish which goes out of the big mesh, but we catch no small fish of any kind to make any money of.

35,574. Do you work over the same ground as that upon which the long-line fishermen lay their lines?—Yes.

35,575. Have they buoys attached to their long-lines?—Yes, they have.

35,576. Do you work in the day time?—Yes.

35,577. And at night?—Yes; the same as they do.

35,578. In the night you cannot possibly see the buoys?—No.

35,579. You may trawl over them without knowing it?—Yes.

35,580. In the day time are the buoys large enough to be seen at a considerable distance?—They may be seen at a distance of 60, 70, or 100 fathoms.

35,581. Suppose you see them, do you get out of their way?—We cannot get out of their way sometimes.

35,582. How long does it take you to get your trawl net up?—From an hour or three-quarters to two hours.

35,383–4. Have you ever had any complaint made against you for carrying away the long-lines?—I have.

35,585. What took place; were you summoned before a magistrate for taking the lines?—No; I was never summoned before a magistrate for taking away lines. I have not often done so. Generally speaking, it was their fault. They will shoot their lines across us as we are towing, and we are forced to go across them.

35,586. How are the long-line men to know how you are trawling; does not that depend on wind and tide?—They can see us.

35,587. Do they leave their long-lines down at night?—Yes, sometimes.

35,588. They cannot tell in what direction you may be working at night?—No; but I am speaking of the daytime, and we catch them as much by day as by night. It does not injure them going across them; it is only when we catch one of their buoys that we injure them.

35,589. The long-line fishermen say, why should they not shoot their lines over a particular patch of ground as much as you your trawl net?—I think those who have their fishing gear down should be allowed to fish, and that the others should give way to them.

35,590. If you put your nets down night and day, I do not see how anybody is to be beforehand with you?—We do not have them down all the time.

35,591. But how are the fishermen able to tell when your net is up or down? They do not know when you haul it up?—No. There is no cure for it at night, but in the day they will shoot across us, when there may be 15 or 16 boats all towing up together. They shoot their lines across, and if their lines are caught they must go. There is a certain fishing-ground ahead off Lambay, and if we don't go there we should get no fish. They go there too.

35,592. Practically, does not your working the trawl prevent them from fishing?—No, it does not. If we go across their lines, we do not injure them, except we may take away a hook or so.

35,593. If you go athwart their lines you do not hurt them, further than that you carry away one or two snoods now and then?—No.

35,594. Does not the trawl net haul up the line altogether?—No.

35,595. Does it not become entangled with the hooks?—No; it may break off a snood so, but never more.

35,596. But if you were trawling in the direction of the line you might tear the whole thing up?—We never do that, because we go with the tide, and they shoot their lines just across the tide, and we consequently go over them.

35,597. Then the damage done by the trawlers is not so great as to prevent the long-line fishermen from submitting to it?—No.

35,598. The damage done is not substantial?—No.

35,599. (*Mr. Lefevre.*) You do not carry away the line?—The line is on the ground, and we go with the tide. When our nets are down we can only go the way the tide will drive us, and the tide may bring us in the direction of the buoys, and then we cannot help it.

35,600. But the buoys are on the surface of the water?—Yes, but the line is on the ground, and if we don't get foul of the buoys or the stones attached to the lines we do no injury. If we do get foul of them we tear the lines away, but if we go across we do no injury to them.

35,601. Have your profits much diminished since the disappearance of the haddocks?—I don't think they have, in a general way.

35,602. Did the haddocks form a large portion of your catch?—They did.

35,603. Have the prices of other fish increased since then?—They have been larger for the last four or five years.

35,604. Has the price of soles increased?—Yes, soles and turbot.

35,605. How much has it increased?—Sometimes about one half and sometimes double.

35,606. Is that the case with all fish caught by the trawl?—No; but on the average we get a better price for our fish than we used to do.

35,607. Have the trawlers diminished in numbers during the last few years?—No.

35,608. Are they still increasing?—Yes.

35,609. What distance from the shore do you generally fish?—We fish from four miles from the shore to 40 miles.

35,610. Do you often fish within three miles of the shore?—No, not often within three miles.

35,611. Is there very little trawling ground within that distance?—Dublin Bay is within that distance, but we do not go inside Dublin Bay. We generally go inside Buffer's Bight and from that further out.

35,612. Do you fish off Arklow?—No; there is no fish down off there.

35,613, Do you fish off the Skerries?—Yes.

35,614. What distance from the shore?—Four or five miles.

32,615. Do you fall in with herring-boats there?—Yes.

35,616. Do you ever have any difficulty with their nets?—No, we don't trawl when we see them; we always avoid them; we don't shoot where there are herring nets at all.

35,617. Do you avoid that part of the coast when the herring season is on?—Yes; there is no place out here where we can fish with the herring men.

35,618. How many men have you in your trawl-boat?—Three men and a boy.

35,619. Do you sail your own trawler?—No, I am in a herring-boat now. I am not fishing with the trawl.

35,620. But do you still own a trawler?—Yes, I own three of them.

35,621. Has there been a reappearance of the haddock during the last year?—Not to my knowledge.

35,622. Have you fished round the south-east coast of Ireland?—No.

35,623. You confine yourselves entirely to the Channel?—I have been down in Galway Bay.

35,624. Do trawlers from Liverpool come here at all?—Yes.

35,625. How do you pay your men?—By share.

35,626. What share do they have each?—Each man gets a share of one-eighth, and the skipper gets a share and a quarter.

35,627. And the boy how much?—Half a share.

35,628. Do you fish at all over the Nymph Bank, off Waterford?—Yes.

35,629. Is it a good trawling ground?—Yes.

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35,630. What do you get there?—Sole, turbot, plaice, cod, and hake.

35,631. Do a great many of the trawlers go there?—No. Generally for five or six weeks there may be 20 sail down there.

35,632. Do any trawlers from Waterford fish there?—Three used to be five or six, but now there are only four.

35,633. What is the season for that ground?—In the winter, from Christmas to the end of January.

35,634. Does it fall off after that?—Yes; the fish go away.

35,635. Has there been any trawling in Dublin Bay within your recollection?—There has.

35,636. It has always been prohibited, has it not?—Generally speaking it has, but at one time it was not.

35,637. Used you to take many turbot and soles there?—No; mostly plaice. It was a very valuable fishing there. I have made a good deal out of it. I have made 6*l.* and 7*l.* in a haul out of it.

35,638. You have done that yourself; how long ago is that?—Ten years ago.

35,639. Since that there has been more care in prohibiting the trawlers from going within the bay?—Yes. I don't think they have been within it now for five or six years.

35,640. (*Professor Huxley.*) Do you think the prohibition of fishing within certain limits on many parts of the coast of Ireland is a hardship, and injurious to your trade?—I cannot say,

35,641. Do you yourself feel in any way aggrieved by it?—I would sooner be outside altogether.

35,642. You do not care about it?—No, I do not; but it would be a benefit to us sometimes if we were allowed to go into the bay.

35,643. You were speaking of catching large quantities of plaice in Dublin Bay?—Yes.

35,644. Is plaice a fish that can be caught by the hook?—Yes; they are caught by the hook.

35,645. (*Mr. Lefevre.*) Are there any soles in Dublin Bay?—No, only two or three.

35,646. Are there any turbot?—I never caught any, except one or two.

The witness withdrew.

G. Johnson.

GEORGE JOHNSON called and examined.

35,647. (*Professor Huxley.*) Are you a line fisherman here?—I am.

35,648. How many years have you been fishing here?—More than 40.

35,649. What sort of boat do you use?—A four-oared skiff.

35,650. What does a boat of that description cost?—About 10*l.*

35,651. How many lines do you have in her?—Four.

35,652. What is the length of each line?—They are about 400 fathoms each.

35,653. How many hooks are there on a line?—Four hundred.

35,654. What does each line cost?—About 14*s.*

35,655. So that you can set up the whole for about 12*l.* or 13*l.*, boat and lines and all?—Yes.

35,656. What fish do you catch generally?—We catch nothing at present but plaice and flounders.

35,657. When you began, what fish did you catch?—We caught plenty of haddocks.

35,658. I speak now of fish you catch all the year round?—For the last six years back we have never caught a haddock. I never thought I should live to see that day.

35,659. But let us go back to the time when you began fishing; what sort of fish did you catch then? Were you in the habit of fishing in Dublin Bay?—Yes; about four miles outside the light ship.

35,660. What were the different kinds of fish you caught?—Plaice, flounders, gurnets, haddocks, and cod.

35,661. Any whiting?—Yes, whiting, but very rarely.

35,662. At that time was there plenty of fish?—Yes, plenty.

35,663. What fish was in the greatest abundance?—Haddock, and every sort of fish.

35,664. They were all plentiful?—Yes, all were plentiful.

35,665. How many boats were there fishing at that time—I mean long-line fishing boats—from this place?—There were about eight boats.

35,666. And how many are there now?—I think there are about 10, when they are all together.

35,667. So that the number has very little increased?—It has very little increased, but a great number of the men have died.

35,668. You say the fishing has fallen off a great deal?—Yes, very much.

35,669. When did it begin to fall off?—For some years past now.

35,670. For how many years?—For 10 or 12 years past.

35,671. What are the fish that have fallen off most?—I cannot say; every sort has fallen off.

35,672. Which has fallen off most?—Haddocks have fallen off "teetotally," both small and large.

35,673. But plaice and whiting remain?—There is no such thing as getting any whiting at all there.

35,674. Do plaice remain?—Yes, but they are very scarce.

35,675. What fish is it you catch chiefly?—Some odd plaice and flounders.

35,676. What is the reason that there has been this falling off?—I put it all down to trawling.

35,677. What damage do the trawlers do?—They take the seed and brood of the fish out of the water.

35,678. You mean the spawn?—Yes.

35,679. Have you been on board a trawler?—I fished for a fortnight on board one.

35,680. Did you see the trawl net come up?—Yes, I helped to heave it up.

35,681. Did you see any of the spawn of fish inside the trawl?—Yes, and plenty of small fish too, about the length of my finger; we shovelled it overboard.

35,682. What kind of spawn?—Small whitings, haddock, and plaice.

35,683. But, besides that, you saw spawn—what sort of spawn was it?—I cannot tell what sort it was.

35,684. Might it not be squid spawn?—I don't know.

35,685. You are not sure about that?—No.

35,686. You say the falling off in the fish began about 10 or 12 years ago?—Yes; they became much reduced about 12 years back.

35,687. But trawling has been going on for many years?—Yes, for about 60 years.

35,688. How is it that they did not begin to do you any mischief until the last 10 or 12 years?—That is so.

35,689. But how was it?—They are catching the seed and brood of the fish in the sea.

35,690. Would it not have shown some such effect before 12 or 12 years ago?—So it did; they may shift from one place to another but they will not get a handful of fish.

35,691. You say the trawlers have been working here and doing all this mischief for the last 30 or 40 years. They have been working here all that time according to the evidence we have heard; but you tell us that the great falling off in your line-fishing has only taken place within the last 10 or 12 years?—It began to be reduced long before that, but we didn't much mind it; it is reduced altogether now, both for the line-hookers and the trawlers.

35,692. Is there any seine-fishing carried on here in a way that will do you any harm—I mean small

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seines along the shore?—There are a great many of them; there are a great many of them up in Barrowford Lough, which was a channel for Dublin river before. There is a man here with an uncommon net which he uses; he hauls up with it a great deal of the brood of the fish, and he is continually working it in that lough.

35,693. Where does he get a sale for the fish?—He leaves a great many of them on the bank behind him.

35,694. Is there only one of them here?—There is only one to be seen in the river of Dublin.

35,695. Does that one do all the mischief?—It does a great deal of mischief in the way of killing small fish.

35,696. Have you any good reason to complain of the trawlers having carried away your lines?—Sometimes; but if we see them trawling down with the tide we do not shoot our lines.

35,697. Have you had any lines taken away?—Yes, one about 12 years ago.

35,698. Is that the only time you lost your lines?—I have lost them several times.

35,699. How long ago is the last time?—Four or five years ago.

35,700. Was the line carried away altogether?—It was.

35,701. Did you not get it back again?—I did not.

35,702. (*Mr. Lefevre.*) Did you take the number of the trawler who did the damage?—No.

35,703. (*Professor Huxley.*) Was the damage done in the day time or at night?—In the day; he spoke to us and said he would take away our lines.

35,704. But could you not see his number?—No; we were shooting our lines and he was on our weather side.

35,705. Do you think it was an English boat?—Yes.

35,706. Was it because you could not come up to him that he got away?—Yes.

35,707. Is there much damage done to the long-line fishermen in that way?—There is often, especially to the northern men up off Howth.

35,708. Does the presence of the trawlers on the ground keep you line fishermen from shooting upon it? When you see trawlers on the ground do you abstain from going there?—Yes; if we shoot across them they take our lines away, and it is better to keep them in the boat than to lose them.

35,709. Then the trawlers working upon the ground actually keep you out of it?—Yes; they would do so, if they were coming down with the fleet there north or south.

35,710. If you saw the trawlers working over the best ground would you abstain from going there?—We would not go near them at all.

35,711. Do you practise any other fishing besides the line-fishing?—Cod-fishing and eel-fishing.

35,712. Do you catch congers?—Yes.

35,713. Have the congers fallen off?—They are plentiful along this shore.

35,714. Are there as many as there ever were?—They may be scarcer in cold hard frosty weather.

35,715. But, taking one year with another, is there about the same quantity that there was in former years?—Yes.

35,716. How is it with the cod, do you get as many as you used to do?—No, not one quarter.

35,717. What do you think is the reason of that?—I can prove that it is all owing to the habit of trawling.

35,718. Do you get any hake?—Only a few odd ones.

35,719. Do you get as many hake as you did formerly?—No.

35,720. Then the hake have fallen off, like other fish?—Yes; but the trawlers may catch plenty of them.

35,721. How is it about bait,—what bait do you use for your cod?—Herrings and whelks.

35,722. Can you get plenty of bait,—as much as you want?—No; we have to buy the bait, mostly. We use squid-bait often, and good bait it is.

35,723. Is the bait as plentiful as it used to be?—No, it is not.

35,724. What is the reason of that; have you used up the beds of whelks?—It is according to the weather how we catch whelks; in cold frosty weather they will not come to the quays.

35,725. Do you find the herring-bait good for the cod?—Yes.

35,726. Is it one of the best baits you use?—It not as good as squid-bait, because it will not stop as long on the hooks, nor whelks either. If we leave them a night in the water the fish will not touch the other bait.

35,727. Do you fish all the year round?—Yes.

35,728. Do you do anything besides fishing?—Not a ha'porth.

35,729. Is that the case with most of the line fishermen?—Some go in packets.

35,730. They principally get their living by fishing?—Yes.

35,731. They do not cultivate land at all?—No.

35,732. (*Mr. Lefevre.*) How many men make their living by fishing all the year round?—There are about 80 men belonging to this place, but very few fish all the year round. There are five boats fishing at present.

35,733. Do you find that you get a better price than you did formerly?—No.

35,734. Is it much about the same?—Sometimes less and sometimes more. The herring-boats being so plentiful on the coast make the fish cheap.

35,735. Are your earnings less than they were in former years?—Yes, a great deal less.

35,736. What do you calculate your earnings at in the course of a week?—If we work day and night for 14*s.*, that is accounted a good week now. We might earn that, some years ago, in a couple of days.

35,737. But not all the year round?—No.

35,738. Only occasionally?—Yes.

35,739. How many of you go out in the same boat?—Four.

35,740. Do you share your earnings?—Yes.

35,741. Equally between you?—Yes; every man has the same.

35,742. How much is there for the boat?—Not a ha'porth. I myself owned the boat, and didn't get a ha'porth for it.

35,743. Do you own a boat?—Not at present. I fish in another man's boat.

35,744. What is the greatest distance you go outside the light?—About four miles, to the best of my knowledge, to a place called Rockmere.

35,745. You do not go further than that, as a rule?—No.

35,746. Do you often find trawlers trawling within that distance?—Yes; they trawl within a stone's throw of the West Pier, and from there by Dublin light along to Howth and across here.

The witness withdrew.

JAMES GALLAGHER called and examined.

J. Gallagher.

35,747. (*Professor Huxley.*) Are you a fisherman here?—Yes, sometimes in the winter time.

35,748. How many years have you been employed in that capacity?—About 24.

35,749. Do you fish all the year round?—No.

35,750. What do you do in the rest of the year?—Sometimes I take to the boats, or anything I can get, in the summer time.

35,751. But in the winter time you are a fisherman?—Yes.

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35,752. Do you ever go herring-fishing ?—Yes.

35,753. The fishing you generally practise is line-fishing ?—Yes.

35,754. Are there many men in Kingstown who fish like you in the winter time, and get other employment in the summer ?—Yes, a good many.

35,755. Is it the case with the greater part of the fishermen ?—Yes, except a few men who, like the last witness, fish the year round. It is not worth my while to stick to it in the summer. I should not be able to get a living.

35,756. Do you agree with the statements which have been made by the witness Johnson ?—Yes.

35,757. About the falling off of the fish ?—Yes.

35,758. And the increased scarcity of it since you have known the fishery ?—Yes.

35,759. And what do you think has been the cause of that ?—The trawlers.

35,760. You put it down to the trawlers ?—Yes.

35,761. Have you ever yourself been trawling ?—Yes, I have.

35,762. Have you seen the trawl net come up and the contents of it ?—Yes.

35,763. What have you found there ?—Turbots, soles, and all kinds of fish ; small fish, about the size of my finger. Sometimes we have been two or three hours hauling it up, and shovelling it overboard.

35,764. What would be the proportion of small fish compared with the rest ?—I have been shovelling out dabs the length of my hand.

35,765. Is there a great quantity of them ?—I have seen two tons weight on the deck, and I have been heaving the fish and spawn overboard after picking the good fish out.

35,766. (*Mr. Lefevre.*) Have they been thrown overboard alive ?—No, not alive.

35,767. Would the small fish be alive ?—Some might be alive, but the shovelling of them overboard would kill them.

35,768. (*Professor Huxley.*) Do you think it is a wasteful mode of fishing ?—I do.

35,769. In what depth of water were they fishing when that took place ?—I dare say it would be from 25 to 26 and 30 fathoms.

35,770. Was that the case ordinarily. Was it usual for there to be so large a proportion of small fish in a haul ?—I was only in the trawler for a short time, but I have often been out in the night looking after squid-bait, and I have seen them doing the same thing, shovelling overboard all the small fish and spawn on to the moles, and the same in the harbour.

35,771. Do you agree with Johnson as to the damage done by the trawlers in working over your lines ?—Yes.

35,772. Have you lost lines in that way ?—Yes.

35,773. Has that frequently been the case ?—It has not happened to me often, only once or twice. Some of the Black Rock men complain that when they are in the habit of leaving their lines out at night, that the trawlers trawl over them. We fish in the day and set our lines in the morning.

35,774. Do you set your lines where you think the trawlers will not come ?—We often go out to haul our lines on the fishing-ground when we find the trawlers there, and we stop on the ground an hour or two waiting for the trawlers to get out of our way.

35,775. Then the presence of the trawlers on those grounds prevents you from fishing there ?—It does.

35,776. What do you think about the effect of seine-fishing on the fisheries ?—It is just as the last witness said. There is one on the Lough which kills all the small fish and spawn, and leaves thousands of them on the bank after taking the good fish out. There is another man down at Killiney, who drags a seine inshore.

35,777. How many are there ?—Only those two.

35,778. How long have they been doing that ?—Those men have been here nearly as long as I can remember ; they have been backward and forward.

33,779. Has no one ever interfered with them ?—Not that I am aware of.

35,780. Have any representations been made to the Fishery Board with regard to the injury they do ?—I do not know if either of the men's names who have the seine nets have been mentioned, but complaints have often been made about the trawlers.

35,781. With regard to bait, do you find any difficulty in getting bait ?—It is just according to the cold weather, which prevents the whelks from coming in ; and then we manage the best way we can. We buy herrings and squid, but we generally take our own bait.

35,782. The scarcity of bait does not interfere with your fishery ?—No.

35,783. If there is plenty of fish, you manage to get bait ?—Yes, we always did. We go to particular places and take the bait. We take our boat across with four, six, or eight men.

35,784. Your boats are not fitted to go out to sea ?—No farther than the Kish Bank, and on that way.

35,785. Do you find that you get better fish further out at sea ?—Sometimes we get better cod and haddock.

35,786. You never take to larger boats, to enable you to find the fish further outside ?—No ; we have always used skiffs with four oars and men.

35,787. (*Mr. Lefevre.*) How long were you on board a trawler ?—Not more than a fortnight or so.

35,788. Where were you fishing ?—Away on the new ground, over at the Isle of Man.

35,789. How far from the shore ?—Fourteen or fifteen miles.

35,790. What made you leave the trawling ?—I don't know. I did not wish to stop in her.

35,791. Did you not make as much money by it ?—At that time they used to make a power of money, but I would not stop in her.

35,792. Why not ?—I would sooner go to some other business.

35,793. What was your reason ?—I had no reason, any further than that I could make more out of the long-lines at that time.

35,794. How long ago was that ?—It is going on for 20 years.

35,795. And I suppose the haddock were then in abundance off this coast ?—Yes, they were very plentiful. We could go and load a boat on the edge of the rough ground off the pier then.

35,796. How many months in the year are you employed in fishing now ?—I go backwards and forwards. I work in vessels. There are many times when I go in vessels.

35,797. On the average, how long have you been employed in fishing ?—Backwards and forwards, about six months.

35,798. Do you find that your earnings are very much less than they were ?—Yes.

35,799. Could you make more by trawling now ?—No ; I do not care to go trawling at all.

35,800. Do you think that they do not make money by trawling ?—No. I was talking to a man to whom I paid two shillings for bait, and he told me that he had not brought as much into his house for his earnings for seven weeks.

35,801. Do the line fishermen make more ?—No ; both parties are begging, as we may say, now. The trawlers have beggared the hookers, that is my opinion, and now they will beggar themselves.

35,802. Their earnings have fallen off in the same proportion ?—Yes.

35,803. Did you observe what the small fish were that you took up in the trawl ?—They were small flukes and little whiting, and there might be some small haddocks among them. I did not look particularly to see what sort of fish they were.

35,804. Have you observed any trawlers fishing within the bay here ?—Yes. It is not long ago, at the time the "Ajax" was here, when there were ten of them fishing off the pier. That is not more than four years ago. I think there were two taken, and the others swung their trawls, and got away, so that the boats of the "Ajax" could not catch them.

35,805. Was that the last time that you observed any trawling in the bay?—Yes.

35,806. Have the fish in the bay fallen off as much as they have outside?—Yes, I think they have.

35,807. Do you think that the prohibition of trawling within the bay has done any good?—They have not prevented trawling at all. When there are north-west winds on dark nights they are continually trawling in the bay, up to this day.

35,808. What makes you think so?—Because I have seen them.

35,809. I thought you said four years ago was the last time?—I have seen them before that.

35,810. But for the last four years they have not been trawling in the bay?—I cannot say they have not, but I have not seen them.

The witness withdrew.

Mr. James Redmond Barry called and examined.

Mr. J.R.Barry.

35,811. (*Professor Huxley.*) You are the Inspecting Commissioner of Fisheries, Mr. Barry?—Yes.

35,812. The 6th clause of the 5th and 6th Vict., cap. 106, runs thus: "And be it enacted, that no net "or other engine covered with canvas, hide, or other "material, by which unsizeable and young fish may "be taken or destroyed, shall be used on the sea "coast or within any estuary, except for the purpose "of dredging for shell fish; and every person offend-"ing by such use of any such net or engine shall "forfeit the same, and shall also, for every such "offence, forfeit and pay any sum not exceeding "10*l.*" It has been put before us in evidence that some persons are in the habit of using seine nets, by means of which large quantities of small and unsizeable fish are taken in Dublin Bay. Suppose a complaint against such persons was lodged before the Fishery Commissioners, would they feel inclined to prosecute under that clause?—The Fishery Commissioners never considered it their duty to prosecute at all.

35,813. What would they do, then, if a complaint were laid before them?—They would recommend the parties to summon the offenders before the ordinary tribunals of the country.

35,814. Then the Commissioners would not feel inclined to interpret the clause as an authority to take action themselves?—It has never been their practice; and, in reference to that clause, I must say the complaints have been very rare indeed.

35,815. You are, doubtless, thoroughly acquainted with the feeling of the Commissioners. Would you conceive that that clause applies to such a seine as that now under discussion?—Clearly, if the size of the mesh is of that description, or the net comes within the description stated.

35,816. The clause, as you observe, is somewhat indefinite. It is a little difficult to say whether the point is the character of the net or the result of using it; whether the net or engine has to be covered with canvas, hide, or other material, or whether any net which takes unsizeable fish is to be forfeited?—Yes.

35,817. Have you ever heard of a net or engine being used covered with canvas, hide, or other material?—I never heard of such a thing.

35,818. Then there is the further qualification, "any net by which unsizeable and young fish may be taken"?—Exactly.

35,819. So that, supposing the allegation made in this case to be true, it would be a case in point?—Clearly.

35,820. And the persons of whom this is stated would come under the operation of the clause?—Yes.

35,821. So that the fishermen who complain would have a remedy at common law?—Yes.

The witness withdrew.

Henry Williams called and examined.

H. Williams.

35,822. (*Professor Huxley.*) Are you a line fisherman here?—I was.

35,823. How many years were you fishing here?—For the last 20 years.

35,824. Have you given it up now?—Yes.

35,825. Did you not find it answer?—No.

35,826. You have heard the evidence of the previous witnesses?—Yes.

35,827. Do you agree with what they have said?—Yes.

35,828. As to the fact of the falling off, and the cause, and everything else?—Yes.

35,829. Is there anything you wish to add to what they have stated?—No.

35,830. (*Mr. Lefevre.*) What are you doing now?—I am pilot to the harbour master.

35,831. Then you have given up fishing altogether?—Yes, for five or six years.

The witness withdrew.

Michael Smith called and examined.

M. Smith.

35,832. (*Professor Huxley.*) Are you a long-line fisherman here?—Yes, in the winter time.

35,833. What do you do in the summer time?—I go yachting.

35,834. How many years have you been fishing here?—About 17 or 18 years.

35,835. Do you do anything else besides line-fishing?—Not in the winter time.

35,836. Have you heard what the previous witnesses have stated?—Yes.

35,837. Do you agree with them?—I fish on a different scale. I go cod-fishing, and use lines for haddock, and at different times I have been obliged to draw up my lines in consequence of the trawlers.

35,838. Have they kept you off the only grounds worth fishing upon?—Yes; and I have lost a great deal of time by them.

35,839. When was that?—About four years ago. I took the number of one of them.

35,840. What did she do then?—She was fined 3*l.*

35,841. How many lines did you lose?—Three out of five.

35,842. You did not get back the value of your lines?—No; I never got them again.

35,843. But the trawler was convicted?—Yes; she got off with a fine of 3*l.* I believe the fine was about 10*l.*

35,844. Were they new lines?—They were, very nearly; but I have lost new and old lines by the trawlers.

35,845. Did the fine go to you or to the Crown?—It went to the Crown; I never saw sixpence of it.

35,846. Then you got nothing by it?—No; only loss of time.

35,847. Then that would be no encouragement to you to bring them up again?—No; the next day I saw 10 of them trawling in the same place.

35,848. This seems to be a great injury to you?—Yes; it is the greatest injury that is done to our class of fishermen. it affects us more than any other men. Our lines are obliged to be out by night. We should not earn fourpence a day if they were not.

35,849. And your buoys are not visible by night?—They are only small dogskin buoys.

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35,850. The trawlers cannot get out of your way then?—They do not care about doing it.

35,851. Did you hear what was stated by Joseph Edwards, that if the trawlers run athwart your lines they do not injure them?—They do injure them; they cannot go over them without tearing them.

35,852. Then that is not your opinion?—No, they cannot go over them without tearing them. Only a fortnight ago I was out with my lines, when it was blowing hard, and we were afraid to stop with them. We only shot half our lines, and the next morning there was half of them gone.

35,853. Then I gather it to be your opinion that trawling and long-line fishing for cod cannot go on in the same place?—They trawl all along the coast.

35,854. But long-line fishing cannot go on where trawling is going on?—No, it cannot.

35,855. And although there is nominally a remedy at law, yet, in point of fact, it costs you more to enforce the remedy than it is worth?—Yes.

35,856. You lose your time and get nothing by it?—Not a halfpenny.

35,857. The practical effect of the present state of things is, that it drives you off your fishing ground altogether?—Yes; we might as well take and throw our lines into the sea at once.

35,858. Is there any other point which you wish to remark upon?—Nothing more than that I cannot live by the fishing in the summer time. When I first went to fish, I could earn 7*s.* or 8*s.* in a day in the summer; now I cannot earn fourpence.

35,859. What kind of fishing?—Long-line fishing and crab and lobster fishing; there are no fish now. The crabs and lobsters have all been destroyed.

35,860. Do you put all that down to the trawlers?—Yes. In Dublin market I have seen two hundredweight of brood.

35,861. That had been trawled up?—Yes.

35,862. Have you ever been trawling yourself?—No; I know nothing about trawling.

35,863. What do you think of the injury done by the seine nets?—I do not understand them either. I know nothing but the cod-fishing.

35,864. Do the trawlers catch many cod?—I cannot say. There are a great many of them, and a boat I went on board had cod and hake, but only a few haddocks.

35,865. Do you think the trawl-fish is as good as fish caught with the hook and line?—I do not think it is.

35,866. Do they fetch the same price in the market?—They do not.

35,867. If you bring a cargo of line-fish into the market, will you put theirs out of the market?—Yes. For good sized hooked cod we should get half-a-crown a piece.

35,868. Have the codfish decreased since you have been fishing?—Sometimes it has and sometimes not; a strong breeze makes the fish dearer.

35,869. Taking an average of one time and another, are codfish dearer now than they were some years ago?—Yes; they are dearer than when I first commenced.

35,870. Do you agree with the other witnesses as to the complete falling off of the haddocks?—Yes.

35,871. And of the whiting?—Yes; I have seen the time when we could get 40 dozen off Black Rock, and we cannot get one now.

35,872. Why do you think the haddock and whiting have fallen off more than any other fish?—The cod have fallen off nearly as much.

35,873. Have the plaice?—They have also fallen off.

35,874. But the haddock has almost disappeared?—Yes; I have been fishing for months in deep and shallow water, and have not seen a haddock.

35,875. But the same thing has not happened to you with regard to the cod and whiting?—Pretty near it.

35,876. What do you think is the reason?—I think that the small fish have been all killed.

35,877. You think that more the case with the haddock than with other fish?—I do.

35,878. (*Mr. Lefevre.*) What was formerly the season for haddock?—From the 1st of October up to the 1st of March they used to be plentiful in the bay; in the summer time the Kingstown men got them out on the Kish Bank.

35,879. (*Professor Huxley.*) Do you know where the haddocks spawn?—I do not.

35,880. (*Mr. Lefevre.*) What distance were you from the shore when you lost your lines?—About two or three miles south-west of the Kish Lights.

35,881. And what distance do you generally fish?—Sometimes seven miles from the shore.

35,882. Would you exclude the trawlers altogether from that ground?—There is one part of the ground where trawlers cannot come down between this and Bray Head.

35,883. Do you catch more fish on rocky ground?—No; we do not fish on rocky ground.

35,884. Do you find the fish best on the clear ground?—Yes.

35,885. On the same ground that the trawlers fish upon?—Yes; the trawlers cannot fish on rocky ground either.

35,886. Do you generally find along the coast that you catch more fish on the smooth ground than on the rocky ground?—Yes; it is all on clear ground that we work our cod lines.

35,887. Is that the case with the haddocks?—Yes, generally it is; whenever a man goes out to shoot his lines he generally sets them on clear sand; it is the same way with the cod; that is a fish that resorts to the clear ground.

35,888. You said the market was well supplied with cod?—No; I said I had seen a great deal of cod sent sometimes into the market by the trawlers.

35,889. Do you think the trawlers catch the cod you formerly got?—Yes, I do; they cannot miss that sort of fish more than any other.

35,890. Then what would you propose?—I would propose that it is through the trawlers that the fish are scarce.

35,891. Would you exclude the trawlers from fishing within a certain distance from the shore?—Yes, I would; no later than last year I saw 10 or 12 trawling in the bay altogether.

35,892. Then do you think that the regulations which now exist have not had any effect?—I do not think that the limits are sufficient.

35,893. Do the trawlers work within the prohibited limits?—Last winter I saw 10 or 12 fishing within here.

35,894. Then the regulation is not enforced?—No, it is not.

35,895. Then if there were any regulation with regard to their fishing, as you propose, there would be still greater difficulty in enforcing it?—I do not know, but I have seen from 10 to 12 and 14 of them regularly in the bay here. I have seen vessels lying off the light ship trawling.

35,896. What fish do they take in Dublin Bay?—Plaice, principally, and some turbot, and an odd sole.

35,897. Do they catch large quantities of plaice in the bay?—Yes, they do. In Dublin Market I have seen the fish jumping alive, waiting to be sold.

35,898. Do you not fish for plaice?—No.

35,899. Then you cannot say whether they have fallen off in quantity?—No.

35,900. You are employed in yachting in the summer?—Yes; I could not live by fishing.

35,901. How long were you a fisherman altogether?—Seventeen or eighteen years.

35,902. When you first began fishing, did you fish all the year round?—Yes.

35,903. Do you find that your earnings have fallen off?—I could not earn five shillings a week all the year round. I have been, last winter, fishing for four shillings or five shillings a week, and I never could make more than 16 shillings.

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35,904. Take the winter through, what do you make?—Not more than 10 shillings a week throughout.

35,905. What did you make in former years?—About eight or nine years ago, four men in a boat would make 22*l.* in a fortnight.

35,906. Was that the average all through?—Thirty shillings a man was about the average.

35,907. Was that a good season?—It was a good season, but I have had as good before that.

35,908. Was it a very unusual thing to make as much?—Yes. We generally did not earn as much as that, but now we cannot earn 10 shillings a week.

35,909. (*Professor Huxley.*) What would you think an average quantity of fish supplied by each boat by the long-line fishing? What weight would there be in a fair day's fishing, before the scarcity began?—I cannot exactly say what the weight might be, but we were generally in the habit of getting from 40 down to a dozen on four lines. In one of the small boats fishing, we might get five or six dozen in a haul. I have seen 13 dozen cod got in the bay in a haul, but generally it would be from 40 down to a dozen.

35,910. You cannot give us a notion of the average weight of the fish?—No; we never sell them by weight, but by the lump.

The witness withdrew.

M. Carroll.

Michael Carroll called and examined.

35,911. (*Professor Huxley.*) You wish to make some statement to us?—I have nothing to say, with the exception that the chief thing we want to protect us in the Bay of Dublin is that the trawlers should be kept a great deal further out at sea, and that there should be a cutter or something to watch in the bay during the winter.

35,912. Do you agree with what the previous witnesses have said?—Yes.

35,913. You think the bay ought to be protected more than it is?—Yes; nothing will save us from starvation but that. They have been coming here these 20 years, ever since the Act was passed prohibiting them. It is all of no use; they still trawl in the bay, on very dark nights, with the wind from the west. On such nights we cannot leave the harbour to go out ourselves, and then they go in and trawl away, and take all that there is in it. If we go out next day, we may come in with fourpence, fivepence, sixpence, or a shilling for our families.

35,914. Can the trawlers fish when you cannot?—Yes.

35,915. Is there much of the winter when you cannot fish?—Yes, a great deal.

35,916. Then at that time, if it were not for the trawlers, there would be no supply of fish at all?—They could go to other ground to fish, where our small skiffs cannot. If they had not taken all the fish away, we could get a shilling or two to support our families.

35,917. But they can fish over the ground in weather when you cannot fish at all?—Yes.

35,918. (*Mr. Lefevre.*) You agree that the regulation prohibiting trawlers from coming into the bay is not attended to?—Not the least in the world.

35,919. You would extend the prohibition still further?—I would put them further out, to where they are limited, outside the light ship, both for their own good and ours.

35,920. Would it be possible to enforce that prohibition?—I think the Board should do it. The trawlers should strike out other lines for themselves. It would be best both for themselves and for us. They could all go out to sea and get a good living outside.

35,921. Has there not been a Revenue cutter here for the last few years?—That is of no purpose, unless you actually go down and point out to them that there is a trawler, then they may go out or not as they please.

35,922. It is on dark nights when you cannot see them trawling that they do it?—Yes. But if there was a vessel properly stationed in the winter season about the bay, then I expect there would be none of it. If they caught some of them and gave them the benefit of the law, I would engage that after that they would stop out of the bay.

35,923. Have you yourself seen the trawlers fishing in the bay during the last few years, or is it only a suspicion on your part that they do fish there?—It is no suspicion; I have seen them and have boarded them, and have done my best to prosecute them, but I could never get any satisfaction.

35,924. How long ago is that?—About 32 or 33 years ago.

35,925. When was the last time you saw trawlers fishing in the bay?—I myself, together with a man standing here and a son of mine, were working for bait last winter, and I happened to go down along the mole, expecting to see some of them. It was blowing hard from the north-west, and I could see them tacking into the bay, to make a shot. We ran round to the Coastguard, and told them, and the Coastguard went out and brought in word that they could not see them.

35,926. Was it a dark night?—Yes, it was pretty dark.

35,927. Could you see that they had their trawls down?—No.

35,928. Then were you sure they were trawling?—Yes, I think they were coming in for no other purpose.

35,929. But when the Revenue cutter went could they not find them?—It was the Coastguard boats.

35,930. The Coastguard did go out, then?—We went round again and told them we had seen another, and they said they could not see them.

35,931. They said they could not see them from the shore?—I think they said they had seen them, but could not meet with them.

The witness withdrew.

J. Cullen.

John Cullen called and examined.

35,932. (*Professor Huxley.*) Are you a line fisherman?—Yes.

35,933. What do you catch principally?—In the winter time I catch cod. I used to catch haddocks, but I cannot get any of them now.

35,934. Is the fishing falling off?—I can hardly get a living by it.

35,935. What do you think is the reason of that?—I think it is the trawling.

35,936. Is it because the trawlers come inside the bay?—Yes; and they are after killing all, both root and branch. They are killing the spawn and everything else, and they will have the whole sea to themselves presently.

35,937. Were you ever on board of a trawler?—No, never.

35,938. Then what makes you think that?—I am sure of it. If a man has any understanding in his head, he knows what a trawler can do.

35,939. But you do not speak from your own observation?—I do. When I was a boy all kinds of fish were as thick as the grass, and a party of gentlemen fishing from the rocks on the foul ground could get half a boatload of fish. Now you may go from Black Rock to the westward of the black buoy, and from that to the Bailey Light, and where formerly we were able to get from 25 to 30 and 45 cod upon a line besides haddocks, we cannot get 5 or 10.

KINGSTOWN.

J. Cullen.

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35,940. How many years is it since you first began to find the fish fall off?—They have been falling off for the last 15 years.

35,941. But trawling has been going on for 30 years?—Yes; it has been going on longer than I can recollect.

35,942. Then how is it that the fish did not begin to fall off much sooner?—The body of the fish was so plentiful that it took a long time to kill them. Skerries Bay was a great place for the fish to spawn in. When they got sick and would not take the hook they went there to spawn, but the trawl-boats, knowing that, went there and killed them when the lines might be thick on the beach without catching them.

35,943. What is the remedy for that? Would you put down trawling altogether?—Yes.

35,944. You would not allow it at all?—No; and if that is not done we shall very soon not have a mouthful of fish altogether.

35,945. Would you put down trawling everywhere?—I would make them knock it off for 10 or 12 years, and then you would be able to ascertain if the scarcity of fish is their fault or the fault of the hookers.

35,946. Have you anything further to add?—No.

The witness withdrew.

Capt. G. A. Fraser, R.N.

Captain George Alexander Frazer, R.N., called and examined.

35,947. (*Professor Huxley.*) You are a Captain in the Navy?—Yes.

35,948. Have you been employed in surveying on the coast of Ireland?—I have surveyed the whole of the banks, and my charts are supplied to the ships that navigate the Channel.

35,949. Is it long since you were actively engaged in that duty?—In 1853 I was put on half-pay, but since then I have had to report upon the public works of the country.

35,950. Is there any evidence you would like to offer with regard to the fishery question?—Only so far as this, that the fisheries are neglected round the coast.

35,951. Neglected?—So much so, as to render it a matter of general speculation. You will see new speculations getting up every day. I think the fisheries on the coast of Ireland are of great value. I know that to be the fact after 25 or 28 years' experience, and it is amazing to me that the people have not taken the matter up in a way that would have been certain to realize a profit.

35,952. Is it your impression that there is an abundance of fish on the coast?—There is no question about it. My own men have hauled in large quantities on different parts of the coast. In fact, there is no end of fish.

35,953. Have you noticed any falling off in the supply of fish?—The fish here have been greatly falling off within my recollection, since about 1822. They did not diminish all at once, as these men try to make it appear, but they have gradually disappeared since the steam communication commenced.

35,954. Do you think that it has been the result of the establishment of steam?—I think it was, at first. There is no doubt that trawling within certain limits must tend to do a great deal of harm.

35,955. Have you ever observed the trawl net being hauled up?—I cannot say that I have.

35,956. Your impression is, that on other parts of the coast there is an abundant supply of fish?—There is an immense supply of fish, if it is properly worked.

35,957. Is it your opinion that the want of success of the fishermen arises from want of enterprise?—Want of enterprise and proper management. There was a company got up some time back, but it was much mismanaged by working too many places, and the profits were swallowed up.

35,958. (*Mr. Lefevre.*) What was the name of that company?—The London Deep-Sea Fishing Company. There were two of them, I believe.

35,959. (*Professor Huxley.*) Is it not very much the case in all fishery enterprise, that when people do not fish themselves, they do not find it answer?—Evidently, this fishery company was mismanaged.

35,960. Do you think that any local restrictions or regulations enforced here have had any injurious effect on the fisheries?—No, I do not think they are sufficiently protected. The suggestion that was made by a man here just now, that some person should be officially appointed to watch the fishing, I think would be a very good thing indeed.

35,961. What would be the duties of such a person?—The same as on the coast of Scotland,—to watch the oysters, and the fisheries generally. Vessels should be constantly out to detect and catch persons breaking the law.

36,962. To prevent trawling in the bays?—Yes. The Revenue cutters cannot do it. They only go out for a short cruise, or to other stations. But if a vessel were appointed especially to watch these people, it would have a very great effect.

35,963. Do you think that the practice of trawling in bays is injurious?—Yes.

35,964. Would you put it down?—Yes.

35,965. Do you think that the practice of trawling anywhere is injurious?—No, certainly not.

35,966. You do not go as far as the last witness, and wish to put it down absolutely?—No, certainly not.

35,967. (*Mr. Lefevre.*) How far along the coast do the observations you have made apply?—I think to nearly the whole of the coast.

35,968. I mean especially with regard to the falling off in the fishing?—It is only here that I have observed it.

35,969. You do not think the supply of fish has fallen off at Arklow?—No.

35,970. Nor off Waterford?—No; the fishing in those places is outside the bay, and there it is different from what it is inside the bays; we fish further south for cod and haddock; there is a great haddock ground off Youghal, but it is on the rough ground that they fish for them.

35,971. To the southward do you come to ground unworked at present?—Yes, and of the the whole west of Ireland there are vast quantities of fish. Some years ago, I was surveying in the north when some of the Skerry fellows sent out one or two trawlers, who rigged up a hurricane house on the rocks and landed a man and a boy. They caught in a few weeks very large quantities of fish, which they salted and cured, and it was as fine fish as was ever got from Newfoundland.

35,972. Do you think the falling off has been mainly in Dublin Bay?—Yes, and I know it has fallen off here. I have been looking for whiting, and such a thing is not to be found.

35,973. Do you agree with some of the witnesses that the trawlers do carry on trawling within the bay?—I have no doubt of it.

35,974. To any considerable extent?—I cannot say, but I have no doubt they do it sometimes; of course they will take advantage of dark nights.

35,975. Do they take a considerable quantity of fish out of the bay?—It is the small fish they destroy which does the harm.

35,976. Have you observed small plaice in the market?—I never go to the market.

35,977. Do you think it would be possible by introducing a Government steamer to put a stop to the practice?—Yes; a small steamer, if compelled to look out at the proper time, would do a great deal of good; the trawlers would know that they were being watched, and that would put a stop to all improper practices, to any great extent.

The witness withdrew, and the inquiry was adjourned until the 19th of August, at Howth.

Howth, Dublin, Friday, 19th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

HOWTH.

R. Handford.

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RICHARD HARDFORD called and examined.

35,978. (*Professor Huxley.*) Are you a fisherman belonging to Howth?—Yes.

35,979. How long have you been fishing here?—It is about 17 years since I first commenced, and I have been all my time at it ever since.

35,980. What sort of fishing have you practised?—Haddock-fishing and cod-fishing in the season, in the first of my days, and herring-fishing and cod-fishing principally now.

35,981. You fished for haddock, I suppose, with a long-line, and for herrings with a drift net?—Yes.

35,982. Do you fish for haddock now?—No.

35,983. Do you fish for any other kind of fish with long-lines?—Only codfish in the season of the year.

35,984. Do you pursue any other occupation except fishing?—Not at present.

35,985. When you first began fishing 17 years ago was there a good supply of haddock?—Yes.

35,986. What would be your average catch?—The average catch we formerly got would be sometimes as high as 30 score.

35,987. That would be a high catch?—Yes. Sometimes it would be as low as five score.

35,988. Would 20 score be an average catch?—Yes, about 20 score.

35,989. What quantity of cod did you catch then?—I have seen as low as half a score, and as high as 18 score in one shot.

35,990. Would ten or a dozen score be the average catch?—About that, I think.

35,991. Did you get plenty of whiting?—Yes, we did.

35,992. What would be the average catch of whiting?—It depends upon where you are fishing. I have seen as high as 10 dozen in a day's fishing.

35,993–4. What sort of boat did you use then?—Do you mean the rig?

35,995. What tonnage were they?—From 30 to 40 tons.

35,996. What would a boat of that kind cost?—I do not know exactly; I never purchased one. They would average from 300*l.* to 500*l.* 20 years ago.

35,997. That would be the original cost of the vessel?—Yes.

35,998. With all its fittings?—Yes.

35,999. Lines and everything else?—No, not including fishing tackle. That was the cost of the vessel.

36,000. How many men would there be in a line boat, when you were fishing?—Not less than eight and a boy, and sometimes 11 and a boy.

36,001. They were decked vessels, I suppose?—Yes.

36,002. Did you fish with hand-lines or long-lines?—Long-lines.

36,003. How many lines did you have?—Each man had eight lines; about 40 fathoms on each line.

36,004. How many hooks?—About as many hooks on each line. Each man would have about 200 hooks.

36,005. How far did you go out to fish?—Sometimes in the winter season we went out a mile or two from the shore.

36,006. Did you fish in the bay?—Yes, and off the harbour, and at this season of the year we have to go further, to where we get the herrings now.

36,007. How far is that?—About 25 miles.

36,008. Was there any trawling at that time?—Yes.

36,009. Were the boats working in the bay at that time?—At times they were working in the bay.

36,010. How many trawl-boats were working at that time?—About 50 or 60 sail.

36,011. As many as there are now?—I believe there are more now.

36,012. What is the state of the line-fishing now; is there less fish than there used to be?—Yes, there are.

36,013. What fish have fallen off most particularly?—Haddocks.

36,014. Have the haddocks almost disappeared?—Yes, they have.

36,015. How is it with regard to whiting?—They are scarce too.

36,016. And how about cod?—Cod are not as plentiful as they were in those days.

36,317–8. What would you reckon an average catch of fish?—Codfish?

36,019. Yes, in a day's fishing?—Well, about five score. We generally get more when we are up at Arklow.

36,020. And in former times what would you have thought an ordinary catch of fish?—Ten score.

36,021. There is nothing like the quantity caught now that you caught in former years?—No.

36,022. And the haddock particularly, you say, has disappeared?—Yes, it has disappeared altogether.

36,023. Do you not catch any at all?—We may get one, two, or three for a whole winter season.

36,024. Do you get bait as easily as you did in former years, and the same kind of bait?—Yes.

36,025. When did you notice the haddock begin to fall off?—About seven years ago.

36,026.—Did you have good fishing up to that time?—Yes.

36,027. And then it began to fall off?—Yes.

36,028. Are there more trawlers now than there were formerly?—I think there are.

36,029. What is your notion of the reason that the fishing has fallen off?—Mine is the same opinion as that of the general run of fishermen, namely, that the trawlers are the cause of it.

36,030. What harm do they do?—They kill the spawn in the first place, and heave it overboard when they take the nets in.

36,031. Have you ever been on board a trawler?—Yes.

36,032. Have you seen spawn brought up?—I have.

36,033. What sort of spawn was it?—Spawn of all descriptions, and small fish fit for no use at all. It was all lying dead on the deck, and was shovelled overboard with a shovel.

36,034. Can you say that the spawn you saw was the spawn of fish?—I cannot exactly say that; but there was plenty of small fish fit for no use at all, and it was thrown overboard.

36,035. You think that that has damaged the fishery so much that you do not catch any fish now?—Yes, I do.

36,036. When you were fishing 16 or 17 years ago, did you find that the trawlers did you any damage by driving over your lines?—Yes.

36,037. Did you ever lose any lines in that way?—Yes.

36,038. How often did that occur when you were fishing?—Very often. Very seldom they would trawl over us when we were fishing without taking away our lines from us, and it was very difficult to escape them.

36,039. Did you ever have anybody summoned for that?—No, I never did.

36,040. Could you not tell the number of the trawler that did it?—Sometimes I have been able to get the

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number, and sometimes I have not been able to get close enough to them to get it.

36,041. Suppose you got the number, would you summon them?—I never had charge of the boat; that was generally left to the master.

36,042. Did the master ever do it when the lines were carried away?—Not to my knowledge.

36,043. Sixteen years ago, were you a drift fisherman yourself?—I was.

36,044–5. Were the same vessels used for drift-fishing as were used for line-fishing?—Yes.

36,046. What was the length of the drift nets then; what would be the length of a fleet of nets?—Not quite as long as they are now, but I cannot say the length.

36,047. Did you catch plenty of herrings then?—Yes, at times I did.

36,048. Were there large shoals of fish at that time?—Yes.

36,049. As large as now?—They were larger, and closer to the harbour; we did not have to go half as far for them.

36,050. Have you been fishing within the last year or two?—Yes.

36,051. Have you found large shoals of fish this year and the preceding year?—Yes; but they have not stayed for a constancy, only for a night or two.

36,052. They were not as good as they were in your former days?—No, I do not think they have been.

36,053. Was the number of boats employed in the drift-fishing when you first began smaller or larger than now?—The number is largernow than it was then.

36,054. The number of boats has increased?—Yes.

36,055. Considerably?—Yes.

36,056. Are the boats of the same size and manned by the same crews as formerly?—They do not have as many in the drift-fishing altogether as they had in the long-line fishing.

36,057. But is the same proportion kept up now as was kept up in former years?—Yes.

36,058. Then, on the whole, the number of vessels and fishermen has increased here?—Yes.

36,059. Did you ever find yourself, when a drift fisherman, interfered with by the trawlers?—In those days I did not.

36,060. They did not work down among you?—No; it was in the Bay of Dublin they were drifting in those days, when I first went to sea.

36,061. Did not the trawlers come into the Bay of Dublin?—Not in my time; I saw none there.

36,062. What time was the herring-fishing carried on 17 or 18 years ago?—It commenced generally in July.

36,063. Did you begin when you pleased?—Yes.

36,064. When were the fish full?—In June or July.

36,065. Were they full as early as June?—They were full in July, at all events.

36,066. Was there any winter fishing?—Yes, up to Christmas.

36,067. Was there no herring-fishing after Christmas?—Very seldom; they generally gave up then.

36,068. Did they give up going after the herrings, and go to the long-line fishing?—Yes.

36,069. Were the herrings in Dublin Bay in the winter time after Christmas?—I could not say that.

35,070. You do not know?—No.

36,071. Did you find the herrings good bait for the cod?—Yes, they are very good bait.

36,072. Are they used largely for catching cod?—Yes, every season.

36,073. How do they catch them in the cod season after Christmas?—Some of the boats will be fishing for the cod before the herring season is given up here.

36,074. Before Christmas?—Yes.

36,075. Then it seems to be your opinion that all the fishing has fallen off, herring-fishing as well as long-line fishing?—Yes; we do not catch the herrings as close in as we used to do.

36,076. How is that?—I cannot form any opinion upon it.

36,077. Have you any suggestion to make about it?—No.

36,078. (*Mr. Lefevre.*) When did you first begin to fish for the herrings?—This season.

36,079. Previous to that time were you fishing only with the long-line?—Yes, haddock-fishing.

36,080. Was there no herring-fishing from this port then?—Yes, there was.

36,081. Did you find the long-line fishing more profitable than the herring-fishing?—No; but they had no boats belonging to this place. It was strangers who came principally.

36,082. Are you the owner of a boat yourself?—No.

36,083. Do the herring-boats ever go out any distance, to the Isle of Man for instance?—They have not been to the Isle of Man this last year or two. They can always find enough to satisfy them about here.

36,084. And they have not been to the Cornish coast?—No.

36,085. Has the number of boats coming here from Cornwall and the Isle of Man increased of late years? Yes.

36,086. And the Scotch boats, too?—Yes.

36,087. Seventeen or eighteen years ago were there any Scotch boats fishing here?—No.

36,088. Then the whole number of boats has increased very greatly?—Yes.

36,089. And the take of fish must have increased very greatly, must it not?—Yes, it has.

36,090. Do all those boats bring their fish into Howth?—Principally, all of them do.

36,091. How many nets do you carry in your boat?—Twenty.

36,092. What is the length of them?—They are about 30 fathoms each in length.

36,093. Do the Cornish boats have longer nets than you?—No; they are considered somewhat shorter.

36,094. Are there as many of them?—No.

36,095. Are the Cornish and Manx boats about the same size as yours?—I think the Manx boats are bigger than ours. They are principally all Manx-built boats in this place that are engaged in the herring-fishing, but I believe they are of different dimensions. They are not all of one size.

36,096. Do you buy your boats from Manx men or from Cornish men?—Most of them from Manx men, and some of them from Cornish men too.

36,097. Is there any mackerel-fishing here?—Not here; but there is at Kinsale.

36,098. Do the boats go from here for that season?—Yes.

36,099. Do they land their mackerel here or at Kinsale?—At Kinsale.

36,100. How long ago is it since you were on board a trawler?—I dare say 14 or 15 years.

36,101. Not since then?—No.

36,102. How long were you on board?—Five weeks.

36,103. Where did you trawl?—In Courtown Bay and Wexford.

36,104. Were you trawling near the shore then?—Yes.

36,105. Were there many boats trawling then?—No, only one.

36,106. What depth of water were you trawling in?—From three to six fathoms.

36,107. What was the size of the boat?—It was only a small boat; about 25 tons, I think.

36,108. What made you leave off trawling?—We could not get fish enough.

36,109. It did not pay you well?—No.

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36,110. Did you find that you made more profit by the long-line fishing?—Yes, we did.

36,111. Do you ever sink your herring nets here?—Yes; we sink them about 18 feet from the surface of the water.

36,112. Is that late in the season?—No; since we first commenced up until now.

36,113. Do you never have them nearer the surface than that?—No; when we are in-shore we have to shorten our nets. That is all owing to the depth of water we are in. If they get on the ground they are liable to tear.

36,114. Do you take many fish after they become spent?—Yes, we do.

36,115. What is the close of your herring season here?—The last season did not close until Christmas.

36,116. And it begins about the middle of June?—They can begin earlier. Some go in the middle of May, and some later.

36,117. What time do the Manx boats come here?—We expect them here in the course of next month.

36,118. They are not here now?—There is an odd one or so, but not the fleet generally.

36,119. How many boats go out from here at the beginning of the season?—I think there are about 20 boats that belong to this harbour.

The witness withdrew.

Nicholas Doyle called and examined.

N. Doyle.

36,120. (*Professor Huxley.*) You are an owner of fishing-boats here, are you not?—Yes, part owner and master.

36,121. And you are also a fisherman yourself?—Yes.

36,122. How many years have you been a fisherman here?—Twenty-six years.

36,123. What kind of fishing have you practised?—Every kind of fishing, with regard to deep-sea fishing,—long-line fishing, trawling, and drifting with herring nets.

36,124. Can you describe the boat that is used here for your deep-sea fishing?—Well, when I first went to sea, in my father's time, they were all wherry rigged fore-and-aft vessels.

36,125. That is, schooner-rigged, as we call it?—Something on the same principle as the schooner. There were no square topsails, and no centre stays, but they had a boom gaff just the same as the fore-and-aft schooner rig. That is the American system.

36,126. How are they rigged now?—Principally cutter-rigged.

36,127. Did you find that the mode of rigging adopted formerly was disadvantageous?—Yes.

36,128. What is the average tonnage of the vessels used now?—The general average is from 25 to 35 tons of our long-line vessels.

36,129. Are they completely decked?—They are thoroughly decked.

36,130. How much will they cost when completely rigged and fitted with lines?—From 300*l.* to 500*l.*

36,131. What did they cost in your father's time?—The boats cost from 400*l.* to 700*l.*

36,132. Then they were more expensive boats?—Yes, owing to the style of building. We now use soft wood, but the other was of oak.

36,133. How many lines are required to make up the fittings of a liner?—Do you mean what would be the cost?

36,134. How many lines would be required, in the first place?—We average according to the fishing we follow in certain seasons of the year. In long-line fishing for haddock, we formerly carried eight coil of line each man. The cost of that at the present time would be about 18*s.* Then there is another attached to the buoy—the floating mark; that would cost 2*s.* 6*d.* besides, and the value of the buoy would be from 5*s.* to 7*s.* Every man is supposed to have that amount of material.

36,135. That would be something under 24*s.* or 25*s.* each?—It would run from about 25*s.* to 30*s.* on the average.

36,136. At that cost a boat should be fitted for the line-fishing?—Yes, each man's part.

36,137. Are the same vessels used for the drift-fishing?—No.

36,138. They are not the same vessels?—No, they are all open vessels for the drift nets. The decked vessels do not suit. You will see a portion of them lying on the off side of the harbour now. There is no occupation for them at the present time.

36,139. Then these vessels are only used in the winter in the long-line fishing?—The cause of their not being used at any other time is that there is no practice for them. It would be of no interest to us to send them out to sea when there are no fish for them to catch.

36,140. Well, then, when you are going to take to your drift-fishing, what vessels do you use for that purpose?—The boats we use at present you will see up and down the harbour. They have the general Manx rig and the French rig.

36,141. What tonnage are they?—From 25 to 40 tons.

36,142. Are they partly decked?—Yes, that is all.

36,143. What is the cost of the vessels rigged, but without nets?—From 240*l.* to 270*l.* odd.

36,144. How long will your fleet of nets be for each boat?—Our fleet of nets are somewhere about an eighth short of a mile at the present time.

36,145. What will a fleet of nets cost?—They will cost from 180*l.* to 200*l.* owing to their additional depth and length; some may have four pieces extra and more than another, and may, perhaps, be 100 meshes deeper than others.

36,146. Will you describe the make of your nets here? What is the size of the mesh to begin with?—The mesh generally runs from 32 to 33 rows to the yard.

36,147. Do they never run smaller than that?—No; there are none less than 33 rows to the yard.

36,148. Are they made of cotton?—Yes, principally of cotton.

36,149. Do you find that much better than the old material?—Yes.

36,150. Does it mesh the fish better?—Yes, but we cannot get the old material; it is a new kind that they manufacture now; there is a new species of flax that is used for making nets.

36,151. Are some of the flax nets as good as the cotton nets?—No, they allow that they are not as good; they will not stand as long.

36,152. How many meshes deep will your nets be?—Eighteen score and from that to 25 score is about the general run; some of the Scotch trains are from 20 to 30 score on the average.

36,153. What do you call here the rope that runs along the head of the net?—We call that the back rope.

36,154. How are your buoys made fast?—We have a string attached to the back rope and we make the buoy fast to the end of it.

36,155. Was it ever the practice to have the buoy on the back rope without any string?—Not that I know of.

36,156. Ever since you can recollect you have had them made fast by strings?—Yes.

36,157. What do you find the most convenient length of string?—There are different lengths; we use them from 15 feet or 2½ fathoms to 5½ fathoms, according to the rise and fall of the tide and the moon.

36,158. Do you ever find it advantageous to your fishing here, about the time the fish become full and are spawning, to sink your nets and ground them?—We never ground them on the coast here, but they do

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at the Isle of Man; they sink them down as far as the ground.

36,159. What time do you find it best to shoot your nets?—With regard to that, at present there is no regulation carried out upon that point; it is very requisite that there should be; sometimes they shoot them an hour and a half before sundown, whereas the proper time is never before sunset, however they may be shot after.

36,160. You say the fishermen here do not observe any rule about that?—No rule is carried out to that effect at all here.

36,161. Are you aware if there is any regulation of the Fishery Board on that subject?—No; they were talking about it five or six weeks ago, but they did not come to any conclusion upon it. You may say that the fishermen might arrange that for themselves, but that is impossible. If you and I were to have a meeting with some others and come to an agreement about the time we should shoot our nets, we should find that others would not adopt our course, and so the whole thing would be knocked on the head. In the Isle of Man they have a vessel which carries a flag, and if any man goes out and shoots before the Commander lowers the flag he is under a penalty.

36,162. Is there no rule to that effect here?—No.

36,163. Has any application been made to the Fishery Board on the subject?—No, none that I know of.

36,164. Then you think it would be advisable to have a rule upon that subject?—Yes, it would be most proper.

36,165. Why do you think so?—Because it is disadvantageous to the fishery altogether.

36,166. How does it hurt the fishery?—We all allow in general, both Englishmen, Irishmen, and Scotchmen, that when the nets are shot before sundown it causes the fish not to rise.

36,167. Does it break the shoal?—Yes; and it keeps them from rising the same evening. They do not come to the surface anywhere where the nets are.

36,168. Do any foreigners fish off this coast besides the Manx men and the Cornish men,—do any Frenchmen come here?—No; there are only Scotchmen, Englishmen, Irishmen, and Manx men.

36,169. Do you ever find yourselves interfered with in drifting by the trawlers?—Yes, very often.

36,170. Do they drift down amongst you?—Yes, very often.

36,171. Are your boats lighted at night?—They are.

36,172. How are they lighted?—By a lamp extending six feet from the centre of the bowsprit bit. It is fixed on a stand, and the lantern is 18 inches square, and there are four panes in it, 14 inches long.

36,173. Then you can be very easily seen at night?—Yes; and when we find these vessels coming into collision with us, we throw out a flare-up.

36,174. Do they drift upon you, notwithstanding?—Yes, very often.

36,175. Is that because they trawl at night here?—Yes; they always did so.

36,176. Has trawling been going on ever since you knew the place?—Yes; as long as ever I have been at sea I have heard of trawl-boats.

36,177. Was your father a fisherman?—Yes.

36,178. Did he talk about them?—Yes.

36,179. Did he complain of their interfering in the same way?—Yes.

36,180. How many trawl-boats were there working when you began fishing, 20 years ago?—From 35 to 45, speaking roughly.

36,181. (*Mr. Lefevre.*) Is that including Dublin?—It includes Dublin, Ringsend, and Kingstown.

36,182. (*Professor Huxley.*) Are there more now?—Yes, one-third more.

36,183. Are the boats as large now as they used to be?—Yes; some of them are far larger. Some are nearly 20 tons larger.

36,184. Have you been pursuing the herring fishery all the time that you have been a fisherman?—No.

36,185. When did you begin herring-fishing here?—Only six or seven years ago.

36,186. Up to that time, was there no considerable herring-fishing here?—Yes, with the Cornish men and Manx men; but we had no fleet out from this place.

36,187. Is it true that, during all the time you can recollect, there were Cornish men and Manx men fishing off this coast?—Yes.

36,188. I thought you told us your father complained of the interference of the trawlers?—So he did, but I meant the Cornish herring fishermen and the Manx men. As long as I can remember, there has been herring fishing carried on here by Englishmen and Manx men on this coast, but not in general by a fleet here, because we had none.

36,189. Your father was an Irishman, was he not?—Yes.

36,190. Then if he complained of the trawlers interfering with his fishing here, that implied that he was fishing?—Yes, he was long-line fishing.

36,191. Then did he complain not of their interfering with the drift-fishing, but the long-line fishing?—Yes, and drift-fishing as well.

36,192. How could he complain if he was not a drift net fisherman?—But he was.

36,193. Then at that time there were Irishmen pursuing drift net fishing here?—Yes, but there were only a few, such as the Arklow boats. There were one or two at this port, another at Malahide, and others at Kilrush, and so on.

36,194. (*Mr. Lefevre.*) What number was there seven years ago?—The number of boats about seven years ago from this harbour was not more than 14, and at the present time they have 35 or 36.

36,195. (*Professor Huxley.*) There were as many as 14?—Yes.

36,196. (*Mr. Lefevre.*) Take 20 years ago. How many were there then?—Not more than two or three out from this port and Baldoyle altogether then.

36,197. (*Professor Huxley.*) Had they as large fleets of nets?—No, the nets were not more than two thirds the size of those used now. They were one-third less than the nets used at the present time.

36,198. Can you tell us why it was, seeing there was an abundance of fish on the coast, that the fishermen of the coast did not pursue it?—Because they were not able. They had not the capital themselves, and those who had it took no interest in the fisheries.

36,199. Then what was it that made them take to it seven or eight years ago so suddenly?—Perhaps, I might be able to master part of a vessel, and I might induce gentlemen to assist me, and pay them interest for the money they advanced. That has most likely been the way in general.

36,200. Did persons who had capital, seeing that the fisheries were likely to prove advantageous, lend money to the fishermen to start them? Was that the way in which it was done?—No, they bought vessels themselves for the fishermen.

36,201. Seven or eight years ago were the additional vessels found by persons who had money in that way?—Yes.

36,202. And fishermen were put in them to work them?—Yes.

36,203. Were the persons who first bought the vessels inclined to let the fishermen become possessors of them themselves if they chose to buy shares?—Some of them were, and some were not.

36,204. Has it been the case largely for the fishermen themselves to become owners?—Yes; the greater part have become part owners.

36,205. Then a good deal of money has been made out of the fishing?—Yes.

36,206. And it has been a flourishing thing altogether?—Yes.

36,207. I suppose, from what you tell me, that if the people had been so inclined 20 or 30 years ago,

in your father's time, they might have done the same thing just as well ?—Possibly they might.

36,208. Were the fish there then ?—There would be more fish then, because there were not so many trawl-boats to destroy the fishing.

36,209. So that if there had been the same public spirit displayed 20 or 30 years ago the fishing might have existed then as well as now ?—Just so.

36,210. And there would have been that development of the fisheries on the coast which has taken place since ?—Yes; in regard to the herrings especially.

36,211. Ever since this increased development of the fisheries took place, has it been very profitable and successful ?—Yes; but it has not been as well as it would have been if the trawl-boats had not interfered on the coast in the night time. They have caught an abundance of herring in the trawl when we have been night after night and could not shoot one net. If we speak to them, all the satisfaction we get is, that they tell us to go here and there and do our best.

36,212. Have you no protection against that ?—We can get no protection.

36,213. Can you not take their numbers ?—We tell them we will, and we get nothing but sauce and abuse.

36,214. If you were to lay an information before the magistrates, would you not obtain redress of some kind ?—Yes, but you feel inclined to drop it, and I feel inclined to drop it, and the thing is allowed to rest.

36,215. Why is it not worth somebody's while to prosecute ?—I have spoken to different parties I have been employed with, and they have always said "wait until another time," and so the thing dropped altogether. I believe there was one man, a Mr. Greaves, of the Isle of Man, who took proceedings against some of the boats under the Scotch Act and got 280*l.* for it, but we never carried that out here.

36,216. Did he lose his nets ?—Yes, 17 nets out of 20, and the fish and all.

36,217. If people will not take the trouble to put the law in force themselves, what is to be done ?—We did put the law in force with regard to our long-lines, and we got no satisfaction.

36,218. How was that ?—Because they were a stronger party than we were, and they were upheld by stronger parties. We are only poor, dependent men, and when we lose our long-lines it is a serious matter for us; they come across us and take away our lines and buoys, and when we speak to them we get nothing but sauce. I should not like to make use of the language they give us. They tell us to do our best and our worst, and that is all the satisfaction we get. If we run foul of them the consequence is that we get no redress. We have taken our case to Mr. Richardson, the proctor, and other parties, but we have got no satisfaction.

36,219. Did there appear to be no law, or was the law not put in force ?—I believe they bribed the parties, and having more capital than we had they carried the case to a higher court. They appealed, in point of fact.

36,220. They beat you by the length of their purse ?—Yes.

36,221. You are prevented, then, from following out your functions by the existence of trawlers on the same ground ?—Yes, and no matter what portion of the sea the long-line fisherman or the drift-net fisherman goes to, the trawler is sure to follow him.

36,222. What do you think would be the best mode of remedying that state of things ?—They should not be allowed to trawl within the limits of the headland at the Mountain foot or Carnsore Point. If they do, then they destroy the spawn. They ought to keep out eastward of the light ship from Lambay Island to Bray Head. I think that is the greatest nursery for fish in any part of Her Majesty's dominions, and yet it is being thoroughly torn up by trawling.

36,223. That would not affect the injury done to you as fishermen for herrings, so far as the trawlers trawling among you and carrying away your nets are concerned, because you are often fishing for herrings outside that line ?—Yes.

36,224. What would meet the injury which you suffer from the trawlers coming among you and carrying away your nets ?—I think the proper thing would be, to have one of Her Majesty's steam-vessels to protect the fleet, and to see that the herring-boats are allowed to drift their nets without any hindrance being placed in their way by any trawl-boat. If that is not done we shall get no satisfaction whatever in the herring-fishing, but they will destroy the fishing altogether.

36,225. There is at present operative in certain parts of the kingdom an Act called the Convention Act, and that provides, among other things, that wherever drift-net men and trawlers are fishing together, the trawl men shall keep at least three miles from the drift-net men; would a regulation of that kind meet your case here ?—That would be better than the present condition of things, because we have now no regulation whatever. A small boat outside, not long ago, was nearly run down, with all hands, by a trawl-boat. They had to haul for life and death in order to get clear of him. As it was, the trawler caught the mizen-mast and knocked it all away.

36,226. It appears by an abstract from the byelaws and orders appended to the Report of the Commissioners of Fisheries, that on the 20th of April 1849, a byelaw was made (as I conclude in consequence of an application from persons fishing on the Wexford coast) by the Fishery Board, "prohibiting trawling "in all places where there are boats engaged in mac-"kerel or herring drift-net fishing, and providing "that trawl-boats shall keep at a distance of at least "three miles from all boats fishing for herring or "mackerel with drift nets, and that whenever herring "or mackerel boats shall commence drift-net fishing, "on any place on or off the coast of Wexford, trawlers "shall depart therefrom and keep at least three miles "distant from the drift-net herring or mackerel boats;" so that, you see, when an application was made to the Fishery Board, and due cause shown, they passed a regulation of that kind, which would at once prevent such interference as that of which you have been complaining ?—Yes; but that byelaw is not carried out.

36,227. Do you mean at Wexford ?—I don't know about Wexford, but it is not carried out here.

36,228. You have not taken the requisite steps here; you appear to have made no application to the Fishery Board ?—I have made none; but I believe there are other parties who have.

36,229. But in Wexford, after due application was made to the Fishery Board, they did their best to prevent the injury of which you complain ?—Yes.

36,230. So that, as far as the power of the Fishery Board goes, the remedy is in your own hands ?—Yes.

36,231. What has been done at Wexford it is possible for you to do here ?—Yes.

36,232. The grievance of which you are now complaining is not the fault of the law; it is possible for you to have that grievance remedied ?—Yes.

36,233. With regard to the injury done to the fishing by the trawlers bringing up spawn, do you think that that injury would be remedied by keeping the trawlers outside certain limits ?—Yes, candidly, I think it would.

36,234. You have no objection to the trawlers fishing out in the open sea ?—No.

36,235. So long as they do not interfere with your drift-net fishing ?—No.

36,236. Have you ever been mackerel fishing ?—No, never; but I have vessels that fish down at Kinsale.

36,237. Is mackerel fishing not much practised here ?—There are only four boats.

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36,238. Have you ever practised any other fishing than you have described to us?—No; except catching mackerel with hooks in the States of America.

36,239. Is there anything you wish to remark upon, that you think injurious to the fishing?—Yes.

36,240. What is it?—I do not see, when we go out and put our lines down in the water, and the trawl-boats come and take them away, why they should not give us satisfaction. If we ask them to do so; they take no notice of us whatever. They only tell us, in the worst of language, to go away and do our best. Then, on the other hand, when they catch our lines they never return them to us again, but take them away and make a sale of them. Further than that they run their knives through our buoys and make aprons of them. I call it merely robbing the fishermen.

36,241. All these things are offences at common law, and you have a remedy by prosecuting the offenders?—Some will give them up for fear we should take the law against them, but others will not. Further than that, I may say, that within the last 15 years there has been a general and almost total failure, which has lasted up to the present time, with regard to the long-line fishing for haddocks.

36,242. You have had no haddocks?—No.

36,243. What do you think is the cause of that?—It is trawling. I have seen more than 1,000, aye 20,000, score of small haddocks, not that length (*measuring*), packed up here and sent away in hampers. They were so small that it would take 500 or 700 to fill one hamper, and of course the catch of so many small fish must tend to decrease the fishing. In addition to that, there is a vast quantity which they shovel overboard. They were brood, and of course we cannot have the fish when the brood is destroyed. I am interested in trawling as well as in other fishing, but I am prepared to give up my part of it on account of the injury it does to the fishing.

36,244. Are you part owner of a trawl?—Yes; I trawl for fish in certain seasons of the year.

36,245. Do you find when you trawl that large quantities of unsizeable fish are brought up?—Yes.

36,246. In the deep sea, as well as inshore?—Yes; it is more so in the deep sea in the winter time, and in March, April, and May, when the small fish are beginning to come round, they are totally destroyed.

36,247. What fish do you get in the trawl out here?—Plaice, sometimes turbot, but only a very few, and sometimes a few cod.

36,248. Do you get any soles?—Yes, but very few at present. There was an abundance when we first went to sea; all we had to do was to go four or five miles from the harbour, and we could catch as many as a horse and dray could take to the market. Now we cannot catch as many as a man could eat, in comparison.

36,249. Are you speaking of soles alone?—Soles, plaice, or any other kind.

36,250. Do you think the ground has been overfished?—Yes, it has totally run out altogether both of spawn and fish.

36,251. Under these circumstances, how is it that the number of trawlers has increased during the last 20 years?—They go to various parts of the channel, down to Dungarvan, to the Isle of Man, Galway, Holyhead, and Dingle Bay, because they are not able to make a living here.

36,252. Is it your opinion that the trawlers who work round this coast also work in Dingle Bay?—Not the whole of them, but some of them do.

36,253. Then there must be a considerable number who continue to get their living by fishing on this coast?—Yes, there is a great number of them.

36,254. What I cannot clearly comprehend is, that, if they have so completely fished out one patch of ground, they have not fished out the rest, and cleared the whole thing, making it not worth while to fish?—Take it from St. John's Point to Coningbeg light ship, it will be about 130 miles south-south-west, and north-north-east. The whole of that length has been thoroughly fished out. The trawlers have run out all the limits that they trawled on in that direction.

36,255. But yet they are still trawling there?—Yes, but it is generally a failure; when they go there they can get nothing. They run the ground out, and they can get no fish upon it. If they want to get fish they have to go to some part of the channel where there has been no trawling for a number of years. Many of them have been obliged to lay their trawl-boats up, and come here to fish herrings. Others have sent their boats in different directions both to the English and Scotch coasts.

36,256. Are there any trawl-boats laid up in this harbour?—Yes, there are four lying up off the quay which have been generally trawling or long-lining, and there are three on the bank. I knew a time when there were 15 belonging to this harbour, 15 more belonging to Baldoyle, and 10 to Rush, 14 more to Balbriggan, the Skerries and Malahide, and they are all laid up here, and of no use just now. During the winter months they are engaged in trawling, and then long-lining. They trawl from the month of March, through the month of April, up to the 1st of June, and then they go long-lining from that time until the 1st of March again.

36,257. Are there trawlers laid up here because the men have gone herring-fishing?—Not generally upon that account, but rather on the ground that it is of no advantage to keep them out at sea because there is nothing for them to do. They can make no money at it.

36,258. (*Mr. Lefevre.*) Are they laid up altogether, or are they employed in the line-fishing?—They are laid up until the herring-fishing is over for the season. When the weather is too bad to go for herrings, then we go out for codfish.

36,259. Do you not use them for trawling at all?—Yes, we do in March, April, and May.

36,260. From May until the autumn they are laid up altogether?—Yes; they are laid up at the present time, and have been for the last four years, in a general way, unless they go down to the coast of Donegal or Sligo to bring ling up for the Dublin market.

36,261. (*Professor Huxley.*) Your complaint against the trawlers is, I take it, in the first place, that they have exhausted the fishing grounds and damaged the fisheries; and, in the next place, that they have interfered with you both in long-line fishing and in drift-net fishing; in the one case by carrying away your lines, and in the other, by fouling your nets?—Yes.

36,262. And the remedy that you propose is, that they should be excluded from fishing within certain bays, and be kept out beyond certain limits?—Yes.

36,263. And that you should have a Government vessel, to see that they do not take away your lines?—Yes.

36,264. (*Mr. Lefevre.*) Are you aware that trawling is prohibited within a line drawn from Lambay Island to Carlingford Bay?—Yes.

36,265. Is that regulation attended to?—No, it is not carried into effect; it is not attended to in any way whatever. We were herring-fishing last winter, in the months of November and December, in three fathoms water, between Skerries Harbour, Drogheda, and Clogher Head, when the trawlers were fishing there. They came across our nets, and went away with them. We lost our nets out of the water altogether; they carried them away.

36,266. Are the trawlers in the habit of trawling within that line?—Yes.

36,267. Have you taken any means to prevent it?—We reported to the Coastguard, and have tried to prevent it in many other ways, but we never went to such authorities as you.

36,268. Have you taken the numbers of the trawlers?—Yes.

36,269. And have reported them?—Yes.

36,270. To the Custom House authorities?—No, we never went to the Custom House.

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36,271. Then to whom did you report?—To the Coastguard.

36,272. Has any action followed from that?—No. Only last season we had our nets taken up, on the 12th of this month, by a boat belonging to Dublin. What damage was done, I cannot say.

36,273. Do they only trawl in dark nights, or in the day-time?—They trawl at any time they can get a chance.

36,274. Are they boats from Howth?—No; there are no Howth boats trawling at that time. They are Rush, Balbriggan, Dublin, Kingstown, and Skerry boats.

36,275. When did you trawl?—Last May.

36,276. With your boat?—Yes, down at Wexford.

36,277. Is not winter the best time for trawling?—It is, in general, with the Dublin boats.

36,278. But not with yours?—No; we go long-line fishing in the winter.

36,279. Do you find that more profitable?—Yes, we do.

36,280. Do you make more money by it than the Dublin boats by trawling?—I cannot say that, but we find it better ourselves.

36,281. What is the size of your boats?—From 25 to 30 tons.

36,282. Are the Dublin boats larger?—Yes; some of them are 60 tons, and some of them as much as 100 tons; there are one or two of 100 tons.

36,283. What distance from the shore do you fish for cod in general?—From one mile outside as far as 16 or 18 miles off east-north-east and east-south-east from this harbour. We go up from Carlingford Lough to fish about 12 miles from the entrance to the Lough.

36,284. Then the line you draw from St. John's Point to Carnsore Point would include all the ground you fish for cod?—Yes, in general.

36,285. Where do you find the herrings when the season begins?—South-east from this harbour, at a distance of from eight to ten miles off.

36,286. As the season goes on, where do you find them?—Still in the offing, in the deep sea; there is no want of fish in the offing. Sometimes we find them 15 miles off, and at others about 20.

36,287. What is the greatest distance you go for them?—From 15 to 25 miles from the harbour, due east and east-south-east. We go from that until we get 14 or 20 miles east of Drogheda Bar.

36,288. Is that the furthest point north you go to?—It is the furthest we fish for this market, but we do go further north. When we go further north, we make for other markets, owing to the weather.

36,289. What markets do you go to?—Probably Balbriggan in the fall of the year, but we generally come here in the summer season.

36,290. Do your boats go to Arklow?—None go to Arklow at all. Perhaps there may be one or two that go in the course of the season.

36,291. How long have you been the owner of a boat?—About four years.

36,292. Then you have been able to lay by money enough to buy a boat?—No, I have only bought a portion of it; we are obliged to buy according to our means. If we want a boat, we have to purchase it second-hand first.

36,293. Have the fishermen here been making money during the last few years by herring-fishing?—They have made a little progress.

36,294. As compared with previous years?—Yes, there has been an advance as compared with what it had been for the last eight or ten years. In other kinds of fishing, we have had nothing to speak of at all.

36,295. Are there many of the fishermen employed in agriculture in other periods of the year?—No; we carry the fishing through and through.

36,296. Do the herring fishermen go line-fishing in the winter?—Yes.

36,297. What number of boats go line-fishing in the winter?—From 10 to 14 or 20. That will be about the average.

36,298. (*Professor Huxley.*) What time are the herrings full here?—In the first of the summer they begin to get full now. They are full in the month of September.

36,299–300. When do you get them spent?—We get them spent in December.

36,301. Are they beginning to spawn about September?—Yes, some of them.

36,302. When do the general average spawn?—From September to Christmas month.

36,303. As late as that?—Yes.

36,304. Have you ever noticed herrings here in February?—No; I never caught any in February.

36,305. Do you ever see any signs of them?—Yes, there are plenty of signs, but we don't fish for them.

36,306. But you think they are here?—Yes, they are here.

36,307. Do you get them by accident, or do you catch them for bait?—Sometimes, if we get large hake, or cod, or ling, we find a number of herrings in them.

36,308. Are they full or fat fish at that time?—No, they are very slight; it is then they get smaller.

36,309. (*Mr. Lefevre.*) You said there should be regulations prohibiting the shooting of nets until after sunset?—Yes; I think it would be highly approved of by everybody, and that it would be for the interests of all.

36,310. Do you think half an hour before sunset should be about the time?—I think when the sun is going down is the time to shoot the nets.

36,311. Do you think it would do harm to shoot half an hour before sunset?—It would not do a great deal of harm then; but, at this time of the year, it is not prudent to shoot our nets at 6 o'clock, or twenty minutes before 6.

36,312. When that is done, the principal sufferers are the fishermen themselves?—Yes; there are not many who do shoot as early as that. The practice is, if they get upon a berth, to shoot in order to keep it.

36,313. Do you think that, in shooting their nets so early, they do harm to others as well as to themselves?—Yes; they do harm to the fisheries altogether.

36,314. The principal sufferers are the fishermen themselves?—Yes, the men and the owners of the vessels. Every one who has an interest in the fishery is injured by it.

The witness withdrew.

Mr. J. R. Barry.

Mr. James Redmond Barry called and examined.

36,315. (*Professor Huxley.*) You wish to make some statement to us, Mr. Barry?—Yes; I merely wish to make an explanation in reference to an answer given by me yesterday at the meeting at Kingstown. It may be assumed from that answer that the Commissioners of Fisheries never interfere in prosecutions. Now I can state that, in every case where there has been an infraction of the law, and where the officers in the vicinity,—the Coastguard principally, who are the executive department,—certify that such was the case, we have invariably been in the habit, on their requisition, of furnishing the means, by sending down either counsel or solicitors, of prosecuting before the ordinary tribunals of the country. Further, in reference to regulations that have been made in some places and not made in others, and which do not extend to this quarter, namely, the regulations in reference to abstaining from fishing until a certain hour in the evening, by herring nets, and requiring the trawlers to keep

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lations of that kind wherever we have been called away from the herring-boats, we have made regu- upon, and found, on inquiry, that it was desirable. No such application has ever come from this quarter. On the contrary, in consequence of the great importance of the herring fishery, we have from time to time suggested to some of those persons who have complained of the want of regulations, if it was not desirable to make some; but we found that there was rather an indisposition towards it than otherwise.

36,316. (*Mr. Lefevre.*) Have there been many cases of prosecutions?—A good many. The prosecutions have been at the instance of the parties injured, but we have furnished the law.

36,317. And the prosecutor?—No; the prosecutor does his own work.

The witness withdrew.

C. Rickard.

CHRISTOPHER RICKARD called and examined.

36,318. (*Professor Huxley.*) You are a fisherman here?—I am.

36,319. Are you part owner of a vessel?—Yes.

36,320. How long have you been engaged in the fishing here?—I suppose about 27 years.

36,321. Did you hear what was stated to us by the witness, Nicholas Doyle?—Yes; some of it, but not the whole.

36,322. Were you not here during the whole of his examination?—No.

36,323. But you were here during the first part of it?—Yes.

36,324. Do you agree with what he stated generally?—Well, I did in some of it; but Doyle has not known about the herring-fishing as long as I have. When first I went there were neither Scotch nor English boats.

36,325. How long ago is that?—From 27 to 30 years ago.

36,326. There were neither Scotch nor English boats here then?—No; there were some Carrickfergus boats.

36,327. What boats were fishing then?—Arklow boats, Skerries boats, and others along the shore.

36,328. Was yours the only boat going from Howth?—No, there were a good many small boats; most of the fishermen had boats and nets.

36,329. How many went from Howth at that time to fish for herrings?—I suppose there were about 30. The big boats had yawls for the herring-fishing. They would go out on summer nights and haul their nets into the big boats. They were the long-line fishing boats we have now. The Skerries men did the same.

36,330. How many boats were there at the Skerries?—I suppose there would be 40 or 50 sail of Skerries boats.

36,331. Was the greater number of the 20 or 30 boats which went from Howth, small boats?—They were all large boats, but they had small boats to fish the nets out of the large boats. They were yawls of about six tons. They would shoot the nets, and if a breeze came on the big boats would go out and lay to them.

36,332. The small boats were boats of about six tons?—Yes.

36,333. What was the tonnage of the large boats?—About 35 or 40 tons.

36,334. How many large boats would there be?—About 50 from Balbriggan, Dublin, and the Skerries.

36,335. How many from this place?—About 30 sail.

36,336. And how many small boats?—Each had a small boat.

36,337. Was there a very considerable fishery?—Yes.

36,338. How many men would there be in each of these boats?—Nine men.

36,339. Nine men?—Eight men and a boy; there would be nine hands altogether.

36,340. Then they would get a great deal of fish?—Yes. At that time the fishery was practised all by Irishmen. There were no Scotchmen or Englishmen here either in the winter fishing or in the summer time.

36,341. During what time was the winter fishing practised?—It began in October, and went on for a couple of months till Christmas.

36,342. Did you not fish after Christmas in the winter?—No; I never saw them get any fish after Christmas.

36,343. At that time the fishing was almost entirely in the hands of Irishmen here?—Yes.

36,344. How was it that they did not keep it?—They did all they could to keep it, but the long-line fishing was so plentiful then that they did not mind going after the herring-fishing in the summer.

36,345. They preferred going after haddock and cod?—Yes.

36,346. They neglected the herring-fishing because herrings were cheap at that time?—Yes.

36,347. How many years ago is it since they began leaving off fishing for herrings,—when was it that the Irish boats began to fail?—It is about 15 years ago since the boats began to fail.

36,348. Then, as I understand, there was a very considerable fishing practised here by Irish fishermen?—Yes, there was.

36,349. For a time the Irish seem to have given up the herring-fishing?—Yes.

36,350. Because they found the line-fishing more advantageous?—Yes.

36,351. They did not take the trouble to keep up their nets and boats?—No.

36,352. Was it in consequence of that that the Scotch and English fishermen came in large numbers?—It was; they had finer boats and better nets than we had. Our nets were very light. They would go out from Howth 20 miles in the summer time, and get some good fishing, while we had no boats and nets to go there. Our boats were too large for fishing in deep water.

36,353. Too large?—Yes; and our nets were too light.

36,354. Did the Scotchmen have better boats?—No; the Scotchmen were not here then.

36,355. Were they Manx men?—No, Cornish men.

36,356. They had better boats than you?—Yes.

36,357. Then why did you not get better boats and tackle?—We were doing so well at the long-line fishing. If the haddock and cod had continued, we should not have minded going herring-fishing now.

36,358. Did you fish for haddock and cod all the year round?—Yes.

36,359. And you got them in great plenty?—Yes, they were always plentiful, both haddock and cod, whiting and ling.

36,360. How long did that plentifulness continue?—Always, until about 7 or 8 years ago.

36,361. When you began to be a fisherman were there any trawlers?—They were just coming here a few years before I went to sea.

36,362. How many were working off here before you went fishing?—Thirty or forty.

36,363. Thirty or forty sail?—Yes.

36,364. How many are there now? More than 40?—I counted a score out this year.

36,365. Then the number of trawlers has not increased since you began fishing?—No; there were about as many at that time; perhaps there are about 9 or 10 more now.

36,366. Will there be a third as many again?—Yes; there will be somewhere about 42 or 43 now.

36,367. Were the boats as large and well found then as they are now?—No, nor one half as well;

one boat now is as good as three they had at that time.

36,368. At that time, when you first began working, did the trawlers work every day in the season throughout?—Yes; they could get as much in one haul as they could get now in a month; I was trawling too.

36,369. You were a trawler also?—Yes.

36,370. You got plenty of fish?—Yes; sometimes more than we were able to get on board.

36,371. Then it seems for many years the trawling and long-line fishing went on here and both did very well?—Yes, but continual trawling killed all the small fish; I had an opportunity of seeing them throwing them overboard in Wexford Bay last summer; I saw them throw away more than 30 score of small soles and turbot not bigger than half-a-crown.

36,372. That was in the Bay of Wexford?—Yes; they threw them overboard.

36,373. When you were trawling in deep water did you get the same proportion of small fish?—Yes, a good many more; we got tons weight of it; I have known a trawler throw a ton and a half of small fish overboard.

36,374. Do you get more in deep water than in shallow water?—It is in deep water that we get them; in 30 or 40 fathoms of water.

36,375. In former times, 20 or 30 years ago, when you began fishing, were there complaints against the trawlers for carrying away the long-lines?—Yes; I have heard my father and others who went fishing before me complain that the trawlers would ruin the coast.

36,376. But the two kinds of fishing went on together for some time?—Yes, because the fish were then plentiful, but now they have killed them all; there are no small fish now to catch. I have seen as many as 30 turbot on 10 score of hooks on a long-line, but we cannot get one if we would give a thousand pounds for it on the long-lines now.

36,377. Are they all got by the trawlers?—The trawlers get all kinds.

36,378. Were there many complaints when you began fishing of the trawlers interfering with the drift men?—There were not as many complaints as there are now; the men did not know where to go to complain.

36,379. Twenty or thirty years ago did the trawlers trawl at night?—Yes, they did.

36,380. Do they do so now?—Yes. You were talking about taking their numbers when they do the damage. They took 30*l.* worth of lines from the boat's crew I was with, besides the fish between October and March. I have seen 20 trawlers going over our lines in the course of a day.

36,381. (*Mr. Lefevre.*) Then they go often across your lines without doing you any damage?—If they go between the buoys they will not do us much damage, but they will not do that. If they catch one mark they will take two or three men's shares of lines.

36,382. You said that you have seen 20 trawl vessels go over your lines on the same day?—Yes, but they took our lines away that day, and we spoke to them. The first boat lifted our lines off the bottom, and all the rest coming after it and the lines floating they took them away.

36,383. Did the trawlers take a great number of haddock?—They did; they have occasionally got more than they could get on board; they have had to cut their nets in order to get them on board.

36,384. Did the haddock and whiting form a great proportion of their catch then?—Yes.

36,385. But they do not get them now?—Though you would give 40*l.* for a haddock you would not get one out in this quarter.

36,386. Then the disappearance of the haddock has been a great loss to the trawlers?—Yes, and it has been a great loss to the poor people of Dublin, who would rather see haddocks than herring.

36,387. Was it a very profitable fishery?—Yes; we were able to make a good fishing all through the year out of it.

36,388. In consequence of the disappearance of the haddock you have taken more to the herring-fishing?—Yes; if the haddock had continued we should not have had so many herring-boats.

36,389. Since that time you have done pretty well with the herring-fishing?—Yes; but I would rather be long-lining than herring-fishing. It would pay me better.

36,390. Would you make more money, if the haddocks were here, by long-line fishing than by herring-fishing?—We might not make more, but we should do as well, and we should not have as much work to do for it. It would be all day work, and we should not be at work at night.

36,391. Do you attribute the disappearance of the haddock to the trawlers?—There is nothing else destroys them, only the trawlers.

36,392. How long is it since you observed the disappearance of the haddock?—About seven or eight years ago.

36,393. Did they disappear suddenly?—No; they have been getting scarcer and scarcer every year.

36,394. How many boats are there now that come from Cornwall?—There are about 150 here belonging to Cornwall. This year there are even more; from 150 to 200.

36,395. How many from Scotland?—60 or 70 sail from Scotland.

36,396. And from the Isle of Man?—Not more than three or four this year.

36,397. What number generally come from the Isle of Man in the season?—They are coming now, and in October there will be 150 from the Isle of Man.

36,398. What time do the Cornish boats go away?—They go away in the latter end of July.

36,399. When you recollect the herring-fishing first, 27 years ago, I understand you to say that there were not any of these boats from England?—There might be some, but they would not stop here to fish. The Englishmen would go down to Ardglass and the Isle of Man; they would pass by here.

36,400. Do all the boats you speak of bring in their fishing to Howth?—Yes.

36,401. Then a greatly increased quantity of fish is brought here?—Yes.

36,402. Are they exported from here fresh or are they cured?—They are cured, and also sent to Dublin fresh. There was no market at Liverpool then, the same as there is now, for the winter fishing, but for the summer fishing there was.

36,403. Are they sent to Liverpool direct?—Yes; they are sent to England.

36,404. Do you agree with the last witness, that trawling ought to be prohibited between a line drawn from St. John's Point to Carnsore Point?—I agree that the trawlers should be put outside the long-liners and the herring fleet, and they should be stopped altogether for five or six months in the spawning time of the year.

36,405. What time of the year is it that the fish begin to spawn?—From the 1st of March, and they spawn for about three months, and in three months more the fish come to perfection.

36,406. During that time you would put a stop to trawling altogether?—Yes, I would do so, if I could; if I had my way I would very soon put a stop to them.

36,407. But during March, April and May they catch a good many fish?—Yes; at that time they get the best catches they take, but neither haddock, cod, nor ling is in season then.

36,408. But they catch a good many soles?—Yes, in the month of May they do.

36,409. Then would you stop the supply of soles in those months?—We could live without soles, and if we kill them all, those who come after us will have to do without them.

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36,410. Notwithstanding the prohibition line drawn from Lambay Island to Carlingford Bay, a considerable amount of trawling goes on within that line? Do you agree with the statement made to that effect by the last witness?—In the winter time they go trawling within there.

36,411. Notwithstanding the prohibition against it?—Yes; I would stand out against it, because it is too close in for trawling.

36,412. You are aware that it is prohibited?—Yes, inside Bray Head and Lambay Island, and yet they trawl there.

36,413. Do not the trawlers pay attention to that prohibition?—Indeed they do not. From next month up to March they will be trawling there.

36,414. Both during the day and in the night time?—Yes.

36,415. Have you ever taken their numbers?—We have taken their numbers and brought them to the law, but we could not get paid for our lines. They brought us to a higher court, and then we knocked it off. There is no use in going to law with them at all.

36,416. Do they get considerable quantities of fish within the prohibited lines?—Yes; all they catch in the winter they catch there. They shoot their trawl outside Kish, and then drag it down to Lambay. That is their continual place of trawling after this month; they take their trawl up to the Black buoy off Lambay, and then drag it back again.

36,417. (*Professor Huxley.*) Is there anything else you wish to remark upon, besides what you have already stated?—No, there is nothing else I remember now, except that I should like to have the trawlers shifted out from where we use our long-lines. They do a deal of damage. There are seven or eight boats in this town and Baldoyle, and seven or eight more from the Skerries, which take a great many pounds away from us in nets and lines, besides the loss of fish.

36,418. The law practically gives you no protection?—No, because if they find the law going against them then they bring the case into a higher court.

36,419. Have you lost herring nets by them?—No.

The witness withdrew.

T. Murtagh.

THOMAS MURTAGH called and examined.

36,420. (*Professor Huxley.*) Are you a fisherman here?—Yes, I am.

36,421. Are you part owner of a boat?—Yes, I am part owner.

36,422. How long have you been engaged fishing here?—About 12 years on and off. I have been about 25 years fishing with the long-line.

36,423. Have you been present while the previous witnesses have been examined?—No, I was not present.

36,424. Have you any complaint to make in reference to the fisheries?—Yes, I have a complaint to make. I have been trawling, herring-fishing, and lining for the last 25 years. I have trawled in every bay in Ireland, except Dundrum Bay, and I can see nothing that the trawl can do except hurt. When I was trawling, we have been shovelling spawn of all kinds overboard by tons weight.

36,425. Spawn of fish?—Yes, of every kind.

36,426. What kind?—Herring, turbot, soles, haddock, and every kind you can mention.

36,427. Are you sure it was fish spawn?—I could swear that it was.

36,428. Did you ever see the fish in it?—No, I never did.

35,429. What kind of stuff was the herring spawn?—It was all matted together, the same as moss.

36,430. Where did you get up the herring spawn?—In Galway Bay.

36,431. What time of the year?—In the latter end of November. I was there trawling on the 23d of November the last time I was there.

36,432. What depth of water was it in?—Twenty-five fathoms.

36,433. Was it on a bank of any kind?—No, in the bay.

36,434. And what sort of ground at the bottom?—It was clean ground,

36,435. Was there any quantity of this spawn there?—Yes, there was plenty of it. Another thing I wish to tell you is, that the trawlers take away all our lines. We cannot fish for them. Years ago, in the deep water, they took away three or four nets from me in one night.

36,436. Was that when you were herring-fishing?—Yes. I lost about 10*l.* worth of herrings, besides the damage done to the nets.

36,437. Could you not get hold of them?—No, it was in the night time.

36,438. That is pretty much what the previous witnesses tell us, namely, that trawling damages the brood of fish, and injures the fishermen by interfering with them?—They have robbed the coast, and they are robbing themselves as well as us.

36,439. You have been a trawler yourself?—Yes; I have trawled in every bay in Ireland except Dundrum Bay.

36,440. You do not seem to wish to continue that calling?—No.

36,441. Is that because you think it is a bad description of fishing?—Yes, it is a bad description of fishing. Here, in the winter time, we cannot shoot our lines because of them, or else we shall have them taken away. They have taken away from me 2*l.* or 3*l.* worth of lines in the course of a day, and how can a poor man stand that.

36,442. (*Mr. Lefevre.*) How long were you employed in a trawler?—Eight months.

36,443. In that time you trawled all over the coast of Ireland?—Yes; in Dingle Bay, in Galway Bay, in Clew Bay, and in every bay you can mention, except Dundrum Bay.

36,444. Did you always shovel the spawn overboard?—Yes.

36,444*a*. As soon as the trawl brought it up, you shovelled it overboard again?—Yes; when the fish fell on the deck they would all be killed.

36,445. But you shovelled it all back again?—Yes.

36,446. Small fish too?—Small fish of any kind.

36,447. Were the small fish alive?—Some would be alive, and some would be dead.

36,448. What time of the year did you begin?—We began in April.

36,449. Where were you trawling then?—Round in Galway Bay; I was fishing with an English company.

36,450. Was that the only place where you found spawn?—I found it in every bay I fished.

36,451. Throughout the eight months?—Yes.

36,452. Throughout these eight months you always took up spawn?—Perhaps not all through the eight months, but in Wexford Bay and Courtown Bay we took up spawn.

36,453. Did you get it in every bay?—Not in every bay.

36,454. Was it the spawn of fish or young fish?—No, not spawn, but small fish. We only got spawn on one occasion, and that was in Galway.

36,455. In the other cases it was small fish?—Yes.

36,456. We must be clear about that point—it was only in one bay that you got spawn?—Only in one bay.

36,457. In other bays it was small fish?—Yes, small fish of every description.

36,458. Is there anything else you wish to remark upon?—Last winter I lost my train of nets down at Skerry Bay with a weight of herrings in them; a trawler picked them up and they had 23*l.* worth of herrings in them. They wanted to claim salvage besides, and 30*l.* worth of damage was done to the nets.

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36,459. Then they sold your fish, damaged your nets, and then claimed salvage ?—Yes.

36,460. That seems rather hard ; you did not pay them the salvage ?—No.

36,461. Did you get the nets back ?—Yes, but they were worth very little afterwards.

36,462. How many years is it since you began herring-fishing from this port ?—I remember herring-fishing here 20 years ago.

36,463. Was there a large herring fishery here 20 years ago ?—There was plenty, but the boats did not stop here. The Cornish men came here, and then went to the Isle of Man.

36,464. We have been informed that 20 years ago the fishing here was mostly carried on by local fishermen,—Irishmen ?—Yes, in the winter time.

36,465. But in the summer time the Englishmen came also ?—Yes, but in the winter time we don't go off.

36,466. Then there was a time when the Irish fishermen rather left off the herring-fishing ?—Yes.

36,467. Why was that ?—They were not able to buy the materials to enable them to continue it.

36,468. Did they find the other fishing more profitable ?—Yes ; the long-line fishing was more profitable, but the trawlers destroyed all the fish off here, and since then they have begun the herring-fishing again.

36,469. If the long-line fishing was more profitable, how was it that the fishermen could not save a sufficient sum of money to buy nets ?—It is hard for poor men to raise 400*l.*, and it takes that to raise a boat and a train of nets.

36,470. But they seem to have had nets and money years ago ?—There were only five here 15 or 16 years ago.

36,471. Then they seem to have dropped off ?—Yes.

36,472. When did the herring-fishing commence again in great activity ?—That was done in consequence of gentlemen here giving boats.

36,473. Did you have anything to do with starting it afresh ?—I always had a boat.

36,474. You never gave up your herring-boats ?—No, I never did.

36,475. But other fishermen did ?—Yes. It did not pay to sail them, but when we had a boat of our own we had to do something with it.

36,476. The reason the herring-fishing was given up was not because the fish had fallen off ?—No.

36,477. But because you had no wish to follow it ?—It was because the men could not raise the nets.

36,478. If the fish had been in great abundance, could you not have continued to pay for the nets by the fish caught ?—Yes ; I gave 130*l.* for nets in Campbeltown, and I paid for them in a very few weeks.

36,479. Why did not others do that ?—Many of them could not give security, which would enable them to buy a boat and nets.

36,480. But, at any rate, the fish were always there, if the people had gone to catch them ?—Yes.

36,481. The recent activity of the fishermen here seems to be due to an advance of money to the fishermen ?—Yes.

36,482. Do you suppose, from what you know of the fisheries here, that they have been successful, and that the fishermen have been able to pay off the advances made to them ?—Yes.

36,483. They got encouragement in the first instance, and they have paid off the money they received ?—Yes.

36,484. They have become independent again ?—That is all according to the amount of fish they get. Every one does not do equally well.

36,485. So that with steadiness and sobriety the thing may answer in the end ?—Yes ; a little support is necessary perhaps.

36,486. You were saying just now that you did not trawl in Dundrum Bay ?—Yes.

36,487. Why did you not do it there ?—The natives would not let us.

36,488. What did they do ?—They cut our trawl net from the side of the boat.

36,489. Did they come off in force ?—Yes, in yawls, and they cut away the trawl.

36,490. When you were fishing in Galway Bay, did the Claddagh men interfere with you ?—No, they did at first, but not when I was there.

36,491. Were they taking to trawling themselves ?—There were a great many of them that were trawling the year I was there. I think it was about eight years ago.

36,492. There was no vessel there protecting you at that time ?—No.

36,493. At that time the Claddagh men did object to trawling ?—No, they were trawling themselves.

36,494. Were you paid by share ?—No, we had so much per month, 1*l.* 5*s.* a week.

The witness withdrew.

J. Edwards.

Joseph Edwards called and examined.

36,495. (*Professor Huxley.*) We examined you yesterday at Kingstown ?—Yes.

36,496. But you wish to make an addition to your evidence, in consequence of what you have heard here to-day ?—Yes.

36,497. What is it you wish to say ?—These gentlemen say we have destroyed the haddocks, and they wish to put the trawlers out from the fishing. I am not a prejudiced man ; I have a herring-boat, and I wish to fish at the herring-fishing and the long-line fishing ; but I am principally a trawler, and I have been trawling for the last 30 years. As far as I understand, these men wish to put the trawlers out beyond a certain line drawn from Carnsore Point to St. John's Point, and they say that we are an injury to them in the winter time, in the summer time, and at all times. Now, I consider that it is nothing but prejudice on their part, for I do not consider that the trawlers injure them to that degree at all times of the year. The trawlers always give way to them in the winter time when the herring-fishing is going on. There may be an individual occasionally who will catch a man's nets, but if he does he has to pay for it, and very properly too. Generally speaking, I give way to the herring men when they are fishing about this coast. Even on the fishing ground we generally go to there are herring men fishing now in deep water, and the consequence is that the trawler do not visit it when the herring nets are down.

36,498. Then you deny their general statement that the trawlers do them much harm ?—Yes. They talked about the trawlers hauling away the long-lines. I stated to you, on a previous occasion, that we cannot avoid that at certain times. Very often we shoot first, when these hookers come out and frequently shoot across us. There is a certain portion of the ground which we are all forced to shoot upon if we want to catch fish, and we have to shoot our trawls athwart of a tide, and if these men come out and shoot in our headway or under our leeway, why then we cannot help it if we come across them. One fisherman has a right to fish as well as another, and why should the trawlers be put outside for the hooker men, or the hooker men for the herring men, or the herring men for the trawlers. One has a right to fish as well as another. All I say is, that the man who has his net, or his hook, or his trawl in the water first should be allowed to fish, and that the man who comes after him should give way.

36,499. Have you anything to say upon any matter of fact, or upon anything which has been said with regard to the destruction of small fish ?—Yes. They say the trawlers destroy the small fish ; they say we destroy all the spawn and the small fish. I, for one,

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as an individual, deny that. There are several hookers here belonging to this place; now I will give 5*l.* to any man who will bring me in any kind of spawn that may be trawled up from this time up to this time twelvemonths.

36,500. Then you absolutely deny it?—I deny it altogether. As I told you in Kingstown, I never saw any kind of fish spawn, with the exception of squid spawn and whelk spawn.

36,501. The last witness who was examined stated that he only took spawn up in the trawl once?—Yes.

36,502. You absolutely deny the statement of spawn being taken?—Yes.

36,503. Is there any other statement that has been brought forward which you wish to controvert?—The trawlers are not always fishing in one place; they are fishing over nearly 200 miles of ground, with the exception of the rough ground from Helvick Head to Ardglass. That will be about 200 miles. They fish all along the shore. The trawlers, I suppose, are only about 50 in number, and in the course of the twelve months they are fishing over the 200 miles of ground. Now, is it possible that they could destroy the spawn and the fishing along that length of coast in that time?

36,504. Do you tell us that the trawlers trawl constantly day after day, and season after season?—Yes.

36,505. I think you stated at Kingstown that you were in the habit of trawling upon different patches of the 200 miles throughout the season?—Yes, over different patches.

36,506. You do not go round to the western coast?—No further than Galway. I have been there.

36,507. But you trawl habitually over this length of 200 miles?—Yes, and 45 miles in width.

36,508. Let me ask you a question as to this statement of your getting foul of the herring nets. It has been stated by a number of witnesses, and there is great accordance in the statements, that the trawlers habitually damage the drift nets. What have you to say about that?—I deny it. There have been instances, no doubt, and the parties who have done so have suffered, and I think they have deserved it, because we have no business to be trawling where a lot of boats are engaged in herring-fishing. Where they are, I believe, it is the general rule for the trawlers to leave and go away. I am sure that is always the case where there is a fleet of herring men fishing, but I cannot say whether it would be so in the case of an individual. The trawlers shift about very much in their fishing. We may be five miles or six miles off to-night, and to-morrow night 20 miles away. The trawlers never know where they are going. They are trawling day and night, but where the herring men go the trawlers do not attempt to fish.

36,509. Would you think it any hardship if the rule which exists on the Wexford coast were applied here?—Is that the rule which keeps the trawlers three miles off any of the herring-boats?

36,510. Yes.—I think it is a hardship.

36,511. Why?—Because the herring men are in great numbers, and they will reach somewhere about 50 miles, and if the trawlers are required to keep three miles from any of them, where are they to go to at all?

36,512. Do you think that it practically puts an end to trawling?—Yes.

36,513. How is it possible to carry on trawling where the herring-net men are?—The trawlers fish by night and day, and they do not go where the herring men are.

36,514. Would you be satisfied with trawling in the day-time when the herring-fishing is going on?—Yes.

36,515. (*Mr. Lefevre.*) Does the rule which has been mentioned apply to the fishing off Wexford?—We seldom go there.

36,516. Is there not much ground for trawling there?—No.

36,517. If a similar regulation were extended to this part, would it interfere with you?—Yes.

36,518. I do not understand that this regulation does prohibit trawling in the day-time?—We take care we do not trawl where the herring men are in the night-time. There may be a single individual who would do it; but as a general rule the trawlers will not interfere with the herring men.

36,519. Would you object to a regulation prohibiting trawling in the night in the districts where the herring-fishing is being practised?—Yes, I would. The herring men extend over a long distance, and there is no fisherman, whether a line or a trawl fisherman, who can tell where they are, or the places where they go to. If a regulation of that sort, prohibiting the trawlers from fishing within a certain distance of them, were enforced, the trawlers might as well stop in the harbour altogether; and I think one fisherman should have fair play as well as another.

36,520. You think it would not be easy to carry out that rule with regard to keeping off three miles?—No; it would not be easy to carry it out.

36,521. In the night-time would it not be difficult to tell what distance you were off?—At night we cannot tell what distance we are from them.

36,522. (*Professor Huxley.*) How would the enforcement of that rule work? Supposing, for example, that the men are drifting for herring, and you are 10 miles off, and you begin to trawl. They are comparatively stationary, and you are going with the wind?—They cannot be stationary; the tide will drift them.

36,523. But they do not drift as you do in trawling?—No.

36,524. Then might it not happen that you would drift down within three miles of them?—We might do so.

36,525. In that case you would be obliged to haul up your trawl and go off again?—Yes.

36,526. Would not that put an end to your fishing altogether?—Yes.

36,527. (*Mr. Lefevre.*) You state that the trawlers avoid all collision?—Yes.

36,528. Do they trawl only in the day-time when the herring fishermen are off here?—Yes.

36,529. They do not go out in the night?—No; they do that in order to avoid the herring-boats.

36,530. Are the trawlers fishing off here now?—Yes.

36,531. On the same ground as the herring-boats?—Yes, exactly the same ground.

36,532. But they are only fishing in the day-time?—Yes, when the herring men are out.

36,533. (*Professor Huxley.*) Have you any other remarks to make?—I could have made plenty at the time the examination was going on, but I have forgotten what I wanted to say.

36,534. (*Mr. Lefevre.*) Have you yourself trawled in Drogheda Bay?—I never did.

36,535. Not within the line from Lambay Point to Carlingford Bay?—Yes, I have been trawling from Carlingford Bay to Lambay Island.

36,536. Do you know when the regulation prohibiting trawling between those two points was made?—No, I do not know.

36,537. Has it been attended to by the trawlers or not?—It has mostly been attended to by the Dublin trawlers, but not by the Balbriggan and Skerries trawlers.

36,538. You think the local trawlers have not paid any attention to it?—They have not.

36,539. Are they trawlers from the Skerries, Balbriggan, and Dundalk?—Yes; there may be an odd individual trawling inside, but as a general rule we do not.

36,640. Has there been any application on the part of the trawlers from Drogheda and Dundalk to be permitted to trawl in that district?—Yes; and some of the Balbriggan boats have been caught.

The witness withdrew.

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C. Larkins.

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CHRISTOPHER LARKINS called and examined.

36,541. (*Professor Huxley.*) Are you a fisherman?—Yes.

36,542. How long have you been fishing here?—About 25 years.

36,543. What have you been fishing?—Haddocks.

36,544. Long-line fishing?—Yes.

36,545. And herring-fishing?—Yes; since the haddock-fishing failed.

36,546. Have you ever been trawling?—Yes; I have been trawling in the English boats.

36,547. What do you want to say to us?—I have seen more spawn, that is, small haddocks, about this length (*measuring*), in Skerries Bay, shovelled off and thrown overboard than I ever saw anywhere else in my life.

36,548. By spawn, do you mean small fish?—Yes, very small haddocks.

36,549. How long is that ago?—It would be about 20 years ago since I saw it.

36,550. Was that when you were trawling?—Yes, in Skerries Bay.

36,551. Was it a common thing when you were trawling?—Yes, a common thing indeed; they were little small haddocks, about the length of my finger.

36,552. Have you ever had your lines fouled and carried away by trawlers?—Yes. A trawler took a line out of my hands when I was hauling it in in Skerries Bay, and when I went to him to get it back again he took up a big hatchet and said he would cut the head off of me.

36,553. How long ago is that?—About 20 years ago.

36,554. Has anything of that kind happened lately?—No, not lately.

36,555. Have you had your lines carried away lately?—Yes; I have been losing my lines often, and I never get any recompense for them.

36,556. Did you take the numbers of the trawlers who did the damage?—I never could get them. It would be generally late at night or early in the morning when it was done.

36,557. Have you ever had your nets damaged when you were drift-fishing?—No, they never took any nets away from me.

36,558. Have you been much engaged in drift net fishing?—Yes.

36,559. But you never lost anything in that way?—No. They have never done me any harm in any boat I was ever in by carrying away my nets.

36,560. Have you heard the evidence of the other witnesses?—Yes.

36,561. Are you disposed to agree with it?—Yes; I think that the English trawlers themselves have cleaned their own coast, and they have left it now to come here.

36,562. Do you agree generally with what the other fishermen have stated?—Yes.

36,563. Is there anything which you wish to add to what they have said?—No; it is all right, what they have said.

36,564. (*Mr. Lefevre.*) Were the small fish you spoke of mainly small haddock?—Yes, small haddock.

36,565. Were the haddock very plentiful off the coast then?—They were as plentiful as I have ever seen them. I could swear that we could get a boatful in one shot of our lines down on the rough here, between Ireland's Eye and Lambay. We could get there as much haddock as we liked in the winter time, and in the summer time we got very large haddock away off in the deep water.

36,566. How long is it since you yourself were trawling?—About five years ago.

36,567. Then you have not trawled much since the haddock disappeared?—No.

36,568. Do you attribute the disappearance of the haddock to trawling?—Yes, I do.

36,569. To the taking of the young fish?—Yes; they have killed the spawn and the young haddock, and they have never multiplied since.

The witness withdrew.

C. Kelly.

CHRISTOPHER KELLY called and examined.

36,570. (*Professor Huxley.*) Have you long been a fisherman here?—Yes; I have been at the fishing these 30 years.

36,571. What kind of fishing have you practised?—Trawl-fishing, hook-fishing, and herring-fishing.

36,572. Have you heard what the previous witnesses have said?—Yes.

36,573. Do you agree generally in what they have stated?—Yes, I quite agree with it. I have seen thousands of small haddocks, whiting, and all kinds of small fish, not three inches long, taken up in the trawl and destroyed. If they had been allowed to remain in the sea and come to perfection, they would have made a great fishing, speaking only of what we have been obliged to throw away.

36,574. Have you yourself ever had your lines carried away?—Yes, scores of times, and I never got any satisfaction for them. They tell you to go to the devil and do the utmost you can, if you speak to them. I have also had some nets carried away by one of the Dublin trawlers about five years ago. When we came out and spoke to him, he told us to do what we could, and seek what remedy we could. We went to the Custom House at Dublin, but we got no satisfaction there. We went then to an attorney to see what satisfaction we could get, and we went down to Ringsend where the trawler was stationed.

36,575. Did you get no satisfaction?—No; they said there was a rule upon the matter in the Scotch fisheries, but that there was no rule for Irishmen.

36,576. Did you appeal to the Fishery Board?—Yes.

36,577. What did they tell you?—They told us they could give us no satisfaction, because there was no Act of Parliament for the Irish fisheries.

36,578. (*Mr. Lefevre.*) How long ago was that?—About six years ago. They took an attorney's letter down to the owner and skipper of the boat, who came up to the attorney's place in Sackville Street, and asked what damage had been done. They promised to come again on the Monday morning, but they never came. The name of the owner of the boat was Morrison. He belonged to the Isle of Man. He would not stop on the coast to be at the expense of being put to a lawsuit, and the matter all dropped.

36,579. Was your boat properly lighted that night?—Yes; I was on the watch myself. I had a lantern up six or seven feet high, and I also lit a flare-up, and called to the boat as it was coming down. Nevertheless; they came down and cut our nets. They said we had no light up, but I can take an affidavit that we had a light which could be seen three miles round the compass; it had four large panes in it.

36,580. Is there anything else you wish to tell us?—No.

36,581. You agree pretty much with the other witnesses?—Yes.

The witness withdrew.

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P. Nangle.

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PETER NANGLE called and examined.

36,582. (*Professor Huxley.*) You are a fisherman ?—Yes.

36,583, From Howth ?—Yes.

36,584. How long have you been a fisherman here ?—For the last 35 years.

36,585. What kind of fishing have you practised ?—Trawling, hooking, and herring fishing.

36,586. You heard what the other witnesses have said ?—Yes.

36,587. Have you anything to remark in addition ?—I have.

36,588. What is it ?—About 30 years ago, when I was a youngster, the first fishing I went to was trawling.

36,589. Was trawling practised off this at that time ?—No, it was in the English waters that I went trawling first, and during the time that I was in that boat I can lawfully swear that I shovelled tons of spawn overboard, and small fish.

36,590. By spawn, do you mean little fish ?—Yes.

36,591. You do not mean actual herring spawn ?—No.

36,592. Did you see anything like herring spawn taken up in the trawl ?—I could not tell herring spawn from any other spawn ; but I have shovelled the spawn overboard.

36,593. You are speaking now of small fish ?—Yes.

36,594. Did you ever see the eggs of fish in the trawl ?—Yes.

36,595. Was that a common thing to see ?—Yes, it was.

36,596. Did you see any of the eggs of the herring in the trawl ?—I could not say if they were the eggs of herring or other fish.

36,597. Have you been herring-fishing ?—Yes.

36,598. Then you know what herring spawn looks like, do you not ?—Yes.

36,599. You never saw anything of that kind in the trawl ?—No.

36,600. What else did you see in the trawl ; did much dead fish come up ?—Yes, plenty of dead fish.

36,601. Do you think it is a wasteful mode of fishing ?—The fish appear to be so long dragging in the trawl, that there is hardly a scale left on them when they are taken up.

36,602. Do you think it is a wasteful mode of fishing ?—I do.

36,603. Did you get plenty of fishing in those days ?—Yes ; that was the time that fish were right plentiful.

36,604. Have you been trawling lately ?—No.

36,605. How many years is it since you trawled ?—I have not trawled since that time.

36,606. *Mr. Lefevre.*) And that is 30 years ago ?—Yes.

36,607. (*Professor Huxley.*) Have you anything else to tell us ?—I have something else to tell you with regard to what this man Edwards has been talking about. He said that he had not seen any boats trawling inside the headlands. Now, I left this harbour with him last winter, to go with him and shoot our herring nets inside the Skerries, and we saw the trawlers trawling inside, and he could see them inside the boundary as well as I could.

36,608. You saw them inside on that occasion ?—Yes, and he was in company with me ; he was going to the northward.

36,609. Do you assert that it is a common thing for the trawlers to fish inside the boundary ?—Yes, they make a practice of it.

36,610. Do you think the trawlers do much damage to the fishery ?—Yes ; if it was not for the trawlers there would be plenty of fish on this coast ; they would be as plentiful as ever they were.

36,611. Do you think the trawlers do harm when they fish out in the sea ?—I do.

36,612. Would you put them down altogether ?—They should be put down for some time.

36,613. Would you not allow any trawlers to fish ? Not in certain months of the season.

36,614. What months in the season ?—In the spawning time of the season.

36,615. Is it because you think the trawlers destroy so much of the young fish ?—I am certain of that. If I did not see it, I would not say it.

36,616. You would not be satisfied with keeping the trawlers outside certain boundaries, but you would put trawling down altogether for certain months of the year. Is that your view ?—I do not think it will be put down.

36,617. That is another business. I ask what you wish to do. Do you think anything short of that would do ?—We should have plenty of fish off this coast, if it were not for them.

36,618. Do you think that nothing short of putting them down for certain months of the year will save the fisheries. Is that your view ?—Yes.

36,619. What made you give up trawling ?—Because it did not answer, and I had another occupation to go to. I would sooner be at the hooking.

36,620. You liked hooking better ?—Yes.

36,621. Was hooking more profitable ?—Yes, it was.

36,622. Have you anything else to tell us ?—No.

36,623. (*Mr. Lefevre.*) Do you think that trawling does harm to the herring fishery as well as to the other fish ?—Yes.

36,624. In destroying young fish, or what ?—In killing the spawn.

36,625. Have you observed any falling off in the herring fishery here ?—Some years ago the herrings were knee deep here, but now we may be fishing for a good while before we make a week's work.

36,626. But a great deal more herrings are brought into the harbour here than was formerly the case ?—That is because they have a better material for killing them. If it were not for the material, they would not bring so large a quantity in.

The witness withdrew.

N. Doyle.

NICHOLAS DOYLE recalled and examined.

36,627. (*Professor Huxley.*) You wish to add something to the evidence you have already given us ?—Yes ; I wish to say that I would totally abolish trawling altogether, the same as in England and Scotland.

36,628. But it is not abolished altogether in Scotland or England.—Yes, it is. I mean that it is within the limits of the herring-fishing ; summer or winter, it is abolished then.

36,630. Do you mean that you would like to see a regulation established here with regard to trawling, when herring-fishing is going on, similar to that which is contained in the Convention Act ?—Yes ; I would like the same limits and rules and laws as the Scotch fishery, and we should also like to have a steamboat to attend upon the fishery.

36,631. The trawling which is forbidden on the west coast of Scotland is not the kind of trawling we are talking about here, but is seine-fishing. What is put down on the west of Scotland only is catching herrings with the circle net,—it is that which is prevented there, and not beam-trawling.—I understand from different parties that the beam-trawling is totally done away with among the herring fleet.

36,632. The regulations of the Convention Act prevent beam-trawling from going on among the herring fleet,—they must keep three miles off.—But one person here last season had his nets cut away with an axe, and we have known the nets hauled on board of the trawlers and subsequently sold.

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36,633. That we have already had in evidence. What other point did you wish to remark upon ?—There was a point I remarked upon before, which I hope you will pay some attention to, and that has reference to shooting the nets before sunset.

36,634. (*Mr. Lefevre.*) I understand that you would not wish to put a stop to trawling altogether ?—No ; I have an interest in trawling in a certain portion of the year.

36,635. Do you think it would be enough to put a stop to it in certain seasons of the year ?—Yes ; and in the winter time it is more injurious to us than at any other time. When the English and Scotch fleet are off here our boats are unable to live in the offing, because they are few in number and the fleet is so powerful. They have such heavy vessels that they do not care for us at all.

36,636. Do you see any objection to the trawlers trawling in the day-time off this ground ?—There is no objection here, but the cutter at Balbriggan, the Skerries, and other places, has stopped them.

36,637. That is, within the line of prohibition ?—Yes.

36,638. Have you any objection to the trawlers being allowed to trawl in the daytime off the ground that the herring-boats were in the habit of fishing ?—They should not be allowed to trawl there either day or night, because they are the total destruction of the herrings.

36,639. What harm do they do ?—The herrings often rise in shoals and play on the surface, and when the trawl comes among them it will send them down again and make them go off the ground ; it drives them into some other limits.

36,640. Do you think that the trawl frightens them away ?—I am certain that it does so.

36,641. Do the trawlers trawl among the herrings in the day-time ?—Yes, and the night time also. I saw them last Wednesday and Thursday nights, trawling among the fleet.

The witness withdrew.

CHARLES HUGHES called and examined. *C. Hughes.*

36,642. (*Professor Huxley.*) You are the chief officer of the Coastguard here ?—I am inspecting officer of the Coastguard.

36,643. Are you acquainted with the fisheries here ?—A little ; but I have been here only 14 or 15 months.

36,644. Are all the boats registered ?—Yes.

36,645. Whatever their tonnage may be ?—Yes, they are all registered.

36,646. What is the total number of fishing boats here now ?—The number in existence now is 31 boats of the first class, and 8 of the second.

36,647. How do you distinguish the class ?—It is according to the size.

36,648. What would be the first class ?—Anything over five tons.

36,649. And what forms the second ?—Anything under.

36,650. It is independent of rig or fitting ?—We do not care about the rig.

36,651. You merely go by the tonnage ?—Yes.

36,652. Does your experience extend sufficiently far to enable you to say whether there has been much change in the number of native boats here ?— I believe they have increased.

36,653. Will the records show that ?—No ; we have none.

36,654. Are there not returns of that kind made every year ?—There are, but we do not keep a copy here.

36,655. Can no copy be obtained of them ?—I think there might be from the Fishery Board.

36,656. Do you find that many complaints are made here by the drift-net fishermen against the trawlers, or *vice versâ* ?—The drift-net men are constantly making complaints against the trawlers, but I never had a definite complaint or anything I could take hold of. I never had a vessel identified by her number, so that I could make a report of it to the Board, but there have been constant complaints against the trawlers for taking up their nets and for taking away the long-lines.

36,657. Does that arise from the practical difficulty of identifying the trawlers at night ?—Yes, I think so.

36,658. They cannot see their numbers ?—No.

36,659. Are the drift-boats properly lighted at night ?—Yes.

36,660. So that it is possible for the trawlers to see them ?—Yes.

36,661. Have you ever had any practical experience of trawling yourself ?—No, I have not.

36,662. You have not been on board a trawler ?—No. I have seen the trawlers come in the harbour of Brixham, in Devonshire, and there they used to bring in small fish, and there was a manufactory for turning them into manure ; the small fish used to be brought in there in enormous quantities.

36,663. Have you many complaints from the long-line fishermen against the trawlers ?—Yes ; they say the trawlers cut up their lines a great deal.

36,664. Does it never happen that the damage takes place during the day-time ?—No ; I never had any complaints in which I was told the name and number of the boats which did the damage.

36,665. Might it not be for the reason that the trawl-boats are unable to observe where the lines are at night—they cannot see the buoys ?—Of course that may be the cause.

36,666. And at night, when the drift-boats are properly lighted, is it always possible for a trawler to know on which side it is that the fleet of nets is drifting ?—No.

36,667. Then a trawler might fancy that he was going up well outside the nets and yet be in the middle of them ?—Yes.

36,668. So that the damage done is not necessarily wilful ?—No ; as long as they have their trawls down, I do not think they can help themselves very well.

36,669. You are aware that it takes a considerable time to take a trawl up ?—Yes, of course it does.

36,670. Does anything occur to you which might remedy the evil complained of,—have you considered this subject with a view to suggest any remedy for the evil that exists ?—I think the herring fisheries are of sufficient importance for the Fishery Board to have a cutter of their own to see that the law is attended to. The Revenue cutter has no interest in it, and it gets no credit for making seizures when the law has been infringed.

36,671. Would there not be some practical difficulty in a cutter superintending the fishing ? For example, if there are 40 or 50 herring-boats drifting with their nets out, the cutter would not venture to go within two miles of them ?—No, but a cutter would prevent the nets from being shot before sunset.

36,672. But after they were shot, she could not exercise any effectual superintendence over the fishing ?—Not at all.

36,673. Does your practical experience suggest any way in which a cutter, if she existed, could exercise a superintendence over the fishing at night ?—No, but she could keep the trawlers outside the limits.

36,674. Could she keep them altogether outside ?—Yes.

36,675. Supposing they were forbidden to come within three miles, for example ?—Yes.

36,676. But might not this happen,—it is a case I put to one of the fishermen just now,—namely, that a

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trawler might have begun to fish 10 or 12 miles outside the drift men and either by setting down upon the drift men or the drift men setting down upon them they might fish within the specified limit?—Just so.

36,677. And then would it not be somewhat of a hardship probably, on one side or the other, to have to get out of the way?—Yes, it would, but I do not see how it is to be avoided, unless you make them raise the trawl at sunset, and allow them to trawl only through the day-time between sunrise and sunset.

36,678. (*Mr. Lefevre.*) Do you hear many complaints with regard to the trawlers fishing within the prohibited line?—Yes, constantly.

36,679. Do you ever do anything with them?—No; I have no means of getting at them.

36,680. If a Revenue cutter was employed, would she do any good?—I think her presence would tend to keep them out.

36,681. I presume you mean a small steamer?—Yes.

36,682. The Revenue cutter would not do?—No, she has plenty of other things to attend to. Unless there is a small steamer especially detailed by the Admiralty for the work, you would probably not get it done.

36,683. I suppose that the greater portion of the herrings are caught outside the prohibited line?—Yes.

36,684. So that the enforcement of a line would be of no advantage to the herring fishery?—Not much.

36,685. Would it be necessary to have some further regulations?—Yes.

36,686. Is this abstract which has been handed to us prepared by you?—By my assistants.

36,687. Do you take the number of boats every week?—Yes.

36,688. And the quantity of fish caught?—Yes.

36,689. Can you make out a complete return for the last five or six years?—I cannot; but I think that might all be done by the Fishery Board.

36,690. Since when have these returns been made by the Custom House?—Only last year and this.

36,691. Can you give it then for those two years?—No, I do not keep any copies.

36,692. The number of fishing boats is given at 90?—Yes.

36,693. Does that include boats coming from other places?—Yes; Arklow, Wexford, and other places.

36,694. There are only 30 belonging to this place?—About 30.

36,695. Has this been a very successful season so far?—I think it has. There have been more fish caught about here, and there have been more boats.

36,696. Has the price of fish been good this year?—Yes, very good.

36,697. Is the greater part of the fish sent off direct to Liverpool?—Yes.

36,698. Are the fish cured?—No, they are sent away fresh.

36,699. Is there any curing of herrings here?—No curing of herrings at all.

36,700. Do the Cornish and Scotch boats also send their fish from here?—Yes; most of them go across the water. The Cornish men in general seem satisfied with the fishing they can have here.

36,701. They have not gone to the Isle of Man?—No; one or two may have gone.

36,702. Usually they go to the Isle of Man?—Yes.

36,703. This year they have not done so?—No.

36,704. (*Professor Huxley.*) Is the fish caught by the trawlers brought in here?—No.

36,705. Where is their market?—It mostly goes to Ringsend.

36,706. Do the line fishermen bring their fish here in the winter?—Yes.

36,707. Is it sent to Dublin?—Yes.

36,708. Is there any return kept of the line-fishing?—No. It is not of much importance now, and no return is kept of the quantity brought in.

36,709. (*Mr. Lefevre.*) Is any return kept of the number of boats that go out every week?—No, not every week. We know the number in the season employed in the line-fishing, that is all.

36,710. (*Professor Huxley.*) Is there any observation you wish to offer to us with regard to the fisheries, that occurs to you?—I think not.

36,711. (*Mr. Lefevre.*) The Manx boats come later in the year?—Yes. We have only had eight or ten yet.

36,712. The number put down here is 14?—Yes.

36,713. What number will there be later in the season?—There may be 60 or 70.

The witness withdrew.

T. Montgomery.

THOMAS MONTGOMERY called and examined.

36,714. (*Professor Huxley.*) You are a boat owner here, Mr. Montgomery?—Yes; I own some boats.

36,715. Have you been a boat owner for many years?—This is the third year.

36,716. So that your experience in that way does not extend over a very long period?—No, not very long.

36,717. Are you only engaged in drift-fishing?—Only in drift-fishing for herrings and mackerel.

36,718. Is there much mackerel fishing off here?—No, not here, but at Kinsale.

36,719. Do you send your boats to fish for mackerel?—Yes, about the 1st of March, and they return here the 1st of June for herrings.

36,720. Do you find the supply of herrings pretty good, and that it has kept up?—I think this has been about as good a season as last. It has been about the same. For the last three or four weeks it has been light, but up to that the season was as good as it was last year.

36,721. Is there any subject which you wish to bring before the Commission as a matter of complaint?—I should like to see a cutter or a steamer out amongst the fleet, so as to prevent any little disputes from arising. They sometimes shoot foul of each other's nets, and that leads to disputes and differences of opinion. A cutter or a steamer, to attend the fleet when they go out upon the fishing ground, and to be here to settle disputes, would be of considerable advantage to us.

36,722. Do you mean disputes among the drift-net fishermen themselves?—Yes. There are sometimes a few little collisions among the different classes of fishermen, and with different boats from other places.

36,723. Have you, as a boat owner, suffered much damage from the trawlers?—No, I have suffered none.

36,724. Have you never had any nets carried away?—No, never.

36,725. Neither in the herring-fishing nor in the mackerel-fishing?—No; there are no trawlers on the coast where we fish mackerel.

36,726. Then you have nothing to remark upon with regard to the trawlers?—No, I have nothing to say about the trawlers.

36,727. Is there any point upon which you think it desirable to offer a suggestion?—No, indeed there is not, except what I have just mentioned. I think a steamer is the proper thing to station here. I cannot conceive that a cutter could attend to the whole fleet, so as to see that the regulations about shooting before sunset were enforced. The fleet are generally spread over a distance of 30 or 40 miles, and no cutter could go among them all.

36,728. Do you think that is a very important regulation?—I do; and I should like to see a vessel attending the fishery with authority to settle disputes

and differences when the men get foul of each other's nets. Some men complain of others handling their nets roughly when they get foul, and there ought to be some proper authority here to settle disputes of that kind.

36,729. Would it not be necessary under those circumstances for a steam-vessel to detach boats, because she dare not go among the nets herself?—She might go up between the nets. They are generally lying in a direct line, and she could go between the buoys.

36,730. Could she do that at night?—No, not at night.

36,731. Would not the nets be apt to get foul of the paddle-wheel?—Yes, there might be some injury done in that way; but I think the effect of a steamer being among them, and their knowing that there was such an article, would deter them from breaking the regulations.

36,732. You would like to have a fishery vessel, in fact, as they have on the coast of Scotland?—Yes, I would.

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36,733. (*Mr. Lefevre.*) How many boats do you own?—Three.

36,734. Have you the whole of them?—No; they are owned by my cousin and myself.

36,735. Have the fishermen any interest in them?—No, never.

36,736. Are the fishermen gradually obtaining boats themselves?—There are a few instances, but only very few.

36,737. Are they all paid by shares?—Yes.

36,738. Are there many disturbances between the fishermen of this place and those coming from a distance?—No, except a man may occasionally take to his beer on a Monday morning.

36,739. There are no disturbances on the sea?—I do not think there are.

The witness withdrew.

NICHOLAS MAY called and examined. *N. May.*

36,740. (*Professor Huxley.*) You are a fish buyer here?—Yes.

36,741. Have you been engaged in that occupation for many years?—Yes, a good many.

36,742. How many?—About nine.

36,743. What kind of fish are you in the habit of buying?—Herrings,

36,744. Only herrings?—Not herrings only, but herrings chiefly. Sometimes I buy cod and conger eels, and so on; but herrings and mackerel are the chief things I buy.

36,745. Do you buy from all persons who come in here?—Yes.

36,746. Whether Manx men, Cornish men, or anybody else?—Yes, it makes no manner of difference.

36,747. Was there a considerable quantity of herrings brought in here by the Manx men and Cornish men before any extensive Irish fishing began?—Eight or nine years ago, and even five years ago, the herring-fishing was slack here.

36,748. Did numbers of boats come here to fish for a certain period until the time for fishing at the Isle of Man came on, and then leave here at the latter end of June? Was that the case until four or five years ago?—Yes.

36,749. When did they begin it?—About the 1st of June.

36,750. Were the herrings in good condition then?—Not as good as they have been of late years.

36,751. But they were saleable?—Yes, but they were a scarce article at that time of year.

36,752. When was it that the considerable supply came in?—This was the fourth year.

36,753. Is it some six or seven years since the number of boats increased largely here?—Within the last four years, as far as my experience goes.

36,754. What is the chief market for fish here?—The chief market is Liverpool, because that is the head-quarters for the English buyers, but at present we work all the English markets,—London, Birmingham, Liverpool, Manchester, Shrewsbury, and others.

36,755. Do you use cutters?—Yes.

36,756. And steamers?—Yes.

36,757. I suppose the fish are sent away with salt interspersed between the layers?—Yes.

36,758. But practically they are fresh fish?—Yes, we call them fresh herrings.

36,759. Do you not do any curing here?—Very little. Last winter there was a little done for the Scotch market.

36,760. Do you cure in the same way that they do on the east coast of Scotland?—I believe so. I believe the process is the same.

36,761. Do you find a ready market for your fish?—Not always.

36,762. Have you any desire to have the branding system here which is in use on the east coast of Scotland?—My opinion of it is, that if it did no good, it would do no harm. It would be an advantage on the whole. The herrings, however, command so good a price when they are fresh that we should never cure them properly, unless they became very scarce in Loch Fyne, and then they might give such a good price that we should have an inducement to send them to the Scotch markets. When we cure them, we send them to Scotland, on account of the superior quality of the fish; but it is only when they chance to be scarce in Loch Fyne that we do that.

36,763. There is a very considerable quantity of Scotch herrings imported into Ireland every year?—Yes, of a very bad quality. They are coarse herrings.

36,764. Your herrings, if cured, would make a superior fish?—Yes, equal to the Loch Fyne herrings.

36,765. The reason you do not cure them is that you think that is not an economical way of disposing of them?—There is no inducement to cure them. When potatoes here are good and plentiful, we have always a good price for the herrings; but the only time when we can get a large price for them to cure is in the Scotch markets, when their own fish fail.

36,766. The reason you do not cure the herrings is that you can do better with them fresh?—We get a smaller profit, but we obtain it readier and easier.

36,767-8. And you prefer to do that?—Yes, and we have got a standing market for them. There is no brand attached to them, and when they go to Berwick or Glasgow, they are sold as Loch Fyne herrings.

36,769. Do you get a better price for your herrings than the east country herrings?—Yes; we could buy those a hundred or two hundred per cent. cheaper.

36,770. If you were to cure your own herrings, would they fetch a much higher price?—I do not think, where the herrings are to be had cheap, considering the class of people who use them in the winter time, that our herrings would be able to compete with the Scotch herrings here in regard to price. Ours are very valuable, and must go to a better market, where the people can afford to give a better price for a good article.

36,771. Is that the reason why you import fish; is it, in point of fact, because your own fish fetch a much better price?—Yes; we are realizing a much better price for ours; but, at the same time, I think if the herrings, when they were cured, were branded it would give them a standing in the market, and would be an advantage, not only to the buyer, but to the fishermen, and that it would greatly enhance the value of the fish in exceptional years, when there is a demand for them for curing.

36,772. The herrings that are branded go principally to Central Europe?—Yes; and a great many go to the Baltic.

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36,773. If your herrings, when cured, are like the Loch Fyne herrings, would they be of superior quality to the ordinary east coast herrings?—The Baltic trade is worked in the early part of the year, but I think if we had the same facilities for working the north of Europe as they have in Stornoway, that a trade might be opened from Arklow, where the herrings are acknowledged to be of superior quality. It is, however, a trade that has never been tried from this coast. Not a single barrel of herrings has been cured and exported in that way. It is in the winter time of the year that we try the Scotch market with herrings, namely, in October and November.

36,774. Is there anything you, as a dealer in herrings, have to suggest in the way of regulations?—I cannot say there is. As a trader in herrings, and speaking on behalf of some of the boat owners, I would suggest that some improvements should be made in the harbour at Arklow, and that a Government protection should be given to parties going to fish there in the early season. It would be of great advantage for the boat owners and buyers.

36,775. What sort of Government protection?—A cutter or steamer.

36,776. Are strangers there interfered with?—It is universally acknowledged that no stranger goes to Arklow to fish for herrings.

36,777. Is there any considerable local fishery at Arklow?—There has been a very fine fishery there for the last three years, and they get the herrings before we do.

36,778. If strangers go there, what happens?—I believe they have tried to go there, and they have come away faster than they went.

36,779. Are they attacked?—Even our men dare not go, although there are large quantities of herrings to be had there.

36,780. Are they fairly assaulted and driven off the coast?—I cannot speak to that, but I know the herrings are there, and they dare not go after them.

36,781. Would not the Irish fishermen go there?—No, they dare not; not to shoot a net in those waters.

36,782. Do the Arklow people believe in Arklow for the Arklowites?—Yes, and all the world for them.

36,783. How far do they consider that their jurisdiction extends?—At that time of the year we are of opinion that the herrings come from the southward; and in the early part of the season, in the second week of May, they get considerable takes of herrings there, while we think we are doing well if we get 400 or 500.

36,784. At that time, are the herrings in good condition?—Yes, they are very fine.

36,785. Are they fat fish like the Scotch fish?—They are not quite as oily.

36,786. (*Mr. Lefevre.*) What distance north and south of Arklow do they get the fish?—To the southward. I attend much to the south fishing, and I have remarked for the last three years that the night after they have missed the herrings at Arklow we get them at Howth.

36,787. Have you yourself any personal knowledge of the fishing at Arklow?—Yes.

36,788. Then you speak of what you know, and not from hearsay?—Most decidedly.

36,789. Have you, as a dealer in herrings, any wish to see a close time enforced here for herrings?—No; I see no necessity for it. I have never seen any young herrings caught here.

36,790. You are a boat owner?—Yes.

36,791. Have you bought herrings yourself at Arklow?—Yes.

36,792. Did you ever spend a season there?—No, I was never there for a season. I have gone there on three occasions when herrings were rather scarce here, in the early part of the year. On one occasion, a man and myself stood in as partners. I was here, and he went there. I have as thorough a knowledge of the Arklow fishing as if I had been there every season.

36,793. Is the season over there before it begins here?—I have noticed that when they lose them at Arklow we get them here the next night, or at any rate in two nights after. It sometimes occurs that the fish strike down to the southward again, but never in the same abundance. Their season is practically over when we get them here.

36,794. Then their season is comparatively a short one?—Yes, and then we get them here, and they keep moving north. Then they move north and south during the whole season.

36,795. Do you purchase a good many fish from the Scotch and Cornish boats?—Yes.

36,796. Do you observe any difference in the take of those boats, as compared with the Irish?—I think our Irish boats have proved very successful. They have got very fine boats, and a great number of them, and very fine gear, and I consider that on the whole they have been almost, if not quite, as successful as any men who frequent this coast.

36,797. Have they been improving of late years?—Yes.

36,798. Was there a time when they were not equal to what they are now?—When I came here there were no boats belonging to this place.

36,799. Are there many herrings sold about the country here?—About this time of the year there are a good many herrings sent into the interior, but in the early part of the year the Irish people do not take them there to dry.

36,800. Are they sent then as fresh fish to Liverpool?—Yes; that is the head-quarters; but they are sent direct to Manchester, Birmingham, and London also. They are repurchased by salesmen in different parts of the country, who have curing houses for making bloaters and kippers.

36,801. Are the herrings here nearly as good as the Loch Fyne herrings?—I believe the only herrings in the world that can compete with them are the Loch Fyne herrings, and nine times out of ten we are superior to them.

36,802. The east coast herring cannot compete with you?—No.

36,803. Do the fish become indifferent as the season goes on?—This fishing is very early after the Stornoway fisheries, or even while they are on. That is the only fishing that can compete with this fishing in the early part of the season. If you leave the Stornoway fishing out of the calculation, this is the only fishing in Europe for a number of weeks, and, in consequence of that, the herrings make a large price wherever they are sent.

36,804. When are the herrings best in quality here?—In June or July.

36,805. Is it then that they are making the best price?—Yes, the very best price. They make, on the average, from 6*s.* to 6*s.* 6*d.* a hundred in the month of June. On one occasion, I paid 10*s.* 3*d.* a hundred for herrings, and I filled 32 barrels in one day's buying.

36,806. How long does the season last here?—It gets slack in the first week in September. It is pretty well done then.

36,807. What is the average price then?—About 1*l.* or 18*s.* a maze then. There is another fishing after that, a winter fishing, which comes on six weeks or two months after. There is then plenty of fish on the Yorkshire, Lowestoft, Yarmouth, and Scarborough coasts.

36,808. Is there a fresh fishery here at that time?—Yes.

36,809. Is it a different quality of herring?—It is rather smaller, but it is still rich. That is the time they are put up for the Scotch market.

36,810. Are they different shoals?—Yes, they are quite different, but they are an oily herring, clean and rich. They are put up then for the Scotch market.

36,811. Do you catch at that time any of the spent fish of the former shoals?—No, not as a rule; not what are properly called spent fish.

36,812. What time do those herrings spawn that are caught in September?—I believe that shotten herrings here are the exception, and not the rule. It is very seldom that we see any shotten herrings here; and we seldom see any herrings come in here with spawn amongst them as they do at Douglas.

36,813. When do those fish spawn,—at what time of the year?—I do not know.

36,814. Do they spawn on the coast here?—If they do they spawn upon some ground to which our men do not go with their nets.

36,815. (*Professor Huxley.*) Are the fish getting full now?—As a rule we never get the fish really full here; we never see such a thing on the coast as a real full herring; neither, as a rule, do we get shotten herring. They are always something like half and half, between the one and the other. We never get full herring.

36,816. In the early part of the season are they fat fish?—Yes, like what the Scotch people call mateys.

36,817. Do the mateys become fuller towards the end of the season?—Yes, but we never get them.

36,818. Do the shoals leave the coast when they are full?—Yes, there is a continuous change here.

36,819. The herrings you get in September, are they mateys again?—Yes, but of a younger brood; you will only observe in one case out of ten either the milt or the roe.

36,820. Will those be fish that get fuller somewhere about February?—I should say so; but I have seen large takes of herrings in this harbour both winter and summer, and we never find any spawn mixed up with the herrings, the same as they do on other fishing grounds, such as Douglas. At some of those fishings the fishermen have to shovel the spawn out of the boats, but we never have that here, and we never, therefore, see a real full herring or a real spent one.

36,821. Is the herring you get now a much fuller fish than the herring you get in November and December?—Yes.

36,822. Can you state if any real acts of violence have been committed by the Arklow fishermen?—Not to my knowledge. I have heard it stated, but I never witnessed it.

36,823. Or any actual intimidation?—I cannot give you an actual case. Perhaps there are persons present who can; but, in point of fact, the thing is generally acknowledged.

36,824. It is a matter of common notoriety?—Yes, it is notorious; it is generally admitted by all parties. People are most anxious to try that fishing not belonging to this place alone, but to others, who are of a more enterprising and speculative turn in regard to fishing. I know several individuals who are anxious to try it, because it is earlier in the season, and they are held back by no other consideration than fear of the Arklow men.

36,825. But the Scotch and the Manx men and the Cornish boats come here in great numbers?—Yes.

36,826. They would be able to hold their own?—It is a serious thing to lose a train of nets without getting any satisfaction for it. A train of nets will cost from 160*l.* to 180*l.*, which is a great consideration.

36,827. What is the number of boats fishing from Arklow?—Perhaps a couple of hundred.

36,828. All belonging to the place?—Yes.

36,829. And the number of the Cornish boats is about 200 also?—That is at the height of the season.

36,830. I presume they would wish to stop at Arklow on their way here?—I do not know if the Cornish men would care about it; but if it were made a free port they would. I do not think they are desirous of trying the experiment, but there are a number of people here who would, if they got anything like a chance or a promise of protection.

36,831. Have those persons who felt aggrieved ever brought the matter before the Fishery Board?—I cannot say.

36,832. (*Mr. Lefevre.*) Would it be of considerable advantage to the fishermen of this place if they were able to fish there?—Most decidedly; there is no question about that.

36,833. Would it give them another month at the herring-fishing?—It would give them a fortnight or three weeks; and, if they gained nothing by it, I think a man ought to have the option of going there if he chooses.

36,834. Do the Arklow men come here at all?—Yes.

36,835. There is no objection to them here?—No, they take French leave.

The witness withdrew.

James Rigby called and examined. *J. Rigby.*

36,836. (*Professor Huxley.*) Are you a fish buyer, Mr. Rigby?—Yes.

36,837. Have you long been buying fish?—I have been here about four years.

36,838. Did you hear what Mr. May told us?—Yes.

36,839. Do you agree generally in what he stated?—Yes.

36,840. Is there anything you wish to add to that?—No, I do not think there is. He has stated the case plainly.

36,841. Do you buy from the long-line fishermen?—Yes.

36,842. Have you found, during the last four years, that the supply of white fish has fallen off?—Yes.

36,843. Has it been falling off year by year?—Yes; it has been worse this last year than in any former year.

36,844. Your experience does not extend to 10 or 12 years?—No, only four years.

36,845. Is the amount of fish brought in now very considerable?—No, it hardly pays them.

36,846. Do you buy haddock?—I have not done so, because there has been none.

36,847. Do you buy cod?—Yes.

36,848. Whiting?—They do not catch many whiting; not more than a dozen or two now and then.

36,849. Have you been present while the fishermen were giving their evidence?—Yes.

36,850. Do you confirm and corroborate what they stated with respect to the falling off of the fish?—Yes.

36,851. All the other fish taken by the line seem to have fallen off?—Yes, codfish especially, and haddock altogether.

36,852. Do you buy trawled fish?—There is scarcely any that comes in here.

36,853. How is it that the trawlers do not come in here; it is a convenient port, is it not?—They say there is not enough water at the mouth of the harbour; they run to Kingstown; it is handier for them.

The witness withdrew.

Peter M'Callum called and examined. *P. M'Callum.*

36,854. (*Professor Huxley.*) You are a boat owner here?—Yes.

36,855. Have you been so for many years?—Fourteen years.

36,856. Are your boats herring-boats or long-line boats?—Herring-boats.

36,857. Exclusively so?—Yes.

36,858. Have you any long-line boats?—No; they would answer for long-lines, but we do not use them.

36,859. Is that because you do not think they would answer in the winter?—We do not think it is profitable.

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36,860. Have you many herring-boats?—Six.

36,861. Do you find that the supply of herrings keeps up pretty well?—For the last four years the average has been nearly the same. Formerly it used to be very dull for about ten years.

36,862. When you began to fish here it was dull?—Yes.

36,863. Nevertheless, there were many boats fishing off here?—Yes, but not so many as at present.

36,864. Does that arise from the increased number of native boats coming into the fishing?—Partly so; but there have been a good many strangers who have come here also.

36,865. But the number of native boats has increased?—Yes, 56 per cent. since I came here.

36,866. (*Mr. Lefevre.*) Are your boats manned by Irishmen or Scotchmen?—Principally by Scotchmen, with a few exceptions.

36,867. (*Professor Huxley.*) Are they from Campbeltown?—Yes, and from the Isle of Skye.

36,868. Have you to complain of the trawlers for carrying away your drift nets?—Yes.

36,869. Is that a matter of frequent occurrence?—No, it is exceptional.

36,870. Do you think it is done by the trawlers wilfully, or is it the result of accident?—I do not think it is an intentional thing; it is the result of accident.

36,871. Is it difficult for the trawlers to get out of the way of the drift nets?—I believe it is when the fleet is heavy.

36,872. Do you think that the damage you suggest is done in that way?—Yes, it has been. There was one case in which Charles Wright, from Penzance, about four years ago, lost two-thirds of his nets. He asked me if there was no way to get redress, or to recover satisfaction. I said it was a little difficult, but I went up to Dublin and called on the Fishery Board with him. When we went up, Mr. Barry gave us a warm reception; he used his influence, so that we recovered two-thirds of the loss. If it had not been for that, Charles Wright would have been literally ruined. Mr. Barry gave us every assistance, and seemed to be anxious to put an end to this sort of thing, as far as possible, so much so, that a meeting was called down at the pier on that occasion, and we had several trawlers examined from Ringsend and Kingstown, and the conclusion arrived at was, that the injury done was very great when the trawlers came within certain limits. The limits of the fishing since that time have much extended; the boats now go to a distance of from 30 to 35 miles; unless they go that distance they need not expect fish. I was the first to come down with Scotch nets to the Isle of Man, but there were some here before me. We found the fish when we came to the Manx and Irish coasts at least 10 or 15 miles nearer the coast than they are now. The reason we assign for their having gone further off is, that there is so large a fleet working upon them and so large a number of trawlers. I believe there is no use in fixing three miles as a limit beyond which the trawlers shall trawl from the herring fleet. The proper shooting time is when the sun is setting, but sometimes the boats have to run on until it is nearly 12 o'clock, because if they do not get their distance they need not expect the herrings; then if the trawlers are shooting outside of them they come in contact with them against their will. So long as the herring-fishing is being carried on, I do not see that the trawler has any chance of success without doing injury both to himself and to the drift-net fishermen.

36,873. Do you think the two modes of fishing incompatible?—Yes.

36,874. Then it becomes a difficult case indeed for any legislative action?—Yes.

36,875. What do you think would be the best and fairest measure to adopt in a case of that sort?—That is a matter of opinion altogether.

36,876. Well, we want your opinion?—I think this trawler here (the witness Edwards) is a very candid man. There was one of my boats coming in about 12 o'clock one day last season, and they had some large rope coiled on the forecastle. I said to the master "Where did you get that." He said "We had a very heavy job to get it in this morning; a trawler left his rope and net behind; we got the rope, but I think the net is sunk." I handed the rope over to the harbour master and he took charge of it. We could easily have found the trawler, but we thought it desirable to let the matter pass over. We sustained considerable damage that night, and got nothing for it. You ask me now what is the best remedy to remove that. It is very difficult to suggest a remedy, without being very detrimental to the trawlers. If there was a steamer in connexion with the Fishery Board here, and the Commissioners were to have influence over that steamer, it might answer both parties. If the herrings were at the north side of Ireland's Eye or Lambay, as at the present time, the trawlers might work to the south of it, but it would require a steamer or some vessel to keep a look out to see that that was done. That is my view of the case.

36,877. Does it not occasionally happen that after a fleet of herring-boats has gone out for a fortnight and found no fish, they take their nets in and try another place?—Yes.

36,878. Suppose that they had made up their minds to try one locality, and then took it into their heads to try some other nearer the trawlers, would you oblige the trawler to get up his net and go off?—No, I would not; but we always fix on our ground before we leave the pier-head. If we propose to stop at the south corner of the fleet, we take that side. We always make for one point, and we know our ground before we leave the pier.

36,879. Do you not leave that ground, and fish somewhere else that night?—We leave it, if there is a necessity for it, or if we are driven from it.

36,880. On the same night?—Yes, if anything occurs to render it necessary. There is a steamer lying at the pier here. We have had occasion to hire her, and if we do not get her, we go to Dublin for one. I had one on Monday last. In the month of July and up to the middle of August the weather is very fine and dead, and it is quite impossible to get the boats and nets to the fishing ground without the aid of a steamer.

36,881. Does the steamer tug them out?—Yes. There is a little steamer, called the "Sea Mew." She was enabled to get to the fishing ground last night by the aid of steam, when I believe two-thirds of the fleet could not get there for want of wind. She brought in 14 maze of fish, at 1*l.* 15*s.* a maze. That arose from the fact of the fishing-boats not generally being able to get out,—to get in and out to the fishing grounds. That will show you the advantage of steam when the weather is dead.

36,882. Does it pay to use a tug in that way?—It is profitable to use a tug now and then; but I do not know how far it would be profitable to charter them during a season.

36,883. She is here for general purposes, and you use her when you want her?—Yes; we use her to convey the fish to market. She is waiting for the fish, and whenever it is necessary she can take out the fishing boats as well.

36,884. (*Mr. Lefevre.*) How many will she tow out at once?—On one occasion, I think she had 29 or 31 after her.

36,885. (*Professor Huxley.*) You said that you make up your mind as to what ground you will fish upon before the boats leave the pier?—Yes.

36,886. By what principle are you guided?—I hardly think it desirable to explain that on the present occasion.

36,887. Not to go into the nature of the principle upon which you act, you believe you have some means by which you can form a judgment as to where the herrings are?—We think we have. If

everybody knew the principle, we should be no better than the rest.

36,888. But you consider you have some means ?—We calculate the tides and moon, and one thing and another ; and if we neglect doing that very little is done. Sometimes we make a great mistake, and at other times our principle acts very well. If I could get a good situation under the Government, I would have no objection to explain the matter more satisfactorily.

36,889. Is it your opinion that, by proper arrangements, the trawlers and drift-net men might work, if not on the same ground, in different parts of the sea at the same time ?—With regard to trawlers, it appears to me that it would be to their interest to give up trawling for some years. My reason for saying that is, that one of the trawlers has been fitted out with a train of nets for the last two years, and I believe he finds it equally as profitable for that vessel to follow herring-fishing as trawling. I have had men from those trawlers in my boats, and they seem to think it would be well to allow the fish time for breeding, as they did formerly.

36,890. Do you think the trawling has destroyed the breed of fish ?—I think there is not two opinions about it. It destroys the brood of all kinds of fish.

36,891. How do you explain the fact, then, which has been brought before us elsewhere, that trawling goes on in a particular district (as, for example, Brixham, where it has been practised for, at least, 60 or 70 years) every year, and they continue to make a living out of it ?—Is it exposed to the westward ?

36,892. Southward and westward.—Is it an open sea ?

36,893. Yes.—There is one thing evident, that wherever there are bays, land-locked, in a few years the fish will be drained out ; but if it is an open communication, then there is a strong probability that the shoals of fish will not be interfered with as they are going up.

36,894. Then your objection applies to trawling in the bays, but not to trawling in St. George's Channel ?—My objection is against trawling altogether, because I think it is detrimental to all fishing, particularly in the Channel. The deep-sea fishing is 30 and 40 miles off, and I believe it will affect that in the course of time. They may have a good year or two, but if it slackens the same as it has done here for the last 10 years, they will have to look after something else. I think that Wexford, Dunmore, and Kinsale ought to produce herrings, as well as this place, if it were properly followed out.

36,895. Have you ever desired to send your boats to Arklow ?—I cannot say that I have.

36,896. Do you agree that any foreigners would be put down there, if they did ?—I have heard a good deal of reports to that effect, but I do not know whether there is any truth in them.

36,897. You never send your boats there ?—No, never.

36,898. Your opinions incline to putting down trawling altogether ?—I think that trawling has as good a right to exist as the hook and line or the drift-net fishing ; but the question is, whether it is detrimental to all kinds of fishing, and, I think, there is but one opinion upon that. I think that nine-tenths of the trawlers are themselves satisfied that it is injurious to the fisheries.

36,899. (*Mr. Lefevre.*) What is your opinion as to shooting nets before sunset ?—The principle laid down is, that the nets should never be in the water until sunset. If I had my will, I would not put them in until an hour after, because the fish are coming up to the surface of the water just in the shade of the evening, and it is a well known fact that if the nets are set before sundown, it is nine chances to ten whether you get many fish. I have known several instances of that this season. I have frequently directed my boats to keep clear of the rest of the fleet, even if they were an hour later in shooting. Last season they got heavy fishings by keeping clear of the fleet altogether, and being later in shooting their nets. I attributed that principally to the fish lying on the surface of the water, and to being disturbed by the fleet shooting too early. Even if the glare of the light is seen, acting upon the fish before the nets are shot, there is a probability that the body of fish will go down, whereas boats that were an hour later in nine cases out of ten would get fish clear of that water altogether.

36,900. But if you shot before sunset you would not catch many fish ?—I think not.

36,901. Would you not leave each person to decide for himself whether he would undergo the risk or not ?—If you did that, the supply of fish would be limited very often.

36,902. Would not the fishermen soon find out that they would be only gaining a loss ?—They find it out very often too late. They will have their nets out, and they find it takes them too long to haul them in to be of any service to them.

36,903. Why do you think that trawling is detrimental to the herring fishery ?—Wherever there is any motion going on under the surface of the water, it has a tendency to put the fish either to the bottom or further off to sea, and I think the fish are at present so far from here from the very fact of the fleet having driven them off to sea. You might ask how I ascertain that, and my answer is, we know that if there is coarse weather the boats are obliged to refrain from fishing, perhaps for a week, and then after that the fish will be 10 or 15 miles closer in than they are generally.

36,904. For the last four years have your boats done very well here ?—If anything, there has been an improvement these two last years.

36,905. You have not observed any loss to the herring fishery from trawling ?—Nothing further than the damage I have explained.

36,906. You think it would be better if there were no trawling ?—I myself think it would be an improvement, and a very great improvement to the herring fishery. I think it would be very hard to suppress the trawlers altogether, but if we could put them in a position to become herring fishermen, or make them believe it was to their interest to do so, I think it would be much more profitable for them.

36,907. Do you pay your men by shares ?—We pay them generally by wages ; but if any of them are taken unwell and obliged to go home, then we take men from here.

36,908. (*Professor Huxley.*) You were discussing trawling with reference to the interests of the fish just now. Did you ever consider it in relation to the interests of the consumers of fish in England, particularly where very large quantities of soles are consumed? In fact, that forms one of the largest items in the fish market, does it not ?—Yes.

36,909. Supposing trawling were put down, or ceased to be followed, how would the market be supplied with this fish ?—There is no doubt it would be a very great hardship, and it would be difficult to supply the market if you were to take away these trawlers. I quite grant that.

36,910. As to the mere quantity, I dare say you know that the quantity of fish supplied to England, particularly by trawlers, is exceedingly great ?—Yes.

36,911. There are 300 sail of trawlers coming into Hull, and 60 or 70 into Brixham, and each boat will supply a third of a ton of fish per diem ?—Yes.

36,912. From your knowledge of long-line fishing, do you think that any development of long-line fishing would supply that quantity of fish ?—I do not think it could do so in this channel. My impression is, that the long-line fishermen and the trawlers in a short time will have to take up new ground, and go to more extended waters than they have at present.

36,913. If the long-line fishermen had it all to themselves, could they supply the enormous quantity of fish now consumed in our English fish markets ?—I do not think they could from this coast, but I have

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no doubt that the increase in the supply would be very great if they applied themselves to develope the fisheries as they ought to be developed.

36,914. But they could not supply soles at all?—No.

36,915. And that is one of the principal items in the English fish market?—Quite so.

36,916. So that in putting down trawling you would put down one half or more of the fish supply in England?—Yes.

36,917. Have you turned your attention to the probability of establishing a January and February fishing?—I have, in the way of curing herrings a little.

36,918. You spoke of a winter fishing before Christmas?—Yes, a fishing in October and November.

36,919. Is there no fishing after Christmas here?—No, there is none that is followed.

36,920. But the herrings are here, I believe?—I believe they are in the Channel, but the distruction of material in following the fishing then would be very great.

36,921. On account of the bad weather?—Yes.

36,922. You are aware that the fishing has been developed in Wick in the winter lately?—Yes, particularly in the winter season.

36,923. And has been practised on the east coast of Scotland, in Anstruther and that region for many years?—Yes.

36,924. And very profitable also?—Yes. One reason why there should be more of it at Anstruther than Wick is that it is more convenient to the market and the fish are of a better quality than the Wick fish.

36,925. Would not the herrings be equally profitable here if they were caught at that time of the year, in January and February?—I have not seen them in February, and they are not as good in quality in October and November. They are young fish, which come to maturity in those months. They would do very well for curing if they could be obtained at a price, but the market is good, and it is more desirable to send them fresh than to cure them. I sent them to Scotland cured two years ago, and they took exceedingly well when they were properly handled.

36,926. Would there not be a sufficient market for fresh fish to make it worth while?—The material is very expensive, and I do not think it would pay for the wear and tear.

36,927. (*Mr. Lefevre.*) Do you know of any banks off here where the herrings spawn?—I do not know of any particular banks here where they spawn. I never saw any spawn in the nets the same as we do in the Isle of Man. The fish are caught there from the 24th to the 28th of August. That is when it commences. They let their nets down and take the fish on the ground.

36,928. You never sunk your nets to the bottom here?—No; but they do in the Isle of Man, and, consequently, they take the spawn with the fish whenever their nets are on the ground.

36,929. You do not know where they spawn here?—No, we do not know exactly.

The witness withdrew.

Capt. W. Brabazon.

Captain Wallop Brabazon called and examined.

36,930. (*Professor Huxley.*) You are interested in the fisheries here, Captain Brabazon, I believe?—I have been connected with the fisheries. I have had fishingboats, and, in conjunction with a number of Irish gentlemen, I have felt strongly upon the subject of trawling. In point of fact, I have almost foreseen the certainty of having the coast fishermen expelled from the country altogether, if trawling is to be allowed in the bays. Sir Richard Levinge asked me to attend this meeting, and to give you any evidence in my power upon the subject.

36,931. Have you been present at this meeting, and have you heard the evidence which has been given to us?—Yes, I have.

36,932. Did you hear the statements that were made to us by the fishermen—the line fishermen more particularly?—Yes.

36,933. Do you agree with those statements?—I do. In olden times my father had property on the seacoast; he had fishingboats there, and the fisheries were a regular succession of harvests to the coast fishermen. There was the cod and ling fishery, the haddock fishery, the herring fishery, and also mackerel-fishing and trawling. I had a trawl-boat at that time, and I was anxious to keep that trawl-boat continually at work, but the skipper of the trawler came to me, and said, "Sir, this is a thing that can "last only for a very short time; the destruction of "the fish occasioned by the use of the trawl-net is so "very great, that it will more than consume the "produce of the sea."

36,934. Was that the result of your own observation also?—Yes, it was. I found, when I happened to be on board a vessel when the trawl-net was brought up, that only 25 fish out of 100 taken on board were fit for the market.

36,935. Were the rest small fish unfit for the market?—Yes. The rest were very small fish. They were shovelled overboard. When the net was hauled up, I found them packed in the purse of the trawl.

36,936. Were they alive?—No, they were generally dead when they were shot out, or nearly so. When they were shot overboard, the sea, for, I suppose, 40 or 50 yards was strewn all over with this small dead fry.

36,937. Did you see any spawn brought up in the net?—With regard to the spawn, said to have been taken in the trawl-net, I think the fishermen are mistaken in the term they apply to it. I do not think that they mean spawn, but rather the small fry.

36,938. It is quite clear that they mean the fry.—The net drawn along the bottom of the sea is pretty heavy in itself, but in order to save it, they attach aprons to it, and make it twice as heavy again. The sand being volatile, these nets harrow into it, and they tear up the spawn, and crush it so much that it never can come to maturity. They crush the spat and spawn of the crustaceous fish, such as shrimps, crayfish, and whelks; very large whelks, horse-cockles, and all kinds of shell-fish of that description are destroyed by them. I may say that beds over which the trawl-nets are used are alive with animalculæ, which is the reason why the fish resort there. It is, in point of fact, the great feeding ground for the fish. There are also spawning grounds in 20, 30, and 40 fathoms of water. Ground of this description forms the spawning ground of the round fish generally, such as the haddock, ling, cod, and hake.

36,939. Do you think that any injury has been done to those spawning grounds by the use of the trawl?—Yes, I think that the whole of those spawning grounds have been destroyed, and that by degrees the fish are becoming extinct on the coast.

36,940. With respect to the crustaceous animals, do you think the trawl destroys the spawn of lobsters and crayfish?—I do not think that the lobsters go there, but the crayfish do.

36,941. But do not lobsters and shell-fish of that kind carry their eggs underneath them, attached to their bodies?—Yes, they do; but I specially exclude the lobster.

36,942. But do not the crayfish do the same thing?—The crayfish which are taken upon these grounds are generally she-crabs and others which hide themselves in the sand. I think that some of these crustaceous fish form, in a great measure, the food of the fish outside. You will very frequently see the

broken shells in the sand when it is brought up, evidently showing that it has been the food of some of the fish.

36,943. The damage which you say is done to the spawn is, I take it, rather a matter of calculation than of actual observation. You think that it must be so?—Yes; I believe it is allowed that the fish, to save their spawn, bury it in certain places in shoal water. This is done by the turbot, plaice, sole, and other fish. The fishermen, at low-water spring tides, have shown me the stuff which has been turned up by them when they have been digging for sand eels and lug worms to use for bait, and it was evidently spawn.

36,944. Was it the spawn of soles?—It was spawn, but I did not know what it could be the spawn of, except in the case of turbot.

36,945. I suppose you are aware that many things pass under the name of spawn among the fishermen which have nothing to do with fish at all?—Yes; such as the swalter and the jelly-fish, but that which I have seen was, I think, fish spawn. We could see the egg pretty perfectly, especially in the spawn of the turbot.

36,946. Have you been in the habit of distinguishing between the eggs of squid and those of fish?—That is a matter that I have not paid any attention to.

36,947. That would make a great difference in considering a question of this sort. There are great masses of squid spawn brought up, which are assumed to be the eggs of fish, and the whole of it is put down as spawn. Of course, it is unnecessary to tell you that any catch of the eggs of squid would not affect the productiveness of fish?—No; but I have seen the fish, when I have been on the water, taken up with a string of spawn hanging out of them, when they have been disturbed in the spawning season.

36,948. Then is it your opinion that trawling does a great deal of harm to the fisheries?—Yes.

36,949. Does that opinion extend to trawling out in the deep sea, as well as to trawling in-shore?—I think not. I think the heavy breeding fish become buoyant in the spawning season, and come nearer in-shore to deposit their spawn. I do not think that any fish could live in 100 fathoms of water, except perhaps the whale.

36,950. But no trawling goes on in 100 fathoms of water?—No, I am aware of that.

36,951. The trawlers generally fish in about 35 fathoms of water?—Yes.

36,952. Do you not think that the fish spawn in water 35 fathoms deep?—No, I think not.

36,953. Why?—I think the pressure would be too great upon them. In my opinion very few flat fish go into more than 35 fathoms of water, unless it is a large turbot or sole.

36,954. Then you are not disposed to prohibit trawling in deep water?—No; I should say that that is the proper place for the trawler, but he ought not to be allowed to fish in less than 30 fathoms of water.

36,955. The fishermen here seem to think that trawling is quite as injurious in the deep as in the shallow water; indeed, some of them have stated that they are more interested in the deep water than in the shallow water; I gather from what you have stated, that that is not your opinion?—Where seine nets are used in Dundalk Bay and other places, I have seen immense quantities of fry—sole, plaice, and flounders—brought in and carted upon the land, where, I believe, pigs have been fed upon them by the farmers on the coast.

36,956. Have you ever been in a trawler on the deep sea?—I have not been in one that was trawling in more than 20 fathoms of water.

36,957. Have you seen the trawlers working in 25 fathoms?—No; I have chiefly seen them about Clogher Head. I have seen them working there, and, I believe, it is generally in from 9 to 15 fathoms of water that they work off that Head. The coast there is pretty shallow all round; there is no great depth of water. I consider that the reason the herrings have not decreased is, that they spawn in those bays which the trawlers are prohibited from going into. By that means the stock of herring is kept up. At Clogher Head I have repeatedly seen the edges of the rocks covered with immense shoals of the herring fry.

36,958. But the herring fry might come in although the spawn was deposited in much deeper water?—Yes, no doubt they might.

36,959. Is there any other matter that you are desirous of bringing before us?—No.

36,960. (*Mr. Lefevre.*) I believe you were asked to come here in reference to some application which has been made in regard to trawling?—Yes, in regard to trawling in the bays.

36,961. Was it in reference to trawling in Drogheda Bay?—No, in Dundalk Bay, but I think it arose from what has been done in Galway Bay. When trawling is first commenced, there is an immensity of animalculæ and small fish displaced and thrown up, which is left on the ground by the trawl; other fish come there to feed upon it, and the consequence is, that as long as that lasts the fish are more numerous than they were before.

36,962. Are you acquainted with the fishing in Dundalk Bay?—Yes.

36,963. Are you aware whether any application has been made on the part of the people there to be allowed to trawl in the bay?—Yes, an application has been made.

36,964. It is now pending, I believe?—Yes; it has been resisted by the whole of the coast fishermen who supply the town from their long-lines. They say that if the trawlers are allowed to come into the bays, the whole of the fish will be cleared out, as it has been on other grounds. They allege that the trawlers have exhausted other grounds, and that the supply of fish comes from the breeding of fish in the bays along the shore. Having exhausted the grounds upon which they have hitherto been accustomed to work, they are trying to follow the breeding fish close in-shore.

36,965. Did the application to allow trawling in Dundalk Bay come from the trawlers?—No, I believe not.

36,966. From whom did it come?—From the merchants and shopkeepers of Dundalk, who expect to buy trawled fish for little or nothing. The fish are very plentiful in the bay, and they were under the impression that the trawling in the bay would be limited to a few boats belonging to Dundalk. Mr. Barry, however, explained to them, that if trawling was allowed in the bay at all, the bay must be thrown open to all the trawlers on the coast. I told them that in ten days the trawlers would clear the bay of every tail of fish. After hearing that, they thought it advisable to reconsider their application, and they have not pressed it since.

36,967. Are there any trawlers belonging to Dundalk?—No.

36,968. Has there ever been trawling there?—No; trawling has not been practised from Dundalk.

36,969. Do you think that the prohibition of trawling within the limits of Carlingford Lough and Lambay Island has been effectual?—Yes, to a certain extent it has. I know, however, that some of the local fishermen,—some of the fishing-boats at Skerries and Balbriggan, have several times gone trawling within the prohibited line; but I believe they have all been of opinion that trawling will ultimately obliterate every trace of fish off the coast, and that they may as well go on now and take what they can out of the bay at the present moment.

36,970. Is Dundalk Bay at present full of fish?—Yes.

36,971. Do you think that that is the result of the prohibition of trawling?—Yes.

36,972. How has the bay been protected from trawlers?—The coast fishermen protect themselves as at present the men in Claddagh are trying to do. They are trying to protect themselves against the

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evil effects of trawling in Galway Bay, and to keep them in terror the Board of Works at Dublin have had a man-of-war steamer, the "Geyser," there for some time. That has been blockading Claddagh, and I believe they have lost one of their gun-boats there, worth 25,000*l*. That has been the result of blockading and starving these poor fellows, while the fisheries are being destroyed by the trawlers.

36,973. Do you think that, if trawling is allowed in Dundalk Bay, it will injure the fisheries there?—If you will look at the chart of Dundalk Bay, you will find that the soundings are so very shallow that the bay, in point of fact, protects itself.

36,974. Is it too shallow for the trawlers to go into?—Yes.

36,975. Then where was it that the people of Dundalk wished to have trawling allowed?—They were desirous of having trawling sanctioned in the bay from Clogher Head to Ballagan Point, at the mouth of Carlingford Lough.

36,976. Is there no trawling at present carried on within that distance?—No. Some of the ground is foul, and on account of there being no trawling that is the only district in which there are any haddocks to be had on the coast. They have been taken in considerable numbers off Carlingford Lough.

36,977. But we have heard a good deal with regard to the trawlers going within the prohibitory line?—That is the line from Carlingford Bay to Skerries Point.

36,978. (*Professor Huxley.*) Are you a magistrate?—No, I am not.

36,979. You are aware that it is the duty of the State to support the law as it exists?—Yes, certainly.

36,980. When a law has once been framed, until it is altered, it is the duty of the magistrates to maintain that law?—Yes.

36,981. At the present time, by the existing law in Ireland, persons are permitted to trawl, and have been for some years in Galway Bay?—Yes.

36,982. The vessel which was sent down by the authorities was not sent down for the purpose of assisting in the starvation of these Galway people, but was sent down to protect the rights the trawlers have as subjects of the Queen. It is hardly right, therefore, that a statement publicly made, similar to that which you made just now, should go forth without some explanation.—No doubt there may be a good deal to be said on both sides. It seems that, in the first place, there were two Fishery Commissioners appointed, who understood the fisheries better than any other persons, and they always prohibited trawling in Galway Bay. After acting for a short time, they became merged in the Board of Public Works, and people began to think that it would be better to introduce a little of the principle of free trade. Here was a fishery which had existed for years, and had supported a large colony, the Claddagh. It was originally, I believe, a Spanish colony, and the fisheries of Galway Bay have been almost their sole support for nearly 300 years, when all of a sudden these trawlers are sent down into it.

36,983. The trawlers were not sent down by the Board of Works?—No, but permission was given to them to fish in Galway Bay.

36,984. But permission having been given to them, they had a perfect right to fish there, like all the rest of the Queen's subjects?—No, I think there had been a prohibition against trawling.

36,985. There was no prohibition at that time, and the trawlers were only exercising a right which they undoubtedly possessed as subjects of the Queen. Until the law is altered, it is obviously the duty of the State to protect them in the exercise of their rights. Under these circumstances, it is most undesirable that a public statement should go forth uncontradicted, that vessels have been sent down to Galway for the purpose of injuring or oppressing any class of fishermen. I do not say whether trawling was expedient or not; but it was permitted by the law at that time, and the trawlers had a perfect right, as well as any other persons, to be protected in the exercise of their rights as citizens. Is that not the case?—No doubt. There is a general impression that the trawlers have been enabled to use greater influence than they were entitled to use in any way. In the first place, they employ fewer men than those who follow other modes of fishing. They also destroy much more fish than they can bring into the market, and of course the coast fishermen are the persons who suffer from it. At Clogher Head, in my younger days, there was a very thriving population. Every person was in good circumstances, and the district was altogether free from crime. But after the trawlers had been at work for a short time, they lost the haddock and cod and ling fisheries, which they had been accustomed to, and the result has been, that almost the whole of them have emigrated.

36,987. We wish you to understand that we do not express any opinion as to the expediency or otherwise of trawling; but as long as trawling is not against the law of the land, it is obviously improper that any particular class of men should take it upon themselves to prohibit that or any other lawful operation. Is there any other matter that you wish to bring before us?—No, there is nothing further, I think.

The witness withdrew, and the inquiry was adjourned until the 20th of August, at Dublin.

Dublin, Saturday, 20th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

Mr. JAMES REDMOND BARRY called and examined.

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36,988. (*Professor Huxley.*) You are Inspecting Commissioner of the Fisheries here?—Yes.

36,989. You have occupied that post or a similar one, namely, that of Inspector of Fisheries, for a number of years?—My official connexion with the Fisheries commenced in the year 1819. I was then appointed, during the existence of the old Fishery Board, Inspector-General of the Province of Munster, there being four officers in that capacity—four Inspectors-General.

36,990. That was under the old Fishery Board?—Yes.

36,991. What office did you succeed to after that?—I continued connected with that department until it was broken up in the year 1830, and from 1830 to 1835 I was the officer, though not absolutely in office, referred to by the department to whom the management of the concern was deputed—first, the Board of Inland Navigation, and afterwards the Board of Public Works.

36,992. And then you were appointed by the Board of Public Works one of the Inspectors of Fisheries?—In 1835 I was appointed one of the Commissioners of Inquiry, whose report you will no doubt have seen. Two reports were published in 1836, together with very voluminous evidence, and they have, I believe, been furnished to you.

36,993. Yes. Was the Act of the 5th and 6th Vict. mainly based on that report?—It was presumed to have been based upon it, but the principal recom-

mendations contained in that report, and which were concentrated in what were called the Eighteen Suggestions, were not all adopted.

36,994. By whom was the draft of that Act made?—By Mr. Mulvaney and Sir John Burgoyne. Sir John Burgoyne was at that time Chairman of the Board of Works.

36,995. Was it originally drawn up in accordance with the suggestions of the report?—The object of the bill seemed to be more to promote the inland than the sea fisheries. The 5th and 6th Victoria, as you will see on examining it, has but few sections relating to the sea fisheries.

36,996. But such sections as there are give unlimited powers to the Fishery Board?—They give powers to the Fishery Board to make regulations, to make byelaws, and to do several acts.

36,997. When that Act was passed, was power given to the Board of Works to appoint Inspectors of Fisheries?—No; to the Government.

36,998. You became one of those Inspectors?—Mr. Mulvaney and I were appointed Inspectors of Fisheries—he for the inland, and I for the sea fisheries.

36,999. You had the inspection of the whole sea fisheries at that time?—Yes.

37,000. After that time a further change was made?—Yes.

37,001. The title of Inspector was changed to that of Inspecting Commissioner?—Yes; Mr. Ffennell and I were then associated with the Board.

37,002. That was by the Act of the 11th and 12th Victoria?—Yes.

37,003. As Inspector you merely reported to the Board?—Yes.

37,004. Were your reports published as such in the reports of the Board?—Yes, generally.

37,005-6. But the Board had a discretion by which they could suppress any report if they thought fit to do so?—They did exercise that discretion generally.

37,007. So that the opinions expressed in the reports as published are not always your entire and complete opinions?—Distinctly not.

37,008. Then you would not consider it fair for us to appeal to these reports as the expression of your opinion in all cases?—They contain nothing important that I dissent from, but they do not contain a great deal that I would have advocated.

37,009. Will you tell us why the change of name was made from Inspector to Inspecting Commissioner?—I think it was in order to associate us, and to make us more thoroughly part of the Board, and also to give us more ample powers to hold public meetings, and so forth.

37,010. Then again, as Inspecting Commissioner, you had, as a member of the Commission itself, the power of voting upon your own reports?—Distinctly.

37,011. And the power of controlling their publication?—Yes.

37,012. Whereas formerly you had no such control?—There was none which was ever exercised by us. The subject was never discussed in our presence. The determination as to what portion of our reports should appear was invariably the act of the Chairman, was not communicated to us, and of course was submitted to.

37,013. After you became Inspecting Commissioner you had no more control over your reports than you had as simple Inspector?—Certainly not.

37,014. Will you define the functions of Inspector or Inspecting Commissioner of the sea fisheries? What were his duties?—That is a difficult question to answer. We had generally to carry out the directions of the Board. Their policy was to do as little as possible, but to preserve the peace, if possible. In urgent cases they held public meetings, in order to ascertain the correctness of statements made to them in memorials. No positive act was done in the shape of establishing a byelaw or order without a public meeting having been previously held.

37,015. Did you inspect the principal fisheries annually?—No.

37,016. Did you visit them?—Sometimes. There was only a kind of desultory visitation.

37,017. There was no methodical visitation?—No. I should observe that a vast portion, more than an ordinary portion of our time, was occupied by the inland fisheries.

37,018. Were you occupied by the inland fisheries?—Yes, and most actively too.

37,019. (*Mr. Lefevre.*) Was that the most important part of your duties?—It was considered so.

37,020. (*Professor Huxley.*) So that although you were appointed Inspector of Sea Fisheries you generally gave much of your time to the inland fisheries?—It was clearly understood that I was also to act in regard to the inland fisheries.

37,021. Did you then only inspect the sea fisheries by direction of the Board; did you visit particular places only by the direction of the Board?—It was so understood. No travelling expenses were to be incurred without the special order of the Board.

37,022. And there was no standing order that you should make a periodical series of visits at any times or seasons of the year?—No.

37,023. Nor did you visit the different stations when the fishing was going on?—I generally visited them at periods when some interesting information could be obtained. If there was anything like a disturbance in any particular quarter, or a matter to be arranged, I went down and endeavoured to tranquillize the fishermen as much as possible.

37,024. Did a year ever elapse without your visiting a fishery at all for a formal inspection?—Without anything like a regular inspection, but it seldom happened that I did not go to some important place.

37,025. Suppose that, in your inspection of the sea fisheries, you became acquainted with a practice which appeared to you to be injurious to the fisheries, was it your duty to bring that practice under the notice of the Board, and would they take action upon it?—It was my duty to bring it under the notice of the Board, and I invariably did so, but they did not at all times take action upon it.

37,026. What would be their course of proceeding?—The truth is, their hands were so full that it was with extreme difficulty that those who were engaged in the management of the inland or sea fisheries could obtain their co-operation. They had a very great pressure upon them of important business, and sometimes we have waited for a considerable time to get a Board.

37,027. That is to say, to get a Board which should pay attention to the fishery business?—Yes.

37,028. What was the number of persons on the Board?—The number of Commissioners of Public Works was three.

37,029. There were only three to master that enormous diversity of business?—Yes; and two Inspecting Commissioners of Fisheries.

37,030. And at the early period of the history of the Board of which we are speaking, the Inspecting Commissioners were simply Inspectors?—Yes.

37,031. Then there were only three persons to attend to all the work?—Yes.

37,032. Were the members of the Board, or any of them, persons who were practically conversant with the fisheries?—One of them was—Mr. Radcliffe. He ceased lately to be a member of the Board. He was a member of the Commission of Inquiry.

37,033. After the Inspectors became Inspecting Commissioners, supposing any important fishery business, or any matter which they considered important, came under their notice, had they not power to suggest a meeting, or to call a meeting?—Not without the authority of the Board.

37,034. The authority of the Chairman?—Generally of the Chairman; but it was formally put before the Board in most cases, and approved of. Indeed, I am bound to say that on most important occasions, where any suggestions were made by the Inspecting

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Commissioners, and they appeared to be well founded, they were sanctioned either by the holding of a meeting, or by taking other important steps. Meetings were generally held when the object was inquiry.

37,035. The First Annual Report of the Commissioners, published in 1843, defines very clearly the nature of the policy to be pursued by the Commissioners ?—Yes.

37,036. Was that policy defined by the Commissioners themselves after a conference with the Inspectors, or upon their own view of the matter ?—It was not after a conference, but by themselves, and the course they pursued was often a course dissented from, by myself particularly.

37,037. You were at that time then inclined to have adopted some more active interference ?—A more active interference.

37,038. They have put forward here under four heads the great principles of their policy. The first of the statements, or rather principles, which they lay down is, "that the greatest caution should be "used in applying restrictions on any mode of fishing "in so vast a field as the open sea, and that it should "only be done on very certain grounds." Do you object to that ?—Certainly not.

37,039. The second article is, "That the extent to "which the trawls and trammels are used prove that "they are productive and profitable modes of fishing, "and consequently should meet with encouragement "on public grounds." What do you think about that article ?—Under qualifications.

37,040. How far would you qualify that as the result of your own experience ?—There being several localities where proofs were given of injury done by trawl nets.

37,041. Had these proofs been submitted to the Commissioner at the time they drew up this statement ?—They had had before them the result of the examinations—of a most laborious examination—made by the Commission of Inquiry in 1836, and recorded in their report. The whole evidence is recorded.

37,042. Then do you think it is to that they refer in the third article, where they say, "that the argu- "ments put forward for an absolute prohibition of "them are founded on prejudices and vague theories, "not by any means confirmed by facts"?—No, there were no such arguments put forward in the report of the evidence I have alluded to.

37,043. There were no arguments in favour of absolute prohibition ?—No; nor was there anything, that I am aware of, connected with the department which was in favour of absolute prohibition.

37,044. They go on to say, "that although it would "be greatly to be regretted, that the extension of the "use of these, or any other improved modes of fishing, "should injure the interests of any other class, by "increasing the produce and lowering prices, particu- "larly if that should be a poorer class, such reason "cannot be admitted as an argument for their being "suppressed." However, you state that nobody had advocated the suppression ?—No, that never was advocated.

37,045. They go on to say, "at the same time, there "are cases where we have considered that a certain "degree of restriction ought to be applied, such as of "small bays of comparatively shallow water, or the "narrow entrances of deep inlets; the indiscriminate "use of trawls or trammels in such confined waters "might tend to prevent the fish from congregating "in these sheltered spots (where they can be most "easily followed) and partially from entering them; "it would be, therefore, tantamount to reducing, by "so much, the available extent of coast, while, at the "same time, a restriction in such places is of no great "consequence to the parties using those implements, "and has a great incidental advantage of protecting, "for a great extent, the poorer class of line fishermen "who have only small boats, from the injurious effect "of trawls on their lines. The use of trawls in Dub- "lin Bay has been restricted on this principle by bye- "law, which, having been made the subject of appeal "to the Privy Council, was confirmed." Does that paragraph embody your view of the amount of restriction ?—Yes; I have not the slighest objection to anything in that paragraph.

37,046. So that, in fact, you are in perfect accordance with the paragraphs laid down here ?—Not with all. My objection was to alter the general tone of the principle of non-interference. To the details I assent fully, such as the restraint upon the modes of fishing under peculiar circumstances, provided it be necessary.

37,047. But I think you assented to these *seriatim*, as I read them ?—I suppose I did. Strange to say, I have not for a long time read them, but the impression on my mind is, that the tone adopted in that first report, was one to which both myself and my late colleague, Mr. Ffennell, took exception.

37,048. Perhaps it may be, that your recollection now does not at all relate to these details, but to a paragraph in the earlier part of the report, in which the Commissioners state, "by a reference to the Act it "will be perceived, the principle adopted has been "one of non-interference by the Government, to make "the provisions as definite as possible, to the effect "that the public in general might have the power of "causing it to be enforced, the intervention of the "Commissioners being only admitted as an authority "for deciding matters that are of a nature varying "according to localities or circumstances, and that, "consequently, could not be defined by the Act"? —Precisely.

37,049. It is that broad statement—that broad principle of non-interference, that you object to ?—Yes. With regard to that broad statement of absolute non-interference, I always urged, and so did my colleague, that it was our duty, not only to act in cases such as are minutely detailed there, but to be upon the alert in affording every species of encouragement to the promotion of the fisheries—of the sea fisheries.

37,050. On what principle would you base your view of the propriety of Government interference or Government promotion of this particular branch of trade ?—I would refer to the suggestions of the Report of 1836, and I think that amongst them will be found certain propositions which, if acted upon, would have been greatly calculated to improve the sea fisheries of Ireland, and would, as I firmly believe, have prevented a great many of the scenes that followed after the famine year. To be candid, I have at all times considered, that our department was a species of delusion. We were supposed to be the persons having charge of the sea fisheries of Ireland. Our duties, though strictly observed, according to the instructions given in the Act, were mistaken by the public. It was believed that we were to be the encouragers of the fisheries, and many persons who, perhaps, felt that that duty would have devolved upon themselves, as proprietors, looked to us as the parties whose duty it was to do that which we thought we had no right to do.

37,051. Do you not think that that is very often the consequence of Government interference with particular branches of trade ?—It may be so.

37,052. That persons who should exert themselves to promote particular branches of trade look upon the Government to do it for them ?—Yes.

37,053. (*Mr. Lefevre.*) These reports were always made public ?—Always.

37,054. And the same line was followed throughout all the reports ?—Yes.

37,055. We may take it, also, that there are no passages in these reports which have led the public to understand that the Government would interfere with the fisheries ?—Certainly not; but a vast number of persons entertained that opinion, who did not take the trouble to read the reports at all.

37,056. (*Professor Huxley.*) The mere fact that a Fishery Board existed led to the inevitable conclusion that that Fishery Board was to help them in some respect or other ?—Clearly so.

37,057. That delusion existed in the minds of the public ?—I think it is rather unfortunate that there existed any department at all.

37,058. As leading to that impression ?—Yes; even the very Coastguard, who are our executive department, in their reports and returns, in answer to queries, invariably complained of the want of any species of encouragement. They have said, "Here is a place "where there are a poor distressed people, whose "boats have been destroyed by bad weather and by "storms, they have no means of restoring them; a "little aid given now would be very well paid for "afterwards by the produce of the fish," but our answer always was "We have no means."

37,059. In fact, you had the command of no funds ?—No.

37,060. Is it the first or the second report to which you refer ?—The first.

37,061. There are 17 heads ?—Yes. The discussion of those 17 propositions occupied, perhaps, more time than the remaining portion of the whole inquiry, there being, I am bound to say, some dissentients among the Commissioners.

37,062. I see that, in the first article, you recommend the consolidation of all the Acts relating to the sea fisheries of Ireland into one statute ?—That is done by the 5th and 6th Victoria.

37,063. There have been a number of Acts since, have there not ?—They were passed afterwards, but at that time the Acts then existing were consolidated by the 5th and 6th Victoria.

37,064. Then that has been done, in fact ?—Yes.

36,065. You then recommend "That the chief "superintendence and control of all matters con- "nected with the fisheries be vested in some public "department, which shall make an annual report of "its proceedings, to be laid before Parliament." That recommendation has been carried out also ?—It has.

37,066. But the effect of that, judging from your answers just now, does not seem to be good, inasmuch as it raised that sort of false hope which you mentioned ? Would you be disposed to think still that the recommendation should be carried out, so that the fishermen should trust themselves to private enterprise, like all other branches of trade ?—I am decidedly of opinion that it would be better to leave them to private enterprize, and to the ordinary tribunals of the country, than to let the shadow of encouragement even exist in the public mind; but I am thoroughly persuaded that it would produce sad disappointment.

37,067. Disappointment, from the prevalent impression of the Irish public that they are to be helped by the Government ?—From the belief that still exists, that that branch of industry is more subject than perhaps any other to reverses. It will be remembered that the parties who pursue it are, in fact, not tenantry, generally speaking. They are a poor class of persons, occupying hovels upon the coast, and they are not an object to encouragement so much by the landlords. The benefit to the landlord not being direct, they take little trouble about them. Then again, as an encouragement to a naval force. It is perfectly clear that seamen were very much wanted at a critical period by England, and that if the same encouragement had been given to the fishermen in Ireland that had been given in France, there would not have been the want of a marine.

37,068. (*Mr. Lefevre.*) Are you speaking the views of the public in what you are now saying, or your own ?—I am speaking my own views.

37,069. (*Professor Huxley.*) Our own experience on the sea coast does not go quite so far as that. We have not been able to discover that the fishermen will take service in a man-of-war. It is a very rare thing indeed for them to do that ?—Not in men-of-war. But they go into the merchant service. They supply the commercial marine, and from that they very often go into men-of-war. It is an intermediate stage.

37,070. We do not find that on the English coast. They do not go much into the merchant service ?—When you reach Dungarvan, you will find that nearly all the men that are worth having have gone into the merchant service.

37,071. We may pass over the third and fourth articles here. The fourth says "That agreeably to "the enactments of the 48 Geo. 3. cap. 110. sec. 8., "of the 55 Geo. 3. cap. 94., and of the 59 Geo. 3. "cap. 109. sec. 51., a Government vessel be fur- "nished, at the requisition of the superintending "body, at such times and places as may be deemed "necessary for the protection and assistance of the "fishermen, and that a competent authority for the "preservation of the peace accompany such vessels." That clause provides that a vessel shall be placed at the disposal of the superintending body, for the assistance and protection of the fisheries, and for keeping the peace ?—Yes.

37,072. Was that ever done ?—Only occasionally, and not on our recommendation so much as upon that of the constituted authorities, the magistrates and authorities who wish to preserve the peace.

37,073. Has any vessel been placed at the disposal of the Irish Fishery Board, in the same way that one has been placed at the disposal of the Scotch Fishery Board ?—No, never.

37,074. Do you attribute any of the outbreaks and difficulties which have occurred at Galway and elsewhere to the absence of such a restraining force ?—I think it has at all times proved to be a very great check when disturbances have occurred.

37,075. We have been given to understand that there have been serious disturbances on different parts of the coast of Ireland, and particularly in Galway Bay. Have representations been made to the Fishery Board on such occasions ?—Sometimes.

37,076. What action would the Fishery Board take upon it ?—If the representation was accompanied by a suggestion for an alteration in the regulations, there generally was an inquiry.

37,077. But would they take any active steps to put down such disturbance ?—Sometimes the matter would be referred to the Castle and the Executive Government, and if the intervention of the Admiralty was required, in all probability a vessel would be sent.

37,078. Was that ever done ?—Yes.

37,079. The fifth article recommends, "That the "superintending body be empowered to institute, or, "on requisition after public notice from persons "interested in the fisheries of any particular district, "to adopt and confirm any local legislation which "they shall consider as decidedly salutary, either for "the due conduct of the fishermen, for the preserva- "tion of the peace, or for the protection of the "fisheries." Was that recommendation embodied in the Act ?—Yes, in the 91st section, which gives power to make byelaws and orders.

37,080. Then the sixth article recommends, "That "such further pecuniary aid be given for the con- "struction and maintenance of any piers, harbours, "and other public accommodation as may be deemed "requisite for the service of the fisheries; that pro- "vision be made for the repair and maintenance of "all those which have been provided entirely or "partly at the public expense, and may be thought "worthy of being preserved; and that they should "be declared public property; and that power be given "to enforce such rules and regulations as may seem "desirable, in order to render them as generally useful "and desirable as possible" ?—That, to a certain extent, has been done, with considerable benefit, in a distinct Act, passed after the 5th and 6th Vict., commonly known by the name of the Piers and Harbours Act.

37,081. What was the general purport of that Act ? Under what conditions could the fishermen obtain subsidies ?—They were not the fishermen, but any applicants who came forward. The Act was the

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9th Vict., cap. 3, and it was an Act to encourage the sea fisheries of Ireland, by promoting and aiding with grants of public money the construction of piers, harbours, and other works. There is a very short explanation of the Act, and an epitome of it given by me as an instruction to parties asking for information.

37,082. It is here stated, that no grant for any one work shall exceed 5,000*l.*, and the proportion of the contributions to be found shall in no case exceed three-fourths of the total cost of such work ?—Yes.

37,083. How much money has been granted under that Act ?—A great deal.

37,084. And have many harbours been built ?—Several have been.

37,085. And are many kept up in repair by that Act, or rather by those grants ?—The Board of Works, having been overwhelmed with business, with the sanction of the Treasury transferred to the grand juries of the several counties the duty of preserving and keeping in order the piers that were formerly built, as well as the piers that have been built under the Act. There are several piers which had previously been built under the old Fishery Board, and ever since that they have been going into rapid decay.

37,086. Do the grand juries not take much interest in the matter ?—They do not take the interest in it that they should. The maritime members—those who have resided on the coast, have sometimes sought for aid ; but those who lived in the interior have said, "This is no affair of ours, we derive no benefit from it." And the consequence has been, that the works have been neglected. However, there is a power given to the Board of Works which, I think, they have sometimes exercised, in the event of an application being made and refused by the grand juries, of laying out the money themselves, if they judge it expedient, and there is an imperative obligation upon the grand juries to raise it from the counties.

37,087. Is there any limit to the amount of contributions made in that way from the public funds ?—Yes, a certain sum was granted under the Act.

37,088. (*Mr. Lefevre.*) Has that sum been exhausted ?—No, there remains some portion of it still.

37,089. (*Professor Huxley.*) Was it a grant of one sum ?—Yes.

37,090. How much ?—50,000*l.*

37,091. There is a further recommendation contained in the fourteenth article, "That loan funds "shall be established to assist fishermen in procuring, "repairing, and fitting out boats." Was that recommendation ever carried out ?—No, never. Here is a document which I intended to submit to you. It is a document which will show you the feeling—and perhaps it is a feeling in which you will to a great extent concur—entertained by the other members of the Board on the subject of loans. In the year 1844, a proposition was made by the Treasury to place at the disposal of the Commissioners a certain sum of 5,000*l.*, with, I believe, some additional funds, to be applied to the purpose of loans. The proposition was submitted to the Chairman, who disapproved of it. I had several conferences with him on the subject. I, on the contrary, thought it was a very critical moment, and that the plan would have been very beneficial. He requested that I would place upon paper my views on the subject. I did so. They were submitted to him, and here are his minutes and his objections to them. They were then submitted to another member of the Board, and subsequently to the junior member, and their views are also given on the subject. I should hardly consider myself at liberty to give the document to be made public. At the same time, I will give it to you for your guidance. It sets forth their views fully, with all the pros and cons—perhaps my absurd and injudicious views, and their wise ones.

37,092. (*Mr. Lefevre.*) But was not a sum of 5,000*l.* afterwards advanced by way of loan ?—There was a sum of 5,000*l.* given at the time of the famine. It was employed in the construction of curing houses. Some good followed from it, for there was a system of cure introduced into some places in the country where it was not understood. We had some Scotch curers sent over to us, and their instructions were of considerable value.

37,093. (*Professor Huxley.*) The fourteenth article of these recommendations does specially recommend that loans shall be made by the Board of Works to parties desirous of erecting curing houses, fishery yards, salt stores, or fishermen's houses ?—Yes.

37,094. That recommendation was carried out ?—No, it has not been.

37,095. I understand you to say that it was during the famine ?—No ; what was done then by the Board was done on a different principle. It was a mere desultory thing, done at the pressure of the moment, in order to rouse the fishermen from the apathy into which they had fallen, and in remote districts to teach them a better mode of curing. In that respect there is no doubt that considerable good was done.

37,096. Have the effects of that been permanent ?—Yes ; in those localities.

37,097. Are there curing establishments there still ?—No, they were broken up in the course of a short time. It was found that the establishment, as every Government establishment of that kind is where they take upon themselves to operate, was altogether too expensive, and would not pay. Consequently, they were broken up, and the balance of money still in hand was returned to the Treasury.

37,098. Did anybody in the neighbourhood set up a curing establishment ?—Yes, for a short time, and some of the curing establishments were handed over to individuals who were known to be enterprising men. Amongst others, to Mr. Andrews and his Company, on the Island of Valentia, in the county of Kerry.

37,099. Have they continued to work ?—Not at all.

37,100. Then has all trace of the Government operations been wiped out ?—Yes.

37,101. (*Mr. Lefevre.*) Were there not several private curing establishments set up at the same time ?—Very few.

37,102. (*Professor Huxley.*) The last article is, "That a practical education in the manufacture of "nets and in reference to fishery operations shall be "adopted in the schools." Was that recommendation carried out ?—No.

37,103. However, it would seem that most of these recommendations, with the exception of that to erect curing houses and that to furnish a guard vessel, were pretty fairly carried out, were they not ?—The most important were those which related to the loans, and they were not at all adopted, nor was any authority given with that object in the 5th and 6th Victoria, which was the Act which immediately followed. I can put into your hands a copy of a bill which was read twice in Parliament. It was brought into the House of Commons by the present Lord Lieutenant of Ireland, who was then Chief Secretary, and Chief Baron Woulfe, who was then Attorney General for Ireland. It was a bill directly founded upon these recommendations. It was read twice, but before it was committed there was an outcry raised against it from Scotland.

37,104. From Scotland ?—Yes. At that time there was a strong jealous feeling, and the impression upon the minds of many persons, and upon my own among them, was that the break up of our establishment in 1830, with the continuance of a large establishment in Scotland, was altogether the effect of Scotch influence. I am happy to state for the memory of one individual belonging to that country, that that was utterly and completely forgotten and extinguished during his management of the Scotch fisheries. I allude to the late Sir Thomas Dick Lauder. He died Secretary to the Fishery Board. He took, I have reason to know, during the latter years of his life, as deep an interest in the fisheries of Ireland, as a man of humanity and universal benevolence, as he did in those of his own country.

37,105. During his lifetime was no such adverse influence exercised ?—No, none at all.

37,106. I think we are now pretty well informed of the history of the Board and the legislation which has taken place on the subject. Will you be so good as to tell us what your opinion is respecting the trawling question. You have had a great deal of experience and information upon that subject. What do you think about trawling inside the bays ? What is the effect of it ?—I am decidedly adverse to trawling inside the bays.

37,107. On what ground ?—On the ground of disturbing the fish, and taking vast quantities of very small fish ; disturbing also the settlement of shoals in places where the herrings fall into the bays.

37,108. By driving the shoals away ?—Yes.

37,109. Can you point out any particular cases where trawling in the bays has led to a falling off in the supply of fish in those bays ?—All the evidence which we have received tends to leave upon my mind the full conviction that it has done so in Galway Bay.

37,110. During what period was trawling permitted in Galway Bay ?—Trawling commenced in Galway Bay, as near as I can remember, about the year 1840 or 1841. One of the first meetings that were ever held in Ireland after the passing of the 5th and 6th Victoria was at Galway. On that occasion there was objected to but a single solitary trawler, belonging to a respectable individual, a gentleman of fortune in the neighbourhood, Mr. Pearce. Mr. Pearce was not judicious in his dealings with these ignorant people. He is said by them to have been in the habit of trawling among their boats, and a very angry feeling was produced in consequence. The people of the Claddagh, most especially, had most unreasonable notions in reference to their rights over the Bay of Galway. They conceived that nobody could exercise any description of fishing there without their authority, and they had a decided objection to trawling. That objection was founded, I believe, not upon the notion that it would injure their fishing, but upon the unreasonable idea that it would increase the quantity of fish in the market, and thus diminish their profits. I believe that at that time such was the predominant motive of their objection. But that has since ceased with the facilities for transport, and yet the objection continues. There was a period during which, by the influence of some very intelligent men who lived in the immediate vicinity,—the gentlemen of the Dominican Convent of the Claddagh,—they were prevailed upon to yield their objection and themselves to become trawlers for a short time, but that very soon ceased, and they expressed themselves thoroughly convinced that the experience they had had only confirmed them in their belief that it was a mischievous practice. The result of the meetings which were held in Galway was that a line of demarcation was fixed by the Board within which there should be no trawling. I have here a map of Galway Bay. You will find, and I have it accurately stated upon this small scale, the present line of demarcation. You will observe, however, that it is shown there to be an oblique line. Every successive Inspecting Commander of the Coastguard who came to Galway objected to the obliquity of the line as rendering it exceedingly difficult to enforce the regulations. The people themselves sought for very little more. Instead of having the line from Barna to Gleninagh Castle they wished to have it from Black Head to Spiddle, and that has been the bone of contention up to a recent period. One of the motives with the Claddagh men was, that it would give them an additional preserve.

37,111. But that is a very small difference ?—A very small difference indeed. It was originally my recommendation that a line should be drawn from Spiddle to Black Head, and I still entertain the belief that that would have tranquillized the public mind on the subject of trawling in Galway Bay, if it had been adopted.

37,112. Had the Galway men no objection to trawling outside that line ?—Not until a recent period.

37,113. Is the ground outside as good for trawling as the ground inside ?—Yes, in fair weather.

37,114. What were the grounds which determined the adoption of the other line ?—I really cannot tell, further than that it was adopted, and that being adopted it should not be changed. I think it was a very groundless objection.

37,115. How many trawlers were there engaged at any particular time in Galway Bay ?—I do not suppose there were ever 20 at a time.

37,116. Never more than 20 ?—I do not suppose there were more than 20. It varied very much.

37,117. We have been told that after having trawled out one particular place, they go to another ?—You were truly told that. A ground may be trawled out.

37,118. Then you are of opinion that they really do sweep the fish out of the bay ?—I think they do a great deal of mischief.

37,119. Are there any returns of the catch by the line fishermen during the time the trawlers were there ?—No.

37,120. So that there is no precise data on which to form a judgment ?—Nothing more than the evidence of the several witnesses taken at the different inquiries.

37,121. Those being fishermen, of course ?—Yes. There were persons in the neighbourhood, owners of boats and respectable shopkeepers in the town, whose evidence was also taken.

37,122. As you are aware, fishermen are apt to make somewhat broad and incautious statements ?—Yes, exaggerated statements.

37,123. It would have been desirable, if possible, to obtain accurate returns of the quantity of hooked fish caught before trawling commenced, while it was going on, and after it was over. That is the only way to form a safe and accurate judgment upon the question. Does anything of the kind exist ?—No. Upon one occasion we employed an intelligent member of the Coastguard, a chief boatman of the Coastguard, who was strongly recommended to us by his principal officer, to give a return of that sort. We put him on board a trawler, and requested him to keep an accurate account of the result of the proceedings on board. He did furnish us with reports and evidence on various occasions. All of them were decidedly opposed to trawling. His name was O'Flaherty. He is still in Galway, and may be examined before you.

37,124. Was he opposed to trawling on account of the great quantity of small fish taken up ?—He had a general objection to the destruction of small fish. I should mention that the common name they give to all small fish is spawn.

37,125. From what you have heard or known of this matter, do you think that they have taken spawn, in the proper sense, in the trawl, namely, the eggs of fish ?—There were sent to me by that man what appeared to me, as far as I could judge, to be the eggs of fish intermixed in a mass.

37,126. Are you not aware that, very often, fishermen confound the eggs af other animals with those of fish ?—I could not tell what fish it was.

37,127. What is your opinion as to what should be done with regard to this vexed question at present ; what do you think ought to be done, if there is to be any legislation at all upon the general question of trawling in the bays and within the headlands ?—I cannot give a general opinion upon the subject. It is impossible. I am convinced that there are places where it is quite innocuous.

37,128. Will you instance some of those places ?—Galway Bay is one place where my last recommendation would probably have been adopted by the Board, had it not been for the approach of this Commission. We determined to do nothing until after the result of this Commission was made known. But the recommendation was made upon the suggestion of some

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very intelligent persons in Galway, that there should be a trial made, a three years' jubilee, as we call it. There was to be a total interdict of trawling in Galway Bay for three years. But it was clearly understood that it was to be experimental, in order to see what effect it would produce on the fisheries.

37,129. There is this difficulty about the matter, that one has to consider what would be regarded as a satisfactory result. I suppose that, if, in consequence of such a jubilee, fish should become tolerably abundant for the long-line fishermen, it would be considered that the experiment had been successful?—I presume so.

37,130. Yet, looking at the question from a consumer's point of view, that does not exactly follow; because, although the trawlers sweep the fish out of the bay very speedily, and exhaust the bay for a time, it is quite possible that the quantity they furnish to the consumee may be equal, in the long run, to that furnished by the long-line fisherman. I do not say that such is the case; I only put it as being possible?—Yes, it is quite possible,—excluding the consideration of brood.

37,131. Then it would not exactly follow, from the apparent success of a measure for suppressing trawling, that in the interest of the consumer, which is the principal question the public have to consider, trawling should be put down. It would scarcely matter, if the same quantity of fish were obtained, whether it was obtained once in three years, or in small quantities spread over the three years?—The question is surrounded by difficulty. I am aware of the injurious effect it would produce in the supply in some of our most important places.

37,132. (*Mr. Lefevre.*) What is the number of trawlers that are owned in Galway itself?—I should think there are not more than seven or eight.

37,133. What would be the effect of a three years' jubilee on the owners of those trawlers?—I suppose they would go somewhere else to trawl.

37,134. Are there any other bays in which they can trawl with convenience?—They can trawl outside.

37,135. From Galway?—Yes, from Galway. Lately the trawling has been outside the Arran Islands, and there has been some good trawling there. My notion of the application of the trawling system is, that it should always be practised in the deep water and outside headlands.

37,136. But is there not frequently bad weather, when it is impossible to trawl outside the Islands of Arran, when they could easily trawl inside?—Yes; and that is the time they commit breaches of the regulations in most places.

37,137. Might not a jubilee of three years in the bay practically destroy the trade of trawling from Galway?—There are periods in the winter when with great facility they may trawl there and in other places in the deep sea.

37,138. Have you formed any opinion as to what portion of the year it would be possible to fish out in the open sea?—The season is precarious. Very often we get fine weather in the months of September, October, November, and even December. Then January, and February, and March are very bad. For a long time there was an impression on the mind of our Board in favour of a close season. But if a close season is to be established, then the question arises, what the close season ought to be.

37,139. A close season for trawling?—Yes.

37,140. And all kinds of sea fishing?—No, only for trawl fishing. You will find that the different descriptions of fish spawn at different periods. We took a great deal of trouble to get answers to querries as to the periods of spawning for fish, but they have only embarrassed us the more.

37,141. (*Professor Huxley.*) At any rate your opinions do not go further, in any case, than a local limitation of trawling?—No.

37,142. You do not recommend the putting down of trawling altogether?—Unquestionably not.

37,143. And do you recommend this local limitation on the supposition that trawling tends to extinguish the fish in that locality, or that it tends to take away the livelihood of different classes of the people?—Certainly not. It is simply because of its effect upon the fisheries, and not of its effect upon production. I look upon it that that objection is completely extinguished by the facilities of transport. In all places within reasonable distances of railways, no matter what may be the quantity of fish taken, it will find a market. It was not so always. When the conflict commenced, if it had been so, it is very possible that that conflict would not have existed, for I admit that the spirit of monopoly was the first and main foundation of the hostility to productive fishing.

37,144–5. You go on the principle that the sea is a great common ground, producing fish for the whole nation, and that it is of importance that it should not be allowed to be fished destructively?—Yes.

37,146. Have you any reason to recommend any restriction upon the herring fishery, or any particular form of legislation to suggest?—The herring drift-net fishing has gone on very fairly, without any complaints being made to us in reference to it. In Galway Bay, again, there are certain local regulations among the fishermen, which have been greatly complained of as being amongst their unfounded prejudices. But in my visits to Scotland, and England, and the Isle of Man, I have found that amongst the most civilized communities those regulations do positively exist.

37,147. Such, for example, as shooting at sunset?—Yes, and also, when there is an influx of what is called bay fish coming into the bay, allowing them a short and reasonable time to settle in the bay before the fishing commences, and then fairly starting together. The Claddagh men, who are no doubt unreasonable in many respects, but whose want of common sense is greatly exaggerated, I believe advocate the necessity of some regulation of that kind. That is considered to be one of their prejudices, and they are censured because they will not go out to fish the moment they find the fish present in the bay. Considering what their fishing is, and that they are not in the habit of going far to sea to fish, and that they have not adequate gear to enable them to do so, I think there is great reason in their wishing to allow the fish to settle in the bay before they commence fishing. Therefore I am not one of those who think that an unreasonable regulation.

37,148. As the law stands at present, I apprehend there is no general regulation of any kind whatsoever applying to the herring fishery throughout the coast of Ireland. The Act of the 5th and 6th Victoria overrides all other Acts, and the Convention Act, by an order in Council, does not apply. Under those circumstances, unless your byelaws in any locality prohibit a man from fishing for herrings in any way he thinks best he can do so?—Clearly.

37,149. He can shoot his nets before or after sunset, and in fact there is no restriction on any mode of fishing, as a general rule, throughout the whole of Ireland?—None.

37,150. Have there been any localities in which the Board has been moved to make byelaws in reference to the herring fishery?—None, except where you were yesterday, at Howth. There the herring fishery is conducted in a more judicious manner than in any other parts of Ireland, and some parties there have complained that it is the practice to shoot nets before sunset. It is said that they do not observe those conventional arrangements among themselves which exist in other places, and that the Scotch are the most remarkable for breaking the arrangement with regard to net-fishing before sunset. That is the only place where a complaint has been made to us incidentally, and without any formal application for an order on the subject.

37,151. With respect to the complaints of the drift men as to the interference of other vessels, there are certain localities in which applications have been

made to you to make byelaws. Wexford for example? —Yes.

37,152. An application was made to you from Wexford on the 20th of April 1849?—Yes.

37,153. And in that case you enacted a byelaw which is a repetition of the Convention Act?—Yes.

37,154. That byelaw which you enacted was one prohibiting trawling in all places where there were boats engaged in herring or mackerel drift-net fishing, and provided that trawl-boats should keep at a distance of at least three miles from all boats fishing for herring or mackerel with drift nets; that whenever herring or mackerel boats should commence drift-net fishing, in any place on or off the coast of Wexford, the trawl-boats should depart therefrom, and keep at least three miles distant from the herring or mackerel drift boats?—Yes, exactly.

37,155. Are there not some other parts of the coast where applications have been made on account of the interference of the drift-men?—Yes, at Dungarvan Bay. Under the head "Trammel nets," you will find a very complex byelaw; in point of fact, it is so complex, that it has been found utterly impossible to carry it out. My son is the resident magistrate of that district, and he writes to me, in a private letter, "for mercy's sake, make this byelaw intelligible to us."

37,156. Then there is a byelaw here with regard to Galway Bay keeping the trawl-boats three miles from the drift nets when large shoals of herrings set into the bay?—Yes. That is another byelaw that has not yet been defined. One class of persons—the anti-trawlers—say, that as soon as any herrings appear in the bay, the trawlers should desist altogether from fishing in the bay, under that byelaw. The trawlers, on the other hand, say that they are not restrained from fishing by the mere influx of a small quantity of fish, but that it is only when there is a large herring fishery. They say that it was not established in order to stop them from trawling; and they add, that as the herring fishermen only fish by night, they ought not to be restrained from fishing by day. Between them both, the contentions have rather increased than diminished.

37,157. (*Mr. Lefevre.*) Has there been any decision under that byelaw with respect to fishing by day?—No.

37,158. (*Professor Huxley.*) Have you, anywhere, a byelaw permitting seining for herrings?—No, but the 5th and 6th Victoria interdicted the use of seines, by daylight; but that was so completely opposed to what was the practice on parts of the coast, that it was judged expedient, in a subsequent Act to get it altered.

37,159. By the 7th section of the 7th and 8th Vict.?—Yes. The use of the seine nets was not lawful for herrings.

37,160. Was a special application made to the Board to permit seining for herrings?—Yes.

37,161. Where is that practice pursued in Ireland?—Upon the south coast, particularly in Bantry Bay and the shores above Glandore Harbour; and in several of the small inlets you will find on the southern coast.

37,162. Is that a very productive mode of fishing?—Yes, very productive.

37,163. Did the people of those localities apply to the Board to be permitted to use that mode of fishing?—Yes, and in consequence of that application, this section was introduced into the Act of the 7th and 8th Victoria.

37,164. Then the Board, on the evidence that was offered to them, found that there was nothing wasteful or destructive in that mode of fishing?—There was no objection to it. There has been no objection, except an objection raised sometimes to the capture of the small and young fry of other fish. That has been complained of in Kinsale Harbour, Strangford Lough, and other places.

37,165. But not catching small and unsizeable herrings themselves?—No.

37,166. You have a good many regulations apparently regarding oyster dredging?—Not a great many. We have not deviated from the statute law in reference to our oyster fisheries, except in two or three cases.

37,167. The 33d section of the 5th and 6th Victoria gives the power of changing the close time?—We have exercised that in favour of the fisheries of Arklow, and that immediate coast.

37,168. On what ground have you done that?—Upon the ground that the harbour is a very bad one, and very inaccessible. The coast is an open wild coast, and there was an anxiety on our part to afford facilities for the sale of the oysters to English boats which come over from the coasts of Kent and Essex, and other parts of England. 7,000*l.* or 8,000*l.* have been received by these people in the course of a few days for the oysters taken away. But the boats could not come as early as the last month of our open season, the weather being often very boisterous. It became necessary, therefore, to add the month of May to the open season, and the change has produced the greatest advantage and great wealth to the people of Arklow. It was confined to purposes of brood.

37,169. How long has that permission been given?—I think since 1846.

37,170. Has it gone on ever since?—Yes.

37,171. Has it been attended with any injury to the oyster beds?—I think not, because they are very extensive sea beds. I have devoted a good deal of attention to the subject, in order to ascertain how far that relaxation of the close time has done any injury, and it is positively alleged, although I must say the allegation came from interested parties, that it has increased the supply of oysters.

37,172. By weeding them out?—Yes, by working on the beds. That statement, which I considered at the time to be an absurd statement, has been in a great measure confirmed on the east coast of England, at Whitstable, most particularly, where I found that the principle of working on the beds is considered indispensable in order to render the oyster beds profitable.

37,173. (*Mr. Lefevre.*) Do you mean dredging all the year round?—Yes, cleaning the beds.

37,174. (*Professor Huxley.*) Is there any restriction in regard to the size of the oysters which may be taken at Arklow?—No.

37,175. Are they mostly small oysters that are taken, to fatten on the English coast?—The English buyers would prefer small oysters, but they take them as they come.

37,176. They take them indiscriminately?—Yes.

37,177. (*Mr. Lefevre.*) But they would prefer the small ones?—Yes; they are most suited for their purposes.

37,178. (*Professor Huxley.*) Then you have the power of suspending the oyster fishery. That is given to you by the 7th and 8th Victoria?—Yes; we have the power of suspending the oyster fishery for any term not exceeding three years.

37,179. Why was that clause inserted?—Because there were some places where the oyster fisheries were over-wrought, and consequently utterly destroyed, more especially Lough Foyle, Lough Swilly, and Carlingford Lough.

37,180. Were they over-fished, notwithstanding the observance of the close time?—Yes.

37,181. The open months were sufficient to enable the fishermen to overdo them?—Yes. The demand for oysters has become so great since the facilities for transporting them to the interior have been supplied. People in England are now eating oysters who never dreamed of it, and also people in Ireland. In point of fact, the demand is without limit.

37,182. It was found absolutely necessary to suspend the oyster fishery altogether?—No; we have not done that in any case.

37,183. Then the power was sought for, and has not been exercised?—It has never been exercised. We were desirous of exercising it, particularly in Lough Foyle, and we held important meetings upon

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the question; but we were overpowered by the popular cry against it, and by appeals from the gentry of the neighbourhood, who said "There is a "class of persons deriving sustenance from the "trade; you will throw them on the world, and "destroy them."

37,184. But if the beds were exhausted, their case would be just the same?—No; they were still getting a little.

37,185. (*Mr. Lefevre.*) Was that in 1846?—Yes.

37,186. (*Professor Huxley.*) Then, as a matter of fact, the beds were not exhausted?—No, not thoroughly exhausted.

37,187. Has there been sufficient to give these people a livelihood since?—I don't think there has, but the increase of price has compensated them in some degree for the diminished quantity.

37,188. But if the gentry of the neighbourhood represented that the stopping of the fisheries would throw the poor people upon them, they evidently thought that keeping the beds open would keep them off?—They admitted that injury was being done, but they said, "It is an embarrassing question, "like the trawling question, and we cannot bring "ourselves to recommend you to make a byelaw."

37,189. Would not the fishing check itself? If there was a scarcity of oysters, would not the people be led to seek a supply elsewhere?—They were local people, who fished for the purpose of bringing oysters into Londonderry, where they were sold to the dealers, who shipped them off to Liverpool, generally for export.

37,190. What is the condition of the beds now?—I am told they are very poor.

37,191. (*Mr. Lefevre.*) Are they worse than they were in 1846, when that inquiry took place?—Yes, and every year they are becoming worse.

37,192. (*Professor Huxley.*) The power thus given to you has never been exercised?—No.

37,193. The 16th and 17th sections of the Act give you the power of granting licences for making oyster beds?—Yes.

37,194. Has that power ever been exercised?—Yes, to the extent stated in the list of licences.

37,195. From this list it appears that 34 licences have been granted between 1846 and 1864 inclusive?—Yes.

37,196. And the total area of new beds thus formed is 7,796 acres?—Yes.

37,197. These licences give a certain right over the fishery, I suppose?—Yes; to the owners of the land, or to the occupier, or to any other person getting permission of the owner or occupier.

37,198. And the oysters then become the private property of the person who lays them down?—Yes.

37,199. Has that practice resulted in the establishment of profitable oyster beds?—No, I am sorry to say it has not generally.

37,200. Have the beds which have been formed been used merely as the oyster parks of Colchester?—I am sorry to say that in most cases, up to last year, the only effect that followed the granting of these licences was a little preservation upon the beds, and by that means there may have been a slight increase.

37,201. No new beds have been formed?—Very few. A small quantity of oysters has been dropped on some of the beds, but the only instance in which there is really an active operation in progress is in Clew Bay, near Westport, by Captain Austin, who is the owner of a large oyster fishery at Whitstable. He came over to this country, and took a lease from a lady, who had obtained a licence for establishing an oyster bed upon the shore. He paid a rent for the bed, and has since applied for an extension of the ground. He is really working now upon the English system,—upon the Whitstable system,—and I am sure he will do so profitably.

37,202. What he is doing, I presume, is to dredge the oysters out of the deep water, and lay them down in parks?—Yes. He buys them from the people, and has afforded immense employment to the poor people in the neighbourhood, who fish in all parts of the bay, and bring to him the oysters they obtain, which he purchases at a fair rate, and lays down on ground previously prepared for the purpose.

37,203. Has he, or any other person who has sought for power to make oyster beds, attempted the multiplication of oysters on the French system?—I don't think he has, because at Whitstable I find they do not appreciate the French system. They deny the efficacy of it, which has embarrassed us a good deal, because we have published M. Coste's report, and other information upon the same question, and the people ask us if the statements there given are not exaggerated. We, of course, cannot say, but we tell them they must find that out for themselves; we give it as we get it.

37,204. At Whitstable they merely preserve the oysters in parks?—Yes; all the year round they are dredging on the open grounds for the supply of their parks, in contravention of the existing statute law, which is the same with us. But they act under the authority of orders in Council, which I think are very judicious.

37,205. A great portion of the shores of the inland bays on the west coast of Ireland must be admirably adapted for oyster beds?—I think they may be rendered a source of great wealth.

37,206. Does anybody think it worth while to try the French system?—Public attention has been much directed to it.

37,207. But nothing has been done yet?—No. They wait for something like certainty. It is an expensive undertaking, one involving considerable expense.

37,208. Still it has been carried out by many poor communities in France?—Yes.

37,209. And has been attended with success?—Yes; I believe that in the Isle of Re it has been attended with great success.

37,210. (*Mr. Lefevre.*) Are most of the beds below the line of low water?—Almost all of them. Our original power did not extend further than low-water mark, and it was found not at all sufficient,—that the tendency of the shore being to incline, and of the oysters to fall into deep water, the effect was that the individual who obtained a boundary on the verge of low water found his oysters getting out into deep water, and then they became an available bed for the public. Our powers were then extended by the 13th and 14th Victoria, and we have since been enabled to go as far as we judge expedient, without a limit.

37,211. Have licences been given in places where oyster fishing already existed?—We have been a good deal embarrassed in that way. We have viewed the question liberally, wherever there was anything like a really productive oyster fishery that could be considered an object of commercial profit to the community. In such cases we have never granted licences. But where there were only a few scattered oysters in a locality, their existence rather furnished us with a proof that it was a favourable spot for the purpose, and, everything else being favourable, we should in such cases have granted licences.

37,212. The only occasions, you say, where there has been any success, are where oyster fisheries have existed before?—Yes, where a few oysters have been remaining, and perhaps where a small quantity have been scattered upon the ground.

37,213. In such cases, then, the effect of granting licences has been to give a monopoly, and to restore the fisheries which originally existed?—Yes, in the expectation of improved cultivation and protection.

37,214. Have any rents been charged in such cases for the licences?—Never; the whole is done without expense to the individual applying.

37,215. Then to what do you attribute the small success of the operation?—To the apathy of the individuals who get the licences, and to their igno-

rance. In truth, we have ourselves been exceedingly ignorant on the subject up to a very recent period. The movements in France, and the efforts which have been made there, have roused us very much, and have induced me to suggest the publication of a little collection of matter for which we do not profess to be accountable, but which gives suggestions from other quarters, and amongst others M. Coste's reports, and reports from the Isle of Re, translated from the French.

37,216. Have there been any complaints from the fishermen with regard to the restrictions of their rights of fishery?—We give no licence without holding a public meeting, and in some cases, we have been obliged to give up the idea altogether, in consequence of a public outcry against it. In other cases, we have been obliged to limit considerably the ground sought for by the applicant. There have also been cases in which some of the landed proprietors have been concerned. Lord Sligo and Lord John Browne have applied for licences in Clew Bay. In the first instance, they claimed to have an exclusive right; but, finding they could not sustain it, they applied for licences. We, after holding a meeting,—and a very troublesome and turbulent meeting it was,—came to the determination of excepting from the applications certain portions which proved to be ground resorted to by the public for oysters, and we proposed to give them only those places where there were scarcely any oysters at all, but which were favourable for being formed into oyster parks.

37,217. In the cases you mention, where the effect of the licences has been to restore the fisheries by the application of capital on the part of the licensee, have there been subsequent complaints on the part of the fishermen?—No, but I do not think there has been any increase worth naming anywhere, except where a small quantity of oysters were deposited. That has generally been done for the purpose of establishing a right. Some small deposit has been made, and after the oysters have been left there, no more trouble has been taken about them. Deposits have often been made on portions of the ground which have been very injudiciously selected in some cases.

37,218. With the exception of the case you mention, you have not thought it necessary to visit the grounds?—No. We did that in the case of Clew Bay. If you visit Kenmare, you will find an important station there. On the north shore of Kenmare we granted licences to a Mr. Mahony. He is since dead, and the property has been sold. Not only Mr. Mahony himself during his life, but his successors, have devoted some capital to the improvement of the beds, and with considerable profit. He told me, a short time before his death, that the result of what he had done was more profitable to him than the cultivation and improvement of any land that he had ever held to the same extent. He was, however, a most intelligent gentleman.

37,219. Was that under a licence granted by you?—Yes. It was one of the earliest licences. It was granted to Mr. John Mahony, and another licence was granted to the Rev. Dennis Mahony. I believe that in the latter case nothing has been done at all. Mr. John Mahony did a good deal; and Mr. Matthews, who now holds the beds, is following his plans, and is doing a great deal of good.

37,220. How far does the power of the Fishery Board extend out at sea?—I do not know.

37,221. Has it ever been tried?—No.

37,222. How far does the authority of the Commissioners or of the Board of Works extend over the Scotch or English fishermen?—Not at all, I should say. In any case where there has been a deviation from the rules, as, for instance, in the mixed fisheries we have at Howth, we have called on the parties to observe the regulations of their own respective countries, and when we have found them obstinate in not doing so, we have communicated with the authorities on the other side.

37,223. Suppose that a Brixham trawler took it into his head to put into Galway Bay and trawl there, has the Irish Fishery Board any authority over him?—I really cannot tell. Such a case has never occurred, but I should think not.

37,224. Then with respect to foreigners. Suppose the French or the Dutch thought fit to fish for herrings on any part of the Irish coast, would the Fishery Board have any jurisdiction over them. The Convention Act is suspended for Ireland, is it not?—It is suspended for Ireland.

37,225. Or is that conditional on the absence of foreign vessel?—It is conditional on the absence of the mixed fishing of French and other boats. If French boats were present, then the restrictions of the Convention Act would come into operation under the Order in Council. Such is my construction of the Order.

37,226. And be operative on all the fishermen?—Yes.

37,227. So that from the mere fact of a single French vessel fishing upon the Irish coast, the Irish fishermen would become subject to all the minute regulations of the Convention Act?—It might be so construed.

37,228. Have there been any cases in which bait beds have been licensed?—No.

37,229. Have you heard any complaints of the want of bait?—Yes; more especially at Kinsale. At the special instance of the fishermen of Kinsale, I induced the late Judge Jackson (then Attorney General), when in London discussing the 5th and 6th Victoria, to introduce that section into the Act; but under that section no beds have been formed.

37,230. Are there portions of the coast which are favourable for that?—Yes, particularly in the harbours.

37,231. And yet no action has been taken upon it?—No.

37,232. With regard to the number of fishing boats in Ireland, I should like to ask you a question as to the number of fishermen at different periods on the coast. Can you tell me what were the numbers in 1830, 1836, 1845, 1848, and 1864?—The following return will show the numbers:—

——	Number of Vessels of all classes.	Number of Men and Boys employed.
1830.—Fisheries under stimulus of bounties or loan funds.	13,119	64,771
1836.—Fisheries under depression, caused by withdrawal of bounties.	10,761	54,119
1845.—Fisheries immediately before the famine.	19,883	93,073
1848.—Fisheries after the famine.	15,932	70,011
1864 - - -	11,748	50,692

Classification of Boats and Men, 1864.

1st class Vessels, above 15 tons -	- 1,141
2d class Boats - - -	- 10,607
1st class Men - - -	- 4,740
Ditto Boys - - -	- 692
2d class Men - - -	- 41,390
Ditto Boys - - -	- 3,870

37,233. Up to 1864, there has been a considerable decrease?—Looking at these returns, you will see that there was a considerable decrease in 1836, when the fisheries were under a depression in consequence of the withdrawal of the bounties.

37,234. When was the next decrease?—From 1845 to 1848.

37,235. Was that decrease in consequence of the famine?—Yes.

37,236. From that year up to the present time has there been a progressive diminution in the number of men and boys?—Yes.

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37,237. To what do you attribute that diminution?—To the diminished population, in consequence of the famine and emigration.

37,238. Has not the diminution been even in a larger proportion than the diminution of the general population of the country?—I think it has. Other causes have operated, more perhaps on the coast than anywhere else.

37,239. Is it to be observed more on the west and south coasts of Ireland than on the east coast?—Distinctly.

37,240. Has the proportion of the diminution been the same with regard to first-class vessels and second-class vessels?—I should say that the diminution has been more in the second-class vessels, in those boats which have been worked by the very poor people.

37,241. What is the class of vessels that is included in the first class?—Boats of 15 tons and upwards.

37,242. Carrying a sail?—Yes, sailing boats.

37,243. Then the whole number of vessels carrying sails in Ireland at present is a little over 1,000?—Yes.

37,244. Is there a great proportion of these boats on the east coast, or are there as many on the west coast?—They are stated in detail in the reports. I am, however, obliged to repudiate the accuracy of the returns. Our own executive are the Coastguard, and although I find among them zealous men, anxious to do their duty, they have so many things to attend to, and they get so little for performing this particular duty, that the returns they give us are very unsatisfactory.

37,245. In what respect are they deficient?—In not taking the trouble to ascertain the accuracy of the returns.

37,246. Do they give more than the true number of fishermen?—We sometimes find one return precisely identical with the number given in the preceding year, which can scarcely be the case, proving that all attention to the subject has been totally disregarded in such instances.

37,247. I presume that a considerable number of the men registered as fishermen are fishermen for but a short portion of the year?—Yes.

37,248. During the rest of the year they are working at other occupations?—Yes, they are employed as agricultural labourers.

37,249. Can you tell us at all what proportion are fishermen throughout the year?—No, I cannot.

37,250. Is there no means of ascertaining that fact?—There are no possible means of ascertaining it by our returns, otherwise than by considering that those men who are stated to be in sail-boats are generally fishermen throughout the year, whilst those who are employed in row-boats are occasionally employed otherwise.

37,251. Have any means been taken by the Board to ascertain the quantity of fish taken off the coast?—No, there have been no means of ascertaining that. We have put several queries to the Coastguard officers, but have not had satisfactory returns.

37,252. We were shown an abstract of a return, with reference to the quantity of herrings brought into the port of Howth; is that exceptional?—Yes, that is completely exceptional. It has been done for the last two years most satisfactorily, a special reward having been given to the Coastguard officer for preparing it.

37,253. What payment has been made to the Coastguard Officer?—It is something very trifling.

37,254. Would there be any difficulty in ascertaining the same facts from other parts of the country?—I think it would be difficult to do so. The work is more concentrated at Howth. The sales there are public sales. The officer is an intelligent man, and he has had the opportunity of being present and of obtaining returns of the quantity, which he furnishes every week.

37,255. From the evidence you have already given, I think we may take it that the policy of the Board from its first formation has been to interfere as little as possible with regard to the question of trawling and other matters relating to the mode in which the fish are to be caught?—Yes.

37,256. When you say that their policy has been to do as little as possible, do you mean that it was founded on an intention to interfere as little as possible, entertaining an opinion that it was desirable not to do so?—Yes.

37,257. Notwithstanding that policy, the Board have from time to time made regulations prohibiting trawling in the different loughs on the coast of Ireland?—Yes.

37,258. And it is prohibited now in a considerable number of the loughs on the coast?—Yes.

37,259. Have any steps been taken to ascertain what has been the effect of this prohibition?—In some cases we have been called upon to repeal some of the prohibitions.

37,260. I believe there is one appeal pending now?—Yes.

37,261. That is in the case of Dundalk?—Yes; and in the case of Dingle it has been repealed.

37,262. Have there been any other applications?—There has been one from Lough Swilly, and one from Dundalk. The Bay of Dundalk constitutes a portion of the interdicted district. The people there ask for exclusion, and for permission to trawl within the bay.

37,263. Do you mean exclusion to the public, and permission to themselves?—Precisely, such would be the effect; but, being told that that could not be done,—that, if the bay was thrown open it could not be thrown open exclusively to them, they have discontinued the urgency of their application.

37,264. Have inquiries taken place on the part of the Commissioners, in consequence of these applications?—Yes, and they have resulted in nothing being done.

37,265. From the evidence collected on that occasion, have you reason to believe that good was done by the prohibition?—We only know that it would be highly injudicious to except a portion of the district that was restricted, which would have been the case in Dundalk Bay, and for Lough Swilly we saw no valid reason why the application should be acceded to.

37,266. Did you find that there had been an increase in the quantity of fish taken there?—It is a good while since the meeting was held, but I believe that was so. The meeting was held by our then Chairman, Sir Harry Jones.

37,267. Have there been any cases in which accurate statistics have been taken since the prohibition, with a view of ascertaining whether it has had a tendency to increase the quantity of fish?—No, never.

37,268. Have you any reason to believe, from the increase in the number of fishermen fishing in these bays, that the prohibition has been good?—On the contrary, I believe there has generally been a diminution.

37,269. Take the case of Dingle Bay, where you say the prohibition has been repealed; that bay was closed for a period of ten years, and at the end of that period was re-opened?—Yes.

37,270. Did you find that, during that time, the fish had increased in the bay?—I have not been at Dingle lately or since the repeal; but it has been alleged that they are now taking a great deal of fish there.

37,271. Was the prohibition removed in consequence of the increase of fish, or because there were complaints that the take had not been as great as it had been?—The prohibition was removed in consequence of there being persons there who were desirous of being permitted to trawl in the bay.

37,272. You say that the 5th and 6th Victoria gives power to the Coastguard to carry into effect any prohibitions which are made by the Board of Commissioners?—Yes; they are called the executive department of the Fishery Establishment.

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37,273. For that purpose they are constituted constables?—Yes.

37,274. Have they been effective in maintaining the prohibitions?—As far as they well could, they have. They have had other heavy duties to perform, and their instructions are, when it does not interfere with their other duties, to act. But I am bound to say they have been much less effective lately than they were formerly, inasmuch as they are almost a differently constituted department now, since they came under the direction of the Admiralty.

37,275. Do you think that trawling has in effect been prohibited within the districts laid down?—There have been several breaches in many cases.

37,276. But, on the whole, do you think the prohibitions have been effective?—In many cases I think they have; but it has been alleged that in all cases there have occasionally been breaches of the regulations.

37,277. Can you suggest any other mode in which the prohibition might be made more effective?—I cannot, at present. It would involve a long discussion upon the management of the department with which it rests, which I cannot venture into. They are for other and more important purposes.

37,278. They could not devote more time than they already do to these purposes?—I believe not.

37,279. Have there been any cases in which applications have been made for the prohibition of trawling in which you considered that trawling was injurious, and in which the Commissioners have not thought it right to prohibit trawling?—I cannot remember. I was not a consenting party, except formally, to the total abolition of the restrictions in Dingle Bay.

37,280. But with regard to any bays in which trawling is carried on, and an application has been made to prohibit it?—No; I remember our having had an inquiry some time ago, at Kenmare, in reference to the Kenmare river, and, although it was ascertained that it might, perhaps, be desirable to have some restraints, yet the number of trawlers was so exceedingly small, and there was so little probability of their increasing, that it was judged unnecessary to take any action in the matter.

37,281. Then any difference of opinion between you and the Board has been with regard to the limits in particular bays within which the prohibition should be enforced?—Yes; but only in one case.

37,282. The case of Galway?—Yes.

The witness withdrew.

Sir James Dombrain called and examined.

Sir J. Dombrain.

37,283. (*Professor Huxley.*) You are Inspecting Commander of the Coastguard?—I was Inspector-General. I first introduced the Coastguard in Ireland in the year 1819.

37,284. Have you been Inspector-General ever since that time?—Up to the year 1848.

37,285. So that for more than 20 years you were engaged in examining all parts of the coast of Ireland?—Yes; and, since that period, I have been attached to the Lighthouse Department of Ireland, and I have every year gone round the coast as I had done before.

37,286. Then you are pretty intimately acquainted with the condition of the coast and the coast villages?—Yes, thoroughly.

37,287. Have you had occasion to pay attention to the coast fisheries?—I have at different periods, and I have assisted in the formation of companies on two or three occasions for the purpose of developing, if I could, the deep-sea fisheries on the west coast of Ireland.

37,288. What is your opinion with regard to the abundance of fish on the west coast?—I think it is very much exaggerated.

37,289. Is there a good supply of fish to be got by the long-lines there?—There is at certain places and on certain parts of the coast, but the fish are very uncertain in their habits.

37,290. What are the practical difficulties in the way of the fishing? The west coast is extremely stormy, is it not?—Yes. That is the great difficulty we have to contend against. No vessel you can construct as a vessel for the purpose of fishing, within a moderate size, is capable of contending with the heavy seas we get on the west coast of Ireland.

37,291. Is the weather so much worse than in the North Sea? Could not trawl-vessels like those which frequent the North Sea keep the sea on the west coast of Ireland?—No.

37,292. Are the seas on the west coast much more boisterous?—Yes. As a proof of that I may mention this fact. There are two lighthouses on an island off the coast of Mayo, called Eagle Island. About two years ago, a heavy sea broke 24 panes of thick plate glass in the lantern of one of those lighthouses, at an elevation of 240 feet above the level of the sea, and the tower was so filled with water that the united force of ten men could not open the door. They had to bore augur holes in the door to let the water out. There was not a particle of stone or anything in the sea by which the damage was done. It was a pure green sea. The extraordinary fact is, that it should have travelled up a column of 80 feet with such force as to be enabled to break the glass in the lantern.

37,293. In fact, I suppose that a few miles out from the shore on the west coast of Ireland you have the regular ocean wave?—Yes.

37,294. And you feel the full force of it?—Yes.

37,295. On the other hand, there are a great many sheltered bays on the west coast to which vessels can very readily run?—Yes; there are a great number of very good harbours indeed, but the misfortune is, that if a fishing vessel gets into a port of this kind the expense of the maintenance of the men is so great that she can make no profit when she gets a take of fish.

37,296. And again, very few of these harbours have anything like a market or a quick communication with the markets?—No.

37,297. As harbours, they are of no use in enabling the fishermen to get their fish to market?—Not for general consumption, but they are for local consumption. There are not, however, any great quantities taken in-shore. The moment the boats can get out, they do so.

37,298. Is the average of the weather on the west coast so bad that fishing vessels will often be confined for many days together in these harbours?—Yes, and for weeks together.

37,299. For weeks together?—Yes.

37,300. During the summer season?—No, during the winter season; but even in the summer season it is often with extreme difficulty that vessels can keep at sea.

37,301. Is the fishing ground mostly well out at sea?—Yes, off the headlands.

37,302. What you are saying now refers to vessels thoroughly well found and fitted, as the trawlers are on the coast of England?—Precisely.

37,303. So that, even supposing a person were to be found with capital to fit out such vessels, and public spirit enough to set them going, you think the badness of the weather would render the speculation a bad one?—Yes, and the uncertainty of the fish. I can mention an instance which occurred with regard to Colonel Latouche. Some years ago, he hired a small steamer for the purpose of ascertaining if there did exist on the coast the enormous quantity of fish we were led to suppose did exist, and I believe he lost a very considerable sum by it. He had the vessel fitted out in the most excellent manner in every respect for fishing. He brought over some English fishermen who understood long-lines, and so

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on, and yet he gave up the business a considerable loser.

37,304. You have been yourself concerned in some of the fishery companies which formerly existed on the west coast?—Yes, in two or three.

37,305. Can you give us the history of one of these companies as an illustration of what you have been saying?—One company was called the North-West Fishery Company. A friend of mine, Lord George Hill, was one of the parties who originated it. I joined the company for the express purpose of seeing whether the wealth which we were told was in the ocean really did exist or not, and we found, as I tell you, that even when they took any quantity of deep-sea fish, when they brought it in there was a very poor market for it.

37,306. On account of the difficulty of communication?—It was at a very low price, and there were no railways to take it off. There was also the uncertainty of the cadgers or curers coming down and finding that a vessel had no fish. That was a disappointment again. So that there were various causes operating. We lost our money, and wound up the concern.

37,307. Has that been the case with every company established for fishing on the west coast of Ireland?—Yes. One was started a few years ago; Captain Symonds had the management of it. That has been all broken up with great loss to the originators, who fitted out very fine vessels indeed.

37,308. Then if a private company, able and willing to put plenty of capital into the business, and to superintend it themselves, with a view to their own interests, were not able to do anything for the fishermen on the west coast, is it not quite chimerical to think that the Government could do anything?—I cannot say what means could be devised for improving the fisheries on a large scale. There are places so circumstanced locally that where a few people go into the fishery on the spot, and have the control of the thing themselves, they do very well. There is a man from whom I gave you a letter yesterday, named Savage, of Birdhaven, who got up a fishery here, and sent two cargoes to Spain, and did very well.

37,309. What kind of fish did he send to Spain?—Ling, hake, and that kind of fish.

37,310. Is it at all probable that such a development of railways will take place on the west coast as will tend to get rid of the difficulty now existing in regard to the want of proper markets?—I do not see any railway that goes to a fishing ground, except to Westport, off the coast of Mayo, and in that direction. That may be of advantage.

37,311. Is the poverty of the country so great that there is not likely to be traffic enough to reward a railway company?—Yes. For instance, at Broadhaven, Belmullet, Killybegs, Connemara, and Clifden, there is not likely to be such a traffic.

37,312. The neighbourhood of Tory Island is one of the best fishing stations?—Yes.

37,313. It is hardly likely to expect a railway in that direction?—No. At Inishtrahal, an island which lies off the coast of Donegal, there is a successful fishery carried on, principally in turbot, and so on. They send their fish off from that place to Glasgow and Liverpool, which they can easily do on account of the prevailing wind being westerly. They generally run into Moville, meet the steamer, and put their fish on board.

37,314. From the north side of the island?—Yes. The last time I was there, we could go and choose any number of turbot we liked.

37,315. Do they keep them alive there?—Yes, and we could go and pick out any fish we chose.

37,316. How are they caught?—By long-lines. They keep them alive in their boats, and put them in ponds until they have a sufficient number to take off to the steamer.

37,317. Would your objection apply equally to the herring fishery?—I have been concerned in that also.

37,318. What is the result of your experience?—The result was that, when we thought we had everything fully prepared and likely to succeed, the fish deserted the place, and there have never been any since.

37,319. Where was that?—At Killybegs. For 20 years there have been no fish there.

37,320. Were there fish there formerly?—Yes, for years there was a great fishery. It was the same at Rutland. The Government, in former times—in the time of the Duke of Rutland—made a large grant to the Conyngham family to build stores there. I believe the year after they were built the fish deserted the place, and they did not make their appearance again for 40 years. They then set in for a year or two, and now they have deserted the place again.

37,321. (*Mr. Lefevre.*) Do you think the herrings are more capricious on that coast than on the east coast?—I think they are. I think it arises from the sudden storms that come on, which often break the shoal of fish, and when it is once broken in that way and the fish are frightened they go off into deep water.

37,322. And do not come again?—No.

37,323. (*Professor Huxley.*) Would your objection apply to oyster-fishing? Do you think the coast, and the bays around the coast, are well adapted for oyster preserves?—Yes, very well adapted.

37,324. Then the objections you mention are not applicable to oysters?—No, because they would all be in smooth water.

37,325. Have any of the companies you have mentioned turned their attention to oyster culture?—No.

37,326. You think that is likely to be profitable?—I think it would be very profitable indeed, and, a little time ago I advised some persons to go into it largely.

37,327. With the present great demand for them, and their high price, the cost of railway carriage would not be too much to prevent a good market?—No, and oysters would keep a long time. If we had a small steamer to run with them they would soon be got to market.

37,328. The demand for oysters is very great for the oyster parks on the coast of England?—Yes.

37,329. It is so great that the people who have oyster parks would be likely to avail themselves of the supply from the Irish coast?—Yes.

37,330. That does not seem to have occurred to any great extent?—No. There are in Broadhaven as fine oysters as any in the world, and they are totally neglected.

37,331. (*Mr. Lefevre.*) Are they fished? Is there anybody to dredge for them?—Nobody seems to care about them, and it is a remarkably fine bay, and exceedingly well sheltered.

37,332. (*Professor Huxley.*) Have you formed any opinion about the trawl question?—Indeed, I have not given any attention to it. I know there are a variety of opinions about it, some believing it to be injurious, and others not.

37,333. Is there any point you wish to bring before us which occurs to you with regard to the fisheries, other than those which we have been discussing?—I think not.

37,334. (*Mr. Lefevre.*) Is Galway an exception to what you said with regard to the west coast? That seems to be well adapted for a fishing station?—There is no great fishery up the bay itself.

37,335. Do the fishing boats go a good way out?—Yes, 15 or 20 miles before they find fish.

37,336. There is one point, upon which your long experience in connexion with the Coastguard, will enable you to give us some information. Do you think it possible to combine with their ordinary duties that of a fishery police, or collectors of fishery statistics, or have they too much to do already?—When I was in the Coastguard, in all the ventures which I made with other people in trying to form little companies, I obtained, in the first instance, the sanction of my superiors, to give all the aid and assistance

I could, and I stated fairly that I was concerned in the speculations myself. It was the object of every Government to promote the fisheries as much as possible. All that I did, I did with their sanction and concurrence. We were at all times, on all parts of the coast, anxious to render every aid and assistance we could.

37,337. Did you find that it interfered with other duties?—Not in the remotest degree. I always undertook it with the stipulation that it should not interfere with our more immediate duties. But we were expected cordially to assist when our duties were not interfered with; and I believe that every officer and man around the coast were anxious and willing to do all in their power.

37,338. Would it give much trouble to calculate the number of fishermen and boats in their different neighbourhoods?—O dear, no; I always was in the habit of making returns to the Inspector of the Fisheries regularly. I was frequently consulted as to the boundary lines for trawling, and matters of that kind. Here, at Dublin, there was frequently an apprehension of disturbance among the fishermen, and I sent down a Revenue cutter to keep them in order.

37,339. Is it at all practicable to obtain from the Coastguard officers such information as would give us a notion of the yield of fish in the fisheries in their localities?—That might be more difficult, but still they would have the advantage of consulting all the old experienced fishermen on the coast.

37,340. It would be an extremely useful thing with regard to any discussion which may take place respecting the increase or falling off in the supply of fish, that accurate statistics should be got together?—Yes.

37,341. That has never been done yet?—No.

37,342. Have not the Coastguard greater facilities than anybody else for collecting such statistics?—Yes.

37,343. And they might do it without much interference with their other duties?—They are supposed to guard every foot of the land, and the fish must be brought into the district of one or another of them. Where they have to travel, I think some allowance ought to be made for their expenses; but, otherwise, I think there would be no difficulty. They must know where every boat is kept, and I could tell you, almost without looking at the map, every place where a boat is kept on the coast of Ireland.

37,344. From your knowledge of the fishing population, what proportion of the so-called fishing population are real fishermen, who live by fishing?—Very few indeed. At the same time, at places, such as Waterford, Dungarvan, and Kinsale, there are people who live entirely by fishing, but almost all the rest are fishermen and farmers, and probably at the very time they would have more chance of success than at another they are mostly attending to their farms.

37,345. Do you think that any scheme of encouragement by the Government, by a direct subsidy, or any other means, might tend to divert the people from their other occupations, and so, on the whole, rather tend to the impoverishment of the country than to its advancement?—I am myself opposed to any scheme of bounty, and I think the Government were very wise in abolishing it.

37,346. In fact, Government aid of that kind created an unnatural stimulus in a particular direction, not warranted by the circumstances of the country?—Yes.

37,347. In cases where the prohibition of trawling has been adopted, has it added much to the duties of the Coastguard?—I think not.

37,348. Have they been useful in carrying out that prohibition?—I have known very little of them of late.

37,349. Then you are not aware whether there have been any informations laid by the Coastguard at all?—No.

37,350. With the exception of the island of Inishbofin, is there any other station on the coast from which a regular supply of fish is sent to the English market?—I think at Dingle they have established some communication with Tralee and Killarney.

37,351. And from thence to Dublin?—Yes; I believe there is a small supply from Galway.

37,352. And from Sligo?—There is no great fishery there, except the salmon fishery. There is no deep-sea fishery.

37,353. How is it at Donegal?—There is nothing there.

37,354. Then all the fishing along the west coast, with the exceptions you have mentioned, is for the local demand?—Yes, to meet the local demand. The last time we were round off the coast of Kerry we fell in with the fishing boats there, and they were up to the thwarts almost with fish.

37,355. Was that merely for the purpose of local consumption?—It often happens, when they can get out, that they have good takes of fish; but there is no harbour there, and they have to haul up their boats on the island.

37,356. Take the case of Donegal, in which it has been represented to us that there are a considerable number of fishermen. Are they nearly all of the class you mention?—In Donegal they are all fishers and farmers, except at Inishtrahal, where they really are fishermen.

37,357. Is there any considerable consumption of fish in the interior of the country, or is the supply consumed merely by the fishermen themselves?—There is a considerable consumption when they can get a good take.

37,358. Is it hawked about the country?—Yes, it is hawked about the country, and they get a very small price for it.

37,359. Does it form a large proportion of the food of the people?—I think it does. I think the fishermen sell the most part. They keep the coarse fish for themselves, and sell the rest. I have frequently seen that done. At Malin, in Donegal, I have seen codfish brought in, and I have taken my choice of a dozen for 5*s*. In Broadhaven, five years ago, I bought five turbot for 4*s*.

37,360. (*Professor Huxley.*) Were they fine turbot?—Yes. If they had taken and hawked them about the country they would not have got more than 1*s*. or 1*s*. 6*d*. each for them, at the outside; so that it was better for the fishermen to sell them to us on the spot.

37,361. (*Mr. Lefevre.*) The poor people in the country would hardly afford to give 1*s*. for a turbot?—No, the poor people cannot. They might take them at Ballynahow, but they would only give 2*s*. for them there.

37,362. (*Professor Huxley.*) It was stated, at the time of the famine, that the people had an objection to a fish diet?—Yes.

37,363. (*Mr. Lefevre.*) In many cases they were starving, although they had plenty of fish on the coast?—Yes.

The witness withdrew.

Mr. James Redmond Barry recalled and examined.

37,364. (*Professor Huxley.*) You wish to add something to the evidence you have already given, Mr. Barry?—Yes. I wish to state that, up to the period when there was a resident Inspector in Dublin, and when the practice of fixing an Inspecting Commander in each of the districts was adopted, we made our Fishery district co-extensive with the Coastguard district, and it is utterly impossible for anything to have gone on more admirably than the whole machinery. The system was afterwards changed. We had to correspond with London, and I think the appointment of Inspecting Commander may be said to

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have been only temporary. By the time one man became acquainted with his district, he was transferred to England, and there has been such an interchange and such an alteration altogether in the system, that we certainly have not had the same advantages from the Coastguard that we formerly had. But, generally speaking, I think they are very well disposed to do all they can to aid us. I now present to the Commission a kind of form, which we forward annually to each Inspecting Commander or Inspecting Chief Officer, as the case may be, for answers to certain printed queries.

37,365. Then is it the case now, that if you want anything done by the Coastguard in Ireland, you do not make your application to the head of the Coastguard, but to the Admiralty?—No; we now make our application to one of the two vessels,—to Captain De Courcy, or to Captain Heathcote.

37,366. The guard-ship?—Yes.

37,367. But I think you said there was a period when you had to correspond directly with London?—There was; but the period when we had Sir James Dombrain to apply to was a period of unexampled correctness in the execution of anything we wished. We found him one of our most efficient coadjutors, and immediately after an order was made it was sent to his department and carried out. That, however, has ceased to be the case.

37,368. (*Mr. Lefevre.*) We were told yesterday by some of the fishermen that the fishermen of Arklow endeavoured to prevent fishermen from other ports, not only of Ireland, but of England and Scotland, from fishing off their coast. Can you tell us anything with regard to that?—It was a revelation which quite amazed me. I never heard anything of it before.

The witness withdrew, and the inquiry was adjourned to Ringsend.

Ringsend, Dublin, Saturday, 20th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

RINGSEND.

J. Good.

JOHN GOOD called and examined.

37,369. (*Professor Huxley.*) You are the owner of trawl-vessels here, I think?—Yes.

37,370. Have you been the owner of trawl-vessels for many years past?—Yes, for more than 30 years.

37,371. Was trawling in full operation when you first took to that occupation here?—I think it was; I suppose there were more than 30 boats.

37,372. How many are there now sailing from Ringsend?—I went to count them over within the last day or two, and I think we have of established trawlers belonging to the port 50, and there will be at sea fishing and in full working order in the course of the month from 44 to 46. These are trawlers from Ringsend and Kingstown.

37,373. Then does your previous statement, with regard to the number of trawlers which existed 30 years ago, apply also to Dublin and Kingstown?—Yes.

37,374. When you began fishing, what was the tonnage of the trawlers employed?—From 36 to 40 tons, old measurement.

37,375. Were they decked boats?—All were decked boats.

37,376. What was the rig?—They were cutter-rigged, as at present.

37,377. What is the average tonnage now?—The average tonnage, builder's measurement, is rather over 60 tons than under.

37,378. Do you recollect what was the average cost of a trawler in old times?—I do.

37,379. What was it?—It was from 420*l.* to 450*l.*

37,380. Is that with the net fittings and everything complete?—Yes.

37,381. What is the cost of one of the modern trawlers?—From the 700*l.* to 1,100*l.*

37,382. Then the number of trawlers has increased more than 50 per cent., and the cost nearly 100 per cent.?—Yes.

37,383. Should we be far out in saying that the capital invested in trawlers within the last 30 years has doubled?—No; you might rather say that it has trebled.

37,384. When you began fishing, where did the trawlers fish?—They fished on the ground that they frequent at present, with the exception of Waterford and Dunmore. We never went south of the Tuskar light at that time.

37,385. Did you work inside Dublin Bay?—Only occasionally.

37,386. Was there any prohibition?—No.

37,387. What was the length of the trawl-beam you used then?—From 34 to 36 feet.

37,388. Is it of the same length now?—It runs from 40 to 45 feet now.

37,389. Then you found a larger beam necessary for the larger vessels?—Yes.

37,390. If there had been any restriction in regard to the size of the trawl, would that have prevented you from using vessels of a larger tonnage?—I think it would.

37,391. What was the size of the trawl mesh that you used when you first began?—Precisely the same size as that we use at present. We have a seven-inch mesh in the square of the back; it is the same in the wings, and diminishes down to the pocket. There has been no alteration in that respect at all.

37,392. How do you measure the mesh?—It will be three and a half inches from knot to knot, or seven when extended.

37,393. Do you trawl over the same limits?—Yes.

37,394. And you work with the same mesh?—Yes.

37,395. Then the only great difference is, that your vessels have doubled in tonnage, and pretty nearly doubled in number?—Yes.

37,396. And the capital invested in them has largely increased?—Yes.

37,397. What fish do you get with your trawl?—Soles, plaice, turbot, hake, conger, ling, bream, whiting, and skate. We take those in the largest quantity, and then white soles, meagrims, a very few dories, and a great many gurnards. In fact, the description of fish varies very much according to the fishing ground.

37,398. Do you get codfish?—Yes.

37,399. In great quantities?—No, in no great quantities.

37,400. And haddock?—Not in very great quantities.

37,401. Was the quantity of haddock and cod greater when you began fishing than it is now?—Yes, very much greater.

37,402. Does that decrease apply particularly to cod or to haddock?—More particularly to haddock. The haddock increased during my recollection of trawling. I should state I had been trawling for 20 years from Dublin, and there were some who had been trawling nearly 45 years, and during all that time, up to within the last seven years, the haddocks rather increased. About seven years ago, the haddock was

never known to be so abundant in the Irish Channel as it was in that particular season.

37,403. Seven years ago?—Yes, about that time. I have had several conversations with the long-line and hook fishermen belonging to Howth, and they have declared that when they were boys, 60 years ago, haddocks were then vastly less abundant and inferior in quality to those that were caught seven years ago.

37,404. They were larger and finer fish some years ago?—Yes.

37,405. We are informed that about six or seven years ago the haddocks suddenly fell off?—Yes; they disappeared, as if they all went through the bottom.

37,406. Did that take place after the great abundance?—Yes, the next season or shortly after.

37,407. Has there been any similar change in the abundance of the cod?—They have diminished in quantity.

37,408. As taken by the trawl?—Yes, and by the hook, too.

37,409. Then does the sole constitute any large proportion of the supply of fish taken by the trawl?—It does.

37,410. What proportion of your haul is formed of soles?—There is one particular ground we fish where soles are the prevailing fish. That is off the Calf of Man.

37,411. Is the sole a fish in great demand in Dublin market?—Yes.

37,412. Do you supply the Dublin market principally here?—Yes, exclusively, for many years.

37,413. Have you yourself been a practical trawler?—No, I have only been out occasionally with them, but I have been continually superintending the fitting out and building of them.

37,414. As a trawl owner?—Yes.

37,415. Have you owned a large number of trawlers?—Yes, the largest number in this country, I think.

37,416. How many?—I have got 11 at present. I remember when I had 13 within a year and a half.

37,417. Have you ever, as a trawl owner, been summoned into the magistrates' court in consequence of your trawlers having carried away the lines of the long-line fishermen?—Not in Dublin.

37,418. Have you been summoned elsewhere?—Yes, in Galway.

37,419. But not in Dublin?—No.

37,420. During the 30 years you have been working here you have never had a summons?—No. If I thought there was a bad case of that sort, and that the poor men had suffered, I have always thought it more prudent to give them compensation than to have any litigation in the matter.

37,421. Do you work over the same ground as the long-line men work over?—Yes; we work over Rockmere.

37,422. What is the range of ground the Ringsend trawlers work over—how many miles north or south?—There is a variety of not very large grounds.

37,423. What length north and south do they stretch over?—Some 20 miles along north-east and south-east. I have a map with each of the fishing grounds mapped upon it.

37,424. Do your trawling grounds extend as much as 100 miles from north to south?—Yes, more than that.

37,425. About 150 miles?—Yes, about 150 miles.

37,426. How much east and west?—The only eastern ground we have is the Isle of Man ground. The deep-water ground is the most eastern of the whole grounds.

37,427. How much east and west have you to work upon?—Forty or fifty miles.

37,428. Taking the whole of that large run, is the greater part of it soft ground over which you can trawl?—A great deal of it is mud, on which we never trawl.

37,429. Is much of it rocky ground?—Yes, barren ground over which we do not trawl; we never trawl from Wicklow Head to the other side of Tuskar light. That is outside ground. It is all barren ground, where there is no food for the fish, and is never trawled over.

37,430. Do the long-line men set their lines over all that area?—They do not.

37,431. Over how much of it do they set their lines?—From Skerries Bay and Rockmere and on the south sands.

37,432. If you did not work your trawls over that large space, would a considerable part of it remain unfished?—A great portion of it would.

37,433. Does it happen that occasionally you send your boats to trawl over one of the patches in this area of ground for any considerable time?—Rarely more than for two months.

37,434. But not unfrequently your trawlers have been working over a limited space for two months?—Yes.

37,435. How many other boats will be working there?—Nearly all.

37,436. As many as 15?—Yes, from 15 to 20, and probably all sometimes. During the whole of the season there is no other fishing ground for them. The last two or three seasons we have all been on the southern fishing grounds.

37,437. How long will the piece of ground be over which they work,—20 or 30 miles on the average?—Not 10 miles in width.

37,438. Then they work in pretty close order?—No.

37,439. Do the whole of those 20 or 30 boats work over that ground for two months?—Yes, during the fishing days, but they are not out often on the Monday, and never on the Sunday, and during the summer months they do not fish on the Saturday. There is only a short time of the year that they fish on the Saturday, when the fish will keep well, so that they may be sold on the Monday.

37,440. Then there are two or three fence days in every week?—Yes. I may say that there are often three or four fence days in a week now.

37,441. When the boats are working over a piece of ground of that kind for a week or a fortnight, do you find any diminution in the quantity of fish they can take?—Not in the slightest.

37,442. What makes you leave one patch of ground and take to another?—Sometimes the buyers get tired of that kind of fish and want a variety, and occasionally the fish shift of their own accord. They will leave a particular ground and come again next year in the proper season.

37,443. Then they leave at a regular time?—Yes. As regards catching all the fish the whole of our 40 or 50 trawlers will be out next month on this very deep-water ground we were speaking of, and they will make a haul on Friday. Every boat out of the whole 40 or 50 will get from 3 up to 10, 12, or 15 turbots, and sometimes they get as many as 20. Perhaps they may go out next week and the week after and find that there is not one turbot to be got amongst the rest of the fish they take.

37,444. You do not mean to say they are all caught in the last haul, although they are all gone?—No, the boats will be three or four miles apart, and it would be impossible for them to take all. It is like a man drawing a bit of string over a street or two here in this town. We may have been catching turbots in great abundance on the Friday, and then next Monday or Tuesday we go out and there is not a turbot to be caught. They have shifted with the herrings, sprats, or whatever fish may have been in.

37,445. What will be the average yield of a single trawl-boat per day,—what weight of fish will it catch?—Taking the year over, three tons will be rather over than under the average.

37,446. Three tons a day?—No, three tons a week.

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37,447. That is half a ton a day?—That will be about the average taking one time with another. They don't get that, however, of prime fish.

37,448. When you commenced 30 years ago how much would be the average?—The boats were smaller and the beams were shorter, but probably the quantity of fish caught was much about the same. There were more haddocks and cod then. Turbot would be about the same, plaice a little scarcer, and hake about as abundant, although there are sometimes more now than ever there was.

37,449. How would it be with whiting?—They have altogether disappeared, with the haddock. There used to be an enormous quantity taken by little boys in the river with rods. Two or three cart loads would be caught by these small boys with rods, showing that there was an enormous quantity outside. They would never have come into the river here if they had not been there. As for catching them in the trawls we would often see the little ones flying through the meshes. For each one taken, ten escaped through the meshes of the trawl.

37,450. How many years ago was that?—About the time that the haddock disappeared.

37,451. Within the last seven years?—Yes.

37,452. There seems to have been a great plentifulness of haddock and whiting, and then suddenly they all went away?—Yes. As regards the supply, I have known a hamper of whiting, containing perhaps two and a half hundredweight sold at from 1*s.* to 2*s.* a hamper. Two and a half hundredweight would frequently be sold for 2*s.* and the cartage we should pay upon them would be 1*s.* 6*d.*, so that often in reality they were not worth the labour of obtaining.

37,453. Then the abundance was rather a misfortune than otherwise to the trawlers?—At times, but at another time, when they would be scarce, probably only a short time before they were so plentiful, we should get 3*s.* 6*d.* a basket for them, so that upon the quantity we sold we should have a profit of 2*s.* a basket, and might make 40*s.* or so. At another time, when there are plenty of herrings, fruit, and salmon, people don't care to buy them.

37,454. If the average yield of fish has been the same since you were a trawler, you would see no reason for saying that the fish have fallen off on this coast?—Haddock and cod have.

37,455. But apart from them?—No, not to any great extent.

37,456. Have they fallen off at all?—I think they have.

37,457. To what do you ascribe that?—I cannot tell.

37,458. Do you think they have been over-fished?—I don't think we catch one in a thousand.

37,459. During all this time the long-line fishing has been going on here?—Yes.

37,460. Has it been to your interest to attend the markets?—Yes.

37,461. You do attend the markets?—I did for 30 years. I have sold all the sorts of fish sold in the Dublin market during that time.

37,462. Did you ever see soles brought up by the long-line fishermen?—No, not with any regularity.

37,463. What would be the average proportion brought by the long-line fishermen?—I can give a pretty good guess at it. I have not often seen more than 10 brought by them.

37,464. What would be the average of all kinds?—They never fished all the year round. There was a fence time with them, and they gave up altogether for a certain time. After the cod spawn, about the 1st of April, they start off into deep water. The haddock disappeared from them, and they went round to the north-east to cure fish.

37,465. Take one day with another when they were fishing, would they supply 10 tons to the market on the average?—Yes, they would, and perhaps sometimes more. There is a large space where they alone can fish in the lower part of Skerries Bay. It is rough ground, where we could never trawl, but the fish have also disappeared from them, although a trawl was never shot there. The whole coast eastward is covered with boulder stones, upon which it would be impossible for us to trawl.

37,466. Where is that?—By the Mountain's Foot.

37,467. That is ground on which the trawlers never come?—No; owing to these boulder stones.

37,468. Do they fish outside?—Yes; in the spring we have got large haddocks from that very ground; there are very few small ones at all. The cod there were at one time very large and fine, and they were more in quantity. We got 20 or 30 per day. Turbot also were very abundant, and the cod and hake were enormously large. In fact, I have seen hake caught there fully 6 feet long.

37,469. There seems to have been a certain falling off, apparently, although it has not been very great, in most kinds of fish?—Yes, with the exception of hake; they come in prodigious quantities still, and turbot were as abundant last year as ever they were. There have also been more soles caught off the Isle of Man than there have been for a number of years previously.

37,470. At the time trawling in Dundalk Bay was permitted, was it your interest to have your trawlers trawling in the bay?—Yes, I think it was. At particular times in the winter, we have to go a great distance down to the Waterford coast, but owing to the prevalence of southerly and south-westerly gales, we have not been able to get there. Our men are sometimes then very badly off, whereas, if they were allowed to fish for some two or three months in the winter time in Dublin Bay, they would be able to take some 7,000*l.* or 10,000*l.* worth of fish. That money would be distributed among the people and the owners of the boats, and I don't think the hookmen would suffer in the slightest degree, because we catch large plaice in our trawl, which they never take on their lines. They are very small plaice which they get, but we get them 18 or 20 inches long.

37,471. Do you mean to say, that the long-line men do not get the big plaice?—Yes, they don't take the hook.

37,472. (*Mr. Lefevre.*) Do your observations apply also to Drogheda Bay, and other parts?—Yes, and to Dundalk Bay. Some persons there applied to the Commissioners of Fisheries to rescind the byelaw prohibiting fishing in Dundalk Bay; I do not know whether it was the gentry in the neighbourhood or the boat owners, but they asked, whether, if it was rescinded, the Dublin trawlers would be allowed to fish there. The Commissioners said that of course they would if the byelaw was rescinded. "Oh" said they, "if the Dublin trawlers would be allowed, then we don't want the byelaw rescinded." In point of fact, they wanted the fee simple of the fishing in Dundalk Bay for themselves. The poor people are sadly mistaken with regard to us; in fact there is no water in that bay sufficient to swim our boats, much less to enable us to fish there.

37,473. (*Professor Huxley.*) What is the greatest depth of water you trawl in in St. George's Channel?—From 45 to 50 fathoms. There are deep spots where it rises up to 60 fathoms.

37,474. When you are trawling in that depth, what proportion of unsizeable fish do you get in the trawl?—Scarcely any in deep water.

37,475. Does the quantity increase as you come into more shallow water; is it greatest in the shallow bays?—Yes.

37,476. Is it your impression that the destruction of fish that takes place in the bays is injurious to the fisheries?—I don't think when the trawlers are drawing 13 feet of water, they would fish where there would be any destruction that would be injurious to the fishing. In my experience, there are zones or belts where the fish come in. They come in certain distances, until they actually come into two feet of water, and then you will see little plaice and turbot

not larger than a sixpenny piece, and as they increase in size they go off into deeper water.

37,477. Do you think that the catching of those small fish, not more than the width of a sixpence or shilling, would be injurious to the fisheries ?—I fancy that it would.

37,478. Do you think it would be destroying fish that would grow up to be larger ?—I think it might be the case, but then instinct leads them to go further out. Fourteen years ago, I have seen herring fry caught up in hoop nets at Essex Bridge, mid-way to the wall of the Phœnix Park.

37,479. Were they herring fry ?—Yes ; they have been here ever since.

37,480. Are they being sold in the market ?—No, but I think a few of them have been caught and sold as whitebait. I have not been attending the market here for the last 10 or 15 years.

37,481. Did you ever see sprats here ?—I never saw sprats here but once.

37,482. There is a further statement made, that the trawlers are in the habit of catching up and destroying a great deal of spawn and the eggs of fish ; what is your opinion about that,—did you ever see any in the trawl ?—I have been on the deck of the trawlers, as a constant habit, for years until lately. It was my custom to go on board all our boats as they came in; I have been out a few times with them; and at all times I inquired minutely of the masters and crews what had been going on. I can state with confidence, that what you call ordinary fish spawn—the ova of the fish—was never taken in the trawl. The only matter we have got in the trawl, which we knew to be spawn, was sea grape and sculsh, "pounds of candles" as they are called. We get the spawn of the whelk occasionally. I noticed a short time ago, upon the Wexford coast, inside where the oyster men dredge, there was strewed a great quantity of that kind of spawn, like honeycomb in large masses.

37,483. Was that after a gale ?—Yes; but I don't think that they were driven ashore until the young had escaped from the cells. There was nothing but empty cells, and you might have blown them from your hand.

37,484. Do you know the thing they call in England "dead-man's fingers" ?—Yes.

37,485. Do you get that ?—Yes, in great quantities; they call it here "thumbs."

37,486. There is a further statement respecting the action of the trawlers upon other fishermen, namely, that they are very apt to get foul of the drift-net men; do you work over the same ground that they do ?—In the day-time we work over the ground that they work over at night.

37,487. Do you not trawl at night ?—Not always. We could not catch fish in deep water at night; but in Skerries Bay the hauls are best by night. It is muddy ground, and I don't think the fish see the trawl. I have seen the deck covered with brown lobsters at times, whereas one of them has not been known to be taken by a trawl in the night-time.

37,488. Then you do not practise trawling at night? —Not in deep water.

37,489. Then, in that case, you would never get foul of the drift men ?—I have heard of two cases in which trawlers have been foul of them.

37,490. Have you ever had complaints made to you on that point ?—Last year a trawler was prosecuted for cutting a drift-man's net, and he had to pay for the nets. There was a similar case the same year, and a collection was made to pay for the drift nets, Whether the damage arose from the drift-net man having the ropes to his nets defective I can't say, nor will I undertake to say whether the nets were not cut by the drift-net men themselves.

37,491. Those trawlers must have been working at night ?—Yes.

37,492. Are there many of them that do that ?—They are almost too lazy to heave their trawl up, and if they don't heave it they cannot catch fish.

37,493. (*Mr. Lefevre.*) Do they remain out all night ?—If they catch no fish they do.

37,494. If trawling at night were forbidden, would it be any serious loss to you ?—Not at that particular place.

37,495. Would it be anywhere ?—Yes.

37,496. Where ?—In Skerries Bay, the Mountain's Foot, and on the Dunmore Grounds.

37,497. Do you catch much fish there?—Yes.

37,498. Are those places where the herring-fishing takes place ?—No ; there is no herring-fishing in Skerries Bay.

37,499. If your trawlers are at a little distance from this spot do they stay out at night ?—If there is little wind and they have little fish to come in with, they do not take the trouble to come in. They heave to, but they don't fish.

37,500. Do they fish as far south as Wexford ?—Not on the Wexford coast, but in Wexford Bay.

37,501. Is there a byelaw prohibiting trawling where the herring-fishing is going on ?—That is in the bay and in the harbour. There are 30 small trawlers there, and the small drift-net boats fish for herrings there.

37,502. Does not that byelaw affect you in any way ?—No. I think there must have been some error in one of the witnesses stating that the Commissioners refused to assist them in putting down trawling. I was present when the complaint was made. Mr. Barry held an inquiry, and the conclusion come to was, that the fellows were more frightened than hurt. Not one of them could state that they had sustained any injury.

37,503. Would it be injurious to you, as a trawl owner, if your boats were prohibited trawling during the herring season, on the ground frequented by the herring-boats ? — During the herring season we scarcely ever fish at night. It is actually out of the trawling season that herrings are got there. For the last two or three months scarcely any trawlers have been to sea, owing to the want of hands.

37,504. What is the ground you fish on off the Isle of Man ?—There is a large patch of ground there. There is no herring-fishing going on there.

37,505. Do you fish over the coral beds there ?—No ; that is off Douglas Bank and we do not trawl there.

37,506. Do you meet many trawlers from Liverpool ?—I have seen a few off the Isle of Man, but they never come on this coast. I never saw them here.

37,507. Is there much ground in the Irish Channel that you have not tried ?—I don't think that would make one per cent. difference.

37,508. Have you ever been summoned in consequence of your trawlers having fished within the prohibited districts ?—Yes, some of our men have.

37,509. Do you think that prohibition is observed by the trawlers on the whole ?—I think it is.

37,510. How many cases have occurred ?—Not more than six.—If I said six, I should exceed the number of prosecutions for fishing in the bays.

37,511. Have the summonses been taken out by the Coastguard officers or by the fishermen ?—The fishermen have become informers to the crew of the "Ajax," who brought the trawlers in. One case occurred which I think was a great hardship. They got off Wicklow Head and towed in for shelter; they were caught there and fined, and half of the fine had to be paid.

37,512. What did the fine amount to ?—Twenty pounds and the forfeiture of the net.

37,513. Does any portion of it go to the informer ? —A portion of it does.

37,514. What number of men have you in your boat ?—Three men and a boy. I imagine that oftener they have three boys and a man.

37,515. Are they mostly Irishmen ?—Yes, except a few. I have only one Englishman, and he is part owner, but his sons have been born in Ireland. Englishmen certainly came here to colonise the place, when the fishing was started by boats from Devonshire. Up to that time they only trawled when they chose—one month out of twelve, and it must have been fine weather, or else they would not go out.

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They would never go out at all, unless they were sure to get back the same night.

37,516. Has the disappearance of the haddock made any difference in your profits?—It has.

37,517. Do you find that you get a better price for other kinds of fish?—The price fluctuates.

37,518. Has the number of trawlers increased?—It has increased within the last few years. Four, five, or six have been added within the last few years back. Notwithstanding the disappearance of the haddock, I still live in the hope of seeing them return. I have heard of the herrings going away for 20 years, and remaining away for that length of time, and then coming back again. I have the greatest faith in seeing the haddocks come back again. I think we have neither caught nor destroyed them, but that they have taken a change. After the disappearance of the trawlers from our coast, I was frequently at Liverpool on business. I have seen some trawlers land enormous quantities of the same description of haddock which we caught in our smacks here. They caught tons of haddock where haddock formerly was never known. I think, until the last 10 years, the haddocks were never known upon the Liverpool coast.

37,519. Where are they got?—To the east side of of the Isle of Man, on the coast off Fleetwood, and on the Cumberland coast.

37,520. Are your men paid by share?—Yes.

37,521. Have you ever sent your vessels round to the west coast?—Yes, to Galway and Dingle.

37,522. How long ago was that?—About 13 years ago.

37,523. How long did they remain there?—For one season. They allowed them to remain at Galway for one season, until the Claddagh people turned out, and compelled them to put their trawls on the deck. They would not allow them to fish.

37,524. Were they intimidated?—Yes.

37,525. Did they make good hauls when they were there?—Almost equal to anywhere in the country, at a certain time.

37,526. What time was that?—In the spring months, March and April. It was inside the Arran Islands. They call it the Ailladie Ground. The soles are very abundant and fine.

37,527. Was that outside the prohibited line?—It is, a long way.

37,528. Were your boats there before the prohibition was enforced?—No; subsequent to the prohibition.

37,529. What other fish do they catch there in abundance?—Turbot were pretty abundant; plaice hake, and turbot were very abundant.

37,530. Did you catch any haddock?—Very few; but fine and large whiting. Very good in quality, though not many in quantity.

37,531. You were obliged to recall your boats, in consequence of the intimidation?—Yes; I despaired of doing any good with them.

37,532. During the time your vessels were there, did they do better than on the east coast?—Yes. They determined, however, to put the trawling down, at all hazards; they would set their lines right in your way, and they did not care if you meddled with them or not; they rather liked the pleasure of going to law with you.

37,533. Did you confine yourselves entirely to fishing within the islands?—Yes. There is one remark I ought to make. In the latter part of the year 1847, the Society of Friends chartered a vessel from my father, for the purpose of fishing the west and south coasts. It was one of the largest and best trawlers which could be obtained. They commenced their operations in Clew Bay. I was bound to supply nets and all fittings. No matter how many nets they lost, I was obliged always to keep them in good order. We were well paid for the work, it is true, but the risk of the nets was solely my own. We tried all the fishing grounds outside the headlands, from Clew Bay round to Cork Harbour, and I never made a clear haul, not even for an hour, in any part of the coast. We spent, in the time, large sums of money. They chartered the vessel for a year and a half, and a good able man, Mr. Tottington, Secretary of the Society, remained on board himself. The result of those operations was, to convince me that there is no fishing ground whatever outside the headlands on the west coast.

37,534. On what kind of ground did you fish?—It was a rough bottom, all rocky. Sometimes they would heave the lead down on the top of a flat rock, and it would come up with a little bit of sand in it, but it was no use fishing there. They had also the whole force of the Atlantic to contend against.

37,535. How far did this vessel explore?—From Clew Bay to Cork Harbour, and the only patch of ground they got was a little patch of ground west of the Cape, where there are about five miles of ground in length, by one and a quarter miles wide. Donegal Bay, Galway Bay, and a few of the minor bays, Dingle and Bantry, were the only places where they could get the fish in any quantity. They gave away all the fish they caught, although they paid so well for catching it.

37,536. Is the ground in Galway Bay, which you speak of, as good for fishing between the islands to a line drawn from Black Head to Corrahowna Point?—It is.

37,537. That is, the line drawn as it is at present?—I think so. Any extension of the line in Galway Bay would be equivalent to depriving them of Galway Bay. I would rather recommend them to push in the line to five fathoms of water, instead of extending it outwards.

37,538. If it were extended further out, do you think it would be injurious to the fishery?—Yes; and I do not think the Claddagh men would avail themselves of one atom of the benefit.

37,539. How many trawlers might be employed there?—I do not think any number of trawlers would be able to injure the fishing during the season. During certain winds the bay is full, and then, probably next week, there will not be a fish in it; they clear out at a certain time. I think they fill up in the bay in certain winds, and if they are not caught they will go away. There is an enormous area of coast, which must produce a prodigious amount of fish. They do not work the long-lines there the same as the Skerries men. The whole coast, in point of fact, is lost to them. They only fish about the bay for herrings in the shallow water.

37,540. (*Professor Huxley.*) Do you consider that there is a good long-line fishing outside, although there is no fishing for trawlers?—Yes.

37,541. Then you might apply to have the law reversed, and let the long-line men go outside and the trawlers come in?—Yes, precisely.

37,542. You spoke just now about the trawlers not fishing for the last two or three months?—They have not.

37,543. Why is that?—Because they have had other employments. They make more money in the herring-boats and yachts.

37,544. (*Mr. Lefevre.*) Do you ever fit out your trawl-vessels for the herring-fishing?—Yes. Last year they were not successful, but this year they have been.

37,545. Do you find the boats convenient for the purpose?—There are some advantages and some disadvantages. In the first place, they are large fine-built vessels, and there is no fear of drowning the people in them. They can go out and get in in safety, whereas there is great risk of an open boat getting swamped.

37,546. They can fish at times when the other boats cannot venture out?—It is only in the summer months, when they can get no trawling, that they go out. We never consider June, July, and the first of August profitable for trawling; the ground is soft and the water deep, there is no wind, and the fish are not in demand. They may as well bring paving stones to the market as trawl-fish then. At that

time there are plenty of herrings, salmon trout, mackerel, and fruit, and a variety of other things.

37,547. Do you know the ground where the soles spawn ?—We fancy that we do.

37,548. Where is it ?—We know they are full of spawn when we come on the Isle of Man ground. I have heard the masters of the vessels say that they never miss them off that ground until the latter end of the season, when they get them without the spawn.

37,549. When are they full of spawn ?—At the first of the season. We fancy that they go upon the rough ground. We lose them on the rough ground, but we are not able to catch them where they spawn. If we were to manufacture the cable of the "Great Eastern" into a trawl-net, we should not be able to fish where they go to spawn.

37,550. In what depth of water ?—Forty-five fathoms. They evidently spawn there, although they sometimes spawn in shoal water as well. There they are on the ground, at all events, and they are a long way from any other ground on the Irish coast.

37,551. When you fished in Dublin Bay, was the proportion of small fish you caught greater than elsewhere ?—There was always a small average of small plaice. The plaice we caught in that way were exactly the same as those they take on the long line.

37,552. Were there many small soles or turbot ?—No, very few ; very little of that indeed.

37,553. Did you catch any turbot in the bay ?—Yes, a few.

37,554. Or soles ?—A few small soles, but we got prime plaice in the bay, which would not have been caught by anybody else, nor could we ever find out where they go to when they leave the bay. The bay has been cleared out clean ; although we do not catch them, they clear out.

37,555. (*Professor Huxley.*) Are you acquainted with all the trawl owners here for the last 30 years ?—Yes.

37,556. Are you aware whether any of the trawlers have given up their vessels, and sold them and gone out of the business on account of not finding it successful ?—Like all other trades, there are some people who enter it who are not prudent enough to manage their business properly. Perhaps they may have entered it in the expectation of making a rapid fortune. I know a time when it was like coining money, and some who went into it thought that all they had to do was to take a summer residence, and wind up.

37,557. Was it always easy to get trawled fish ?—Yes, it was easy to get it then, and it is easy to get it now.

37,558. There is not such a demand for trawlers as there was, is there ?—No, they do not appear to be in favour.

37,559. Are persons who are engaged in fishing afraid of being interfered with by any legislative enactment ?—Not here.

37,560. That is not the reason they abstain from going into the business ?—No.

37,561. Is it because money is tight here that they do not think it will pay ?—I do not know. Some persons think there are fortunes to be made out of the herring trade. There is a tremendous rush at present to get into the herring trade, and I am convinced that there will very soon be a greater rush to get out of it. There was the same rush to get into the trawling trade, and there was as great a rush to get out of it again. There was a company started here ; I am happy to say that most of them were Londoners. They were coaxed into investing 40,000*l.* down at Galway, and they sunk the whole capital in 18 months. When they wound up, the liquidator did not get his costs out of them. I never got anything of them until they wound up, and then I went to the auction. If such a company were started every year, I think I should make a fortune out of their work. There are six rather inferior vessels at Waterford, and there are also six tolerable good vessels at Galway. I think Mr. Sweeney, of Galway, has five or six as good vessels, taking them on the average, as you would get anywhere, even at Hull.

37,562. (*Mr. Lefevre.*) With those exceptions, are there no other trawlers ?—No.

37,563. (*Professor Huxley.*) It is stated that the trawlers, working by day over the same ground that the herrings frequent, frighten away the shoals ?—I do not believe it. We have been fishing for 40 years over that very ground. It is a particular ground, which is most profitable to us as trawlers. In the deep-sea season it is our only standing profit, and it is on that very ground where the herrings are caught in large quantities.

37,564. Are you working upon that ground now ?—Yes, that is where we have been fishing.

37,565. Do you not find that your heavy trawl-boats drift too fast for your nets, if there is a little breeze ?—I do not. There is a way of adapting the length and depth and weight of the trawl to the size of the vessel. We fished last season during eight or ten weeks and made a haul of 60*l.*

37,566. You are speaking now of the herring-fishing ?—Yes. Our nets were not deep enough, or there was something wrong with us—a screw loose somewhere. This year we profited by the experience of last year, and the first week we made 60*l.*

37,567. Did you have much larger nets ?—No ; they were the same, but we added five score to the depth. The Cornish men are not successful, because their nets are too shallow—they rely on the length and not on the depth. The deep net will keep steady in the water, whereas the shallow nets keep dipping and washing about, and will not catch the herring.

37,568. Then your heavy boat becomes rather an advantage than otherwise in the fishing ?—Yes ; and we heave up with a spring back and carry our nets on deck.

37,569. Your trawl-boats are not bigger than the Dutch busses, are they ? Do you know the Dutch busses on the east coast of England ?—Yes, I have seen them.

37,570. Are your trawl-boats about the same size ?—Yes.

37,571. You do not think that the trawling frightens the herrings away ?—I am sure it does not. There have been herrings here from time immemorial. The first day they fished for them, there were some Cornish men returning from Ardglass ; seeing herrings, they shot their nets and they got them there. They told their countrymen what had happened, and next year they stayed at Howth, and got money hand over foot. After that they went away, and Scotch men, and Manx men, and other people came here. It is only lately that the people here commenced getting herring nets themselves.

37,572. You were trawling all the time over the ground ?—Yes. Our people knew very well that there were plenty of herrings there, on account of the enormous quantity of hake and turbot they got there.

The witness withdrew.

THOMAS PILE called and examined.

T. Pile.

37,573. (*Professor Huxley.*) What is your occupation ?—I am a fish factor.

37,574. A buyer of fish ?—No, a seller of fish.

37,575. You buy fish from the fishermen ?—I sell for them on commission.

37,576. Then you are a commission agent for the fishermen ?—Yes.

37,577. Have you been long engaged in that occupation ?—Yes, about 16 years.

37,578. Have you found that the supply of fish remains stationary, or has it increased or diminished ?—Do you mean at certain seasons of the year ?

37,579. No, altogether, taking one season with another ?—I am not aware that the fish have de-

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creased to any great amount, with the exception of haddock and cod.

37,580. In those fish has there been a considerable decrease?—There has, decidedly.

37,581. When did you first observe that?—I agree with the evidence you have had just now, that it is about seven or eight years since. About that time we had very good takes, so good, in point of fact, that I was investing in new trawlers, and other persons were doing the same, when shortly afterwards we found the haddocks and cod dropping away.

37,582. Do you sell all the different kinds of fish?—Yes.

37,583. Herrings?—No herrings. None come into Dublin to be sold by commission; they are sold at Howth.

37,584. You have heard the evidence of Mr. Good?—Yes.

37,585. Do you agree with it?—I do. Mr. Good has stated the matter very fairly.

37,586. (*Mr. Lefevre.*) Are you a trawl owner yourself?—Yes.

37,587. How many do you own?—Two.

37,588. (*Professor Huxley.*) Supposing trawling were put down, what effect would that have on the fish market?—I am not aware how the market would be supplied, if trawling was put down. Certainly not by the hook and line fishermen.

37,589. The last witness said the liners could supply 10 tons a day; how much is required for the Dublin market?—A large quantity; I can scarcely say, but a very large quantity is brought into Dublin and exported to Liverpool.

37,590. How much will there be a demand for at Dublin?—Perhaps from 10 to 20 tons. Those fish Mr. Good mentioned are cod, ling, and conger eel, a heavy description of fish, a heavier class of fish than we send into the market.

37,591. From your knowledge of the markets here, are you able to say with what kinds of fish the market would be supplied if trawling was put down?—The only fish then would be conger, ling, cod, and pollack. We should never catch plaice by the hook, except in small quantities.

37,592. Do you think they could not supply the market with plaice?—The men in smaller boats might, but the Kingstown men catch flounders.

37,593. How would it be with regard to turbot?—They would only catch a turbot very rarely.

37,594. Have you heard of instances in which the turbot has been caught with the hook?—Yes, but it is not common; it is entirely exceptional.

37,595. What is most in demand?—Turbot, haddock, and soles, if we had them.

37,596. Is there a large and good demand for cod?—Yes, in the season.

37,597. Is there much demand for conger?—Yes, from the poorer classes.

37,598. Is there much demand for pollack?—Not as much as for conger and hake.

37,599. What will the great demand be for the middle and upper classes; will it be soles and plaice?—Yes, and brill, if we had them.

37,600. Those are fish caught by the trawl?—Yes.

37,601. And for the middle and upper classes the market would be emptied, if it were not supplied by the trawlers?—Yes.

37,602. Do the poorer classes buy large quantities of conger and hake, and so on?—They do. They give high prices for them. They seem to lay great stress on them.

37,603. What are the fish most in demand for the English market?—Cod and soles, haddock and turbot.

37,604. Is it trawled fish that are more in demand, or the hooked fish?—The trawled fish. The hook fishermen can only supply them with cod.

37,605. You heard an estimate made of the quantity supplied, at half a ton a day by each trawler?—Yes, that would be a fair average. Sometimes more, sometimes less.

37,606. It would be half a ton a day for each trawler among the whole body of trawlers?—Yes that would be a fair average.

37,607. That will average 15 tons a day?—Yes, some of the trawlers may be out, and some may not. It would be very rarely that we should have 40 boats fishing at one time.

37,608. Have you any notion as to what the total quantity of fish supplied to the Dublin market is, by all kinds of fishing-boats; will there be 30 tons?—Perhaps there may be sometimes, but at others there may not be as many hundredweights.

37,609. Taking one day with another?—Ten or twelve tons would be a fair average.

37,610. How much fish would the market be deprived of, if the trawling were stopped?—I can hardly say that.

37,611. How much per cent.?—I fear the greater quantity.

37,612. Fifty per cent?—Yes, and more than that.

37,613. Sixty?—I should say eighty. But it is only for some few months that they are out at sea; at present they are sending none in.

37,614. Do they find the herring-fishing more desirable?—Yes.

37,615. The great demand now in the market is for herrings?—Yes.

37,616. Supposing there were a great demand for long-line fish, would the supply meet that demand?—Yes, if the men went to it; but that is not the habit of the men during the summer season. They go on shore, and go to other things. They go to the west coast for the curing.

37,617. What would be the effect on prices if trawling was stopped?—It would increase them very considerably.

37,618. Are the trawled fish, as a general rule, cheaper than the line fish?—The fish obtained by trawl-fishing is quite a distinct class of fish.

37,619. You cannot compare them?—Not very well. We sometimes catch cod and hake, and trawled cod is always preferred to the hooked. They are always firmer and better fish.

37,620. How is the money value of the two kinds of fish? I gather from you that the fish consumed by the higher classes is mainly supplied by the trawlers?—Yes.

37,621. Then is it not altogether a more expensive fish?—Yes.

37,622. Then is the money value of a trawled cargo, weight for weight, greater than that of a lined cargo?—Yes.

37,623. Then the stopping of trawling would, in reality, stop a large proportion of the wealth brought into Dublin?—Yes; 90 per cent. of the wealth brought into Dublin by fishing.

37,624. Is there anything you wish to add to the evidence we have received from Mr. Good?—No.

37,625. (*Mr. Lefevre.*) Comparing the prices now with what they were 10 or 15 years ago, is there much difference?—The prices have advanced.

37,626. Take the price of soles?—It has advanced.

37,627. How much?—In some cases nearly 100 per cent., and 50 per cent. in others. The price depends very much upon the supply.

37,628. Is that increased price due to a diminished supply?—No; but to an increased demand for fish from England.

37,629. And also from the country districts in Ireland?—Yes, around Dublin.

37,630. I suppose an increase in railways has produced a considerable difference?—It has made a certain demand, but not in Dublin so much as in other places. It has rather brought the fish into Dublin, instead of supplying the interior from Dublin.

37,631. Is there much fish brought in from the westward?—There is some, but not a very large quantity.

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37,632. What sort of fish is it?—Turbot, from Galway, and soles.

37,633. Does that form a large proportion of the fish brought into the market?—In the Galway season they send us large quantities.

37,634. Is the supply kept up now?—No, it has quite stopped.

37,635. Is Galway the only place from whence the fish come in in large quantities?—No, from other places,—from Ballyheighe and other places.

37,636. Is there any supply of haddock obtained now from the west coast?—I do not think they ever had any large quantities of haddock there.

37,637. Was there any difference of price in the haddocks caught by the trawl and by the hook?—The same rule holds as with the cod. The hooked haddocks will sometimes be brighter, but as a rule the trawled fish, whether it is that it is caught in deeper water or not, I cannot say, is considered best. I think the hooked fish are caught on the spawning ground. At any rate, we always find that ours sell for the best price.

37,638. Setting aside the haddock and cod, is there as large a supply in the market as there was 10 years ago?—I think not.

37,639. Not as large?—No.

37,640. Setting aside the haddock and cod?—There has been some falling off in the supply of fish, but the boats themselves are not properly worked and kept at sea. The men have left them, and that has interfered and led to a diminished supply.

37,641. You are speaking now of the line fishermen, not the trawlers?—No, of the trawlers.

37,642. But the number of trawlers has not fallen off?—No, but the boats have been hauled up, and not been worked.

37,643. The Dublin boats?—Yes.

37,644. Has it not paid to work them?—It has not paid in the summer, and the men have left them, as a rule, and gone to the herring-fishing, where they think they do better than if they kept at the trawling.

37,645. Do you think that the increase of the herring fishery has operated on the supply of trawled fish?—It has taken the crews from some of the trawlers, and there are now only a limited number of men here. They have gone to the herring-fishing. One or two have made a good deal of money, and perhaps they have been the means of drawing off 20 after them.

37,646. During the time the trawlers are at work, do they supply as much fish to the market as they did formerly?—There is not much difference.

The witness withdrew.

CHARLES BURNHAM called and examined.

C. Burnham.

37,647. (*Professor Huxley.*) Are you a trawl master?—Yes.

37,648. How long have you been working at it?—I have been a skipper 35 years.

37,649. You are an Englishman?—Yes, but I have been 45 years here.

37,650. Where did you come from in England?—Brixham.

37,651. Were you engaged in trawling there?—Yes.

37,652. Then you know all the ways of the Brixham trawlers?—No, I was young when I left it.

37,653. Have you been fishing here for 35 years?—Yes, for more than 40 years.

37,654. Did you come here to establish trawling on this coast?—I was brought here an apprentice.

37,655. What made you come here?—I came in one of the trawlers.

37,656. Did the Brixham men take it into their heads to come and fish here?—Some Dublin gentlemen bought some of the boats, and the men followed them.

37,657. They bought Brixham trawlers?—Yes.

37,658. And engaged crews to come here?—Yes.

37,659. To teach trawling?—No, to benefit themselves, not to teach trawling.

37,660. Was there no trawling before you came, upwards of 40 years ago?—There was; the boats of this coast were trawling.

37,661. How many trawlers were working here when you came first?—About eight or ten.

37,662. Were they small vessels?—They were vessels of about 40 tons. They were a great deal smaller than they are now.

37,663. How many Brixham boats came here?—They were coming by degrees.

37,664. Were they large boats?—About the same size as the others.

37,665. What made them come, if there were plenty of people trawling here?—They came in the expectation of making more money. Those which were here were doing well.

37,666. Are you a part owner now?—Yes.

37,667. I suppose you were not part owner when you began, 40 years ago?—No.

37,668. Then you have fished your way into it?—Yes.

37,669. Then you have not found trawling turn out so very badly?—We do not complain. There are some disappointments in trawling itself, and we have had great disappointments.

37,670. You get plenty of fish?—Yes, as long as we are at it, we can always go ahead.

37,671. Where are you trawling principally; on all the grounds round this coast?—All round Ireland, from St. John's point to Dungarvan.

37,672. Along the east coast?—Yes.

37,673. You heard what Mr. Good said?—Yes.

37,674. Do you agree with what he said?—There were a few things in which I did not agree, but I have forgotten what they are now. I do not think the trawlers catch half the fish he says they catch.

37,675. You do not think the average of the catch is so great?—Not more than half of it.

37,676. Do you think they do not catch more than a quarter of a ton a day?—Yes, five hundredweight a day; they do not catch more than that.

37,677. Taking one day with another?—Yes.

37,678. What do you think about the catch of small fish; have you noticed that many small fish are caught when you are trawling?—Yes, we catch plenty sometimes, when we are fishing where they are.

37,679. Where do you find them mostly?—Generally in the bays and in shoal water, when we are allowed to go there.

37,680. Not so much in the deep water?—No.

37,681. What proportion of small fish do you get to a haul, when you are fishing in the bays?—That depends on the quantity of all kinds.

37,682. What would be the proportion of the whole quantity; will you get half?—Not a quarter.

37,683. We heard yesterday of people being seen up to their knees in small fish?—I never saw it.

37,684. Have you ever had complaints made against you for getting foul of the long-lines?—I do not think I ever have.

37,685. Does not that happen sometimes?—Yes; but I have not had complaints against the boat of which I own a part more than twice in my lifetime.

37,686. Was that in trawling at night or in the day-time?—I think it was in the day-time.

37,687. When the long-lines are down in the day-time cannot you see the buoys?—We can, and we try to go between them. If we can do that, we can go across without injuring them.

37,688. Can you trawl over a long-line without bringing it up?—I have done so hundreds of times.

37,689. Now and then you bring it up?—Not if we go clear of the buoy. In that case we go clear of them altogether. Sometimes we may have taken off a few hooks.

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37,690. Does it depend upon which way you trawl, whether you go lengthways or athwart ?—The more we go across the line the more likely we are to be clear, except we catch a hook or two.

37,691. When you are trawling at night, are you apt to get foul of the buoys and lines at all ?—They do not put the lines down much at night.

37,692. When you have been among the herring fleet, have you ever got foul of the nets ?—Yes, I think so, but I do not remember more than one instance.

37,693. Were you trawling at night then ?—Yes.

37,694. Were not the boats lighted?—I do not remember whether they were lighted or not, but if they were you could not tell where the nets were, they are such a distance from the boats.

37,695. But most likely you would find the nets somewhere to the windward of the boats ?—We should always do that ; the trawlers have frequently been stopped from trawling on account of the herring nets.

37,696. They cannot trawl if the herring nets are down ?—No, they are obliged to give it up altogether.

37,697. As much damage would be done to the trawlers as to the herring men ?—Yes.

37,698. If they were to turn in among them, they would get entangled with them ?—Yes.

37,699. The labour of getting the trawl clear would be very great ?—Yes, and there would be a great loss of time.

37,700. Should you like to be kept three miles off the herring fleet ?—Yes ; I would keep off altogether when the herring men are out, but there is hardly a trawl shot now at all when the herring men are fishing.

37,701. Is it of importance to you to trawl at night ?—We should make something out of it, if the herring men were not there.

37,702. Do you not get enough fish in the day-time ?—No, nor half enough, day and night.

37,703. Could you get more when you first began ?—Very much more ; the fish were more plentiful then.

37,704. Has it diminished much ?—Yes, a good deal.

37,705. All kinds of fish ?—Yes.

37,706. Do you refer now to deep-sea fishing, as well as to bay fishing ?—Yes.

37,707. They have all fallen off ?—Yes.

37,708. What is the reason for that, do you suppose ?—I cannot give any account of it at all.

37,709. It cannot have fallen off very much, if all the fishermen have been saving money and buying shares in boats, and so on ?—That is not the case now. Everybody is nearly sick of it now, or nearly all.

37,710. We hear that the boats have increased in size?—Yes, but there is a sudden diminution in trawling now. Five or six years ago there was a sudden change, and since then, as Mr. Good has told you, those who were previously anxious to get into it have been trying to get out of it.

37,711. (*Mr. Lefevre.*) The loss of the haddocks has made a great difference, I suppose ?—Yes.

37,712. Do you not earn as much as you formerly did by fishing ?—No.

37,713. You have not been making money during the last few years ?—No.

37,714. When did it begin to fall off ?—About six years ago.

37,715. When the haddocks disappeared ?—Yes.

37,716. Do you think it is due mostly to that ?—I think that is the chief cause.

37,717. Are there many fishermen like you who have got money in the boats ?—There are a few here present ; there are one or two who have.

37,718. Not more than one or two ?—Not in the room now.

37,719. But taking the fishermen altogether ?—There are not many who have shares in the boats. Many are sole owners ; few have shares like myself.

37,720. Do many of the owners of boats fish themselves ?—Yes ; there is one here who owns a boat and goes out fishing himself.

37,721. (*Professor Huxley.*) Does nobody look after your trawl nets here ?—No.

37,722. Have you no regulations over you ?—No, I think not.

37,723. Would you like to have somebody to regulate the size of your beam, and that kind of thing ?—I think every one should regulate his own.

37,724. On some parts of the coast of England there is an Act in force which is called the Convention Act. That Act does not apply here, but I should like to know if you would wish to have regulations of that sort established here. Would you like that the beam of your trawl should not be more than 38 feet long ?—No.

37,725. Would that positively put a stop to fishing with large vessels ?—No ; we could increase the weight of the beam.

37,726. But is it not necessary in hauling in the beam that it should be of a certain size ?—We could get over that, I think.

37,727. You would add to the weight ?—Yes.

37,728. But suppose this rule were in force—"The "total weight of the two irons or head-pieces of a "trawl shall not exceed 287 pounds"?—That would be nearly in proportion to the 38 feet beam.

37,729. Would you be able to use as large vessels as those which you have now ?—Yes.

37,730. With the weight of the head-irons no greater than that ?—Yes.

37,731. I thought you said just now that you would have to increase the weight of your beam, if you had a heavy vessel ?—I do not think so ; there are ways in which we can make up for that deficiency.

37,732. Would it be of any advantage to you to have that regulation ?—No, I do not think so.

37,733. Would you have found any hardship in this regulation—"Trawl-boats shall always keep at a "distance of at least three miles from all boats fishing "for herring or mackerel with drift nets"?—I have no objection at all to that.

37,734. You have no objection ?—Not a bit.

37,735. Suppose you got your nets down and were trawling, and a fleet of drift nets came and shot within half a mile of you, would you like to have to get up your nets and be off ?—It would be to our interest not to be there, if the herring men were there.

37,736. But if they come to you ?—We know they will be there every night, and we know what to trust to.

37,737. Do you have your boats all lettered and numbered ?—Yes.

37,738. Who looks after that ?—The Coastguard.

37,739. Do you have the number painted on the sail ?—Yes.

37,740. Do you find that the paint does any harm to the sail ?—No.

37,741. (*Mr. Lefevre.*) Do the Coastguard ever come out to you, if you are fishing within the prohibited line ?—Yes ; that has been done in Skerries Bay and Balbriggan, but not often.

37,742. And have they warned you to go outside the prohibited line ?—Yes, but we must have fine weather to do that.

37,743. Is there much trawling within the prohibited line ?—Yes, at certain times of the year.

37,744. By Dublin boats ?—Yes, Dublin boats and all kinds of foreigners.

37,745. Do you think they go there on a dark night ?—Yes, and in the day-time too, quite frequently.

37,746. Is there anybody to prevent you ?—If it is blowing a gale off the land, there are none of the Coastguard who can come out ; they know that they are safer ashore.

37,747. Then you do not think the prohibition has been of much use in preventing you from going into the bays ?—The trawlers do not continue it

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as a practice, although they will get in now and then.

37,748. (*Professor Huxley.*) Do you care about coming into the bays in fine weather, or only in coarse weather?—If we were allowed to go into the bays, we should go whenever there was fish to be got there.

37,749. But are the fish as good in the bays as they are outside?—Sometimes; there are certain seasons when they are in good order, and in others they are as bad.

37,750. Did you ever see any fish spawn taken up in the trawl?—No; I do not know what it is. I do not know that I ever got an ounce in my life. I do not know any thing about it, no more than if there were no such thing in the world.

37,751. (*Mr. Lefevre.*) Do you catch many small soles in the bays?—No, there are never many got there.

37,752. Not even small ones?—Not in Dublin Bay; there have been a good many got in Wexford Bay.

37,753. But off Dundalk and Drogheda do you get many there?—No, we never do.

37,754. Then what are the small fish you speak of?—Small plaice, crabs, and the like of that.

37,755. Do you get young turbot?—Yes.

37,756. In Dublin Bay?—I never knew many in Dublin Bay; we should not catch five in a week, if we were trawling all the week.

37,757. Where have you caught young turbot?—In Skerries Bay, at Balbriggan, and in Drogheda Bay.

37,758. Have you caught them in any great numbers?—No.

The witness withdrew.

J. Good.

John Good recalled and examined.

37,759. (*Professor Huxley.*) You wish to make a statement with regard to the earnings of the trawlers?—Yes. The gross earnings of 12 months, seven years ago, were nearly 400*l.*, being 398*l.* odd. That is clear of cartage, commission, and other expenses connected with the fishing. Then we had half of that to keep the vessel out of, and for profit, so that out of all we should have about 100*l.* I do not take the last two seasons, because the vessels have been lying up for two or three months; but last year we fished throughout, and there were 78*l.* of a falling off.

37,760. How long did that average of 400*l.* last?—That average continued, I think, for seven years.

37,761. And when did it begin to fail?—About three or four years ago.

37,762. (*Mr. Lefevre.*) What was the falling off attributable to?—I think to the disappearance of the haddock and cod.

The witness withdrew.

W. Bartlett.

William Bartlett called and examined.

37,763. (*Professor Huxley.*) Are you master of a trawler?—Yes.

37,764. How long have you been engaged in that business?—I think about 31 years.

37,765. Always from this port?—No; I have fished in the English Channel, and the Bristol Channel, and in other parts of Ireland, for a short time.

37,766. Have you heard what the previous witnesses have said?—Yes, I have.

37,767. Do you agree with what they have stated?—Not with the whole of it.

37,768. Do you recollect any point upon which you do not agree with it?—Mr. Good stated that the average quantity of fish caught by each trawl was half a ton per day. I do not believe that. I do not believe that the average is more than was stated by Mr. Burnham.

37,769. You agree with Mr. Burnham rather than with Mr. Good?—Yes.

37,770. That the average is not more than a quarter of a ton?—Yes.

37,771. You think that that is a fair statement?—Some will catch that, and some not.

37,772. With regard to the catch of small fish by the trawls, do you agree with what has already been said, that the quantity of small fish caught by the trawlers is much greater in the bays than outside in deep water?—I do not fish in any bays. I never desire to go into the bays.

37,773. Why is that?—Because I can find more profit by fishing in deep water.

37,774. Do you think that, if the trawlers were kept out of the bays altogether, it would be any loss to you?—It would be to some.

37,775. Why to some more than others?—For myself, I do not fish except in Skerries Bay. In Dublin Bay and Wexford Bay, I have given it up altogether.

37,776. Why?—I do not like fishing in shallow water.

37,777. Is yours a particularly heavy boat?—It is a heavy boat, but not heavier than other people's.

37,778. Do you agree with what has been stated about getting spawn; did you ever see spawn in the trawl?—I think if I had a canvas trawl I might catch spawn, but I do not see how I could with the trawls we use now. I think spawn would pass through them.

37,779. Did you ever have spawn drawn up by the trawl?—I cannot say that I have not seen it.

37,780. Are you sure it was fish spawn?—I cannot say.

37,781. You are not sure what it may have been?—No; but it is very rarely that ever we get any spawn.

37,782. Has the quantity of fish you have taken remained pretty steady?—It has been better of late years with me.

37,783. Better in the deep water?—Yes.

37,784. What have you to say with regard to the supply of haddocks, has that fallen off?—Yes; but I am in hopes every day I go out to find that they have come back again.

37,785. What makes you think they will come back again?—I believe they will, because we used to get such a number, and we got a few the other day.

37,786. Where?—In the deep water.

37,787. Have you been fishing on the English coast?—Yes.

37,788. Did you get them there?—They were very scarce.

37,789. One of the witnesses speaks of their being got by the Liverpool trawlers?—I have not been fishing there.

37,790. Have you ever got into disputes with the long-line fishermen, in consequence of trawling over their lines?—Yes.

37,791. Was it in trawling in the night-time?—Yes, and by day-time too.

37,792. Could you not see the buoys?—We could; but a strong tide was running, and we could not get clear. The work was too hard for us to get the trawl up.

37,793. Would it not take you an hour and a half or two hours to get it up?—Yes, and sometimes more than that.

37,794. If it blew hard, it would take more?—Yes, it would sometimes take four hours to get it up.

37,795. Does it occasionally happen that the distance of the vessel from the buoys is not sufficient to

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allow you to get the trawl up in time ?—Yes; sometimes the tide and wind will drift us foul of the lines.

37,796. When the trawl is athwart of them, do you carry away many hooks ?—If we pass between the buoys, we may take a hook or so.

37,797. But you do not bring up the lines ?—No, the trawl will pass over them.

37,798. Are you much in the way of the drift men, or are they in your way ?—I was trawling last year, and they came out an hour before sunset, and put down their nets all around me, and it was with some difficulty that I could get my trawl up. I was afraid that they would take the law of me, and the law is all in their favour.

37,799. Was it before sunset ?—An hour before sunset.

37,800. Is the state of the law such that, under those circumstances, they would be able to recover from you ?—I believe that, if I had got foul of their nets, they could do as they liked with us. I might just as well say, "I am guilty."

37,801. But if it was not your fault ?—They would not listen to that.

37,802. (*Mr. Lefevre.*) Have you ever had to pay anything for getting foul of their nets or carrying them away ?—No, I never damaged their nets, that I know of.

37,803. Do you know of any trawler that has had to pay anything ?—Yes, one had to do so a little time ago.

37,804. For carrying away nets ?—No, for cutting them.

37,805. (*Professor Huxley.*) Is there anything you would like to add to the evidence you have already given ?—No, nothing more.

37,806. (*Mr. Lefevre.*) Are you yourself the owner of a trawler ?—Yes.

37,807. How long have you owned her ?—I have been part owner for 13 or 14 years.

37,808. Your profits have not fallen off of late years ?—I have not observed them do so.

37,809. Do you agree with Mr. Good, that the haddocks were in great abundance seven years ago ?—Yes.

37,810. Previous to that, did they fall off as much as they have fallen off now ?—They did fall off greatly. I have got some in and out.

The witness withdrew.

A. Blackmore.

ALEXANDER BLACKMORE called and examined.

37,811. (*Professor Huxley.*) You are the master of a trawler ?—Yes.

37,812. Are you part owner of one as well ?—No.

37,813. How many years have you been engaged in fishing ?—For 30 years or more; ever since I was a child.

37,814. Have you always been fishing from this place, Ringsend ?—No, I served part of my time in Brixham.

37,815. Are you a Brixham man ?—Yes.

37,816. Did you come the same time as Mr. Burnham ?—I was not born then, I believe.

37,817. What made you come here fishing ?—I thought I could make more of it than in England.

37,818. Have you been trawling over this ground ever since ?—Yes.

37,819. How many years altogether have you been trawling here ?—Twenty-six or twenty-seven.

37,820. How do you find the supply of fish now, compared with what it used to be ?—I think it was scarcer 20 years ago than what it has been for a few years past.

37,821. That is with the exception of haddocks ?—Haddocks and everything were scarcer then.

37,822. Twenty years ago ?—Yes.

37,823. Was there a scarcity of haddocks 20 years ago ?—Yes.

37,824. Did they come back again ?—Yes, more plentiful than ever.

37,825. Was cod scarce too ?—Yes; all fish were scarce.

37,826 Do you recollect in what year that was ?—About 22 years ago.

37,827. 1842 ?—Yes.

37,828. Was that scarcity of fish general ?—Yes, with every one.

37,829. Was trawling going on then as much as it is now ?—Yes, but there were not so many boats as now; and at that time we never went down to Dunmore to catch fish. We never went to the southward.

37,830. Is the ground you trawl over now more extensive than it used to be ?—Yes; we never went off to Dunmore or Dungarvan, or to those places where we get the greatest quantity of fish now.

37,831. Is there much fish caught by trawling in the bays ?—In Wexford Bay there is a good deal of fish, and in Skerries Bay, but that is out in the ocean. It is not a bay at all.

37,832. Would it be a great detriment to the trawlers, if they were forbidden trawling in the bays ?—Not for what they trawl in the bays. They do not trawl at all in the bays at present.

37,833. Mr. Burnham did not seem to agree with that ?—In Wexford Bay they trawl sometimes, but they are allowed off there.

37,834. Is it not an advantage to trawl in the bays when the weather is coarse ?—Yes, in the winter time. Now, nobody would trawl in them. If they did not catch fish, they would leave it. In Wexford Bay the bay is full of fish one week, when, perhaps the next week, they are all gone away, and they will not catch them until the next season comes again.

37,835. Do you think it is the trawling that drives the fish away ?—No; if the trawlers did not go at all the fish would go away.

37,836. Do you agree with the previous witness as to the catch of small fish ?—Yes, in shoal water.

37,837. But there are very little in deep water ?—Yes.

37,838. What have you to say with regard to the taking up spawn in the trawl ?—I do not know much about spawn. I do not know that ever I saw spawn that I could say was spawn.

37,839. Do you got squid spawn sometimes ?—Yes.

37,840. It is like bunches of grapes ?—Yes, we get plenty of that.

37,841. Did you ever see any anything like herring spawn ?—No.

37,842. Is there anything that occurs to you to say about the average quantity of fish taken ? What do you think is about the average quantity per boat ?—I think the last statement was the most correct. Mr. Good went too high.

37,843. There is not half a ton taken by each trawl-boat ?—Our boats never catch as much as that. One boat may get it, but it is not a regular thing to get it.

37,844. Is there any other point that occurs to you, which you wish to bring before us ?—I do not think we could work with beams only 38 feet long. Our vessels are too large for that.

37,845. You think there ought to be a certain proportion between the length of the beam and the length of the vessel ?—Yes. Our beam is 45 feet long, and that it is the shortest length we could work properly.

37,846. In a vessel of the size of yours ?—Yes.

37,847. If you had a smaller beam, you would require a smaller vessel ?—Yes, or we should have to cut a piece of the vessel off.

37,848. Why is that ?—It would be in the way. We should have to go to the aft side of the rigging. We should have no way of getting it in.

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37,849. It would be very inconvenient?—Yes.

37,850. At present there is no regulation at all about the size of the mesh or beam?—No, a man may have a beam 50 feet long, if he likes.

37,851. And you think you get on very well without any regulation?—Yes; we could not work a short beam in any way.

37,852. (*Mr. Lefevre.*) Have you been trawling all the season?—No; I have been carrying herrings to Liverpool.

37,853. Have you found any difference in your earnings for the last three or four months?—The boats have done as well as they could the last season.

37,854. Are you paid by share?—Yes.

37,855. What is the skipper's share?—Thirty shillings out of 8*l*. A share and a half we call it. The vessel takes half, and the crew half. The skipper gets a share and a half and the boy half a share.

37,856. (*Professor Huxley.*) Is there anything you would like to add to what we have heard?—No, I think not. I was down at Kinsale trawling there this season, and I got nothing at all. I never saw a trawl shot there before. We carried our gear with us, and when we had spare time we went out and shot the trawl.

37,857. (*Mr. Lefevre.*) Is the ground good for trawling?—We got soft muddy ground for an hour.

37,858. Were you not there during the season for the fish?—No.

37,859. You might have been trawling at the time when the fish were not on the ground?—That might be so.

37,860. Do you find that the fish often change their ground?—Yes. Wherever we go, if we do not catch the fish we leave the ground. We shift in every way.

37,861. After a time you learn to know the places where you will find the fish?—Yes; we follow the fish round each season in the year.

The witness withdrew.

ALEXANDER AUSTIN called and examined.

A. Austin.

37,862. (*Professor Huxley.*) Are you a fish-curer?—Yes.

37,863. Have you been occupied in fish-curing upon the Irish coast for many years?—Yes, for 20 years.

37,864. Where have you been curing?—Mostly in Dublin, except for three months, when I was in Valentia and Dingle. I have generally been in Dublin, but I have occasionally been in Scotland for a month or so.

37,865. Do you cure herrings, or cod and ling?—Haddock was my principal business up to four years ago. I used to cure for the Irish trade, and I exported a good deal.

37,866. How was it that it ceased to be your principal trade?—I could not get the fish. The supply was very good for seven years, and then it began to get scarce, about seven years ago, and it gradually got scarce until about four years ago, when they disappeared entirely. I think it will be five years, next winter, since I bought haddocks in the Dublin market for curing.

37,867. Do you agree with some of the previous witnesses, that just before they disappeared there was a great abundance of them?—The previous witness must be under a mistake, because the haddocks were my sole business, and no scarcity of haddocks took place 20 years ago.

37,868. None took place?—No. From the time I commenced business in Dublin there was no scarcity for the first five years I was engaged in that business. Any day that I wanted haddocks, I did not require to wait long for them, either at Dublin, the Skerries, or Kingstown. I got as many as I wanted. But about five years after that they got scarcer in the season up to January. There were no haddocks to be had all that winter up to January, and then I bought some, but for about three months I could not get any.

37,869. Was that because they were not to be caught?—They were not to be had in the market. There might be trawled haddocks, but I was not looking for them. The hooked haddocks I bought for curing, and so far I disagree with one of the witnesses, who said he thought the trawled haddocks were decidedly the best.

37,870. What is the reason of that?—When they are caught in the trawl, the haddocks are mauled and knocked about, and they become very soft. The hooked haddocks that I have been in the habit of buying have just been hauled up, and they have been got in a very fine condition.

37,871. Does that depend on the state of the weather?—In hard frosty weather, and with light hauls, they would get good trawled haddocks, but in warm weather and heavy hauls the fish would be too much knocked about.

37,872. Do you agree that, just before the scarcity seven years ago, there was an unusual abundance of haddocks?—I cannot say that there was. There was not an unusual abundance of them. The most plentiful year for haddocks was 18 years ago. The little skiffs going out at Kingstown had very fine hauls. I was down there one day myself, and I saw many people buying them by cart-loads to carry them away. There were no buyers for them. I saw one man who had brought in a boat's load of fish, and had his lines ready to go out again. He said, however, that he was going home, as there were no buyers. I told him that I would buy from him what he could catch. I went out with him in his boat, as I knew that if he had a good take of fish, after selling them at a price, he would be hanging about the steamers and selling them again. I was two hours out with him, and he took 40 score of as fine haddocks as were ever taken. There were a great many of them too large for me. I sold three dozen of them on Monday morning for the price of the whole 40 score.

37,873. All that time trawling was going on?—Yes; but I never used, I think, to get many haddocks before March. When the haddocks begin to get full of spawn, the fish become sick, and will not take the hook.

37,874. When is that?—There has been a great deal of contradictory evidence given about that at your different meetings. I have made a memorandum, which gives my experience in gutting the fish. That has enabled me to judge of these matters.

37,875. Will you read it for us, so that we may have it on our notes?—I wrote it out for the Commissioners of Fisheries here:—

"*April. Haddocks.*—Fish after spawning are very much spent and in poor condition, with nothing inside but entrails and unhealthy looking blood.

May.—Nearly the same, but they have a healthier appearance, and are firmer inside. They are also cleaner and healthier looking, and their stomachs are full of gravelly sand and minute shellfish.

June.—There is a visible improvement. The fish are firm and healthy looking, and their liver is beginning to show.

July.—Still improving, and liver getting larger.

August.—In prime order, and liver still growing.

September.—At their best; liver full grown, and all oil

October.—As good as last month, but can observe the pea; the liver still good and oily.

November.—Still good. The pea enlarging; liver full grown, not so oily, but healthy and in good condition.

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December.—Fish full and in good condition, but not so rich. Pea full grown, and liver getting small and dry.

January.—Still good. The pea of a healthy red colour; liver getting smaller and no oil.

February.—Fish getting poor. Pea soft and pale; liver nearly gone and bloody and unhealthy looking.

March.—Fish at the worst. Pea of pale, soft, and glutinous appearance; each globule appears to be separating previous to spawning; no appearance of liver. The inside of the fish has an unhealthy bloody appearance."

37,876. They spawn about March?—You will see the state of the pea and the liver; when the pea is gone after spawning, the liver begins to show; when the liver is at full growth the pea gradually begins to show. It appears as if the nourishment of the young brood is taken from the liver.

37,877. Have you any idea of the cause of the falling off the haddock-fishing?—I cannot form an idea, but I have a strong hope and faith that they will appear again; they are a migratory fish.

37,878. Do you think they have been trawled out?—No, I am not under that impression at all. I think the Clontarf and Kingstown yawls will get as many fish as they could wish to have. It was the custom in Clontarf and Kingstown for the yawl men to sell their fish by the lump, and not to reckon them by the score. If you paid them by the score, you would get a dozen of them so small as to be scarcely worth having.

37,879. Were they caught by net?—Yes; the large hookers did not catch them, but the little yawls were in the habit of getting them, and they had an equal quantity of small fish with the trawlers, so that unless it was in lifting the spawn, the trawlers did no more injury to the fish, as regards the taking of small fish, than the hookers.

37,880. Do you think that fishing with lines and hooks is quite as destructive as trawling?—Yes, as far as regards the haddocks. If the trawlers were prevented from trawling, it would be necessary to prevent the fishermen from fishing with lines within a certain distance of the shore.

37,881. Would it be of advantage to the fisheries to keep both sets of people from fishing in the bays?—No; I think it is wrong to interfere with anybody's business. It strikes me forcibly that in Dublin Bay, when the haddocks were so plentiful, any injury that was done by the trawlers was in taking the haddocks when they were full of spawn in the month of March. At that time the fish will not take the hook; they were sick at that time, and all the haddocks we got were trawled haddocks.

37,882. (*Mr. Lefevre.*) Do you agree with Mr. Pile, that the trawled cod fetch a better price than those caught by the hook?—From the experience of the last few years, I should say that hooked cod would always bring the best price as a rule. I should say so. There may be an exceptional case where a particular cod will get as good or even a better price.

37,883. Do the trawled fish and those caught by the hook and line come into the market at the same season?—Yes, but in the hooking season the greater portion of the cod is all hooked cod; there will be cartloads and cartloads of hooked cod, and it is very rare to see a full hamper of trawled cod. There is only a very small proportion of trawled cod sold in the market.

37,884. Do you agree that there has been a falling off in cod?—I cannot speak to it for a certainty.

37,885. Have you not cured the cod?—No; all the fish I cure is salmon, sprat, haddocks, and herrings.

37,886. Is there any sprat-fishing here?—I had some sprats from Mr. Pile, which he got from Waterford. The supply was not very large, and as he could not succeed in getting more, I was obliged to get fresh sprats from Scotland and to cure them here.

37,887. Is there any curing of herrings here?—Yes, herrings are cured to a considerable extent. I supply pretty nearly all the cured fish in Ireland, and in the fine way the bloater and kipper herring. The Irish people like the big Stornoway herrings; they do not like the over fine herring.

37,888. Is there also a large importation of cured herrings?—There is a great importation of cured herrings from Scotland, but there is double the quantity of Dublin Bay herrings exported. I myself have sent to the London and Liverpool markets monthly, from the 1st June, from 30*l.* to 50*l.* worth of cured herrings. We get a good return and a ready market.

37,889. Do the Dublin cured herrings fetch a larger price than the Stornoway herrings?—They are a different class of goods. There is as much difference between the Dublin and the Stornoway herring as there is between a chicken and a tough cock. The Irish people throughout this country prefer the big herring; they are no judges of fish. The English and Scotch people like a good fish. They, therefore, prefer exporting their bad herring here, and the Glasgow people get our good herrings there. Here they cry out that what is imported is injurious to the country, but I can assure them that there is more than double the quantity exported from Ireland.

37,890. We were told at Howth, that a great quantity was exported fresh from there?—Not quite fresh, but sprinkled over with salt, and great quantities are bought for the English curers. One curer will buy 100 barrels a day for curing, and it undergoes the process of curing in transit. If they are going to Liverpool, Manchester, or London they are salted here. They are salted enough, and they are cured very like bloaters and kipper herrings. They require merely to be washed and dried.

37,891. Do you cure any herrings from Arklow?—Yes, as soon as we can get them. That is the only chance we have, because when the herrings are taken in Arklow, about May, there are none got anywhere else. We get a high price for them, but as soon as they are taken in other places they get lower in price.

37,892. What time is the season over at the Arklow fisheries?—It does not last more than two or three weeks, and then the winter fishing commences in October.

37,893. (*Professor Huxley.*) After the famine, were there not some curing stations set up on the west coasts of Ireland through the agency of the Fishery Board?—Yes.

37,894. Were you not concerned in that?—Yes, I was there for six months at the three different stations.

37,895. What were the stations?—I went to Castletown in Bear Haven. I received a letter from Mr. Radcliffe, and I went there. I was received somewhat cavalierly by Captain Lyster, who had a curing station two miles from Baltimore. He showed me his curing house. I asked him why the curing station was not at Baltimore. He said he could not find a house convenient to the harbour there. I took a house there, which I said would suit me very well, at 20*l.* a year. I asked where his curing place was, and he told them to take me to the curing stables; he had a curing house above the stables.

37,896. Was that gentleman employed in superintending the Government curing station?—Yes.

37,897. And the station had been set up in that way?—Yes.

37,898. I suppose it is not necessary to ask whether that curing station failed?—Yes, of course it did.

37,899. Then let us take the next?—I went next to Castletown, in Bear Haven. I was there three weeks, and I discharged a cargo of salt. That is all I know about it. The place was then getting in order. I then went to Valentia, and I stayed there three months, and fitted up a splendid curing house there, which was a model of a place.

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37,900. What became of that?—I was there for a good while, but there were no fish to cure. I then thought I could do much better at home, especially as I had my own business to attend to.

37,901. Had curing stations been set up at a place where there were no fish?—At that time there were not. There were only two boats there.

37,902. What induced the people to set up curing stations there?—There was an impression that the fishing boats would come with their fish from Dingle when they found they could get a price for the fish, but nobody came all the time I stayed. After I left, Captain Bennett, an Englishman, went there, as a matter of speculation. Mr. Fowler was his agent, and some boats collected there, and the fish were carried in, but it was a bad job altogether.

37,903. What has become of those curing stations now?—I do not know. I have not been in that part of the country since.

37,904. From what you saw of the country and the prospects with regard to fish, do you think that money invested there would have answered in those places?—No.

37,905. In no one of those places?—In none of them. There was not a class of fish to be had in either of those places fit for curing, and there was no way of conveying it to the market. The way in which I was employed was this: Mr. Radcliffe knew I was supplying all the first-class shops in Dublin, and he asked me to go down to the Custom House. He told me that such a thing was to be, and he asked my opinion upon it.

37,906. Was that before the curing stations were set up?—Yes, after the grant had been voted.

37,907. Who was consulted as to the parts of the coast where they were to be set up?—I do not know. The matter then went into the hands of the Commissioners of Fisheries.

37,908. Did any practical person examine the coast, with the view of ascertaining its fishing capabilities, before the stations were set up?—I am not aware. Colonel Jones and the Chairman of the Board of Works made an inspection in a Government steamer. They came round to Valentia, and gave us great credit for the curing house we had set up, but there were no fish in it.

37,909. (*Mr. Lefevre.*) Was this after the famine?—Yes. An English boat went there. Captain Bennett was a partner in the concern, and he cured the fish on his own account. I do not know how he got on.

37,910. (*Professor Huxley.*) Have you any reason to think a curing establishment might be set up with profit on the coast?—No.

37,911. Why not?—The less interference there is on the part of the Government with the fisheries and the fish-curing the better, and the less any Company has to do with it the better. Neither of them will do any good. The expense of Government officers, or of officers belonging to any Company, would consume all the profits upon the fish they would cure, and would leave nothing for the shareholders.

37,912. It is a trade that will answer very well, if the persons concerned in it work it themselves?—Yes. If poor people lay their heads together, and make up their minds to work it well, they will make money, but not a Company. There have been two Companies in Ireland. Mr. Andrews' Company was one. I gave them six months, and, I believe, they lost a good deal of money; Mr. Good was more cute than they were, and got some of their boats when they gave it up.

37,913. That Company has failed?—Yes.

37,914. From your experience in dealing with the fish, do you think that is sure to be the fate of most Companies?—Yes, sure to be.

37,915. Because a fish Company would require the interest of individuals to be embarked in it?—Yes. I know something of boats myself, and I have had some thought of setting up a boat—a herring-boat. Perhaps I might do so, if I had a man, a skipper in it, who had some interest in it himself, but I have no notion of buying one, and sending it out with somebody else.

37,916. (*Mr. Lefevre.*) Did you go to the west to set up these curing stations in 1847, during the famine?—Yes. It was a desperate effort on the part of the Government to provide some means for staving off the effects of famine. There was a grant, I think, of 5,000*l.* given by the Government, and rules and regulations were laid down by the Lords of the Treasury for the expending of that 5,000*l.* Nothing could have been better than those rules, but the people who were appointed were very inferior.

37,917. In any case, you seem to think that it could not have answered?—I do not think it could have answered.

37,918. Could it not have given temporary relief to people who were starving?—It might have given temporary relief, but as it was, it did no good whatever. I think it was a waste of money, so far as the three stations in which I was concerned went.

The witness withdrew.

Captain Robert Williams, R.N., called and examined.

Capt. R. Williams, R.N.

37,919. (*Professor Huxley.*) You are practically acquainted with the fisheries?—Yes, I have fished a great deal.

37,920. Have you heard the evidence of the witnesses who have been examined before us already?—I have.

37,921. Is there anything you wish to add to their statements?—I think that, so far as accounting for the fish being diminished in the bays is concerned, that the bait has very much diminished. I think that is one reason. With respect to the haddock being migratory, I know that perfectly, but four or five years ago I caught a number in one single haul on my lines.

37,922. Is there any comment you wish to make in regard to the trawling question?—Only in respect to the spawn. I have been trawling for 35 years, and I never saw an ounce of spawn taken up in the net.

37,923. Do you use the trawl?—Yes, I have a trawl now.

37,924. Do you find that it works well?—No, because I cannot work athwart the tide; it collapses.

37,925. You disagree in the statement that spawn is brought up in the trawl?—Yes, and also with regard to the number of small fish taken up. I have once or so in a haul a dozen or 15 brought up and left on the deck.

37,926. Do you agree with the witnesses, that more small fish are brought up in shallow than in deep water?—Yes; they are different fish that are taken up in deep water from the fish that are taken up in shallow water, and they are much firmer fish.

37,927. Is there any suggestion which occurs to you, apart from what we have heard, or in corroboration of what the witnesses have said?—The largest haul I ever had was about three hundredweight or four hundredweight, and that was fish taken in a whole tide.

37,928. (*Mr. Lefevre.*) What is the size of your trawl?—It has a 60 feet beam. I fish in a Revenue cutter.

37,929. And in the bays?—I have not fished further south than Bray Head, and not further north than some distance outside of Lambay. Not on the west coast or eastward. I have trawled at Cork, however.

37,930. Have you observed a greater proportion of small fish in the bays than in deep water?—Yes; there is the greatest possible difference, and it is a different class of fish. With regard to the take of plaice, I have seen 50 or 60 taken in a haul some-

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times. They take all plaice and flounders with a hook, but I never saw a turbot or sole taken. I fished in this bay 35 years ago, and I never saw a turbot taken in the bay at all, nor did I ever see a sole taken in the bay.

37,931. Have you taken small soles in your trawl in the bay ?—No.

37,932. None about an inch in length ?—No, not at any time. I never saw a sole or a young turbot taken in a trawl.

The witness withdrew, and the inquiry was adjourned until the 22d of August, at Arklow.

Arklow, Wicklow, Monday, 22d August 1864.

PRESENT :

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

ARKLOW.

Rev. J. Redmond.

22 Aug. 1864.

The Rev. JAMES REDMOND called and examined.

37,933. (*Professor Huxley.*) You are the parish priest of Arklow, Mr. Redmond ?—I am.

37,934. How many years have you held that position ?—Since October 1839.

37,935. You are doubtless well acquainted with the occupations of the inhabitants here ?—Perfectly.

37,936. Are you able to tell us what kinds of fishing are practised by the fishermen belonging to Arklow ?—It is mainly herring-fishing and oyster-fishing. They also take codfish, but the principal and staple fishing is herring and oyster-fishing.

37,937. Can you inform us how many boats are engaged in the fishing ?—That is a question that could be better answered by those concerned in the fishery than by me. I can only give you general views with regard to statistics. With respect to details, I should prefer that you ask the questions of those who are more immediately interested. I am not conversant with these matters personally. All I know is, that there has been a great increase in the building of boats. There has been a vast increase in every sense of the word. There has been a very great improvement in the appearance of the men and in the condition of the town, and upon those points I am prepared to give you quite satisfactory statistical proofs, if it is the proper time to do so. When I commenced my services here, even before the famine, such was the state of the town that in the course of seven years the Rector of Wicklow and the Rev. H. Brownrigg, who went hand in hand in charity, had to raise 4,000*l.* during that time for the benefit of the population. The necessity for raising such a large amount of money will show what must have been the distress existing at that time.

37,938. In what year was that ?—We commenced in the year 1839. The 4000*l.* was expended altogether or mainly in food for the people of the town.

37,939. Was that between the years 1839 and 1846 ?—Between 1839 and 1847. Seven years after I came here we had the famine. We endeavoured to turn the people's attention to the state of the country. We endeavoured to show that there was nothing for them but to have recourse to those sources of employment which had been given by Almighty God, and that the sea was the only place they could take to to obtain support for themselves and their families, and that if that failed they had no other resource than to go to the poorhouse. I felt it my duty to bring the matter before the public here, and they at once turned their minds to the sea, and since that time, in place of being a burden to others, they have been able not only to live themselves and to support their families, but my own community resolved upon building a new church, and they have been enabled to build that church by their own exertions. They got very little outside the parish, and inside of it I found none so constant, so liberal, and so untiring in their contributions as the fishermen of Arklow. I bring this fact before you for the purpose of showing that, in place of depending upon charity or upon gratuitous donations for support, they have been able to support themselves, and likewise to contribute towards other objects. More than that, at the time when there was a want of sufficient food they had only one hospital in the town. That hospital was quite full, and we were compelled to get an additional house and open it as a hospital. Now, thanks be to God, we have arrived at a much more healthy state of things. The people have become more happy and comfortable. They now adopt habits of greater cleanliness, and get more wholesome food, and, from all I can learn, I do not know a more healthy town in Ireland. There are nearly 6,000 inhabitants in the town now, and we are sometimes for two months without a patient in our fever hospital. In point of fact, there is a less per-centage of death in Arklow than in any town I know of. The best mode I can adopt to bring before you the condition of Arklow is by comparing the two states of things,—namely, the state of things before the potatoes failed and since. At the time of the potatoe famine, the people were in very distressed circumstances, owing to the want of their usual means of support. In 1834 we had a population, I believe, of only 1,400. In Arklow and the neighbourhood connected with it there is now a population of 6,000, and with that increased population we have an increased supply of food, increased comfort, and largely increased morality. Again, in Arklow and in other places, I may refer to the proceedings of the Assistant Barrister. He comes here to dispose of criminal cases only once in every six weeks, and I believe he is generally able to complete his business in the course of two or three hours. Again, I may say, that although the law permits all the public-houses to be open on the Sunday, I do not know that there is an instance of a single drunken man or other discreditable person being found in the streets of Arklow on the Sabbath-day. I may be permitted to say, that I read with very great pain a charge made last week by one of the witnesses examined at the meeting held by you at Howth against the people of this town, as implying that they were lawless and used intimidation in order to prevent free trade. I am able to give that charge the flatest contradiction. I almost considered it my duty to contradict it in the strongest terms when I saw it at first, but the feeling of indignation which I experienced dwindled down in the end to pity for the men who made it. It was stated that the Howth men did not dare to come to fish at Arklow, because they were afraid of being driven off the ground by the Arklow men. There were no proofs given of that intimidation, and the reason was that it was impossible to bring any proofs of it. My own opinion is, that if they could not bring forward any proofs of the intimidation, they ought not to have made the assertion. I think it is clearly one of the ground works of the British constitution that no man should be permitted to make charges without being able to substantiate them, and that every man who is accused should be presumed to be innocent until his guilt is proved. The charge has been made against a whole community, and I think if we had Mr. May, who made it, here, we should soon be in a position to make him eat his own words. I would appeal to the authorities—to Captain Balfour, to the Coast-guard, and to the police, whether there is a community throughout the whole of Her Majesty's dominions who hold themselves more amenable to the laws of the land and are more desirous of observing them

than the fishermen of Arklow. I have seen here as many as 200 sail of boats from all parts of the kingdom,—from the Isle of Man, and from the whole coast along here, from Ballahoun, the Skerries, Howth, Bray, Greystones, Courtown, and Wexford. They all come here with perfect liberty.

37,940. Were they here this summer ?—Yes.

37,941. Then is it a matter of fact that every year a considerable number of foreign boats do come here? —Yes, every year.

37,942. Has that number fallen off of late years ?— No, it is increasing in the herring fishery. There was one great reason before for the fishing being defective. We had a very defective bar. It was a drifting sand, and the channel was very small. It was not always that the boats could get out. I have seen the boats jammed in the river for six weeks at a time, when they could not get out to fish at all. We have now an increased size of boats, and the energy and skill of our fishermen have also been increasing. The size of our boats is naturally commensurate with the depth of the water upon the bar. All we want is to have water in the river sufficient to allow us to get boats of the same size as other people, and in that case we should not be afraid of competition with anybody. Having this bar at the entrance to the river has been a great misfortune to us.

37,943. Is there any record kept here of the number of strange boats which frequent the port ?—There is a Custom-house officer here, Mr. Storey, and a harbour master, Mr. Meagher, but I am not sure whether they keep any record or not.

37,944. If they do keep a record, it would be quite sufficient to produce it, in order to contravene the assertion that people from a distance are kept away from fishing at Arklow, in consequence of the intimidation of the Arklow fishermen ?—If I wished, I could allow myself to be flooded with letters from various agents in France, and other parts, who are anxious to come here for our oysters. Knowing a little French, they correspond with me, and I am thus brought into contact with them. I have also received communications from several English merchants, and other persons have applied to me, through Mr. Brady, to know if I could by any means arrange matters for them, so that they might be in a condition to obtain oysters from this place, I am prepared to say, from what I have heard from these Englishmen and foreigners, that, so far as their assurances go, they have never been in a place where they found the law better observed, or where they found themselves better and more properly dealt with than in Arklow.

37,945. If we rightly understood the complaint it was not with reference to the oysters, but with regard to the herring-fishing ?—I am talking now in a general way.

37,946. The assertion was that the strange drift men were interfered with. There was no statement that the oyster men were meddled with ?—First of all, I wish to state that, wherever there is any kind of grievance, it is reported to me before it is reported to the authorities, because I frequently find that my influence with the men here is sufficient to enable me to correct the abuse wherever it exists, and I must say, that I have never known an instance of a complaint made to me by a stranger. There is what is called a buoy and light ship out here. Nets have often drifted there. The greatest destruction has been occasioned amongst them, and amongst none so much as our own poor people here, who have had hundreds of pounds' worth of nets destroyed. Now if strangers were here, and suffered the same damage, they might say that it was done wilfully, if they did not know the cause of it. If any person lost his nets, he would be very apt to say that it was done by design, but it is no such thing. So far from the Arklow men being the sinning parties, they have been the severest sufferers. Sometimes the destruction is occasioned by other vessels. I recollect having occasion to write to Wexford, and I got compensation from a man who drove his vessel through a fleet of nets and destroyed them.

37,947. Was that a trawler ? No, a coaster. There was another case in which a Jersey man did the same thing, and he had to pay for the nets he destroyed.

37,948. Specific cases were not brought before us, but a statement was made that strange fishermen did not resort here, because they were afraid of something happening to them. Now you state that they do come here ?—Yes, quite freely.

37,949. And in large numbers every year ?—Yes.

37,950. So that is a direct answer to the statement ?—Yes, I contradict it in the strongest terms, and I am enabled to speak satisfactorily of the improved tone of the morality of the people here. There have been great improvements in the comfort of the people, and in the course of comparatively a few years my congregation has increased by 1,000 people.

37,951. Was there any considerable fishery here between 1839 and 1846 ?—The state of the bar and the passage into the sea was such, that it was necessary that the boats should be of a very poor and low class. They were often kept in the river jammed up, unable to get out to the fishing.

37,952. What led to the building of the harbour ? —That was done by the Mining Company.

37,953. When did they commence their operations? —About 14 years ago.

37,954. (*Mr. Lefevre.*) That would be after the famine ?—Yes.

37955. (*Professor Huxley.*) Is it not also probable that the operations of that Mining Company have contributed much to the improvement which you say has taken place amongst the people here ? —It has to some extent, but they have followed the principle of supply and demand, and have had increased benefits for themselves. They have found, since the railroad came in here, that by taking the ore direct to Kingstown, and discharging it by means of trucks into the transporting vessels, they can do it at a less expense, and we understand that they are going to take away all the ore from us altogether.

37,956. But, as a matter of fact, the Mining Company has contributed to the increased prosperity of Arklow ?—It has, positively and collaterally.

37,957. Then it is not all owing to the fishing ?— No, not altogether. The Mining Company have specially contributed to that, by improving the harbour. We had a shifting sand on a lee shore, but since the harbour has been formed and the channel deepened, the fishermen here have been able to increase their boats both in number and in size. In consequence of the shifting sand, it has been very difficult to keep the harbour open. On one occasion about 20,000*l.* were lost here in the course of two or three nights. The sea was alive with fish, but there were south-easterly winds, which jammed all the boats up in the river. There were 130 or 140 boats waiting to go out to catch the fish, and they sustained a loss of between 10,000*l.* and 20,000*l.* in not being able to do so. The bar has been greatly improved since that time. The Mining Company, although they were at the same time advancing their own interest, have served us most materially. They have given us a nucleus of improvement, and there being now a free passage for our boats by which they are able to get in and out, the quality of the boats themselves has been improved from poor little fishing barks to large smacks ; and this population, I am satisfied, will yield to none in Her Majesty's dominions in point of enterprise, or in anything which can enhance the well-being and prosperity of the people.

37,958. Has the improvement of the harbour been a considerable step towards that improvement in the condition of the fisheries ?—Yes.

37,959. And if the harbour could be further improved, the boats would improve ?—Yes ; I am satisfied that there is not a class of fishermen in England who would exceed the Arklow men in the

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size of their boats, and the skill and enterprise which they would bring to bear upon the fishing.

37,960. Supposing the Mining Company had not come here, would all these improvements in the fisheries have taken place?—Not a bit of it.

37,961. They could not have taken place, because you had got no harbour?—No; I can give you a proof of it. At that time we had only one vessel which was a two-master, and it was a matter of wonder to find that vessel coming to this shore. Now, look at the number we have inside our harbour.

37,962. (*Mr. Lefevre.*) Is the Mining Company constantly at work dredging the harbour?—No; but there is this peculiarity in our harbour. We have occasionally a great back-water coming down from the mountains. If there is rain to any extent, it creates a regular flush, and a flood comes down which sweeps away all obstructions. There is only one tide that specially injures us, and that comes from the south. A south and south-easterly wind will put that tide in motion, and that has a tendency to fill up the bar at the mouth of the river with sand. Then we have to wait until we get plenty of rain and a flow from the mountains to carry it off.

37,963. Is that since the erection of the harbour?—Yes; we find even yet that that is the principal complaint we have to make. It is much to be lamented that there is not a steam barge in the river, of sufficient power to carry off such an obstruction. I have already mentioned a case in which the fishermen lost from 10,000*l.* to 20,000*l.*, in consequence of not being able to get out at a time when the sea was alive with fish. The wind came in very strong, and they were altogether unable to get out. Some say, that if there was a wall put out towards the south it would keep the sand from coming down so as to cross the action of the river, and there is a strong impression that that ought to be done; but it would require a great deal of engineering skill to be brought to bear upon it, in order to place the river in a proper position. As it is, we have already effected a vast improvement. If it were possible in this river, I can assure you that the fishermen here would only be too glad to employ the very finest vessels which could be found in the Isle of Man or along the whole of the coast. If we had a fair ingress and egress, the class of fishing vessels would be much superior to what they are now, and they are already greatly superior to what they were some years ago. The tonnage of the vessels is mainly influenced by the state of our harbour.

37,964. Would it not be to the interest of the Mining Company to keep the harbour open?—They have found that by bringing the ore direct into Kingstown they can carry on their operations at a less expense, and they are therefore deserting this harbour. Of course, that is only in accordance with the great principles of commerce. They have found that, by going to Kingstown, they can make more money than they can get by shipping their ore here, and therefore they are going to Kingstown.

37,965. Has that been done already?—They are doing it now, and they are taking off a great quantity in that way. At the time of a storm here, wherever there is shallow water there is great danger. The outer water throws the sand up, the inner water meets it again, and that forms a bar in the form of a pyramid. There is thus a difficulty experienced by the boats in getting in and out.

37,966. (*Professor Huxley.*) Would it not be worth while, under those circumstances, supposing the Mining Company has ceased its operations, for the town itself to set up a steam barge or to erect a sea wall?—This Mining Company has an Act of Parliament. It was nearly one of the last Acts passed by the Irish Parliament, and it grants to them the ownership of the river, and the commerce in and out. They have power under the Act to levy harbour dues.

37,967. Was the whole property of the harbour vested in them?—Yes, by Act of Parliament.

37,968. It is taken from the town?—Yes; we pay harbour dues the same as if we had been strangers. The Hibernian Mining Company have got the harbour now.

37,969. To whom are the harbour dues paid now?—To the Wicklow Mining Company.

37,970. If they chose to send their ore elsewhere, and to leave the quays and wharves to go into decay, would the harbour dues still go to them?—I am not aware of that; but I am sure that so long as they keep a surveillance over the works they will look for the harbour dues.

37,971. Suppose the town chose to exert itself and were to provide for an extension of the sea wall, would there be any obstacle thrown in their way on the part of the Mining Company?—I am quite sure that the Mining Company would stick to their control over the harbour. They would allow no one to interfere with it. They claim it as a matter of their own private property and right, and they insist upon levying harbour dues. It is a great pity that the bar cannot be made better. I think that if something was done in that respect, this town would be one of the best fishing ports upon the Irish coast. The best proof of that is, that the town is at present emerging from a state of downright distress into one of comparative independence; everything around us shows the presence of comfort, and of all those things which tend to make a people happy. Sickness and distress are disappearing, and good order, cleanliness, morality, and everything distinguishing a contented and prosperous people, is being substituted in their place.

37,972. That depends upon two causes, the establishment of the Mining Company and the increase of the fisheries; now the increase of the fisheries is the great point we have to direct our attention to?—I believe that the increase of the prosperity of the town is mainly due to the fisheries, but the fact that the river has been improved and placed in a better state for the working in and out of the vessels has resulted from the efforts of the Company.

37,973. Do you think the fisheries have had as great a share in improving the condition of the town as the commerce which has been brought here by the Mining Company?—The commerce brought here by the Mining Company is quite an insignificant thing. The oyster trade and the herring trade are the things which have mainly benefitted the town. We have also had a great increase in the schooners; they bring in coal and other things, and they have only been enabled to come here in consequence of the increased harbour accommodation.

37,974. Do you find among your parishioners, that it is customary for the fishermen to pass from the condition of fishermen to that of part owners, and finally entire owners, of vessels?—Yes.

37,975. So that the money really comes out of the fishing?—There is no doubt of it.

37,976. And you are not of opinion that any impediments are placed, by the people here, in the way of strangers who desire to fish off this coast?—I indignantly and emphatically reject and deny that charge, which has been made against the people of this place.

37,977. (*Mr. Lefevre.*) At what period of the year do the boats from a distance come to this port for the herring fishery?—They come at the time we are fishing ourselves. They come at the time that they hear of the herrings being caught upon this coast.

37,978. When is that?—I believe that they come generally at the latter end of May.

37,979. Do they land their fish here?—They bring in their fish here.

37,980. And sell it?—Yes. One thing that has tended to advance and improve the condition of our herring-fishing, is the construction of a railway. At the time of a calm there would be considerable delay, but in consequence of having had a railway brought here, we are enabled to send our fish fresh into the market at once.

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37,981. Do they spend any money in the town?—Yes, they stop in it, and are of great benefit to the town.

37,982. Is there any autumn fishery?—Yes.

37,983. And do the boats from a distance come then?—Not so much as to the early fishing; there are not so many herrings to be found here then. The herrings in the winter time go from the north to the south to deposit their spawn. They come down towards the south, in the direction of Courtown and Wexford, but in the early season they drift towards Howth and the north. There is a slight sprinkling in the autumn, but in November the winter fishing commences. It commences below at Howth, and the fish come regularly down along the coast.

37,984. Is there room in the harbour for a considerable number of boats, besides those belonging to the place?—Yes, I should say that 250 or 300 boats could find a resting-place in the river, if they could get in.

37,985. Do the fishermen here fish throughout the year, or are they employed in other occupations?—They get their living purely on the sea.

37,986. How many fishermen are there here?—There are 3,000 people who are living upon the sea here; there are about 700 able-bodied men who get their living from nothing else.

37,987. Do they follow the herrings to other ports?—Yes; they go to Howth, and from Howth to Ardglass and to the Isle of Man, and from there they go to Dunbar, on the east coast of Scotland, and back again.

The witness withdrew.

THOMAS COLVIN called and examined.

T. Colvin.

37,988. (*Professor Huxley.*) Are you a fisherman here?—I am.

37,989. For how many years have you been fishing here?—For about 44 years.

37,990. What kind of fishing have you practised?—Herring-fishing and oyster-fishing, and I have also been in the cod-fishing.

37,991. Is there any other sort of fishing practised here, besides herring-fishing, oyster-fishing, and long-line fishing?—No, they do not follow any other kind of fishing.

37,992. Are there no trammel nets set along this coast?—Not now. The fishermen were in the habit of earning a great deal of money by that means when I was young. Many of them lived by it in the summer time.

37,993. Where were the trammels set?—They were in the habit of setting them on the shore; they had long seines and draw nets.

37,994. Were they in the habit of using those nets constantly?—Yes, there were some thirty men and boys engaged upon about three or four seines.

37,995. How many seines were there altogether?—I think there were three in this town, and 15 men and boys to each of them.

37,996. Is the beach along here well fitted for that kind of fishing?—Yes, very well indeed.

37,997. What kind of fish did you get mainly in those nets?—Small salmon and white trout.

37,998. Did you get many fish?—Yes, a good many.

37,999. In the seines that were used in that way?—Yes, and in the nets too.

38,000. Was it the same kind of fish you got in the seines as you did in the trammel nets?—Yes, but we got large salmon in the seines, which we did not get in the trammel nets.

38,001. How long has this kind of fishing been done away with?—Since the mines were opened, the seine-fishing has been done away with.

38,002. Have you been in the habit of using the seines all the time you have been speaking of up to last season?—I have not seined for this long time past.

38,003. How long is it since you used the seine?—Twenty years ago.

38,004. You have not seined for 20 years?—No.

38,005. Why did you leave off seining?—Because I could get no fish.

38,006. How was that?—The sulphur water drove them all away.

38,007. The mine water?—Yes, the fish were not able to get up further than the bridge.

38,008. Then it was not because you had fished out the fish, but because the mine water drove them away?—Yes.

38,009. Do you recollect how many boats were fishing from this port 40 years ago?—Forty years ago we could number 48 boats for catching oysters, and nearly 100 herring-boats.

38,010. Were the boats you used for dredging different from those which are used in the herring-fishing?—We had a smaller size for herring-fishing.

38,011. What was the size of them?—The smaller fishing boats were about six or eight tons.

38,012. Were they open boats?—Yes, they used to lower their masts down and row the boats.

38,013. Those small boats were used for the herring-fishing?—Yes.

38,014. What kind of boats did you use for dredging for oysters?—They were smack boats.

38,015. Larger boats?—Yes, they were a size bigger.

38,016-18. What size were they?—From 15 up to 16 tons.

38,019. What is the number of boats belonging to the place now?—There are about 150 boats belonging to Arklow now.

38,020. How many were there 40 years ago?—There were about 40 fishing-boats, and about 40 or 50 other boats.

38,021. About 100 altogether?—Yes.

38,022. And now there are 150?—Yes, somewhere about that number.

38,023. Then there are now half as many boats again as there were 40 years ago?—Yes.

38,024. And your boats are larger than they were at the time you speak of?—Yes, they are double as large, and more than that, some of them are three times as large.

38,025. What is the size of your large fishing boats now?—Some of them are 36, 37, and 38 feet keel.

38,026. Are they decked boats, or only half-decked boats?—Some of them are half decked, and a few of them are whole decked. There are some of them up to 20 tons.

38,027. Are they cutter-rigged?—Some of them are lugger-rigged, and more of them are smack-rigged.

38,028. Are they good boats?—Yes.

38,029. And can they keep the sea?—Yes.

38,030. Do they cost more money than the boats that you were in the habit of using 40 years ago?—Yes.

38,031-2. How much more?—Five times as much.

38,033. Are they still increasing?—Yes, they are building them every day,

38,034. Was the kind of boats you used in the fishing, when you were a boy, such as you could beach?—Yes, we put them ashore on the strand very often.

38,035. Was that because you had no good harbour?—We had no place except the river to go to.

38,036. How many years ago is it since the present harbour was made?—I think it is about 14 or 15 years.

38,037. I suppose before the harbour was made here, you could not have used the large boats which you have now?—No, we could not.

38,038. You could not have got in and out of the river?—No.

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38,039. Have they all been bought and built during the last 14 or 15 years?—Yes, they have all been built during that time, and they are enlarging them now every day.

38,040. When you were a boy and went drift-net fishing, how long was the fleet of nets you used?—The fleet of nets consisted of 24 nets, 18 fathoms to the back.

38,041. How deep were they?—They were about four or five fathoms deep.

38,042. What were they made of then?—Hemp.

38,043. What are they made of now?—We make them now of cotton and flax.

38,044. Do you find that cotton and flax are much better than hemp?—Yes, a great deal better.

38,045. How long is the fleet of nets you use now?—We have 30 nets, 18 fathoms to the back, now.

38,046. How deep are they?—Between seven and eight fathoms deep.

38,047. What is the size of the mesh you use here?—Something better than one inch.

38,048. About 32 or 33 to the yard?—About 33 or 34.

38,049. If you were inclined to make them smaller, could you do so without anybody interfering with you?—We should not care about making them smaller; nets of a smaller mesh than that would not be required.

38,050. Do you find that you catch bigger fish?—Yes, and we get a better price for them; small fish would be of no use to us; we should be able to get nothing for them.

38,051. Then you find it of advantage to you to use a mesh of the size you have mentioned?—Yes, and when we use that mesh we do not kill the small brood.

38,052. What is your season for herring-fishing here?—It generally begins at the latter end of May or about the 1st of June.

38,053. How long does that fishing last?—Sometimes we have a month of it, and sometimes we have only a fortnight or three weeks, and so on.

38,054. What condition are the fish in at that time,—are they fat fish?—Yes.

38,055. Young fat fish?—Yes, fine fish.

38,056. Without any milt or roe?—There is no roe in them; they have only a fine gut.

38,057. Then does the fishing break off?—Yes, for a while, and we then go to the Channel fishing.

38,058. Where do you go to?—To the Isle of Man or to the Channel, wherever we can get them.

38,059. You follow the fish?—Yes.

38,060. I understood you to say that you go as far as the east coast of Scotland?—Yes.

38,061. Which way do you go round to the east coast of Scotland? Do you go by way of the north?—No, through the Clyde and the Firth of Forth.

38,062. When do you come back to Arklow?—We come in the latter part of August, up to the 1st of September.

38,063. Are there no herrings to be found about Arklow between the end of June and the beginning of August?—No, only very seldom.

38,064. Do not the fish which are sold here in the latter part of May and the early part of June become full fish on this coast?—They go away up the Channel to the Isle of Man.

38,065. Do they become full fish there?—They spawn somewhere in the Channel.

38,066. And come back in August?—Yes, at the latter end of August or the beginning of September.

38,067. Do you find the herrings here at the beginning of that time?—Some will go fishing then, and some will go back again.

38,068. You are speaking now of the herring-fishing?—Yes; some will go away and some stop.

38,069. Do you find herrings here in the beginning of September?—Not here; but we get them along the north coast about Ardglass, and along from there to Dublin Bay.

38,070. When do you begin to get herrings here again?—About October; sometimes they come earlier and sometimes later.

38,071. What condition are they in then?—They are not in good condition when they come here.

38,072. Are they got full or spawning?—No; we get clean fish in the fall of the year; we never get any full herring here.

38,073. Do you never get any full herrings here at all?—No.

38,074. Not in October or November?—No; they do not spawn here.

38,075. They do not spawn at all here?—No.

38,076. Are they ever like those you get in May and June?—No.

38,077–8. Are they not as good?—No.

38,079. How long do they remain here?—Until the bad weather beats them off; about Christmas we cannot go out, owing to the bad weather, to look after them.

38,080. What time of the year do you think it is that the fish become full?—They are full in the month of September, I believe.

38,081. I thought you said you did not get full fish here at all?—No, but we do at other places; we get no full fish here at all.

38,082. They seem to go somewhere else to spawn?—Yes.

38,083. Do you get any herrings here in January or February?—No, not in those months.

38,084. Is the weather at that time of the year too bad to enable you to go out after them?—We generally knock off before Christmas.

38,085. What do you take to then?—We go to the oyster-fishing.

38,086. What fish do you get with the line here?—Mostly cod, hake, and pollack.

38,087. What sort of lines do you use here?—We fish with hand-lines here.

38,088. Do you not fish with the long-line at all?—No; there are men who come here in the winter time with long-lines, but they are a great annoyance to us.

38,089. Where do they come from?—From Howth, and about there.

38,090. How do they injure or annoy you?—They shoot their lines at the time we are engaged in the herring-fishing.

38,091. Do they carry away your nets?—Yes; we lose a great deal of nets from that.

38,092. Do you come foul of the buoys?—Yes, we drift on them and cannot help it.

38,093. Does that line-fishing you practise yield plenty of fish?—We come to anchor sometimes and fish with the hand-line, and we fish when we are drifting after the nets.

38,094. Do you get any haddocks here?—No.

38,095. When you were a boy fishing did you get any?—Only very seldom.

38,096. Do you think the hand-line fishing has fallen off since you first knew it?—Yes.

38,097. Have the fish been diminishing?—The fish are dying away very much here now, as compared with what we got in former times.

38,098. Is there any trawling carried on on this coast?—There are some odd little boats which trawl up in the bay of Courtown, but there are none here.

38,099. (*Mr. Lefevre.*) Is there no trawling on the banks outside?—No.

38,100. (*Professor Huxley.*) Is that because it is not good ground for the trawlers?—No; I think it is because there are no codfish to be got here.

38,101. Now, with regard to the oyster-fishing here, where are your oyster beds?—They extend about four miles from the shore.

38,102. They extend from the shore four miles out?—Yes.

38,103. Do you find oysters all over that ground?—No, there are places where there are none.

38,104. How far south can you find them?—From Mizen Head away to the north as far down as Wexford.

38,105. In what depth of water do you find them?—In from 10 to 11 fathoms of water.

38,106. When do you begin dredging for oysters?—We begin on the 1st of September.

38,107. Until what time do you go on?—We knock off in May; we don't dredge at this time of the year; we go to the herrings again now.

38,108. Then do you take the oyster-fishing up again afterwards?—Yes, we go to the oyster-fishing about Christmas.

38,109. Has that dredging for oysters gone on here ever since you were a boy?—Yes.

38,110. Is the number of boats greater now than it was in your early years?—Yes.

38,111. Are there many more boats?—There are double as many, and more than that. I remember the time that there were only 23 boats here dredging, and now there are nearly 100.

38,112. Then it is more than four times as many?—Yes.

38,113. Do you take oysters of any size you like?—Yes.

38,114. You are not obliged to throw back the small ones?—No, we take all before us.

68,115. Do you sell them all?—Yes, we sell them to the buyers who come here—Englishmen, Frenchmen, or any one else.

38,116. You take them of all sizes?—Yes.

38,117. Has that always been the practice here?—Yes.

38,118. Are there plenty of oysters to be found here?—Yes, there is a good supply, indeed.

38,119. Does the supply keep up?—Yes.

38,120. Is it as good now as when you first knew it?—Yes.

38,121. There has been no falling off?—No, I don't think there has been any falling off.

38,122. Has there been any increase in the supply?—I rather think the oysters have been scarcer in former times than they are now.

38,123. So that you have had from 40 to 50 boats working for 30 or 40 years, and working in every season, and the supply of oysters has kept up?—Yes, I have seen a time when we could not get 100 shot in a fishing, and now we get sometimes 3,000 shot.

38,124. How long is it since there was that scarcity?—I have not seen any scarcity for the last 10 years.

38,125. Are you able to tell us what was the reason of the falling off?—The oysters did not spawn very well in those years, I think.

38,126. What time do the oysters spawn here?—We see no spawn in the oysters here until about the latter part of May, or the 1st of June. They begin to get black then.

38,127. When do they get clean again?—Not until the latter end of August.

38,128. Is there any law here with regard to the fishing for oysters—are there any regulations enforced here in reference to the oyster fishery?—The regulation is that we should not dredge for oysters from the latter end of May until the 1st of September.

38,129. Who sees that that regulation is carried out?—The Coastguard.

38,130. Do the English merchants come here to buy oysters?—Yes.

38,131. Do they buy them to lay down on their own beds?—I believe they take them mainly to supply the artificial beds there with them.

38,132. Are there no oyster beds formed on the shallow part of the coast about here?—There are about Dublin, I believe.

38,133. But are there any which have been formed about Arklow?—No.

38,134. Why is that?—We cannot form any here on account of the fresh water.

38,135. You have too much fresh water?—Yes.

38,136. But is it not thought that a little fresh water is good for the oysters, rather than otherwise?—Yes, but there is too much of it here.

38,137. Has the water from the sulphur mines at all affected the oysters?—Yes; I believe that it has affected every kind of fish in the river. It has killed the eels and everything in it; nothing is able to live in it.

38,138. Does the influence of the mine water extend far out to sea?—I don't think it does much injury outside. The principal part of the injury it does is confined to the river. It discolours the top of the water outside, but I don't think it does much injury in destroying the fish there.

38,139. (*Mr. Lefevre.*) With regard to the oyster fishery, I understand you to say that you can catch as many oysters as you like?—Yes.

38,140. And of any size that you like?—Yes, but we measure them in barrels to the buyers that come here for them.

38,141. Buyers from a distance?—To Englishmen, Frenchmen, and our own home buyers.

38,142. Is there anything here which injuriously affects your interests as a fisherman, of which the fishermen generally complain?—Yes.

38,143. What is is?—We very often complain of the Jersey men.

38,144. What harm do they do you?—They come here and dredge Sundays, Christmas-days, and every day before them.

38,145. Do they come here dredging for oysters?—Yes.

38,146. Do they come here in addition to your own boats?—Yes.

38,147. Then you have foreigners always coming here?—Yes, but they fish on days when we do not. We knock off on the Friday and come home.

38,148. How many boats will there be fishing on the oyster grounds, taking the boats from Arklow and the foreign boats as well?—There will be from 90 to 100 of our own boats.

38,149. How many foreigners?—There are about 16 or 18 foreigners dredging here in the season; there were that number here last season. Then there are also Wexford men.

38,150. How many of the Wexford boats are there?—There were somewhere about 26 or 30.

38,151. Were there any other boats?—Yes, the Courtown boats.

38,152. How many of them?—There would be about 20 Courtown boats.

38,153. Then in the oyster season there will be as many as from 150 to 160 vessels dredging here?—Yes.

38,154. How many years ago is it since the harbour was made?—About 15 or 16 years ago.

38,155. Have you ever seen a steamer dredging for oysters here?—No, I never saw a steamer dredging.

38,156. Do you dredge for oysters in the month of May?—Yes.

38,157. How long have you done that?—We have had that liberty ever since 1856.

38,158. Do you sell the oysters you dredge then?—We sell them to stock the artificial beds.

31,159. Do any of them go in the month of May to Beaumaris?—Yes, to Beaumaris, round to London, to Falmouth, and to many other parts also, and to our home beds.

38,160. Does the greater number go to Beaumaris, or to the Thames?—I think the greater number goes to Beaumaris.

38,161. Do you find any difficulty in selling them for Beaumaris in the month of May?—No difficulty at all.

38,162. Have you had any difficulty with regard to oysters being seized in Beaumaris in the month of May?—I believe there were two boats that were taken, but I think it was in June, and not in May.

38,163. Has that not been the case of late years?—No; we have not been stopped in May of late years, I think.

38,164. Do you recollect the time when you fished for oysters here all through the summer?—Yes.

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38,165. When did you leave off that practice?—We did not leave it off until the Act of Parliament was passed.

38,166. When you were allowed to dredge in the close month, did you get as good a price for them as you do now?—Yes, and better too. We got 7*s.* or 8*s.* a thousand for them.

38,167. They were not got for eating at that time, were they?—Not for eating, but they were quite as good for laying down.

38,168. Laying down on the artificial beds?—Yes.

38,168*a*. Were they in a foul condition at that time?—Yes.

38,169. Are the oysters which are taken here sold for laying down on beds, or taken for eating?—They are all taken from here for laying down on artificial beds.

38,170. But not for eating?—No, not in Ireland.

38,171. Have you had a good spat for the last two or three years?—Yes, we have had a very good spat indeed.

38,172. You have observed no falling off at all in that respect?—No, none.

38,173. Have you found that you can get a large price for oysters during the last two or three years?—Yes.

38,174. Do you get a larger price for the young oysters than for the large ones?—Yes, the English buyers like small oysters. They want them for improvement.

38,175. What is the difference in price between a barrel of small oysters and a barrel of large ones?—The English buyers do not like the large oysters.

38,176. Do you sell them by the barrel?—Yes.

38,177. You do not sell them by the thousand?—No.

38,178. What do you get for a barrel of small oysters?—We sell them small and large together.

38,179. Then you do not size them?—No, we shovel them all together.

38,180. But the English and French buyers would rather have small sized oysters?—Yes.

38,181. What is the price of oysters per barrel now?—We got from 7*s.* to 8*s.* a barrel for them last spring.

The witness withdrew.

M. Doyle.

MICHAEL DOYLE called and examined.

38,182. (*Professor Huxley.*) How long have you been a fisherman?—Nearly 50 years.

38,183. Have you practised all the kinds of fishing that are practised here?—Yes.

38,184. Have you ever done anything else besides fish?—Nothing. I have been engaged in the coasting trade for some odd times, but very seldom.

38,185. Then the way in which you get your living is by fishing alone?—Yes, by fishing altogether.

38,186. Now, with regard to the herrings, at what time do you get them full here? or rather, do you get full fish here at any time?—Yes, in the winter time, from about Michaelmas to Christmas.

38,187. From harvest up to Christmas?—Yes.

38,188. At that time are they full of milt and pea?—Yes.

38,189. Do you ever get spent fish?—Occasionally we get some odd ones.

38,190. But you do not get many spent fish?—No, only very few.

38,191. Do you never fish for herrings in the months of January and February?—No.

38,192. Were you present when the last witness was examined?—Yes.

38,193. Did you hear all that he stated to us?—Yes.

38,194. Do you agree with what he said?—Yes; I think he said a good deal of truth.

38,195. Was there anything in his evidence which struck you as not being correct?—Only about the fish not being full.

38,196. Have you ever seen fish full in that sense in June and July?—In June and July they have had milts.

38,197. Are they full then?—They have not milt or pea, but a large fat gut.

38,198. Did you ever see them with milt or roe in them at that time?—No.

38,199. But only in the latter months of the year?—Yes.

38,200. What is about the size of the herrings you get here?—They are very fair fish, quite of the average size.

38,201. Is there any curing carried on here?—No, unless by the fishermen themselves.

38,202. Do they cure any quantity of the fish?—They sometimes salt a few, when they go to the market with them.

38,203. There is no extensive curing carried on here?—No, none.

38,204. Are there no curing establishments?—No.

38,205. Where do your fish go?—The buyers come here, and they carry them off in their carts.

38,206. To what market do most of the herrings you catch here go?—They are carried away through the country to almost every place round about.

38,207. Do they go to Liverpool?—The salt herrings do not go to Liverpool.

38,208. Are any of the fresh herrings sent to Liverpool?—Yes, fresh herrings go to Liverpool.

38,209. Do any fresh herrings go to Dublin also?—All the fresh herrings go to Dublin and Liverpool.

38,210-1. Then the majority of the fish caught by the fishermen are sent away fresh?—Yes.

38,212. Principally to Liverpool?—To Liverpool and Dublin, unless a gentleman here takes a fancy to salt his share.

38,213. Can you get rid of as many herrings as you can catch?—Yes.

38,214. There is always plenty of demand for your fish?—Yes, there is.

38,215. Are they sent away in smacks?—Yes; in smacks, by railway, in carts, in barrels, and in every way.

38,216. Did you hear what the previous witness stated in regard to the oyster-fishing?—I did.

38,217. You heard what he said with regard to there having been oyster-fishing, with a great many boats, on the oyster beds for the last forty or fifty years?—Yes.

38,218. And that the supply of oysters upon those beds is as good now as ever it was?—Yes.

38,219. Do you agree with that?—Yes, I do.

38,220. Do you think it is of use to you to have a close time, when you cannot fish for oysters?—We are not allowed to fish them from May until September.

38,221. Do you think that is a good rule?—Yes.

38,222. Why do you think so?—I think, from the first of June until the month of August, it is much better to let the beds rest, and to allow the fish to spawn.

38,223. Do you think it would be of any advantage to prevent you from catching oysters in the month of May as well?—No; I think it would be a very great loss to the town.

38,224. Is it a great source of profit to you to be allowed to take oysters in May?—Yes, to all the people of this place together.

38,225. Would you not be able to sell your oysters, if you caught them in June and July?—We would rather not catch them, but allow them to stop in the beds, in order that they may spawn, and have young ones.

38,226. Do you go to the herring-fishing then?—Yes; we go after the herrings down the Channel, and then we come home again to the oyster-fishing.

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38,227. Is there anything else that occurs to you which you wish to tell us?—There is one thing upon which I should like to make a remark. I heard a remark made about it by one of the other witnesses. It affects us very considerably. We have here a fleet of only 30 nets, which are 18 fathoms to the back, and from 7 to 8 fathoms deep. We are fishing now with these nets in the Channel, and we are placed under great disadvantages, as there are other people fishing in the Channel who have fleets of 60 nets, 18 fathoms to the back, and 12 fathoms deep. They are sweeping the ocean with those nets, and banishing the herring from the shore, and the result is that we cannot get the fish from the great number of the large nets now used.

38,228. Why do you not have big nets also?—Bedad, I think we have them big enough now.

38,229. What was the length that your father used?—Perhaps there would be 20 or 25 nets, 18 fathoms to the back, and 4 or 5 fathoms deep.

38,230. Then the nets which you use are bigger than those which he used?—Yes.

38,231. You use 30 nets, that are 8 fathoms deep?—Yes, from 7 to 8 fathoms deep.

38,232. Would you like anybody to prevent you from using them as big as you do now?—No, not at all.

38,233. Then if your son wanted to use bigger nets still, would you like to see him prevented?—I should not like to see the herrings banished from the coast altogether.

38,234. You have been getting plenty this year?—Yes.

38,235-6. Then up to this time you have not had much to complain of?—No; but I think that using too many nets, of too large a size, is of no use.

38,237. But, as a matter of fact, you have had capital catches of fish during the last 10 years?—Yes, middling.

38,238. Then the size of the nets has not hurt the catch yet?—There is not half as much caught as there ought to be, according to the fleet of nets.

38,239. Do you mean that the larger nets do not catch a proportionably increased quantity of fish?—They banish the fish off the shore. Formerly they were caught in from 8 to 10 fathoms of water, but now we have to go out to 40 fathoms. Their nets are deeper than ours, and the consequence is that our nets get foul of theirs, and we lose our season.

38,240. What boats are you referring to now?—The Scotch boats.

38,241. Are their boats bigger than yours?—They are somewhat larger, but they are all full of nets, and if something is not done to prevent them, they will destroy the whole Channel together.

38,242. If the boats they use are of the same size as yours, I do not understand how it is that they prevent you from fishing, because they cannot drift faster than you?—They have twice as many nets, and their nets are much deeper; and when the tide sweeps them, they go contrary ways, and come one against the other.

38,243. Then why do not you make your nets bigger?—I think that our nets ought to be big enough for anybody.

38,244. But it appears that they do not think so?—Perhaps they are covetous.

38,245. Do you wish the Government to say that nobody shall use nets larger than yours?—I say that nets more than 18 fathoms in the back and 8 fathoms deep will injure the fish, and will prevent the fish from growing and increasing. They will scrape the bottom and tear the spawn up, too.

38,246. (*Mr. Lefevre.*) At what distance from the shore do you find the herrings?—Four or five miles, and some 7, 8, 9, and 10 miles.

38,247. On the other side of the banks?—Yes.

38,248. Do you ever find them inside the banks?—We did before the large boats came.

38,249. Now do you find them further off?—Yes, we find them further off now; they have been banished into deeper water. I think it would be much better if the nets were all of equal size.

38,250. Do you think that more money is made by the oyster-fishing than the herring-fishing here?—I cannot say, but I am inclined to think that the oyster-fishing is the chief support of the town.

38,251. The oysters are the chief support of the town?—Yes, but sometimes from the herrings we get a very good season also.

38,252. You are allowed to take oysters of all sizes?—Yes.

38,253. What is the smallest size of oysters you dredge?—About two inches is the smallest.

38,254. Do you ever dredge up any as small as an inch?—Whatever happens to be in the dredge when it comes up we put into the boat.

38,255. Do you ever dredge up any as small as an inch?—The small are dredged up along with the big.

38,256. Then you must have noticed what size the oysters were?—Yes, about two inches is the smallest size.

38,257. What is the cost of your dredge?—About 1*l.*

38,258. How many of them do you use?—We use six.

38,259. Is that the same number used by the other boats which come here?—I suppose so, but we don't mind the other boats.

38,260. Do you catch as many oysters as they do?—I don't suppose that we do.

38,261. Why not?—They dredge night and day and every night in the year.

38,262. What is the size of your dredge?—About three feet where it scrapes.

38,263. Are you much interrupted in the winter time by bad weather?—Yes, we have a bad harbour, and we cannot often get out. The sand silts up and forms a bar.

38,264. Are there many days you lose in that way?—Yes; we are sometimes a fortnight together on the river without going so sea.

38,265. You cannot get out?—No.

The witness withdrew.

JAMES KAVANAGH called and examined.

J. Kavanagh.

38,266. (*Professor Huxley.*) Are you a fisherman of this place?—Yes.

38,267. How many years have you been fishing here?—About 30.

38,268. Has that been your only occupation?—I never followed any other.

38,269. Have you practised all the sorts of fishing practised here?—Yes.

38,270. Have you heard what the other witnesses have said?—Yes.

38,271. Do you agree with what they have stated,—do you think it is perfectly correct?—Why, of course I do, but I disagree in one thing.

38,272. What is that?—What I would wish to say is, that we don't take all the big and small oysters together. We have a regular sized ring, about two and a half inches across, and anything smaller than that we do not take up.

38,273. The other witnesses seem to think that you take all of them?—Anything that comes up in the dredge smaller than that size we do not take.

38,274. Do you mean to say that you do not catch any oysters small enough to go through the ring of the dredge?—No.

38,275. But anything the ring of the dredge does bring up you do take?—Yes, but the ring of the dredge is of such a size that we cannot take the brood off the ground.

38,276. In that case you mean pretty much the same thing as the other witnesses?—Yes.

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38,277. What is the range of size you get up,—what is the smallest oyster you get up?—About two and a half inches across.

38,278. But do not the small oysters cling to the others?—Yes, of course they do, but we cannot help that.

38,279. Do you not take the trouble to pick them off, and throw them back again?—No, because they are not reckoned.

38,280. But they are measured?—Yes, but the like of them will not help the measure much.

38,281. Do you sell by measure?—Yes, but those oysters are of no value to us, and we don't care to hurt our fingers by taking them off.

38,282. Is there anything you would like to add to what has already been stated?—I have the same complaint to make against the Scotch fishermen for having too large nets.

38,283. Do not you think it would be better to increase the size of your own nets?—I don't think it would be valuable to us. Taking the size together with the depth, I think the nets of the Scotch fishermen, in sweeping along, do a great deal of harm. The size is even worse than the depth. They shoot in 12 fathoms of water, and having their nets 12 fathoms deep, they clear everything away, so that where they have been fishing it is of no use for us to go on the following night.

38,284. Do you mean that where the Scotchmen fish, you never get fish?—I mean that we cannot stay there.

38,285. What do you mean by drifting down,—do they get entangled with your nets?—The tide runs stronger aloft than it does underneath, and by running stronger aloft our nets do not reach down as deep as theirs; in the course of a few hour's drifting we get foul.

38,286. You swim on the top of the tide and go faster?—Yes.

38,287. You drift upon them?—Yes.

38,288. And the result is that you get foul of them?—Yes, and so do the English fishermen also, as the English generally have about the same nets that we have.

38,289. Would you like always to be bound to use the same size of net? Suppose you thought it desirable to increase the size of your nets, would you not consider it a hardship if you were not allowed to do so?—The English have the same complaint to make.

38,290. How many Scotch boats will there be here engaged in the fishing?—There are not many. They don't fish here; they could not sail their boats, there is not water deep enough; there are scarcely any men who can, except ourselves.

38,291-2. Then where do they interfere with you?—At Howth, Balbriggan, and Ardglass.

38,293. Are there many Scotchmen fishing over that range of sea?—Yes, some hundreds of them.

38,294. Do you find everywhere that those extra long and deep trains of theirs interfere with you?—Yes.

38,295-6. Is there anything else you have to mention?—I have no complaint against anything else whatever; but concerning the month of May, if we did not get the month of May for oyster-fishing it would do us very considerable harm. There is no injury done to the fish until the last week in May, at any rate.

38,297. We will come to that by and by. Is there any regulation here about the shooting of your nets before sunset?—I never heard of any.

38,298. What time do you shoot your nets?—Generally about sunset.

38,299. Do you shoot them half an hour before sunset?—Sometimes that may occur, but generally it is about sunset.

38,300. You do that of your own accord?—Yes.

38,301. Is there anybody here to interfere with you, if you do not?—No.

38,302. Then you have no complaint to make on that score?—No.

38,303. Would it do much damage if you were to shoot your nets before?—I think not, because the fish are not aloft then.

38,304. Do you think that some of your fishermen are inclined to shoot their nets before then?—No, I never saw any of them shoot before sunset. Perhaps they might be put in the water a few minutes before sunset, but not more, except when the Scotch boats are there. On account of the long size of their trains, the Scotch boats begin an hour before sunset. It takes them an hour to get out their long trains, but we do not begin until shortly before sunset. We are not so long in getting our trains out.

38,305. With regard to fishing for oysters in May, what do you say about that?—I never saw any injury done to the oyster, unless, perhaps, an odd one in the last week of May. I never saw one taken that was not in good condition. They are in better condition and fitter for eating than in any other part of the year.

38,306. Do you think that dredging oysters in May cannot hurt the beds?—It does them no injury whatever.

38,307. Do you agree that the supply of oysters has not fallen off at all?—Where 20 years ago we could not get 100, we now can get a barrel, or 3,000.

38,308. Although you have been dredging ever since?—Yes, backwards and forwards, but we only dredge, perhaps, two or three days a week. We are as much inclined to give the beds a rest as any other people. Still, there are a great many boats dredging during the season, and when we had a less number of boats, I did not see the oysters more plentiful than they are now.

38,309. (*Mr. Lefevre.*) Do you get as good a price for the oysters in May as at any other season?—We get as good a price then, if not better; generally, we get more for them then than before.

38,310. They are bought for the purpose of laying down on other beds?—Yes, for the purpose of stocking other beds. They are glad to get them here, when they cannot get them elsewhere.

38,311. During the month of May they cannot buy them in England?—No.

38,312. And so they are obliged to come here?—Yes, they come here and buy them of us for England.

37,313. What is the length of ground over which you fish for oysters?—About 36 miles. There may be a few spots where there may not be any, but the beds run for about 36 miles. If you get off them, on one spot, you will be on them again in a few minutes.

38,314. I believe the oyster here is a large one, compared with the oysters in other places; is that not so?—Yes, on some parts of the bed here oysters are far larger than elsewhere, but I have seen some elsewhere which are as large as those we get here.

38,315. Is an oyster two and a half inches across a small oyster here?—There are some two and a half inches across and some a great deal more.

38,316. But is the oyster two and a half inches across a small one compared with the generality?—Yes.

38,317. Is it only the Scotch boats that use large nets?—Only the Scotch boats; but across about the county of Dublin, I am told that they are setting up large boats, which are to be compared with the Scotch boats.

38,318. Do any of the Scotch boats come into port here?—No, none come into the river; they would not be able to get their boats in and out readily; they are too large and long, and with our great fresh water they would not know how to come in and out. I believe that is the reason that they do not trouble us much.

38,319. Do they land their fish here?—No.

38,320. Where do they land their fish?—I don't know. They do not come here to fish in our bay at all.

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38,320*a*. Do the Manx boats come here?—Some few do.

38,321. How many?—Four or five in the course of the year. One had like to be lost when coming in here. Her rudder was unshipped, and she went adrift. I and my crew helped to save her.

38,322. Then the entrance to the harbour is dangerous for the boats?—Yes, there is a considerable amount of fresh water running down. There is always fresh water running, and there is not sufficient water to enable them to come inside.

38,323. How many Cornish boats come here?—A good many, backwards and forwards, but they do not try here constant for fish.

38,324. How many have you seen?—Sometimes seven or eight altogether.

38,325. Do they land their fish here?—They do sometimes, in their small boats.

The witness withdrew.

PATRICK KELLY called and examined.

P. Kelly.

38,326. (*Professor Huxley.*) Are you a fisherman here?—Yes.

38,327. How many years have you been fishing?—About 44.

38,328. You heard what the previous witnesses have said?—Yes.

38,329. Do you agree with what they have stated?—I do.

38,330. Is there anything you wish to add to what they have said?—No; I think the men you have had before you have spoken to the purpose very much.

38,331. Is there anything you think you could add to what they have said?—There is one thing which I think obstructs us in our fishing, and that is a buoy on the bank. It frequently does a very great injury to our nets.

38,332. That is rather a matter for the Harbour Commission. Is there anything else that occurs to you?—Our oyster-fishing about the month of May wants looking to.

38,333. In what way?—If we get the month of May the same as usual, it will serve our turn very much; but if is taken from us, our people will be very much distressed,

38,334. Nobody has taken it from you?—No; but notice has been given to that effect.

38,335. When was notice given?—I do not know when it was given; but there is a notice placarded all over the streets.

38,336. Is it by the authority of the Fishery Board?—I think it is.

38,337. (*Mr. Lefevre.*) Has there been any application for an inquiry with regard to it?—I think not.

38,338. (*Professor Huxley.*) You are of opinion that shutting up the month of May would be a great injury to your fishing, and no advantage to the fish?—Yes.

38,339. Is there anything else you wish to remark upon?—No; I think the other men have stated all that I should wish to say.

The witness withdrew.

The Rev. JAMES REDMOND recalled and examined.

Rev. J. Redmond.

38,340. (*Professor Huxley.*) Are you aware whether there has been any application for an inquiry here with regard to taking away the month of May from the season for oyster-fishing?—I have seen a notice stating that the oyster-fishing was to be closed from the 1st of May to the 1st of September, which, I presume, will be carried out, unless they make a byelaw here in favour of this town. I may state that there is an immense population here depending entirely upon the sea, and it has been found, upon a scientific examination of the temperature of the coast of Ireland, in comparison with England, that the temperature here in May is no more than the temperature in England in April, and the oysters here are as well preserved in May as they are in April in England. Owing to the great demand there was at that time for oysters as food, and as it was considered that, scientifically, no harm would arise from taking them, and, as a matter of humanity, it was necessary that the people should have food, both things were allowed to be combined, the fish were caught, not being deteriorated in condition, and the people were supplied with food.

38,341. When was that regulation enforced?—Subsequent to the passing of the Act.

38,342. The 5th and 6th Victoria?—Yes.

38,343. That is the Act which enforces close time?—Yes; but the month of May was given to us by a byelaw.

38,344. By the 5th and 6th Vict., cap. 106, and sec. 32, it is enacted that it shall not be lawful for any person, between the 1st of May and the 1st of September, to dredge for, take, catch, or destroy any oysters or oyster brood?—Yes.

38,345. In consequence of that clause, did the fishermen of Arklow make an appeal to the Fishery Board?—Yes.

38,346. And in consequence of that appeal the Fishery Board made a byelaw?—Yes.

38,347. Is there anybody trying to take that byelaw away now?—There has been a notice printed and circulated through the town. It appears that there is a new Act of Parliament, and that notice has reference to it. It was posted up as if it came from some authority, and the object of it seems to be that the old law shall be enforced, namely, that there shall be a close time from the 1st of May till the 1st of September.

38,348. That can only be done by the Fishery Board. There is no other power to regulate the Irish fisheries except the Fishery Board?—The notice purports to be signed by the Secretary of the Fishery Board.

38,349. Has there been no inquiry here?—No.

38,350. (*Mr. Lefevre.*) Has there been any application from any person?—Not that I am aware of.

38,351. Has there been any inquiry here, within the last few years, on that point, by the Fishery Board?—No, not one. There was an inquiry in Wexford a couple of years ago, in order to determine whether there had been any deterioration in the fish here, or any scarcity of the brood, and I believe they considered at that time how it would be best to prevent the catching of oysters below a certain size. But it was found, upon a rigid inquiry, that, so far from the fishing suffering from the amount of working upon the beds, the fish were found cleaner and of a more uniform size. In every way the inquiry tended to show that the fish were in excellent condition, and that they had much improved in quality. It was considered for a time, that if the mine water which we get in the river here went out over the beds the fish became sick, as if there was something poisonous in it. That was so much considered to be the case, that the Arklow oysters at one time were looked upon as a kind of drug in the market. There was a kind of animalcule which got upon the oysters and formed like a crust, and they developed gas, which in the course of a few days destroyed the fish. I once knew a whole cargo lost of very beautiful fish from that cause. But instead of the mineral water having anything to do with it, it happens to have become a regular antidote, and has prevented the settling down of these animalculæ upon the shells. The fish, which were formerly despised on account of their greenish hue and their coppery taste, are now consi-

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dered the very best fish in the market. The French and English buyers, I believe, prefer the small oysters to the large ones; they are much better for laying down upon their beds. I think this will show the value of a constant regular action and working upon the oyster beds. It is only since the beds began to be worked with anything like regularity that the oysters have got into that healthy state, and they now have a very fine clean shell. Besides this, the constant action tends to scatter the spat and spawn over the beds, and to cover places where otherwise there would be no oysters at all. A new bed was discovered only this last season, and I never saw such oysters in my life. They were like the hoof of a great London cart-horse, and that arose, I believe, from their not having been worked. The regular working of the oysters over this immense extent of ground, 36 miles long I believe, very much improves them. One of the witnesses stated that the oyster beds are four miles from the shore, but he meant the outer edge. The beds are only from about two to three miles in breadth across, and about 36 miles in length. By regular working the oysters have become much better in quality, and they are more distributed over the beds; they are more healthy in every way, and much more valuable for every purpose.

38,352. (*Mr. Lefevre.*) Do you also think it would be of advantage if the close time was done away with here, in order that there might be dredging throughout the year?—No, I would look upon it as a most injurious thing to have the three months of the year which are now set apart as close time, interfered with.

38,353. The three months' close season?—Yes; I look upon June, July, and August as necessary for the recovery of the fish, but in the month of May, instead of being in an unhealthy state, the fish are peculiarly fitted for being taken away and transplanted to other beds. There are 3,000 persons in this town interested in the fisheries here, and I look with terror upon what the consequences would be, if the fishing in that month were taken away from them. For some weeks the people here have nothing else to live upon, and if the month of May was made a close month, the same thing which compelled the Commissioners to pass a byelaw, and relax the rules in reference to that month, would occur again.

38,354. Are there more oysters taken in the month of May than in any other month of the season?—Yes, and I think a very good reason was given for that sometime ago. In other parts,—in England and France, for instance,—the people there are not allowed to catch oysters for their own country at that time. That being the case, the local men here have the supply to a great extent in their own hands. The buyers come over here from a distance, and they find the oysters here just in a proper condition to lay down upon their beds in Beaumaris and elsewhere, and along the coast about Dublin. So that, in reality, in that month there are more oysters here beneficially applied, and without doing a particle of injury to the fish itself, than at any other time. I can assure you, that it has been an incalculable benefit to humanity.

38,355. Are the oysters that are taken in May sent as far as the oysters that are taken earlier in the year?—No; people from a distance generally take them in the month of April, and the local buyers buy more extensively in May.

38,356. That is on account of the difficulty of transport during the hot weather, I suppose?—No, it is because it is the time for the local buyers to stock their beds. There is a gentleman here, Mr. Doyle, a boat owner, who will give you the fullest information upon that. He is both a producer and a merchant, and I think he will be able to give you a clear exposition of the whole case, with regard to the value of the month of May.

38,357. Is he here now?—Yes.

The witness withdrew.

J. Doyle.

JOHN DOYLE called and examined.

38,358. (*Professor Huxley.*) Are you a boat owner here?—Yes.

38,359. And a fish buyer?—I buy largely at all times.

38,360. Are you a native of this place?—Yes.

38,361. And you are well acquainted with all the fisheries?—Yes, oysters, herrings, and everything.

38,362. Do you agree with what has been stated with regard to the increase of the plant of the fisheries here?—Yes.

38,363. The boats have become larger?—Yes, larger, and there is more room in every way.

38,364. So that it is quite certain that a very considerable amount of capital must have been put into the fishery business here during the last 20 years?—Yes.

38,365. And it has all been derived from the fisheries?—Yes, mostly.

38,366. Are you aware if any regulations have been adopted here which are injurious to the fisheries?—No, I believe not, with regard to the oyster fishery. As to catching herrings, I believe the long and deep trains which are sometimes used here will injure the fishing in the end, and that they will drive the fish from the shore altogether.

38,367. Has any injury been done yet?—Yes; I consider that injury has been done, because the herrings are getting further out of the way.

38,368. Are they further off now than they were formerly?—Yes, they are further off a great deal, I believe. The fishermen tell me that they are 40 miles off now.

38,369. Are you yourself a buyer of oysters?—Yes, and of herrings too.

38,370. Do you find that there is a great demand for oysters during the month of May?—It is in the month of May that I and others belonging to the town supply our customers. The foreign men get all their oysters before then.

38,371. In what condition are the oysters then?—I have never found any harm in them.

38,372. You are, I think, in favour of a close time in the months of June, July, and August?—We do not want June, July, and August. We commence herring-fishing on the 1st of June, and that is more beneficial than the oysters then; but without having the month of May, we should not be able to do at all.

38,373. June, July, and August you think might properly be left as a close time?—Yes, I think so.

38,374. Are the fish sick then?—Yes, they are spawning then.

38,375. But during the month of May you are quite clear they are not spawning?—No, they are not; but they are fit for transplanting to the artificial beds.

38,376. Are you aware whether there has been a public meeting here with regard to the month of May being open or closed?—No, I think not. There was a Commission here, when we got liberty to dredge in the month of May.

38,377. How long is that ago?—About 18 years ago.

38,378. But there has been no meeting since then?—Not that I know of. We had a meeting since, which was attended by Mr. Barry and others from Dublin. It was in consequence of a memorial to prevent us from fishing south of Cahore Point.

38,379. When was that meeting held?—Six or seven years ago.

38,380. Have you seen the notice which has been posted up here with regard to enforcing the close time during May?—Yes.

38,381. What is the tendency of it?—It maintains the close time altogether, and states that it is from the 1st of May until the 1st of September.

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38,382. (*Mr. Lefevre.*) Is that notice directed especially to Arklow?—It is posted with the other notices. It does not mention the town of Arklow specially, nor any other town.

38,383. (*Professor Huxley.*) Then there is, in fact, no evidence at all that there is any intention to modify the close season for Arklow?—No; Mr. Barry was here not long ago, and he said that it was not intended that we should lose the month of May.

38,384. Do you consider that it would be exceedingly injurious to you here if the close time were extended, and you were prevented from taking oysters in May?—Yes; if we are prevented from dredging in May, I think it would be exceedingly injurious to the town, and that it will upset us altogether.

38,385. Did you hear the evidence we have received from the fishermen?—Yes.

38,386. Is there anything you wish to add to it, or correct in it?—I think not. I agree with them in regard to the long trains and the depth of the nets. I should not like to see the fish beaten off the shore altogether, without the inhabitants of this place having a chance of getting their fair share of them.

38,387. Then you think the long and deep trains have done you injury?—I do.

38,388. There is no close time for herrings here?—No, we have no spawning ground here.

38,389. (*Mr. Lefevre.*) Are there any of the oysters which are dredged up in May sold for eating?—No.

38,390. Are they all sold for laying down?—Yes.

38,391. Then the condition of the oysters is not so much a matter of importance?—No, not when none of them are eaten.

38,392. How long are they laid down?—We lay them down in May, and then we sell them to the Liverpool and Beaumaris buyers, but they do not go away until September.

38,393. Is it the case that all the oysters dredged up here are sold for the purpose of being laid down in other places?—Yes, all for the purpose of being sent elsewhere.

38,394. Are all the oysters here affected with the green tint which Mr. Redmond mentioned to us?—Not so much now; not since they began to work the oysters. We have a market for them now, and we had not before. They were not liked at first, but now the buyers will sooner take them.

38,395. Do you size the oysters after you have got them?—No, we take them all, large and small.

38,396. And you sell them in the same way?—Yes, we sell them in a cargo to the Englishmen.

38,397. How are the oysters sent from here to the mouth of the Thames?—In smacks generally. They sent them off by railroad this year.

38,398. By way of Holyhead?—Yes.

38,399. And then by train?—Yes.

38,400. What is the length of the voyage from here to the mouth of the Thames?—About 600 miles.

38,401. What time will it occupy before they reach the end of the journey?—Twenty hours by land.

38,402. But by sea?—It is a very long passage.

38,403. What is the length of the voyage?—Four days, with a fair wind.

38,404. Do the oysters keep well up to that time?—In the winter time they do.

38,405. In May they will not keep as long, perhaps?—No.

38,406. Are there large beds at Beaumaris?—Yes, very fine beds.

38,407. Are any of the oysters bred there?—There are a few in the Lough, but not many.

38,408. Are there any beds there below low water, or are they all between low and high water?—The oysters are all laid down above the low-water mark. We do not leave them below low-water mark.

38,409. Is there any fresh water running on the beds there?—No, there is no fresh water at all.

38,410. Where are the beds you speak of near Dublin?—There is one at the Pigeon-house at Dublin. There is one at the Hill of Howth, and another at Clontarf.

38,411. Are they large beds?—They are pretty large.

38,412. Are there any fresh-water streams running into those beds?—There are a few small streams.

38,413. Do they fatten there?—Yes, very well. The fishermen are talking about doing away with the night dredging. The Jersey men dredge by night, and sometimes they do themselves, but they would like to have it done away with.

38,414. (*Professor Huxley.*) Why would they have it done away with?—Because they consider it fatiguing and a hardship. The Jersey men, when they are dredging, often injure the nets.

38,415. Are they dredging at the same time that you are drift-net fishing?—Yes, they were last winter and the winter before.

38,416. Did they get in your way?—Yes, and they injured a great deal of nets.

38,417. Was there much damage done in that way?—Yes.

38,418. (*Mr. Lefevre.*) Do the Jersey men bring their oysters in here?—They take them to Dublin and Beaumaris.

38,419. They do not bring them for sale here?—No, there is no market for them here.

38,420. (*Professor Huxley.*) Can you give us any notion of the number of men who are employed in fishing here?—I think there are about 600 fishermen.

38,421. On some parts of the coast of England there is what is called the Convention Act enforced, and one of the articles of that Act is, that it is forbidden to dredge for oysters between sunset and sunrise,—is that the kind of regulation you would like to have here?—It is. When I said that there were only 600 fishermen here, I meant the men in the dredging boats. There will be 800 or 900 men fishing altogether.

38,422. Do the same men who dredge fish in other days?—Yes; but there are a good many countrymen who come in to fish.

38,423. They come in for the herring-fishing?—Yes, from the town, and there are boys also.

38,424. Then the regular number of fishermen will not be more than 600 or 700, but the number will be increased in the summer time, by countrymen coming in?—Yes.

38,425. That will bring up the number to 800 or 900?—Yes.

38,426. (*Mr. Lefevre.*) How many men are there in a boat dredging?—Six or seven.

38,427. Are they all paid by shares?—Yes.

The witness withdrew.

L. Furlong

Lawrence Furlong called and examined.

38,428. (*Professor Huxley.*) Are you a boat owner and buyer here?—Yes.

38,429. Have you heard the evidence which has been given?—Yes.

38,430. Is there anything you would wish to add to it, or correct in it?—Nothing that I am aware of at present, only I quite agree with regard to the deep nets that belong to the boats which come here. A law ought to be made to prevent that. Our boats carry 30 nets, which are altogether 540 fathoms long and 8 fathoms deep. If the size of the nets was con-

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fined to that, I think the herrings would not be driven from the shore.

38,431. Then you agree with the previous witnesses upon that subject?—Yes; I think that every man ought to be alike, and that every one should have a fair chance. The men who come here fish for a company of merchants, who hire men to work by the week while they are on our shore. They hire these men for from 15 shillings to a pound a week, and where our men use 30 nets in our boats, they have 60 nets, and where we have them 8 fathoms in depth, they have them 12 fathoms deep. When the two sets of nets are fishing together, theirs go under our nets, and stop the fish from coming aloft; our boats drift on and get foul of them, so that neither of us can fish.

38,432. In fact, you agree with the previous witnesses in what they have stated?—I do.

38,433. Have you anything to add to what they have already mentioned?—All that I have to add is that I think it is a bad system. I think it is also improper for strangers to come and dredge the oysters here all day on the Sunday. It sets a very bad example to our people. They do not like to see it carried on at all. They respect the Sabbath themselves, and they keep at home on Sundays; but the people of whom I speak come here and dredge on the Sabbath. I also think it would be better if we could knock off the fishing at night. I think it is a great detriment to the oysters. I think it is quite enough to dredge for them from sunrise to sundown.

38,434. Do the strangers who come drifting for herrings fish on the Sunday?—They fish on Sunday night, but not on Saturday night.

38,435. Is there any other matter you would like to bring before us?—No; only I think we ought to know whether we are to have the month of May or not.

38,436. (*Mr. Lefevre.*) Has the price of oysters improved much of late years?—Yes; I have seen them here selling at 2*s.* 6*d.* a thousand, and now they have been selling at 7*s.*, 8*s.*, and 10*s.* a barrel this year.

38,437. When did that increase take place?—For the last three years.

38,438. Was it in consequence of the scarcity of young oysters in England?—I think they are scarce in England. Buyers come here both from England and France.

38,439. Has no scarcity been observed here?—No, none.

38,440. Does each boat dredge as many oysters as it did formerly?—Yes, and a great deal more.

38,441. Do you think that the increased dredging has improved the ground?—Yes, I think so.

The witness withdrew, and the inquiry was adjourned until the 23d of August, at Wexford.

Wexford, Wexford County, Thursday, 23d August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

JOHN MURPHY called and examined.

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38,442. How many years have you been engaged in the fishing here?—For 16 or 17 years.

38,443. What kinds of fishing have you practised?—Flat-fish and oysters and herrings.

38,444. How do you catch the flat-fish?—With a trawl.

38,445. You trawl then, and you have been a drift-net fisherman?—Yes.

38,446. And you dredge for oysters?—Yes.

38,447. Have you been engaged in these three modes of fishing all the time you have been a fisherman?—Yes.

38,448. Did trawling go on here before you began?—Yes; there was trawling here before I began.

38,449. There was trawling here in your father's time?—Yes.

38,450. You know the size of the trawl-boats in use when you began?—They were only small sized boats then.

38,451. Are they larger boats now?—Yes, they are a great deal bigger now.

38,452. What was the size of the trawl-boats when you began fishing?—They were about 14 or 15 tons.

38,453. Were they open boats?—Yes.

38,454–5. What is the size of the boats now?—From 20 to 25 tons; some of them are decked, and some of them are open.

38,456. What was the length of the beam of the trawl when you first began fishing?—From 18 to 22 and 24 feet.

38,457. What is the length now?—From 26 to 27 feet.

38,458. What was the number of boats that were engaged in trawling when you began?—I think about six or seven, or perhaps only four or five.

38,459. How many boats will there be trawling here in the course of the season now?—Perhaps now seven or eight sometimes; I mean boats belonging to our own port; sometimes there will be five, sometimes seven, and from that up to nine and ten.

38,460. They are boats belonging to Wexford?—Yes.

38,461. Besides the boats that belong to this place, are there any others which come to trawl from other places?—Yes, there are a great many from Dublin and Waterford.

38,462. Whereabouts do they trawl?—Inside the banks in the bay.

38,463. Not out at sea?—The Companies' boats trawl everywhere.

38,464. What Company is that?—Companies from Dublin and Waterford, but the Wexford boats only trawl in the bay.

38,465. How many sail of boats will there be here in the season?—I have seen 25 trawling in the bay in the spring of the year.

38,466. When you first knew the trawling was there the same number altogether?—No.

38,467. Have the Companies' boats come since?—Yes.

38,468. And the Waterford boats also?—Yes.

38,469. So that the number of boats has increased since you first knew the fishing?—Yes. The Waterford boats have knocked off now, but Dublin boats and boats from Baldoyle and Howth fish here.

38,470. What kind of fish do you get here?—Plaice, sole, gurnard, and turbot.

38,471. Are there plenty of soles?—Sometimes, but they have been getting very scarce for some time.

38,472–3. Has the supply of fish by the trawl fallen off?—Yes, it has.

38,474. Is the quantity very much less?—A good deal less.

38,475. Do you think that that is in consequence of the increased number of people trawling in the bay?—To be sure it is.

38,476. And of the greater length of the beam and so forth?—The big boats are continually trawling;

they are at it night and day, let it blow high or blow low they are always at it, but the Wexford boats only go trawling in fine weather; it is only in fine weather that they can go out.

38,477. I presume that the other boats are much larger and better boats?—Yes, they are great smacks of 40 and 50 tons.

38,478. They can work in all sorts of weather when you cannot?—Yes.

38,479. Do they work at night?—Yes.

38,480. The Wexford boats cannot do that?—No; there are very few nights when they go out.

38,481. The Wexford boats work more in shore?—Yes, but if there is any damage ever done in the bay it is the Companies' boats that do it.

38,482. When you have been trawling did you observe much small fish taken up in your trawl?—Very little indeed, because they would not stop in it.

38,483. Is the mesh so big that it would let them through?—Yes.

38,484. What is the size of the mesh that you use?—In some parts the net is four and a half inches.

38,485. Have you ever been trawling in any other vessels?—No; but I have seen their trawls in the bay.

38,486. What other vessels?—I have seen the trawls of the Companies' boats in the bay, and they have smaller meshes in them than we have.

38,487. Besides that, do you drift for herrings here?—Yes.

38,488. Are there many boats engaged in drifting for herrings from this place?—There are not many employed in that way now, but before I was fishing there used to be 20 or 30 at it. There were not many from this place, but there were a good many from other places.

38,489. How is it there are not so many boats now?—The herrings have failed here, and they did not think it worth while to follow them.

38,490–2. When did the herrings fail here?—For a good many years past.

38,493. What was the number of boats employed in drifting for herrings when you first began?—In Wexford there were 17 or 18 cots.

38,494. Cots?—Yes, small flat-bottomed cots.

38,495. And now have they almost given it up?—If the people had followed them they would not have been able to support themselves. When there was money to be earned there, many people did not think it worth while to follow them.

38,496. Is there any long-line fishing here?—There was not till a couple of years back. Some of the boats from Wexford followed them, but generally the boats from Howth and Baldoyle fished them.

38,497. Whereabouts?—On the oyster beds.

38,498. Is that a good place?—Yes.

38,499. What do they get?—Haddock and cod-fish, but there are none got now.

38,500. Are there no haddock got now?—No, not about this coast.

38,501. Was there when you first fished?—Yes.

38,502. But there is not much got now?—No.

38,503. None at all?—No.

38,504. Was there much whiting taken on this coast?—No.

38,505. Do they get hake?—Yes, after the herring-fishing.

38,506. Do they get it in their trawls then?—Yes.

38,507. And by hand-line fishing?—No, not off this place, only off Tuskar.

38,508. Do you ever get mackerel?—No, I never was catching mackerel.

38,509. Is there any seining along this shore?—No, none at all. No one here follows it except at at Kilmore. A good many Howth boats follow the mackerel-fishing round at Kinsale.

38,510. You have a good many boats at the oyster-fishing here?—Yes, but they are beginning to get scarce now.

38,511. Where do the oyster beds extend?—Abreast of the port here.

38,512. How many miles east and west?—About two or three miles.

38,513. And how many miles broad will the beds be?—About one mile. I do not think they are more.

38,514. How many boats were employed in dredging for oysters when you first began fishing?—There were about 17 or 18 when I began to dredge first.

38,515. Were they row-boats?—No, sail-boats; but they were only small boats.

38,516. What sized dredge did you use?—At that time we had a big dredge.

38,517. How wide was it at the mouth?—About five or six feet.

38,518. How many boats are there employed now in dredging?—There are 30 belonging to Wexford.

38,519. And do the boats come from other places?—Yes, from all parts.

38,520. How many will there be fishing here altogether, besides the Wexford boats?—There were a good many of the Arklow boats, but they have not dredged here for two or three years. The Jersey men have dredged here. I have seen seven or eight of them together.

38,521. And any English boats?—Yes.

38,522. Then how many sail will there be dredging altogether?—Sometimes 40 boats on our own oyster beds just opposite the bar.

38,523. When you first began fishing, was it a close time for oysters in the beginning of May?—We dredged in the month of May when I began first.

38,524. And June and July?—Yes.

38,525. Did any of the boats dredge all the year round?—Yes, when I first began.

38,526. Was there any scarcity of oysters in consequence?—Yes, I was dredging when I could only get 500 or 600 in a day.

38,527. How long ago is that?—Eight or nine or twelve years ago.

38,528. I see that the Commissioners of Fisheries made a byelaw on the 22d of April 1846, "permitting "during the month of May the dredging for oysters "from any of the public beds below the level of the "lowest water of spring tides, on that part of the "coast between Wicklow Head and Raven Point "north of Wexford Harbour, for the purpose of re-"plenishing and supplying artificial oyster beds or "lays, or other beds or lays, the exclusive property "of any person, but for no other purpose whatever,"—how was that permission granted, do you recollect?—I do not. That permission does not extend to the Wexford beds, but only to the beds north of the Raven Point.

38,529. When was it the permission to fish in May was withdrawn?—They have stopped the dredging in the month of May for four or five years.

38,530. Not more than that?—Yes, but they got leave to begin again, and then they stopped it again.

38,531. (*Mr. Lefevre.*) Do you fish in May now?—Yes, but not on our own oyster beds.

38,532. I am talking now of your own oyster beds?—No, we do not dredge any there.

38,533. (*Professor Huxley.*) None?—No.

38,534. When were you first prohibited from dredging in the month of May?—It has been done away with for seven or eight years.

38,535. Up to that time were you in the habit of dredging?—Yes.

38,536–7. What condition are your oysters in in May, or what condition were they in when you dredged there seven or eight years ago?—They were scarce.

38,538. Were they in good condition?—Yes.

38,539. Was there any reason then why you should not take them?—No.

38,540. Were they good to eat?—Every oyster that was caught was fit to be made use of.

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38,541. When do they begin to be out of order—in what month?—In the months of April or May. The month of May is the only month that they are out of order.

38,542. When you were dredging all the year round, in what month was it that the oysters began first to be unfit for food?—I always heard in the month of May.

38,543. Then why did you go on dredging all the year round, if they were not fit to take?—We used to dredge them for bedding.

38,544. Where did you lay them down on beds?—Over at Beaumaris.

38,545. Did you make much out of them?—Sometimes we used to get a good price and sometimes we could not; we took them away and laid them down.

38,546. Are you in favour of having a close time?—Yes.

38,547. You think it is an advantage?—Yes. If the month of May was stopped, I think it would serve the fish.

38,548. You think it is a good thing in regard to your own oysters that the dredging should be stopped in the month of May?—Yes.

38,549. But you think it would be very bad to stop them on other beds?—Yes; I think it would be a good thing to stop them in the mouth of the bay. At Ballyvaldon and in Wexford Bay they would be good for nothing.

38,550. Are the oysters falling off here in Wexford?—Yes.

38,551. Do you find that the trawlers interfere with you in drifting?—No; I have never seen the trawlers doing a great deal here, except the Cornish boats, which trawl on the oyster beds or anywhere.

38,552. Do they do a great deal of damage in that way?—Yes, they have killed the spawn, but the Wexford boats do not.

38,553. Do the trawlers get among you and foul your nets?—No.

38,554. You say that the Wexford trawlers have done you no harm at all?—No; they never went to any place where they could injure us.

38,555. Do you think that trawling does no harm by catching small fish?—I never saw any small fish come up in the trawl.

38,556. None at all?—Not in the Wexford boats.

38,557. Not a single one?—Sometimes there may be a little small plaice, but nothing else.

38,558. Did you ever see any considerable proportion of small plaice brought up?—No.

38,559. Did you ever see a hundred in the take of a trawl?—No.

38,560. You never saw as much as that?—No.

38,561. How many fish would you take in one haul of the trawl?—Not more than a little basket a quarter full sometimes; in the spring of the year we might get more.

38,562. Whenever you have trawled, whether in shallow or deep water, you have never seen many small fish?—No, I never did.

38,563. Have you ever heard any complaint against the Cornish boats for catching small fish in their trawl?—Yes, I have.

38,564. Do they get much?—They will not let us go on board of them to see.

38,565. Is there much complaint of it?—Yes.

38,566. And how do they contrive to catch small fish, when you do not?—Because their meshes are smaller.

38,567. (*Mr. Lefevre.*) Have you a trawl-boat of your own?—No.

38,568. But you have yourself been trawling?—Yes, I have taken another man's boat and trawled with it.

38,569. Where do the Wexford boats chiefly trawl?—Inside the banks from Blackwater Edge down to the Point of Greenore.

38,570. Do they also trawl inside the harbour a good deal?—Very little; they are only little boats that trawl there.

38,571. Not the trawlers you have been speaking of?—No.

38,572. Do the trawlers that come from a distance trawl over the same ground?—They trawl over the banks and the bay also.

38,573. Do they trawl much inside the banks?—Yes.

38,574. Do they come into the harbour?—No, they cannot get in.

38,575. Never?—Not unless there is a gale of wind; they would not have water.

38,576. Do they bring their fish to Wexford Harbour?—No; the Baldoyle men do, but the Dublin men do not.

38,577. How many men trawl here habitually in the harbour?—A few small boats.

38,578. With small nets?—Yes.

38,579. What is the size of the mesh?—Three and a half inches or four inches.

38,580. What makes you think the trawlers from a distance have smaller meshes than you have?—I have seen them.

38,581. Have you been on board of them?—Yes.

38,582. Have you seen them hauled up?—Yes, and and I have caught them in my hand and examined them on the deck.

38,583. What other oyster beds are there north of the bed you have been speaking of?—There is the Teetotal bed.

38,584. How long is that?—It is not very long,—about a couple of miles.

38,585. Are there a succession of beds up from here to the Arklow grounds?—Yes.

38,586. Do the Arklow boats come and dredge here?—They dredge at Ballyvaldon, but not here.

38,587. Do you think the oysters are falling off on the Ballyvaldon beds?—They are scarcer, but I have seen them scarcer than they are.

38,588. Are they scarcer than they are on your bed?—Yes.

38,589. Is there no trawling on that bed?—No.

38,590. But they dredge much longer than you do?—Yes.

38,591. Is the number of oysters brought into Wexford smaller than it was in former years?—Yes.

38,592. Are there many boats bringing them into Wexford besides your boats?—Yes; we have many of the Kentish boats and the Jersey men bringing them here now.

38,593. How long is it since they came off the coast?—Three or four years ago.

38,594. Then, is not the whole number of oysters sold on the coast larger than it was?—No.

38,595. Have your own boats increased in number?—Yes.

38,596. How is it with regard to the price; is it larger than it was?—They were dearer nine or ten years ago than they are now.

The witness withdrew.

J. Bell.

JOHN BELL called and examined.

38,597. (*Professor Huxley.*) Are you a boat owner?—Yes.

38,598. Have you yourself been a fisherman?—No, I am not a fisherman, but I have fished sometimes.

38,599. Are you concerned in the fisheries?—Yes, for the last 16 years, but I have fished in my time.

38,600. How many years have you known the fisheries here intimately?—About 40 years.

38,601. What do you think is the condition of the fisheries now as compared with what it was when you first recollect them; take, for example, to begin with, the oyster fishery, and go as far back as the year 1836; there is an official report as to the state

of the fisheries then ?—I can go back for 15 years, and give you candid evidence with regard to the state of the fisheries during that time; but I cannot go back so far as the year 1836. I have been in the trade now for 15 years.

38,602. That will be 1849?—Yes.

38,603. What was the condition of the oyster fisheries in 1849 ?—The oysters on the Wexford bed were very thin at that time; they were very little got.

38,604. How did that come about ?—The ground was more worked. It was worked all through the year, winter and summer.

38,605. By the Wexford boats ?—Yes.

38,606. Were there any strange boats as well ?—For eight or nine years we have had Jersey men dredging on our ground.

38,607. About 15 years ago ?—I do not think there were any 15 years ago.

38,608. That there were any but Wexford boats ?—There may have been a few Jersey men 15 years ago.

38,609. Do I understand you to say, that the bed at that time was fished all the year round ?—Yes.

38,610. Was there, at that time, no close time for oysters on the Wexford beds ?—I do not think there was any close time.

38,611. What became of the oysters that were fished during May, June, and July,—where were they sent ?—They were sold in Wexford Harbour and loaded upon vessels. The Wexford oysters were not sold for use.

38,612. During June and July they were not eaten here ?—No.

38,613. What became of them ?—They were sent to Beaumaris.

38,614. Were they laid down there ?—Yes.

38,615. And later in the season were the oysters eaten ?—Yes.

38,616. And sold for consumption ?—Yes, they were sold for consumption. They might be laid down in Beaumaris to-day, and taken up to-morrow and sold. They are allowed to do what they like with them in England, but they cannot do so in Ireland.

38,617. That is not exactly the case; oysters are not permitted to be taken in England in the months of May, June, July, and August ?—I do not know what is the case there. They are not allowed to be taken in Ireland.

38,618. Was there any regulation in respect to the oysters at that time; was there any restriction of any kind with regard to the size of the oysters that were to be taken ?—Not a bit.

38,619. Because here is a byelaw made by the Fishery Commissioners, which appears to have been passed somewhere about the year 1846, which states that "all persons engaged in fishing for and taking oysters off the Wexford coast south of Raven Point" —you are south of Raven Point ?—Yes.

38,620. "Shall cull such oysters as may be taken "or got, and shall not remove from any fishing "ground or oyster bed any oyster of less dimensions "than three inches at the greatest diameter thereof, "and shall immediately throw back into the sea all "oysters of less dimensions than aforesaid, as well as "all gravel and fragments of shells as shall be raised "or taken while engaged in such fishing; and no "person shall take from any oyster rock, strand, or "shore off the said Wexford coast, south of Raven "Point, any oyster of less dimensions than three "inches at the greatest diameter thereof; and any "person offending in any respect against this bye-"law, rule, or regulation, shall for each offence for-"feit and pay a sum of 2*l*." Was that rule not in operation at the time you speak of ?—No.

38,621. No one enforced it ?—No.

38,622. (*Mr. Lefevre.*) When was that regulation enforced ?—I think about three years ago only.

38,623–4. (*Professor Huxley.*) Then, up to the last three years, was there no regulation of any kind with respect to fishing on the Wexford Bank ?—No.

38,625. You took the oysters when you liked, and of what size you liked ?—Yes; there was a close season after the month of May.

38,626. You say after May; do you mean from the beginning or the end ?—From the beginning of May.

38,627–8. The 5th and 6th of Victoria was passed somewhere about 1842, was it not ?—Yes.

38,629. But, as I gather from you, many years later than that, as far as 1849, you were in the habit of fishing when you pleased here ?—Yes, there was no hindrance.

38,630. Then the Act was not enforced ?—No.

38,631. When was it that a close time was first enforced here ?—I do not think it was ever so strictly minded as within the last four or five years.

38,632. I think you said that the produce of the oyster beds was rather poor about 15 years ago ?—The Wexford beds were poor, but the Ballyvaldon beds had a great deal of oysters on them.

38,633. Did they get worse or better in subsequent years ?—They grew better.

38,634. Although there was no additional restriction placed upon them ?—There was a change to some extent.

38,635. In what way ?—The boats used to go to the Ballyvaldon grounds, and they remained there fishing upon those beds, while our own ground was allowed to rest.

38,636. So that, in reality, there was a change ?—Yes.

38,637. How many years were the beds allowed to rest in that way ?—They were not allowed to rest all the year round, but the boats would go away in March, and they would not go to the Wexford bed until later on in the season.

38,638. In consequence of that, did the oysters increase ?—Yes.

38,639. How are the oysters on that bed now ?—They appeared very thin when the fishery was given up last year. They were not able to get one-fourth of the complement they had got before.

38,640. Notwithstanding the regulations which were made four or five years ago ?—The regulations were made too late. The ground had been cut up when they were made.

38,641. Do you think that the time had passed by for doing any good ?—Yes, a good deal of it.

38,642. Is there much fishing upon the bed this year ?—Not at this season.

38,643. But during the season of the year ?—Yes, there was.

38,644. The herring-fishing, we are told, is no great matter here ?—It is not tried.

38,645. The boats do not go out ?—There are no boats to go out. It has only been within the last couple of years that we have begun, with a few boats, to fish herrings.

38,646. Was there no herring fishery here years ago ?—There used to be a winter fishing.

38,647. What time of the year was that in,—what month ?—From November up to Christmas.

38,648. Was there any fishing after Christmas ?—I remember the men left it off at Christmas, and there were plenty of fish there.

38,649. In what condition were the fish which were taken at that time ?—They were very good.

38,650. Were they full fish ?—Yes

38,651. With milt and roe or pea in them ?—Yes.

38,652. Did you ever get spent fish about that time, in December ?—I never saw any.

38,653. At any rate, they came quite full ?—Yes.

38,654. When did the herring-fishing cease to be pursued here ?—It has fallen off within the last 11 years. I think it is 11 years since we had a good season, and they have not been plentiful since.

38,655. Did the people give it up because they had other occupations to go to ?—The people still try it on all along the shore.

38,656. When did they begin the summer fishing here ?—In May or June.

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38,657. What year was that; how long ago?—I was at it about 12 years ago, and then we knocked it off.

38,658. Was there any summer fishing in your younger days?—Yes.

38,659. And then it dropped off for a time?—Yes.

38,660. When did they resume it again?—I think this is about the fourth season since I began myself. I was the man who began it.

38,661. Is there a good summer fishing now?—Yes, very good.

38,662. How many boats will there be fishing from here?—In the summer time?

38,663. Yes.—Eight, I believe.

38,664. What is the length of the fleet of nets they use?—About an English mile.

38,665. How deep are they?—About 11 fathoms deep, I think, as near as possible.

38,666. Do not those boats fish off this coast—the Wexford boats?—They go as far as Courtown Bay. I have not tried off the Tuskar light, but I will next season.

38,667. Have you tried the fishing down below?—Yes, abreast of us. The want of a fleet prevented us before.

38,668. Have you not been doing so lately?—No.

38,669. Do you think the herrings are here?—Yes, in the month of May.

38,670. And in the winter time also?—Yes.

38,671. What time do you find the best for your summer fishing?—The 1st of May.

38,672. As early as that?—Yes.

38,673. And do you go on fishing through June?—Yes, until the 1st of September. I have one boat fishing that will fish up until near Christmas.

38,674. What sort of condition are the May fish in?—Very good.

38,675. Are they of good size?—Yes.

38,676. What sized mesh do you use in your nets,—how many rows to the yard?—Thirty-three.

38,677. And do you get many fish in that way?—Yes.

38,678. Fat fish, I suppose?—Yes.

38,679. What is your great market for them?—For the herrings?

38,680. Yes. Where do you send them to?—To Arklow. I go first to fish out of Arklow.

38,681. Do the Arklow people buy them?—Yes, and strange buyers come there to buy them also.

38,682. Do you go fishing off Arklow yourself?—No, I do not; but eleven years since I fished for herrings off Arklow.

38,683. Do many of your fishermen fish off Arklow?—Only within the last season or so. They have not fished there for a good many years, but all our boats have fished off there.

38,684. Did the Arklow people meddle with you?—No, the Arklow men never meddled with us.

38,685. Have you been long-line fishing?—No, I was never long-line fishing.

38,686–7. Have you ever been engaged in trawling?—Yes, I have a boat trawling.

38,688. How long have you been working your trawl boat here?—I have been working her here, on and off, for the last 15 years.

38,689. Where do you generally trawl?—In the south bay, and in the north bay, from the Blackwater Edge up to Varney Bay.

38,690. Do you trawl off here?—No.

38,691. What is the size of your boat?—About 20 tons.

38,692. Is it not decked?—No, it is half-decked.

38,693. What is the length of the beam?—Twenty-four or twenty-five feet.

38,694. What is the size of the mesh of the net?—I suppose there are portions of the net where the mesh will be about three inches, and there are other portions of it where it would only be about two inches. That is the bag of the net.

38,695. The bag of the net is smaller than the rest?—Yes.

38,696. Do you trawl during the day-time or during the night-time?—At this season of the year we trawl in the night-time.

38,697. Why is that? Is it better to trawl in the night-time?—It is better at night-time. We only catch little soles in the summer time, and very little of anything.

38,698. When you trawl during the day?—We get very little in the day, and very little either in the night.

38,699. When you first began fishing with the trawl-boats, did you get plenty of fish?—We got a good deal more soles than we get now. There were far more soles caught when I began trawling first.

38,700. How many vessels were there trawling besides your own 15 years ago?—I suppose there would be 11 then.

38,701. Is the number the same now?—There is about the same number trawling now, or, perhaps, somewhat less. I do not think there are 11 trawling now.

38,702. How many strangers have come into your bay to trawl since then?—I cannot tell how many, but they do come in, and sometimes there may be from 20 to 30.

38,703. Is that many more than were in the habit of coming formerly?—No, they came just the same, and sometimes more than they do now.

38,704. What would you consider to be a fair average take of fish in your trawl for a day's work?—We can only get very little fish now by trawling.

38,705. But you must get some, or you would not go on with it?—We have dropped it off altogether.

38,706. What would have been considered a fair average take of fish formerly, say 14 or 15 years ago?—Well, I suppose a boat would not have been out for more than three hours, as late as four or five years ago, without getting three or four tons of fish.

38,707. How many years is it since you had so great a supply of fish?—About five years ago.

38,708. Was there no falling off in the supply of fish up to about five years ago?—No, not in the plaice fishing.

38,709. When you were working with the trawl, did you find that you brought up any considerable proportion of small fish in the trawl among the large fish?—I do not know anything about the small fish that they may have taken up in the trawl; they were not brought to me.

38,710. You were not trawling yourself?—No. My boats were trawling, but I was not out with them myself.

38,711. Did the people who were working your boats throw the small fish overboard before they brought it to you?—I cannot tell that.

38,712. Have you ever been out trawling yourself?—Yes.

38,713. Can you say from your own observation whether it was customary to take any considerable proportion of small fish along with the large?—We did not meet those small fish you speak of.

38,714. Did you not get flounders and flat-fish a couple of inches long?—Yes, but we got very few of them.

38,715. Did you throw them overboard again?—Yes, they were of no use to us.

38,716. Did you not get a considerable quantity of those small fish sometimes?—No, not a great quantity.

38,717. Was it when you were trawling in the bay that you did not get a great quantity?—Yes.

38,718. What do you think is the reason that the take of fish has fallen off so suddenly with the trawlers?—Well, I think the Dublin trawlers coming here and laying upon the ground, and working with the 42 feet beam in such large numbers, and sweeping all over the bay, have been the cause of the scarcity. They have not given the fish any rest.

38,719. But I understood you to say you had 11 or 12 trawlers working here for 10 years?—But

they do not trawl in this season. They are after the oysters.

38,720. But still they were working for a considerable period, without causing any sensible diminution?—Yes, they were. A portion of the boats used to be engaged in trawling, and a portion of them were engaged in dredging.

38,721. When did the large heavy Dublin trawlers make their appearance off the bay here?—They have made their appearance here for a good many years now.

38,722. Was it ten years ago?—Yes, but there were not as many of them then as there are now.

38,723. Did the supply of fish fall off suddenly?—No. For eight years they have been falling off. Last year and the year before they were very poor.

38,724. Do these trawlers increase in number, and go on trawling in the bay?—Yes.

38,725. Then they must get fish?—I think they do, and they have worn the bay out.

38,726. (*Mr. Lefevre.*) Do they fish all the year round?—Not in the depth of winter. They are afraid to come then.

38,727. (*Professor Huxley.*) Was there ever any long-line fishing here?—Yes.

38,728. Where were the lines laid?—On different parts of our oyster beds, and down in the bay too.

38,729. Was there any considerable catch of fish?—Yes, great quantities of cod were caught.

38,730. Was there any considerable number of haddocks caught?—I have never seen many caught here.

38,731. Are the codfish falling off as well?—I cannot say. They were not followed up. There is no weather here to allow the fishermen to follow them up properly.

38,732. What do you think is the reason that the fish caught by the long-line have fallen off?—I think it is on account of the big trawlers, as I told you before. They give the fish no rest.

38,733. Do they come here to work in the bay itself?—Yes, right chock into the bay.

38,734. Do they prefer that to working outside?—They do not work outside.

38,735. Do they not work outside at all?—We seldom see them working outside at all.

38,736. Will you tell me what you call the bay? What are the limits of the bay?—From Blackwater Bank up to the shore.

38,737. Do the Dublin trawlers trawl outside that bank?—They do not. I never saw them trawling there.

38,738. Do they trawl altogether inside?—Yes, down upon the oyster beds, right down upon the Teetotal ground. I have frequently been watching them when they have been trawling there.

38,739. Do your people never trawl over the oyster beds themselves?—I cannot say, but I think they do.

38,740. Do they not take up the oysters in their trawls, when they trawl over those beds?—Sometimes they do.

38,741. Do the other trawlers take up oysters in their trawls when they are trawling there?—Yes, I think they do. Their nets are more powerful than ours, and they appear to go over the oyster ground more than ours do.

38,742. Is there any source of complaint among the fishermen here?—I do not know.

38,743. What do they complain of chiefly, if they have to complain?—I cannot say that they do complain.

38,744. Do they complain much of the trawling?—I do not hear them complain. They do not follow trawling much, only in the summer time.

38,745. It appears that in 1849 the Fishery Board passed a byelaw, "prohibiting trawling in all places "where there are boats engaged in herring or mac- "kerel drift-net fishing; and providing that trawl- "boats shall keep at a distance of at least three miles "from all boats fishing for herrings or mackerel with "drift-nets; and that, whenever herring or mackerel "boats shall commence drift-net fishing in any place "off or on the coast of Wexford, the trawl-boats "shall depart therefrom, and keep at least three "miles distant from the drift-net herring or mackerel "boats." Do you know how it was that byelaw came to be passed? Was there any public meeting here at that time?—I heard about it. It was said that the trawlers used to interfere with the winter fishing boats in the daytime.

38,746. Not the Wexford people?—Yes, the Wexford people themselves.

38,747. Did they interfere one with another?—Yes.

38,748. Do you recollect making any complaint about it yourself?—No; it was not in my time. I do not remember that law being passed. I was not in the fishing trade at that time, I think.

38,749. Are there any trammel nets or fixed nets set about the bay?—There used to be some.

38,750. Are there any now?—I cannot say.

38,751. (*Mr. Lefevre.*) Are you an oyster purchaser now?—I purchase when the season comes on.

38,752. How many purchasers of oysters are there here now?—Not more than four or five.

38,753. Do you think that the quantity of oysters brought into the town and sold is greater than it used to be?—It has not been as great for the last year or two.

38,754. But taking two or three years before that, and comparing them with what it was ten years ago, do you think the quantity of oysters brought into the town is greater than it was?—There are more brought in now, I think.

38,755. Can you give us any comparison as to the quantity?—Yes, three times and four times as much. The consumption is far more than it was; but there are more boats to catch them, and there are more strangers coming here to get them.

38,756. There are also more boats belonging to the place?—Yes.

38,757. Are the boats better boats than they were formerly?—Yes.

38,758. Do they carry more dredges?—Yes. Formerly we were in the habit of carrying only about one.

38,759. You carry more now?—Yes.

38,760. How many?—We carry now six, seven, and eight in each boat.

38,761. Then do you think that each of the boats dredges up more oysters than a boat did in former years?—Yes.

38,762. We have heard that the bank which they call the bank belonging to this place, lies south of Raven Point?—Yes.

38,763. What banks are there north of that?—There is the Teetotal ground, and the Ballyvaldon ground, and the Courtown ground, and the Arklow ground.

38,764. Do those beds lie in succession, one after another, with intervals between them?—I think so. There are oysters all along the coast.

38,765. Do any boats fish much upon those beds, except the Wexford men?—The Wexford men do not go further than the Ballyvaldon ground.

38,766. Do they dredge there in the month of May?—They are altogether on the Ballyvaldon ground then.

38,767. Do they take many oysters then?—Yes.

38,768. Are the oysters they take in good condition in the month of May?—They are spawning at that time.

38,769. Are they in a worse condition than the oysters taken on the Arklow ground at that time?—No, I think they are all alike.

38,770. They are all the same?—Yes.

38,771. Do you think the oysters taken at Arklow at that time are full of spawn?—Yes.

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38,772. Do you find that you get a worse price for the oysters taken in May than during the rest of the year ?—I do not think that we have done so latterly.

38,773. But in other years did you ?—Yes ; we would get a worse price for the fish, because there would be no one to buy them but one party, and he would give what he liked for them.

38,774. Where does he lay them down ?—In Wexford Harbour.

38,775. I want to know why the regulation permitting oysters to be taken in May, extends only to Raven Bank, and not to the Wexford bed ?—I do not know what was the reason that it was cut off at Raven Point.

38,776. Is there any reason why it should not extend to the Wexford bed ?—I do not know. I do not think there is any reason, but I think it would be very bad for the people if it did.

38,777. Do you think that it is a bad thing that oysters should be taken in May from the Ballyvaldon bed ?—I think if they are allowed to be taken in May there, there will be no oysters at all to be obtained in the course of another year or so.

38,778. Do you think it would be desirable that the oysters should not be allowed to be taken from that bed during the month of May ?—Yes, I do.

38,779. Would not a regulation to that effect take away a considerable amount of employment from the men here in the month of May ?—I do not think it would do them a ha'porth of harm.

38,780. How is that ?—Because there would be plenty of summer herrings here, if it were not for the trawlers.

38,781. Do you think that the dredging of oysters in May prevents the herrings from coming ?—I think that it is in consequence of the trawlers coming here and trawling over the ground, that the herrings are induced to shift outside the bank.

38,782. Do you think that the dredging of oysters on the Ballyvaldon Bank, in the month of May prevents the herrings from coming into the bay ?—Yes, I do.

38,783. Do you think that if the dredging for oysters was prohibited there at that time, the herrings would come in ?—Yes.

38,784. Do any Arklow boats bring oysters into Wexford for sale ?—Yes.

38,785. Do they come and dredge over your Wexford beds ?—Sometimes they do. They do whenever they please; they come whenever they think that it answers their purpose.

38,786. Have the last three years been bad spawning years for the oysters here ?—I do not think there has been much spawning for the last couple of years.

38,787. What is the depth of the water on the Wexford beds ?—I think there is about eight fathoms of water,

38,788. And what is the depth of water on the Ballyvaldon beds,—is it deeper there ?—No, I think it is much about the same.

38,789. I think you said that the regulation with regard to the culling of oysters was made three years ago ?—Yes, for the Wexford ground.

38,790. Has that regulation been observed by the boats here ?—Yes, I think it has.

38,791. Do they carry a measure for the oysters ?—Yes, they do.

38,792. Where do they cull them, in their boats ?—Yes.

38,793. Do they throw the small oysters overboard ?—Yes.

38,794. When the fishermen find a small oyster attached to a large one, do they break it off and throw it overboard ?—No.

38,795. Is there anybody appointed to see that they do not bring small oysters into the market ?—Yes.

38,796. Who discharges that duty ?—The police and the Revenue men.

38,797. If they see small oysters attached to the large ones, do they consider that comes within the prohibition ?—No.

38,798. They do not meddle with that ?—No.

38,799. Is an oyster that is two and a half inches across, a large or a small oyster for your beds ?—That would be a saleable oyster.

38,800. What is the largest size ?—There are some of them about five inches across.

38,801. Do you find that the buyers will give more for small oysters than for large ones ?—In general the small oysters, about three inches across, are thought more of than the large oysters.

38,802. When you sell oysters, do you cull them at all ?—The man who ships to the Liverpool market will do so.

38,803. Does he size them before he sends them away ?—Yes, he does.

38,804. Are there many oysters sold here for eating at once without their being, in the first instance, laid down upon beds ?—Yes, a great many.

38,805. Are the oysters here at all green in colour ?—No, we have no green oysters.

38,806. Do you think that the regulation with regard to culling the oysters has done any good as yet ?—I do not know ; I think it was established almost too late. When they began to be culled, it was found that they were all gone.

38,807. Was there any public meeting here before that regulation was made ?—Yes, there was.

38,808. Was there an application made by the fishermen here to the Fishery Board for the intervention of the Commissioners ?—Yes.

38,809. Why was that ?—Because there used to be tons of oysters brought up from the Wexford bed and thrown ashore, where they were left to die.

38,810. Of what size were those oysters ?—About two inches across.

38,811. Was there no sale for them ?—There was no sale for them at that time ; they were left to die.

38,812. Would not the purchasers from Beaumaris buy them as well as the others ?—There was a time of the year when they would purchase them to take to Beaumaris, but not in the winter time.

38,813. Would they not stand the voyage ?—They would not stand carrying.

38,814. What limit in regard to size do the Beaumaris men put upon the oysters ?—They like good sized oysters.

38,815. Did they say that they would not take them below a certain size ?—They are very fond of big oysters ; it is only for France or the London market that we want the small ones.

38,816. Would not the people from France and London buy the small oysters ?—Yes, they would.

38,817. Then how was it there was no market for them ?—I suppose there were plenty of oysters on these beds at that time.

38,818. But you say there was not a market for them at that time ?—No, there was not.

38,819. Would there be a market for them now ?—Yes, there would be a very good market for them if we had them now.

38,820. Do you think it has been any loss to the fishermen here their not being allowed to dredge up those small oysters ?—I do not think so.

38,821. Do you think that such a regulation ought to be extended to the Ballyvaldon beds ?—The Ballyvaldon three-inch oysters are considered large oysters. They are a deeper description of oyster than those which are got here, and a three-inch oyster, or even a two-inch oyster, is a good oyster there.

38,822. What do you mean by saying they are a "deeper description of oyster"?—They never grow as large as ours. A three-inch Wexford oyster is only a poor oyster.

38,823. A three-inch Ballyvaldon oyster is as good as a Wexford oyster of a larger description ?—Yes.

38,824. Then you think it is not desirable that this regulation should be extended to the Ballyvaldon ground ?—Yes.

38,825. (*Professor Huxley.*) Do you ever go dredging upon the Arklow beds?—No, we do not go down as far as Arklow.

38,826. The rule on the Arklow beds seems to be quite different from what it is here?—Yes.

38,827. They are allowed to fish the oysters during the close time?—Yes.

38,828. Have you noticed any difference at all in the thick and the thin oysters in the time of spawning? Have you ever heard anything of that sort mentioned?—No, I have not.

The witness withdrew.

William Coghlen called and examined.

38,829. (*Professor Huxley.*) You are the Collector of Customs here?—Yes.

38,830. Have you interested yourself in the fisheries of this place?—Yes, I have.

38,831. Have you been long acquainted with them?—I was born here, so that I have had a long personal knowledge, except for a short time when I was absent from the town, but that was only an interval of about seven years.

38,832. It appears from the statements which have been made to us, that not only has trawling been going on in this bay by the people belonging to the town itself, but a number of strange trawlers come here as well?—Yes, I have seen them.

38,833. So that there has been in one way or another a considerable increase in the amount of trawling within the last 20 years?—I think so, but for the last two years there has been rather a decrease. I think there are not as many strange trawlers coming here as there used to be.

38,834. To what cause do you ascribe that falling off?—I cannot say. Three years ago, a boat would come in here with two or three tons of plaice every day, and now I do not see them come with any such quantity.

38,835. Then has there been a sudden falling off in the quantity of fish taken?—Yes.

38,836. But the trawlers have not increased?—No. I have seen them sometimes with a small boat which they had as a tender, and that would not be sufficient to carry away the fish from the moorings, but it would have to go a second time.

38,837. How long ago is that?—About three years since.

38,838. In that case, it does not appear perfectly clear that the increase in the number of trawlers had much to do with the falling off in the take of fish?—I do not think it had, because, for the last three years, I think the number of strange trawlers has rather decreased than increased.

38,839. But you think that, within the last two or three years, there has been a sensible falling off in the take of fish?—Yes, that is my opinion.

38,840. Have you ever been trawling yourself?—No, I have never been trawling, but I have been oyster dredging.

38,841. Then you cannot say, from your own knowledge and experience, whether there is any considerable portion of small fish taken in the trawl?—No.

38,842. You say that you have been dredging for oysters?—Yes, I have just gone out for a day occasionally.

38,843. Will you turn your attention now in particular to the Wexford bed. Has the supply of oysters from that bed fallen off much during the last 10 years?—No; during the last 10 years it has increased considerably.

38,844. But it had fallen off?—Yes, it had fallen off. I myself recollect when a boat would go to the bed, and would, perhaps, not bring in more than 500 oysters, whereas I have seen them come in, within the last six years, with 70,000 oysters.

38,845. In one boat?—Yes; they calculated that they had that number in the boat.

38,846. How many years ago is it since the dearth of oysters you speak of obtained?—Twenty years ago there was a great dearth of oysters.

38,847. Was that just before the passing of the 5th and 6th Victoria?—I recollect when there was no such thing as care taken of the beds at all. The dredgers then might fish all the year round, if they chose. But of late years the bed has had much more care paid to it in the close season. I should say that the reason why the Fishery Commissioners prevented fishing on the Wexford bed, in the month of May, was that the bed was small, and if they continued to fish it during the month of May it would soon have been exhausted.

38,848. You are speaking now of the bed at the mouth of the harbour?—Yes.

38,849. The Commissioners did not prevent the fishing then; they did not make a law to prevent it?—No.

38,850. The prevention was the effect of the Act 5th and 6th Victoria?—Yes.

38,851. Has that Act been fairly enforced for the last 20 years?—I was out of Wexford during that time, for about 10 years. Within the last 15 years I believe it has been pretty well observed. There has been very little fishing on the bed during the close season, more especially within the last eight or nine years.

38,852. Then we find among the list of byelaws here one relating to the size of the oysters taken. How did that byelaw come to be passed? We understand that the Fishery Board only passes its byelaws after a representation has been made to it by the locality.—That byelaw was passed in consequence of the great destruction of the oysters. The boats at that time brought ashore indiscriminately whatever they took up in their dredges. They sold all the oysters they took to the buyers here, and then the buyers picked out the eatable oysters that were fit for the market, and left the refuse to perish. I think that in one season not less than 100 tons of oysters, or even more than that, were left at White's wall at the end of the quay, as being worthless, and the shells were placed upon the roads, to mend the roads with.

38,853. Was it not worth while to take them for laying down on the oyster parks?—I think they were so weak that they would not bear to be removed.

38,854. What time of the year was that?—It was in the month of September, during the open season.

38,855. Then that might be regarded as altogether wasteful fishing?—Yes.

38,856. They were taken of a size so small that they were no good?—Yes, and I think that, if that fishing had gone on, the bed ultimately would have been completely exhausted.

38,857. What was the average size of those very small oysters?—Some of them would not be more than an inch and a half or two inches across. Indeed, I think they took away anything beyond two inches, although, in my opinion, oysters under three inches taken on the Wexford bed are completely worthless.

38,858. Oysters under three inches here are of no value?—No.

38,859. Cannot an oyster three inches in diameter be safely transported and laid down elsewhere?—It may be transported and laid down, but for eating it is not worth anything.

38,860. Would not a prohibition against taking oysters less than three inches in diameter seriously affect the trade in oysters taken to be laid down on the English coast and elsewhere?—It might serve the beds there, but it would injure ultimately the beds here, because if you take oysters indiscriminately, the beds will become ultimately completely exhausted.

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38,861. If oysters were not taken less than two inches, that would prevent indiscriminate fishing?—Yes.

38,862. But it would not prevent the removal of oysters at a time when they were unable to bear removal?—That is my opinion.

38,863. Do you think that would operate injuriously?—Perhaps those oysters which exceeded two inches in diameter might bear to be removed.

38,864. Do you think the working of this byelaw has been productive of much loss to the persons engaged in the fishery?—I think it has been productive of no loss to them at all.

38,865. Was there no great trade in small oysters that could be laid down elsewhere?—There was, but not at that time, for propagation. They were merely laid down for a short period. They were merely put down upon the Beaumaris beds, and left there for a short period. They were not sent away to France for propagation.

38,866. Has there been a demand here for oysters for France for propagation?—Yes, the demand was very great last season.

38,867. Of what size will they take the oysters for that purpose?—They prefer the medium size.

38,868. What do you call the medium size?—Three inches.

38,869. And I suppose they were glad to get them?—Yes, as a larger number can be got into the measure of small ones than large ones, and they sell them by number in France.

38,870. For laying down on the French beds, would they be glad to get them of two and a half inches in diameter?—I should say they would, if they were sufficiently strong to bear the voyage.

38,871. There appears to be no regulation of this kind on the Arklow beds?—No.

38,872. And they fish a month longer there?—Yes.

38,873. Is there any difference in the oysters here and those obtained from the Arklow beds to justify such a distinction being drawn?—Perhaps the Arklow beds are of much greater extent than those here, and they would not be exhausted so soon by being fished in the close season.

38,874. You have no doubt that enforcing the close time carefully has been of great benefit here?—Yes, and I think it would even be of benefit to enforce it in the month of September also, because the oysters then are not very good; they are very weak.

38,875. Are they good in May?—No, they are not.

38,876. In what water is the oyster bed here? What is the depth?—About eight fathoms.

38,877. That is more shallow water, I think, than the Arklow bed?—No, I believe it is deeper, and it is deeper than the Ballyvaldon bed too. I have never been on the Arklow bed, but I think ours is deeper than that.

38,878. Have you heard any complaints from the fishermen here against the trawlers for interfering with their drift nets?—No, none; but I have seen the trawlers here trawling over the oyster bed.

38,879. In that way would they carry away the oysters during the close time?—I should say that they would disturb the spawn.

38,880. From your knowledge of the fisheries here, is there any particular grievance the fishermen have to complain of that you are aware of?—I am not aware of any.

38,881. (*Mr. Lefevre.*) Is there any person appointed here to look after the oysters as they are brought in, and see that they are not under the size?—Yes.

38,882. Who?—The police.

38,883. Have they special instructions to do that?—Yes, they act under the Fishery Commissioners.

38,884. I suppose a considerable number of oysters are brought here that are taken from other beds?—Yes, from the Ballyvaldon and Arklow beds too.

38,885. Will most of those be under three inches?—Yes, but they would be easily known.

38,886. Is there such a distinction in the appearance of the oysters?—Yes, in the appearance of the shell.

38,887. Can you tell whether the boats are fishing on the prohibited beds or not in the month of May?—Yes, it can be seen from the Customs station down at Rosslare, which is at the entrance of the harbour, whether they are dredging on the Wexford bed.

38,888. Have there been any convictions under that byelaw?—Yes, there have been under the byelaw with regard to size, several convictions.

38,889. Have any complaints been made by the fishermen with regard to it?—No, none.

38,890. Do they generally agree in thinking that the regulation is a good one?—Some of them do, and some do not. Some of them would be glad to take every one of the oysters. They would be like the man who killed the goose which laid the golden eggs; but, generally speaking, I believe, they think the byelaw is for their own advantage.

The witness withdrew.

E. Cullen.

EDWARD CULLEN called and examined.

38,891. (*Professor Huxley.*) You are a fisherman here?—Yes.

38,892. You have been here for a great many years?—Yes, I have been engaged at the fishing for about 40 years.

38,893. Do you recollect any public meeting which took place here about the year 1848 or 1849?—Concerning trawling?

38,894. Yes?—We have been stopped from trawling in the herring-fishing time here.

38,895. How was it that that came about?—The north sand men and the St. Clear men applied to the Coastguard, and they stopped us at that time.

38,896. Did the Wexford men make any application against them?—No, they did not.

38,897. Some of your people were also trawling at that time?—Yes, but not when the herring-fishing took place. We all gave it up then. If the herrings were scarce, very likely we might go out with the boats to make a shilling out of the night's work.

38,898. Did you trawl at night?—Yes.

38,899. In that case, I suppose you would sometimes get foul of the herring-nets?—I do not know that any of our boats ever got foul of the herring-nets. They have been out at the time we were trawling, but we generally strove to keep off on account of the fine that would have been imposed upon us if we had injured the nets.

38,900. Do you think that somebody occasionally got foul of them?—I think so.

38,901. And that was the reason that regulation was made?—Yes.

38,902. Was there any public meeting held here about it?—I do not know that there was, but we were stopped by the Revenue men; that is all I recollect.

38,903. The law appears to be that you shall keep three miles outside of the herring-boats?—That is what we were told we were to do.

38,904. Have you always done that since?—Yes.

38,905. Has the enforcement of that regulation interfered very much with your trawling?—Not a great deal. There are times when we can work very well three miles away from them, in the north bay particularly.

38,906. Then you do not care much about the regulation; it does not seem to affect you very much?—It does not injure us very much. If we went among the herring men, the Revenue men would soon be after us, and they would make us give it up;

but the herring men themselves do injury occasionally. In a boat in which I have been before now, they have cut a net away from the stern of the boat.

38,907. Who have done that?—The herring fishermen.

38,908. Do you mean that they cut the trawl off?—Yes.

38,909. (*Mr. Lefevre.*) Did you, in consequence of that byelaw, leave off trawling any time during that year?—We left it off then on account of the fine.

38,910. Did you leave it off both by day and night?—Yes, we gave it up both by day and night when the herring men were there. They got herrings on the north and on the south sand, and we gave up trawling there.

38,911. Since the herrings have left that place, have you gone on trawling all the year round?—Yes, there is nothing to be got in any other way. Certainly the sand men in the season of the year do not object to it so much, but when it comes to Michaelmas and to Hallowtide they will object to us if a few herrings come.

38,912. Do you recollect any person being summoned for breaking the law?—I cannot recollect that.

38,913. Was the law generally observed then?—It was.

38,914. (*Professor Huxley.*) There was no herring-fishing carried on during the day-time?—No.

38,915. But you were kept from trawling during the day?—Yes.

38,916. Would it have been of any use to trawl there during the day?—Yes, we could have done very well at it that season, because there were plenty of soles and plaice at that time; the water was thick, and we could have got them then.

38,917. When you have been trawling in the bay, did you get any considerable quantity of small fish in your trawl?—In the spring time of the year, it is very little small fish that we take, but at another time there may be a few sand dabs, which are generally small, and of no value to bring home.

38,918. Would there be any considerable quantity of them?—No, very little; there may be a dozen or so in the bottom of the net.

38,919. Do you find more trawling outside or inside?—We never trawl outside of our bays.

38,920. Have you ever been trawling over the oyster bed?—Well, not altogether upon the oyster bed.

38,921. Suppose that you got on the oyster bed by accident, would you pick up any oysters with your nets?—Yes, if we did we should take up oysters.

38,922. Could anybody trawl over it without picking up oysters?—I do not think they could.

38,923. (*Mr. Lefevre.*) How far across are the oyster beds?—I think the oyster bed is nearly a mile and a half across, or about that.

38,924. Are there seasons when you find more fish in the bay than others?—Yes, in the spring time of the year, but we generally fall in with the plaice in the month of September.

38,925. Do you sometimes find that the fish leave the bay altogether in the month of May?—Yes, when the weather gets warm, and the water gets clearer, they will go out. I have been trawling in May, and have got one or two tons weight of fish, when they have gone quite away the next day, and I have never got any more till the latter end of the year, when they came in again, and we could get as much as we liked.

38,926. They went away altogether in one night?—Yes.

38,927. Do they come back again as suddenly?—Very often they do.

38,928. (*Professor Huxley.*) Are the oysters more plentiful now than they were seven years ago?—No, I do not think they are; they are a good deal scarcer than they were.

38,929. Are they scarcer than they were five years ago?—I do not think they are. I think they were scarcer then than they are now. They had begun to increase then.

38,930. When did they begin to increase?—It is about seven years ago since I first noticed their increase. At that time, I found on a shell as many as ten only the size of my nail. After that they grew, and there was nothing but oysters.

38,931. When did they begin to fall off after that?—They began to fall off by their continually killing them and taking them away.

38,932. But that has been stopped now?—Yes.

38,933. Do you think it is a good rule to oblige the dredgers to put back the small oysters?—I think it is a good rule, and I think it is a good rule to stop them in the month of May.

38,934. You think it is a good rule to oblige them to put back oysters that are not three inches across?—Yes, because they are of no value to any one.

38,935. May they not be sold for laying down in other places?—That might be done, but in the market they have no value.

28,936. If you were allowed to take oysters two and a half inches across, would you have any market for them; would the French buy them?—Yes.

38,937. Could they be transported; would they stand the voyage?—Yes.

38,938. Oysters of a less size than that would not carry very well?—No.

The witness withdrew.

HERBERT HOARE called and examined.

38,939. (*Professor Huxley.*) Are you a resident in Wexford?—I reside within five miles of Wexford, on the Slaney.

38,940. Have you long resided there?—About 18 or 20 years, but I have been occasionally in England.

38,941. Have you interested yourself in the fishing here?—Yes.

38,942. Do you wish to make any statement to us?—I may say, as a private impartial person, that it seems to be desirable to carry out, with regard to oysters, that which has been done with regard to salmon.

38,943. What is that?—The longer the close season is, and the greater the quantity of brood left, the larger the supply will be. The close time seems to be pointed out by nature, namely, at the time when the oysters are too small to be eatable. I think they are too small even in September, and an impartial person would say, that it would be better not to permit oyster fishing from about the middle of April until the end of September. That would recover the fecundity of the fish, and there would be an abundance of fish upon beds which have been exhausted by over-fishing.

38,944. Do you think that the oysters are not fit to be eaten in the month of May?—They are certainly not.

38,945. And not in the latter part of April?—I can hardly say that, but the longer the close season, the more would be left for brood. If they go on fishing them as they have been doing, the fecundity of the Wexford beds, in the end, will be all destroyed. The Wexford oysters are very much larger than those upon other beds, I think, because they are an older fish and have lived longer. The oyster shells here are very large, and, I believe, there was a considerable pearl fishery in Wexford once. I have lived in Jersey, where my brother had the command of a Queen's steamer engaged in protecting the beds which have been laid down close to Brittany and Normandy. The French exhausted their beds quicker, and were only able to get a small oyster, while the Jersey men got a bigger oyster, because they did not exhaust

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their beds. I recollect that the oysters there were very large, and excessively good, because they were not over-fished.

38,946. We are told that, up to within a few years past, men were in the habit of fishing the oysters all the year through?—Yes, but there were not the great takes then that there are now. For example, a large French lugger was here seven times last summer, and carried away an enormous quantity of fish.

38,947. The existence of a close time could not have affected that; a large number of boats might dredge the beds during the open season; however short you made the open time it would be possible to send a great number of vessels here, and even in some cases to send a steam dredge?—No doubt.

38,948. Your argument would go rather to a limitation of the number of boats?—I think if you limit the season you will have more to breed.

38,949. With regard to oysters, the number taken must depend greatly on the number of boats fishing in the open season?—Yes. I think it is a real hardship that foreigners, persons not belonging to this country, should come here and dredge, and carry away the young oysters for their own purposes. If they are taken away in the winter, we know that the young oysters die from the frost. They are killed and thrown away in the transit, and I think it is certainly hard that that should be permitted.

38,950. You are aware that that is a very difficult thing to regulate?—Yes.

38,951. For example, the Wexford fishermen think it very hard that other fishermen should come to fish for herring on their coast?—That is a fish that comes under a different category. The herrings come down from the northern sea and they are got at that period; they come down here to deposit their spawn in the shallows, and they are only driven off by a rough sea; the spawning time, therefore, is the time at which the herrings are taken, and we must take them when we can get them.

38,952. Would you advocate the general principle of the fish being the property of the persons on whose coast they lie?—The oyster is an inhabitant of the coast; the herring is a migratory fish.

38,953. Would you extend that principle to restricting the Wexford men from fishing on the Arklow beds. I ask the question in order to show the difficulty of regulating the matter?—I have lived in France for some time, and I know the great efforts which have been making in France with regard to oyster culture. Knowing what they are doing in the matter, it does seem very hard that French luggers should be allowed to come here and carry away all our spat and young for their own purposes.

38,954. How many miles from the shore are the oyster beds which are fished off Wexford?—Not more than two miles; I believe they are only two miles from the shore.

38,955. Are they not beyond the three mile limit?—I do not think they are.

38,956. It appears at first sight that the case you have mentioned is a great hardship, but there would be a great difficulty in making a rule on the subject that could not be turned round upon our own fishermen in other ways?—Yes.

38,957. If a law is made for one locality it must be made for all, and then it is probable that the Wexford fishermen would suffer as much as any body else?—Yes.

38,958. Is there any other suggestion that you wish to make to us?—I may say with regard to lobsters, that although there are good fishermen on the east coast, no close season is observed; the lobsters are taken a great deal too small. There is a very great amount of neglect with regard to them. I fancy from what I hear that there is a gross waste and improvidence.

38,959. Do you mean the taking them in the spawning time?—At all times at too small a size. I think there ought to be some minimum weight with regard to lobsters.

38,960. Are they taken so small as to be useless?—No, not useless, but they kill them instead of allowing them to grow up.

38,961. Have you anything to say with regard to trawling?—No, except in this way, I think a great deal might be done by increasing the capability of the shoal water on the sands to hold the spat of the oysters. We know that in France they have found out that, by putting down fascines and so on, so as to give something for the spawn to hold by, they have greatly increased the stock.

38,962. Do you think the sea bottom about here is fitted for oyster culture?—I think it is particularly so.

38,963. Are there large sheltered bays?—Yes, and there is that calmness of water which exactly suits the oyster. The spat must not be deposited too high nor too low; if it is too near the surface it perishes with frost and cold. In order that there may be a success in oyster culture, there must only be a certain depth of water.

38,964. You would not suggest that the Government should do that. If it is necessary, why do not the people who are locally interested in the matter do it? The Fishery Board has the power of giving them an interest in the fisheries, and they have already granted licences to people who are disposed to cultivate the oysters. It has been done in France by private enterprise?—Yes, and they have oyster parks, which are very useful and valuable. I have not seen any here.

38,965. Do you think the ground is such that it might be done with advantage?—Yes; there is an immense extent of sand bank upon which at present there is nothing to hold the oyster spat. If they were to lay down stones and rough things upon the ground, I think it would become a seed-bed.

38,966. Then might it not be worth while that some one interested in the matter should try the experiment? You would hardly recommend the Government to take the initiative?—That is a question that it is difficult to answer.

38,967. If it succeeded would it not pay any private speculator extremely well?—Not if the public had a right to fish there.

38,968. No, but the Fishery Board has the power of granting an exclusive right of property in the shape of licences to persons who lay down the beds?—I do not know how that would be at any distance from the shore.

38,969. (*Mr. Lefevre.*) Are those banks a continuation of the Wexford bank?—Yes. At Howlen's bed there is an immense mass of shoal water.

38,970. At some distance from the shore?—For two or three miles there are great flats quite away from the shore. They may be considered to be off the shore altogether.

38,971. Is there deep water betwen them and the shore?—Yes, they have channels between. Towards Courtown, on the northern shore of the county, there seem to be banks of the same sort.

38,972. Are there any beds here in the harbour, or along the coast, where the oysters are laid down for fattening?—I am not aware of any. I know that, in the case of a small river in the Bay of Tintern or Bannow Bay, they brought over oysters and formed a fishery, and they are oyster fishing now where there was none before.

38,973. You are not aware of any licence having been granted here under the byelaw?—No; and I imagine that, round Carnsore Point to Hook Head there are banks well fitted for oyster culture.

38,974. With regard to the French boats that fish off the coast here, do they bring their oysters here and sell them, or do they carry them away themselves?—I was speaking of a captain who came from Cherbourg. I think he came seven times to pur-

chase oysters, in order to carry them away for laying down on the coast of Brittany.

38,975. Did he purchase them from the fishermen who got them?—Yes.

38,976. Besides that, do French boats come and dredge here?—Yes.

38,977. Do those boats sell them here, or carry them away to France?—I am not aware.

38,978. I presume you would not object to that trade—to the trade of purchasing oysters here for the French beds?—I do not see how it could be prevented at all.

38,979. That appears to be important to the fishermen here?—No doubt the Frenchmen have as good a right to buy them as anybody else. You could hardly prevent that.

38,980. It would be a different matter if the French boats came and fished here, and never landed their oysters, but took them away from here to France?—I understand that the Jersey boats do come here, but they are our countrymen.

38,981. There would be no means of ascertaining, in that case, if the byelaw established here with regard to the size of the oysters is carried out or not?—Of course, the oysters taken away go away without inspection.

38,982. (*Professor Huxley.*) Have you yourself studied the oyster culture on the coast of France?—No, except when I have been bathing there. I have occasionally made inquiries, and I have been in communication with a gentleman in Paris and others who have been acquainted with M. Coste's method. He pointed out to me the difference between a four-year old oyster, a three-year old oyster, and a two-year old oyster, showing that the size of an oyster was a matter of age entirely.

38,983. I asked you the question because I have reason to believe that a great many of the artificial beds in France are laid down between tide marks?—Between high and low water?

38,984. Yes, and they make artificial embankments for keeping in the water. Is that a system which might be carried out here?—They have an economic way of catching fish on the coast of Brittany. A field is, as it were, laid down between high and low water with a heap of stones. Then there is a water-way to prevent the fish from going through as the tide recedes. There is a pool formed there, and you may see the women going in with nets to fish.

38,985. That is, for ordinary fish?—Yes; there are large oyster parks, about Granville especially.

38,986. All that is within reach of private enterprise?—I do not think any private person would venture to turn one of these large sand-banks, two or three miles out, into his own private property, unless he was sure to be able to keep other people off.

38,987. Do you think it necessary that banks should be taken as far off as that; are there not many places in-shore where artificial beds might be constructed?—No doubt there are, but there is a large extent of sand-bank which might be fructified, and which is capable of being converted into a good oyster fishery. It is nearly pure sand, and nothing better can be done with it than covering it over with stones.

38,988. (*Mr. Lefevre.*) What is the nature of the bottom of the bank here; is it rough ground?—It is rough ground; there are small stones and gravel.

The witness withdrew.

The Rev. Michael Vicary called and examined.

38,989. (*Professor Huxley.*) You have prepared a paper in reference to the fisheries here?—Yes.

38,990. Will you be good enough to read it?—It has reference to the Kilmore fishery, and is as follows:—"Kilmore, situated at the eastern terminus "of Ballyteige Bay, is a small harbour, formed by "a pier or mole recently erected, of which the west "wall only is finished. It, however, gives shelter to "about 40 cobles and boats, some of the latter being "20 tons. It requires much a breakwater to the "east, or an east wall, and would thus form a safe "anchorage for the fishing boats. About 100 men "and boys are employed in fishing for cod, bream, "ling, haddock, and conger. Flat-fish are not taken. "The fishing ground in both bays, Ballyteige to "the west, and Tacumshin to the east, abound in "lobsters and crabs. A well found boat will clear "40*l.* in the season. Generally speaking, with the "exception of the crustaceans just mentioned, the "fishery has declined at Kilmore. Some 40 years "back haddock of prime quality abounded, and cod "were much more abundant than at present. It is "difficult to assign a reason for this state of things, as "feeding and spawning grounds of a great extent, "adapted to all the exigencies of the various varieties "of fish, resorting to the locality, are to be met with. "I should say from personal observation, that sprats "arrive in as great quantity as usual, upon which "fish feed, and that nature in this respect, reproduces "itself from year to year. I am induced to think "that the constant fishing, whenever the weather "permits, of nine large trawlers from Dunmore and "other places destroys, during the breeding season, "large quantities of the spawn of the best varieties "of fish. This I have ascertained from those who "have seen the decks of the trawlers loaded with "spawn, and with quantities of small fish, destroyed "by the trawl beam. The remedy here suggests "itself,—to prevent, by legal enactment, trawling "during the months that spawn is deposited, or protecting the beds for a longer period, until the young "fish are able to take care of themselves. The Kil-"more men fish only with the line, and are very pri-"mitive in their habits. Mackerel, and occasionally "pilchards, visit the coast, from about the 1st of "August, in large quantities; but from the want of a "larger class of boats and superior nets, but a small "quantity is taken. With regard to the lobster and "crab-fishing, it would seem advisable to render im-"perative the returning to the sea the small lobsters, "which is now never done. The lobster at Kilmore "is a superior fish, both in size and flavour. The "crab is not so good, and I should say it would not "operate favourably to apply the same rule to the "young crabs, as they form, to a great extent, the "fishermen's bait for many other fish. Bait is much "wanting in the locality, a district or estuary over "which the sea flowed having been lately reclaimed. "The fishery, then, having declined in the locality, "the suggestions that I would make resolve them-"selves into these,—to endeavour to have the pier "finished, so as to protect and encourage a better "class of boat; to limit the period when the trawl-"ers should fish (they fish at a distance of three "miles from the land), and to order the return to the "water of small lobsters. I think that more oyster "beds are to be found on our coast, and, as the "spawn of those fish is thrown up on the shores of "Tacumshin and Ballyteige Bays, it would seem ad-"visable, for the purpose of developing what in fact "they are, mines of wealth, to hold out some en-"couragement for their discovery. I regret that "other occupations prevent my saying more on the sub-"ject, with which, from natural inclination and habit, "I am not unacquainted." With regard to the taking of spawn by the trawlers, I may say that I saw a man who stated that he had seen the decks covered to the extent of six inches, with the spawn of fish. There is no other reason which I can assign for the falling off of the haddock and cod fisheries, except the taking away of the spawn and the young fish. I think this is a magnificent locality for the feeding of fish.

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The two Saltee Islands lie in the centre of the bay, and the ground itself is a good rocky ground.

38,991. Has any representation been made to the Fishery Board by the inhabitants of the district, because that is the first authority to whom representions of this kind should go? The Fishery Board have the entire superintendence of the fisheries of Ireland. It is quite correct that we should have this evidence here, but the body which is charged with the superintendence of the fisheries is the Fishery Board. Has any statement been made to that Board?—I am not exactly aware whether any statement has been made to them or not.

38,992. Supposing the trawlers did all the mischief you speak of, would not the Fishery Board have power to interfere with them?—I am not aware that any recommendation has been made to them. Mr. Coghlen applied to me on the subject. I know a a good deal about it myself, and I know that the valuable fishery of Kilmore has declined.

38,993. If this mine of wealth is waiting for anybody who will take it, is that not a sufficient inducement; what other motive would you have more than that?—I think it ought to be a sufficient inducement, but I thought it as well to bring these matters before you.

38,994. With regard to this inducement to fish, is not the fact of being able to make a large profit out of the fisheries, if they are properly carried out, the best inducement which can be held out to people to follow it out?—No doubt of it.

38,995. So that, without any direct interference on the part of the Government, the fishery might be prosecuted, if it was a good one?—Yes.

38,996. Is there any other inducement you would hold out?—I think not. The fishermen of Kilmore are excellent honest men, but they know nothing of that magnificent net which is used on the coast of Cornwall. They are fishing now in the same way as their ancestors did 600 years ago.

38,997. Do you mean the pilchard net?—Yes.

38,998. Are there large shoals of pilchards here?—Yes, I have seen them; they come and go. Occasionally the pilchards and mackerel break upon the shore. The fishermen then make a mark and surround them with a small seine.

38,999. Do they work with hand-lines or long-lines?—Hand-lines. Long-lines are too much for them.

39,000. Are they too primitive for the long-lines?—Yes.

39,001. (*Mr. Lefevre.*) Do the trawlers not work within three miles of the coast?—Yes, I think there are limited banks; but there is generally dirty foul ground, and places abounding with fish, and I know for myself, that having fished with the long-line, and I remember catching four turbot on one line.

39,002. Then the trawlers, in your opinion, have not much interfered with the mine of wealth you speak of?—No; but I want to find a reason why the fish have declined. The fact is, that the fish were abundant, and now they have declined. I know that the spawn has been injured.

39,003. When you say spawn, do you mean what we generally understand by spawn, or the young of fish?—By spawn I mean the eggs of fish.

39,004. Are there any other fishing villages between this and Dunmore?—There is Kilmore, which is exactly opposite to the two Saltee Islands, which form a natural breakwater.

39,005. How many fishermen are there there?—From 100 to 140 at Kilmore.

39,006. Is there any other place?—There is a place called Feathard, lower down in the bay.

39,007. Are they fishermen throughout the year?—They fish only in the summer months, because the pier is not sufficiently protected in the winter months, but the rough fish are more to be met with in the winter than summer, and these wretched fishermen of Kilmore, with their lobster pots, are obliged, I believe, to send to Wexford for bait.

39,008. How many boats are there at Kilmore?—About 50 altogether.

39,009. Are they open boats?—Cobles, which are small boats; there are a few of the larger and better class.

39,010. They do not come round the point for oysters?—No, they never fish for oysters; but I am convinced there are oysters to be found there.

39,011. Are there oysters to be found south of the Point?—Yes; the men have told me that they have pulled up oysters on their hooks.

The witness withdrew.

W. Coghlen.

WILLIAM COGHLEN recalled and examined.

39,012. (*Mr. Lefevre.*) Are there oyster dredgers between this and Arklow?—Yes, four or five. All along the coast there are stray boats which are hauled up on the beach.

39,013. Is there any means of ascertaining the amount of oysters brought into the port here and sold?—No; you might, perhaps, obtain an average account.

39,014. There is no statistical account kept?—I did make a return to Mr. Barry.

39,015. Was that a comparison of a series of years?—No, only for the last year.

39,016. Can you give us a return for a few years?—No; last year was the principal year we exported. We had no export to France before that, except there may have been a small quantity sent away.

39,017. Do you know the number of fishermen here?—Following the oyster fishery?

39,018. No, I mean engaged in any kind of fishing?—There is a large number on the coast who follow the herring fishery.

39,019. Take the number that dredge for oysters, how many are there?—I should say there are very nearly 500.

39,020. Does that include the number who dredge on the Ballyvaldon bed?—One portion of the beds they dredge on was in fact only discovered last year, and if it had not been for that, I think the original beds would have been exhausted altogether. The fishermen here are under the impression that if the Ballyvaldon bed is fished during the month of May it will be exhausted.

39,021. Have there been other beds discovered here within the last few years?—No; they discovered another bed in a previous year in that locality.

The witness withdrew.

J. Howlin.

JAMES HOWLIN called and examined.

39,022. (*Professor Huxley.*) Have you been requested by the fishermen to attend here?—Yes, to bring forward one point only, namely, that they attribute the falling off upon the Ballyvaldon bed altogether to the month of May being allowed as an open month.

39,023. Do they wish it to be cut off, and a close season applied to it?—Yes; they wish the byelaw to be rescinded, so far as the Ballyvaldon bed and the Teetotal bed are concerned.

39,024. But for the discovery of the new bed which has just been alluded to, do they think that the old beds would have been exhausted altogether?—Yes.

39,025. Are there many men from the shore fishing immediately off the Ballyvaldon beds?—Not oyster-fishing; they are all small boats that go.

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39,026. The people go from here and Arklow ?—I think the Arklow men do dredge there, but it is on the Wexford coast and in the Wexford district.

39,027. Have the Arklow men expressed any wish of that kind ?—No; but the fishermen here have. The oysters are not in season in that month; they have been examined when they have been taken in the middle of May, and they have been found full of spawn. They bring forward in proof of their statement, that since the month of May has been made a close month at Wexford the oysters have increased, while those on the Ballyvaldon bed, which has been left open, have decreased.

39,028. (*Mr. Lefevre.*) Has the condition of the fishermen improved here ?—I think it has.

39,029. What has been the cause of that ?—There has been an immense trade in oysters here, and an improved class of boats.

39,030. A foreign trade springing up here for aying oysters down in France ?—Yes.

39,031. Is there any other matter which the fishermen wish to call our attention to ?—No, that is the only thing.

39,032. You have heard what they have stated to us ?—Yes, and that is the only point they were anxious that I should bring before you.

The witness withdrew.

T. Smith.

Thomas Smith called and examined.

39,033. (*Professor Huxley.*) I believe you wish to state to us that you have never seen trawlers working over the oyster bed ?—Not unless they were Dublin trawlers.

39,034. The Wexford trawlers would never do that ?—Not unless in the night-time, when they might have over-run the ground.

39,035. What is the reason that they keep off from there ?—Because they would tear their trawl and leave it altogether behind.

39,036. And that would be a disadvantage to them? —Yes, it would be of no advantage for them to go upon the bed, because the fish do not lie on that ground.

39,037. They never go there if they can help it ?—No.

39,038. Have you ever seen the heavier trawl-boats trawling over the oyster beds ?—Yes; they go there sometimes, and they are much stronger boats.

39,039. Does not the ground tear their trawl ?—No; and another thing, they have a preventer before the sweep rope, which brings it up before they can tear the trawl.

39,040. Have they other nets before their trawl ? Yes, some of them have.

39,041. Do not your trawls have anything of that sort ?—No, nothing of that kind.

39,042. Is there anything else you wish to say ?—No, nothing else.

39,043. (*Mr. Lefevre.*) I suppose that the Dublin trawlers do not know the ground as well as you do? —I do not think they do.

39,044. Do you not think it possible that they are as anxious as you not to go over the oyster ground ? —They may be, or they may be not. I do not think they would go over it to do it an injury any more than we should.

The witness withdrew, and the inquiry was adjourned until the 24th of August, at Dunmore.

Dunmore, Waterford, Wednesday, 24th August 1864.

Present:

Professor Huxley, F.R.S. (Chairman). | G. Shaw Lefevre, Esq., M.P.

DUNMORE.

S. Mitchell.

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Samuel Mitchell called and examined.

39,045. (*Professor Huxley.*) Have you resided here for many years ?—Yes, for 22 years.

39,046. You are a master pilot, I think ?—Yes.

39,047. Are you acquainted with the fishery and the fishermen ?—I am.

39,048. What are the modes of fishing practised here ?—Trawling and line-fishing of all kinds; there are also herring and mackerel-fishing and hake-fishing.

39,049. Is there any sprat-fishing ?—Yes, and what we call fishing for scad.

39,050. Mackerel scad ?—Yes.

39,051. Are there any crabs and lobsters taken here ?—There are a great many crabs and lobsters.

39,052. Is there any oyster-fishing ?—There are a few oyster beds above the river.

39,053. What is the number of boats employed in the fishing here ?—There are six large trawlers out of Dunmore at present.

39,054. What is the tonnage of those trawlers ?—From 30 to 46 and 50 tons.

39,055. Are they decked boats ?—Yes.

39,056. What is the number of the other boats here ?—There is a great number of small boats; there are over 45 hookers, besides open boats.

39,057. A list has been given by you to us stating that there are eight first-class boats; are they vessels that are employed in trawling or in hooking ?—In trawling. They are large boats.

39,058. Then there are 15 second-class boats ?—Yes.

39,059. Are they employed in hooking ?—They are employed in hooking and trawling.

39,060. Do any of the open boats trawl ?—Yes, plenty of them.

39,061. With small trawls ?—Yes.

39,062. Besides these first and second-class boats there appears to be a number of small boats ?—Yes, yawls and big boats of five, six, or seven tons.

39,063. Can you give us any opinion of the number ?—I cannot say exactly; there are a great many boats up at Passage which trawl.

39,064. Where do the boats which fish from off this harbour mainly come from ?—From Passage, Dunmore, and Tramore.

39,065. Are they the three principal places ?—Yes.

39,066. Since you have known the place has the number of boats much increased ?—Yes, the small boats have increased but the fish have gone away.

39,067. Have the trawlers increased in number ?—They have not.

39,068. Is there the same number now that there used to be ?—Yes, but there are not as many belonging to this place. There used to be three or four more but they have gone.

39,069. The total number working in the bay is as great ?—There are one or two laid up now which are not working.

39,070. Has the tonnage of the trawlers increased ? —Yes.

39,071. And the size of the boats ?—Yes.

39,072. Has the length of the beam become greater ? —Yes, every boat they build becomes larger and larger.

DUNMORE.

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39,073. Was there trawling here when you first knew the place?—Yes.

39,074. Had it been going on here long before you knew it?—With small boats, but not with big boats.

39,075. Do you recollect when the big boats began?—I do.

39,076. In what year was it?—About 22 years ago.

39,077. That is when you first began fishing?—Yes.

39,078. Did you come from Brixham?—No, from Portland.

39,079. Was it Brixham men who came round first?—No, people belonging to my own place. There was also a Dublin boat that came down here; it got blown down from Dublin and was fishing here when we came. Then we had four boats here, and we caught so much fish on the bank outside that we were induced to stay. Messrs. Coxen and Penrose of Waterford then got boats.

39,080. (*Mr. Lefevre.*) Were there small trawlers before that?—There were plenty of hookers but no big boats.

39,081. (*Professor Huxley.*) There is a difference between a trawler and a hooker. Were these small hookers you speak of employed in trawling as well as in hooking?—Yes.

39,082. With small trawls?—Yes.

39,083. When you first came did the large trawlers work outside on the banks or inside?—About 15 miles outside.

39,084. Is it better for them to keep outside altogether?—Yes.

39,085. The small trawlers work in-shore?—Yes, in the season.

39,086. Then on the whole the tonnage and the number of the trawlers have increased?—Yes; when I first came here there was only one boat, but when we found the fish was plentiful out on the bank, from 15 to 20 and 30 miles out, the boats began to increase, and they have gone on increasing up to this day.

39,087. What is the total number now?—There are four fishing and two laid up.

39,088. What is the total number working on those anks from every place?—Outside?

39,089. Yes.—Only four.

39,090. Are there no strange boats?—One from Dublin.

39,091. I understood you to say that there were as many as 30 boats at times?—Yes, in the winter time when the fish come in, and away up to Dungarvan and the light-ship.

39,092. Occasionally are there as many as 30 boats fishing?—Yes.

39,093. That is not the case all the year round?—No.

39,094. When you first began trawling here was there an abundant supply of fish?—Yes, there was an immense catch of fish then.

39,095. Of what kinds?—Of all kinds except red mullet.

39,096. Were soles very abundant?—Yes.

39,097. Was there plenty of turbot?—Yes.

39,098. And of plaice?—Yes.

39,099. And of John Dories?—Yes, and of hake and haddock.

39,100. Were haddocks abundant?—Yes.

39,101. Were they fine haddock?—They were both large and small.

39,102. Was there whiting as well?—Yes, silver whiting.

39,103. Have you been acquainted with the trawl-fishing within the last few years?—I have not been acquainted with trawling within the last 11 years, but I have been in the harbour constantly.

39,104. How long did you yourself trawl?—Nine or 10 years.

39,105. At that time did the yield by the trawl boats fall off?—The fish got very slack.

39,106. Was it a gradual decrease?—Yes; constant working over the ground with so many boats we consider injured the spawn of the fish and the fish left us.

39,107. Did you ever see spawn brought up in the trawl?—Yes, plenty of it.

39,108. Do you mean spawn or the eggs of fish?—Small fish and spawn.

39,109. Real fish spawn?—Yes. In this harbour I have often seen the nets covered with it. Just when I came to this harbour it was full of fish of all kinds. I was fishing here for a long time, and the fish were very abundant. We got a power of fish in the harbour then, so that when the weather was rough we used to shoot on the Maid and found fish of all kinds in the greatest abundance.

39,110. About the question of spawn, do you know cuttle-fish spawn and squid spawn?—I have caught immense quantities of spawn like candles.

39,111. Like what is called dead men's fingers?—Yes.

39,112. That is not fish spawn at all?—No, but there is another kind of spawn like feathers.

39,113. Did you find any great quantity of that stuff outside?—Not so much, because we considered that the deep water washed it a good deal off when we had the net out.

39,114. There is no clear proof that this was fish spawn at all?—No, it is a different kind of thing altogether from those long-fingered things you speak of, which hang like candles.

39,115. That is not fish spawn at all?—I could not tell what it was.

39,116. Do you know what herring-spawn is?—No. Sometimes I see immense quantities of spawn sailing on the top of the water, but I cannot tell what spawn it is.

39,117. Are we to understand that you think that the supply of fish has fallen off from your knowledge of what goes on here and from seeing the fish brought into the harbour?—Yes.

39,118. Has the supply got by the trawlers diminished?—Yes.

39,119. What would be the average take 20 years ago when you began fishing—how much did you bring in on an average per day?—Sometimes as much as four or five tons.

39,120. Would not that be an out-of-the-way take?—No. If we worked the trawl for two or three hours we should have as much as we could take. We should have four or five horse-loads, both in Dungarvan, at the light-ship, and on the Maid. It was the same in all those places.

39,121. What amount of fish do they yield now?—It is a mere nothing now.

39,122. Would you get half a ton?—Perhaps 20 or 30 pairs of soles and an odd turbot.

39,123. Under those circumstances how do the trawlers afford to go on? The tonnage of the vessels has increased, the amount of capital put into them has also increased, and yet you say the yield of fish has fallen off so much. How under those circumstances do they afford to go on—are fish dearer?—They have been doing worse because there is no market for the fish here, there are so many boats trawling in the harbour.

39,124. Would not that make the matter worse for them?—It does.

39,125. Then how do they go on and pay their expenses?—They keep their boats up, but they don't get half the money they formerly got.

39,126. Where does the fish caught by the trawlers go to for the most part?—To Dublin.

39,127. Does much of it go to Waterford?—It goes from Waterford to Dublin in the train.

39,128. Is there not much sold in Waterford itself?—No, not much.

39,129. Does much of it go to Cork?—It don't go there, but to Bristol. It is carried across by steamboat.

39,130. But the most part of it goes to Dublin?—Yes, when the Dublin boats are here.

39,131. It is a little difficult to understand how if the fish have fallen off in that extraordinary manner, so that they only get 20 soles, they can afford to pay the expenses of keeping up the trawlers ?—They don't pay much. They are getting worse and worse every year. There was an abundance of fish off here since I can remember, both trawl-fish and mackerel and herrings.

39,132. How do the little trawlers get on in the bay ?—They have done very well; I have one myself.

39,133. Has not the fish fallen off with them ?—Not until lately.

39,134. Has the number of little trawlers increased since you began fishing ?—Yes.

39,135. Then the fishing has not fallen off with regard to the small trawlers ?—Every poor man now gets a small boat to hook a bit of fish in the harbour.

39,136. But I want to know as a fact whether the supply of fish taken by the small trawlers has fallen off or not, or whether it is the same as it used to be ?—It has fallen off; it has gone altogether. Last year I made 16*l.* by my little boat, but this year I could not make 2*l.*

39,137. Has that falling off been sudden ?—It has been falling off ever since the big trawlers trawled in the harbour.

39,138. Formerly they used to trawl outside ?—Yes.

39,139. Since what time have they began to trawl inside ?—Now for about 13 years.

39,140. Has any application been made to the Board of Fisheries on that subject ?—There was. There was a meeting held by the fishermen of the town. They considered that it did no good to trawl on the Maid bank.

39,141. That would be somewhere about the year 1852 I suppose. There is a byelaw prohibiting trawling by boats exceeding six tons measurement within lines drawn from Credan Head to Temple Church. This byelaw has two dates, namely 2d March 1852 and 12th September 1860. Was it passed in consequence of a public meeting here and after an inquiry ?—It was.

39,142. Do you recollect the circumstances of that meeting ?—Yes.

39,143. Was it held in 1852 or 1860 ?—In 1860.

39,144. What was the cause of it ?—The small boats considered that the big boats were destroying the place and preventing the shoals of fish from coming in.

39,145. Did they complain that the trawlers were coming inside the heads ?—Yes; they were trawling in the harbour when the hake and the herring were likely to come in in the fall of the year.

39,146. Did they make a representation to the Fishery Board on that subject ?—Yes.

39,147. Did you take a share in that representation ?—No, I did not.

39,148. Were you then working a large trawler ?—Yes.

39,149. What took place in consequence of the representation that you made—do you remember ?—I do not. I only know that they passed a byelaw that none of the heavy boats should come in.

39,150. Has that byelaw been enforced ?—Yes, I have never seen a big boat there since.

39,151. And yet the fishery has fallen off every year ?—Yes.

39,152. Then that regulation has not done much good ?—No.

39,153. How far should the large trawlers be kept out ?—They should not be allowed to come inside Hook Point and Swines Head.

39,154. Not inside the headlands at all ?—No; I would have no trawling there. There used to be abundance of fish until the big boats began to trawl.

39,155. Hook Point and Swines Point are the headlands here ?—Yes.

39,156. Credan Head and Temple Church are a long way inside the headlands of the harbour ?—Yes.

39,157. More than seven miles ?—No, about four miles.

39,158. Do you think that if the trawlers were kept altogether outside of the limits of the harbour that the fishing would recover itself ?—I have no doubt of it.

39,159. But the prohibition which exists does not seem to have had the smallest effect ?—No, the big boats inside the harbour destroy all the fish and clear the ground. They do not go further out than from the Hook down to Swines Head.

39,160. Were you ever interfered with when fishing ?—Yes.

39,161. In what way ?—I went trawling outside the harbour when my net was cut.

39,162. Where were you trawling ?—In the deep-sea fishery.

39,163. Outside the heads ?—Yes, in the Channel. It blew very strong upon that day. Some of the rest of the big boats shot on the Maid. I never shoot there before. I did not shoot in the harbour but I towed in when I could not get the fish on board.

39,164. Was there so much of it ?—Yes, of cod, ling, plaice, turbot, brill, large gurnards, and dories. I made 16*l.* by a two hours' haul. Then the hookermen said it was not right, and they cut my net. I think Mr. Barry came from Dublin about it.

39,165. What year was that ?—The year 1860.

39,166. That was when the byelaw was passed ?—Yes, they passed the byelaw to prevent us from going above Credan Head.

39,167. Did the meeting in 1860 refer to that ?—I think it was about that time, as far as I can recollect.

39,168. But what you tell us rather shows that there was a great deal of fish then ?—Yes, there was a power of fish then, but since these big trawlers have been coming in every year the fish have been getting less and less.

39,169. You were at that time outside the line from Credan Head to Temple Church ?—Yes.

39,170. You were outside the line drawn from Credan Head to Temple Church, but yet you were inside the headlands ?—Yes.

39,171. When you speak of the large trawlers trawling inside, do you mean to say that they have gone on trawling inside the harbour but outside the line from Credan Head to Temple Church ?—Yes.

39,172. They do not violate the byelaw ?—No.

39,173. Where did you haul your trawl up ?—Below Credan Head. Sometimes the tide is very strong, and when we begin to heave the trawl up the wind drives us in.

39,174. Do you think the practice of trawling inside the heads is very injurious to you ?—I do.

39,175. We have been told that of late there has been a steam trawler here, when did she come ?—She has not been here above two or three months, not more than that.

39,176. Where does she work ?—She is constantly trawling in the harbour between Hook Head and Credan Head.

39,177. Is that outside the line drawn from Credan Head to Temple Church ?—She trawls above that.

39,178. Why do not the authorities prevent her ? There is a byelaw to that effect ?—She is down at Credan Head, and she goes across towards Broomhill and trawls back again. If she trawls from Credan Head to Broomhill she is still inside the head. She is down there and she crosses to this coast and down again to Credan Bay, and away to the Black Rock. As long as she is outside of that line she is within the limits of the law. No doubt she acts within that.

39,179. What is the size of the trawl that she uses ?—I think it is about the same as ours.

39,180. Have you ever been on board of her ?—No.

39,181. But the size of the trawl is about the same ?—Yes.

39,182. What size is that; is it about 40 feet ?—I believe her beam is 42 feet.

38,183. Is there any evidence to show that she is doing any mischief to the fishery ?—There is; we all feel it.

39,184. What harm is she doing ?—We cannot catch any fish at all since she has been trawling. Although

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she keeps outside the boundary line she drags all the fish away. She has leads as heavy again as other trawlers, and her gear is much heavier. The beam is twice as big and makes twice as much show in the water. The heavier gear we have in shoal water the more it frightens the fish and the less fish we see caught. The harbour was full of fish at the time. Although I have not been fishing myself, I have been looking at the fish as they entered the harbour, and I never saw more fish of all kinds come into the harbour.

39,185. When was that?—When the steamer commenced trawling.

39,186. In what month did she begin?—I cannot tell.

39,187. Cannot you guess? Was it about the spring of the year?—I think it was.

39,188. Before she came was there plenty of fish?—Yes.

39,189. Inside the boundary line from Credan Head to Temple Church?—Yes. I think she came in the month of June.

39,190. Has she only been trawling for three months?—Yes, that is all.

39,191. During that time the fish inside the boundary line have all fallen off?—Yes they have, and a great many gentlemen in Dunmore know it. I have seen shoals of mackerel come right down into the pier on Sunday when they could get rest and when the steamer was not trawling. I have also seen sprats plentiful, but now on Sunday mornings there is not one to be seen. There has not been one seen since she came down to trawl on the edge of the rough ground.

39,192. She does not work on the Sunday?—No, but when she came down on the Monday she did.

39,193. Did she drive the fish away?—I suppose that she frightens all the fish away. When such heavy and rough heads go down in the water they make such a noise and disturb the fish so much that away they go.

39,194. Do you think she disturbs the fish more than a sailing trawler would?—Yes, there is a great deal of difference between a steamer and a sailing vessel. A sailing vessel can only go as she has the wind; if there is a calm she cannot trawl at all; and there are three weeks or a month in the summer time when the harbour is full of fish and no trawler can trawl for want of wind; but when a steamer is trawling up and down, and backwards and forwards, and every way, she can trawl whenever she likes, and is constantly tearing up the beds.

39,195. Do you think that a steam trawler gives the fish no chance at all?—None, because her gear is so heavy that the noise she makes frightens away the fish.

39,196. There is a steamer which comes round from Duncannon and Passage to Waterford, does she frighten away the fish?—No she would not do that when she was only going on the top of the water.

39,197. But she makes a noise?—Yes, but she has nothing at the bottom of the water.

39,198. Then do you think it is the trawl at the bottom that does it?—Yes.

39,199. Does the steam trawler work faster than a sailing trawler?—Yes she does.

39,200. Is her gear so heavy that it will constantly pull?—Yes.

39,201. What rate does she go at?—Three miles an hour.

39,202. You do not trawl above two miles an hour?—We do up to two and a half. It depends upon what we are fishing for. If we are fishing for soles we would drop with the tide in the winter time, but this vessel going with her heavy gear tears up the ground like a plough. It tears up the ground, spawn, and everything else. It must necessarily tear it up.

39,203. Do the long-line fishermen shoot their lines where she works over?—Yes.

39,204. Does she carry away the long-lines?—They pull them up for fear of losing them.

39,205. Would she tear them away more than the other trawlers?—I think so, because her gear is so heavy at the bottom.

39,206. But does she do so as a matter of fact?—I do not know.

39,207. Have you heard any complaints?—Yes, I have seen the men pulling them up.

39,208. The men in the steamer?—Yes.

39,209. Pulling up the buoys?—No the spilliards.

39,210. Would not the steam trawler get out of the way of the buoys?—She would not get out of the way of the boats that were line-fishing for hake.

39,211. When does the herring-fishing take place; is there any herring-fishing in this bay?—We have had no herrings for the last few years in any quantity.

39,212. When you first began to fish was there not much?—There was. We caught them in a small seine I had at home, and we have hauled on shore from 12,000 to 13,000 herrings.

39,213. By seining?—Yes, before the big trawlers began to trawl on the Maid.

39,214. Was seining for herrings a common practice here?—Yes in cobles.

39,215. Was it a seine with a pocket or a circle net?—No, a circle net.

39,216. Not with a pocket?—No, it had no pocket.

39,217. Did you catch great quantities of herrings in that way?—I have caught 12,000, and at another time from 8,000 to 9,000 at one time.

39,218. Was that a common thing?—Yes it was. I was fishing in the deep sea at the time.

39,219. Did many persons fish in that way?—No.

39,220. Was there much drift-net fishing for herrings?—No.

39,221. Is there much now?—There is not much since the big boats came in.

39,222. How long is it since the herrings fell away?—Six or seven years.

39,223. Do many mackerel come in here?—There is a power of mackerel coming in here sometimes, but they don't come inside the Hook. They are little fish that are frightened.

39,224. Are they caught with the seine or the hook and line?—They catch them in the holes of the rocks with seines.

39,225. What time of the year were the herrings here?—About November.

39,226. As late as that?—Yes.

39,227. Was there no summer fishing?—No.

39,228. Then you do not have any herrings here in the summer?—No, but they have been within four miles of this place. Off Howth and down away off Helvick Head the sea has been alive with herrings.

39,229. In what condition were the herrings that were taken here in November?—They were fine fish.

39,230. Were they fat fish?—Yes.

39,231. Did you get spent fish?—Some would be spent and some full of pea.

39,232. In November?—Yes.

39,233. Have you a great number of sprats here?—Yes, at times.

39,234. Have they fallen off?—Yes.

39,235. How are they taken?—By seines and weirs above.

39,236. With bag nets?—Yes.

39,237. Have great quantities been taken in that way?—Yes, but not for a few years past.

39,238. I believe you used to get pilchards here?—Very few come into the harbour. There are sometimes immense quantities outside; I have seen them miles in length.

39,239. Did the fishermen take them?—No, they had no means of taking them.

39,240. They never tried for pilchards outside with herring-nets?—No.

30,241. Is there much crab and lobster-fishing here?—There was a great deal about 14 or 15 years ago.

We had a boat here from England ; she worked 100 pots and in one season she cleared 300*l.*

39,242. Has that fallen off ?—Yes.

39,243. What is the reason of that ; is it over-fishing ?—The fish fell off, they could not catch crabs and lobsters in plenty, and the markets got a little slack.

39,244. To what do you ascribe the falling off ?—I think it was because they went on catching the pea fish.

39,245. They were in great demand ?—Yes.

39,246. You got a better price for them?—We used to send them across to England.

39,247. But you got a better price for the berry fish ?—No, just the same as for the others. They were sold by the dozen. This is a great place for pea lobsters.

39,248. What time of the year do you find them ?—About this time.

39,249. How long do they remain in that state ?—All the winter.

39,250. Do you think it would be well to have a close-time for lobsters in which they could not be caught ?—Yes, in certain places. They will come about this pier to spawn, but every one has his pots and will shoot about the place to catch them.

39,251. Is there not a considerable crab fishery here ? — No, the crabs are generally very small ; smaller than those caught in the West of England fishing.

39,252. Are there any oysters here ?—A few about Credan Head.

39,253. Are there any here ?—I never saw any in the trawl, but I met with a great deal of scallops.

39,254. Are they fished ?—No we cannot make any thing of them here. There is an immense sight of fish caught with the long-lines on the Nymph bank.

39,255. On the Nymph bank ?—Yes, from the light ship to the west end of the bank.

39,256. Is it the principal fishery there now ?—The boats do not go there because there are more herrings now, but a Dublin boat went.

39,257. Was it Dublin boats that fished there ?—Yes.

39,258. Did they fish with the hand or with the long-line ?—With the long-line.

39,259. There was only one boat from Dublin ?—Yes.

39,260. What time of the year did she come ?—In the early part of the summer.

39,261. Did she make a regular practice of it ?—Yes.

39,262. In how many years has that been done ?—She has been here for the last 15 years.

39,263. Constantly coming here every year ?—Yes.

39,264. Was she the only vessel that ever came here ?—There may have been two or three.

39,265. Were there vessels fishing on the Nymph bank which took their fish to other parts ?—No.

39,266. But there was abundant employment for those who came there ?—Yes.

39,267. Do you fish inside the light-ship ?—No, we are not allowed to fish inside the light-ship.

39,268. But you have reason to think that the fish are at the Nymph bank ?—Yes, plenty of them.

39,269. Then why do not the people go out and fish them ?—If they had good boats and good gear they would do so.

39,270. You have a good harbour here—can you take in decked boats at all times of the tide ?—It is a nice harbour for 30 or 40 sail of boats.

39,271. If the fish are falling off so much in consequence of the trawling, would it not be worth while for some of the trawlers to go out there ; they are properly equipped for that, are they not ?—Yes.

39,272. Some of the 40-ton boats you speak of are very good boats, are they not ?—They are getting old now.

39,273. Were they built here ?—Three of them were built at Plymouth and two at Waterford.

39,274. There are plenty of boat builders in Waterford ?—Yes.

39,275. Then if there is so much fish on the Nymph bank, why not go there and catch them ?—No doubt if we persevered and went for it we should get plenty of fish there.

39,276. Do you know anything about the ground off the Saltee Islands ?—That is where we used to fish.

39,277. Is it good ground for fishing?—Yes, splendid ground.

39,278. Is it clear ground ?—Yes.

39,279. Is it worked by the trawlers ?—Yes.

39,280. Is the Nymph bank itself fit for trawling ?—What they call the Nymph bank is about 20 miles off Dunmore. There is very fine sand there but it is bad trawling ground. There are great quantities of fish on it if you go clear, but there are stones peeping up from the sand which when the net goes along cuts it in pieces like a knife. Anybody who is able to go along clear will get an immense sight of fish at certain times of the year, from November to May.

39,281. Is that the reason which makes it not worth while to trawl for fish there ?—The Dublin boats fish there. They made an immense sight of money last year.

39,282. Are they trawling or hooking ?—Trawling.

39,283. Were the boats you referred to just now trawlers ?—No, hookers.

39,284. In addition to them there are trawlers ?—Yes.

39,285. How many vessels are there fishing on the Nymph bank every night regularly ?—If the fish are doing well there are sometimes nearly 40 sail.

39,285. Has that been going on year after year ?—Yes, for 30 or 40 years the Dublin boats have come down every year regularly.

39,286. (*Mr. Lefevre.*) Do they bring their fish to Waterford ?—They used to run it from this place to Dublin, but that was before the railroad was made. Now it is more convenient to send the fish by train to Dublin, but if they get a fair wind and think they can catch the market they will run a boat in order to save expense. They generally go away here three in partners.

39,288. Then there is plenty of fish on the Nymph bank still, and it is easy to catch ?—Yes, anybody who has proper gear can catch it.

39,289. Were you not employed at one time in the service of one of the Companies ?—Yes.

39,290. That Company broke up, did it not ?—Yes.

39,291. What was the reason of that ?—The old gentleman who was the chief owner of the boats died and the other gentlemen did not want to be bothered with fishing ; they were too much engaged with other vessels. We did very well with the fish, but when the potato crop failed in Ireland we could not make so much out of the offal fish, and so they sold their boats.

39,292. (*Professor Huxley.*) Did it make a worse market after the potato crop failed ?—Yes, for offal fish such as hake and gurnard.

39,293. Do you say that there was absolutely less fish consumed during the time of the famine than before ?—Yes, because the people could not afford to buy it.

39,294. (*Mr. Lefevre.*) What number of fishermen are there now in Dunmore ?—I suppose there will be close upon 100 or more out in the yawls and fishing with lobster pots, including trawlers and hookers.

39,295. Are they fishing all the year round ?—No.

39,296. What are their times for fishing ?—They look after the land in the winter time, because they cannot fish then in the small boats.

39,297. In what part of the year are they engaged in fishing ?—They are fishing from March until November.

39,298. And they break off in the winter ?—Yes, they go to look for herrings and haddocks when November comes in.

39,299. How many men are there at Passage ?—I do not know because I am not often there, but there are a great number there who get their living by fishing.

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39,300. Are they mostly small trawlers?—They have mostly small yawls.

39,301. Are they employed in hooking or trawling?—In hooking, in trawling, and in drifting.

39,302. What is the season for fishing in the harbour here?—Any time in the winter.

but not as much. I do not think they take up the ground as much.

39,303. Do the Dublin trawlers come inside the harbour to trawl?—Yes, they come on what we call the Maid for an odd trawl if they happen to be down then.

39,304. Are very few of them down trawling here in the summer?—Yes, there is one here at present.

39,305. You told us the season when the trawlers are trawling on the Nymph bank, are they also trawling on the ground here at the entrance of this harbour?—Yes, the big trawlers when they come, but there are no fish to be got in the harbour then.

39,306. What is the nature of the ground off the entrance of the harbour?—It is rough ground.

39,307. Then your trawlers must trawl inside the harbour or go to the Nymph bank too?—Yes, but they are not able to contend with the big trawlers in bad weather.

39,308. Is it because their boats are not as good?—Yes.

39,309. Has the number of Dublin trawlers trawling over that ground increased of late years?—Yes, and splendid fine vessels like cutters they have now.

39,310. Do they get as much fish as they did in former years?—They get twice as much with these vessels as they used to get with their old ones.

39,311. And it is only occasionally that they come inside the harbour?—Only in the season.

39,312. You would prohibit them from coming within the harbour?—Yes, within the Heads, because we consider that they destroy the fish. We consider that the fish come in from the light-ship,—plaice, hake, cod and ling, in the summer time when the sprats and mackerel make for the shore. Then, if they are caught and destroyed by these heavy boats, of course we can never get them back again.

39,313. What makes you think that the big trawlers do more damage than the small ones?—I think so because their gear is so heavy on the ground.

39,314. But it is the same mesh?—Yes, but the gear is very heavy. They have great heavy bridles and trawl warps. The bridles and trawl beams are of an enormous size in the water and are enough to frighten any fish.

39,315. Is it because they frighten the fish more than the small trawls and catch more small fish that you object to them?—They take up the ground and prevent the fish from spawning there. I have been catching in this harbour 15 or 20 little turbots not as big as a crown piece.

39,316. You have done that yourself?—Yes.

39,317. But the little trawls are quite as likely to catch small fish as the large trawls?—Yes, but they do not do as much harm. They may catch small fish, but they do not frighten other fish out of the harbour. I will just explain what I saw with my own eyes in the harbour about four weeks ago. We were lying at anchor on a Saturday and there was not an air of wind; the gurnards rose on the top of the water in abundance in the ebb tide. They were like shoals of pilchards. They rose in lots just like fish that were startled and frightened, as if something had been through them. They went right out of the harbour in an instant and we have not been able to catch them since. I have seen small boats come down from Waterford which have been loaded with bream and gurnards and now we cannot get enough for our families to eat.

39,318. Do you think it desirable to put a stop to trawling altogether within the headlands?—I would leave that to yourselves.

39,319. You do not think the small trawlers do any harm?—No, not as much as the large ones. They were trawling here years before I was born and there were more large hookers than there are now and they did not consider that the fish were destroyed or that the shoals of mackerel or sprats were broken as they came into the harbour.

39,320. Do you think that the small trawlers destroy the spawn of the fish?—Yes, I do. I think they will catch spawn as well as the large trawlers but not as much. I do not think they take up the ground as much.

39,321. You do not think that they have materially destroyed the fishing in the harbour?—They all do their share of that.

39,322. Has there been any application from the fishermen in the harbour to stop trawling altogether?—Not the small boats; but all are against the big boats. It is natural to suppose that every 10 fish the small boats catch will do as much harm as 10 caught by the big boats. And for my part I should not care if it was all done away with, but I will say that the small boats do not do the same amount of harm to the ground at the bottom as the big boats nor will they injure any mackerel, herring, or sprat, or hake, that come into the harbour.

39,323. Has the number of small trawlers increased?—It has.

39,324. By how many within the last 10 years?—There are five or six here at all events, and all the boats in Passage have little trawls for trawling.

39,325. Have they doubled in number?—Yes, when I first came here there were none of them at all.

39,326. I thought you said the trawlers were here before you came?—They were hookers. What I call small trawlers are little yawls. A man can take the trawl in his hands and lay it across the stern while the vessel is going out.

39,327. Do you think the byelaw prohibiting trawling with larger trawlers than boats of five tons within Credan Head and Temple Church has done any good?—I do not think it has, because when the big boats are trawling out here in the mouth of the harbour they do about the same amount of damage. They are trawling now where the fish would enter the harbour and if they frighten the shoals away of course they do injury.

39,328. Then do you think the prohibition ought to be extended?—It ought to go from Hook Head to Swines Head. That is the entrance to the harbour, and there is no clear ground inside of that where the trawlers ought to go.

39,329. I think you said there were four or five large hookers from this place?—Yes.

39,330. What ground do they fish over?—Their only place is on the Maid here.

39,331. Is that inside the harbour?—Yes.

39,332. They do not go outside at all?—No.

39,333. (*Professor Huxley.*) In your experience as a trawler have you found that the quantity of fish taken by the last trawler out of a number working over the same ground is as much or less than that taken by the first?—Not at all. I should like to be the first to work it, but I should not like to get over another man.

The witness withdrew.

T. Tobin.

THOMAS TOBIN called and examined.

39,334. (*Professor Huxley.*) Are you a fisherman here?—I am a fisherman at Passage.

39,335. How many years have you been fishing at Passage?—I have been fishing, and selling fish there for the last 50 years.

39,336. What kind of fishing have you practised?—Trawling, fishing for salmon, and fishing for all kinds of fish in general, with lines and everything else.

39,337. Were you present when the last witness was giving his evidence?—Most part of the time.

39,338. Do you agree with what he has stated?—Yes, pretty well.

39,339. Is there anything that occurs to you to add to or to remark upon in what he has stated?—All that I know about it is that in respect to one trawler going before another, it is very hard if I turn to the work and bring up a parcel of stones in the trawl. In that way it would be advantageous to the man who follows me because he will not get one at all.

39,340. Do you, as a matter of fact, say that the second and third trawlers will not get as much fish as the first?—No, nor a quarter.

39,341. Have you yourself been trawling?—Yes, I have a small boat of about 2½ tons.

39,342. A yawl?—Yes.

39,343. Have you followed another trawler over the same ground?—No, I would not attempt it.

39,344. Then how could you tell that that would be the result?—We get nothing if we are in each other's wake.

39,345. You think so?—We have proved it.

39,346. Have you ever been trawling outside?—Never.

39,347. Have you ever been trawling anywhere else?—No, only in this harbour.

39,348. Your trawler is only a small vessel?—Yes, a boat of two or three tons.

39,349. You keep quite inside the harbour?—Yes, inside altogether—up the river and down as far as Dunmore.

39,350. Do you get much fish in your trawl?—The chief part of the fish we get are soles and plaice.

39,351. Do you get many small fish in your trawl?—Yes, some small flukes.

39,352. Do you not get small turbot sometimes?—We have got small turbot; I have been getting small turbot the size of my hand.

39,353. You get the flukes very small sometimes, do you not?—Not very small, about the length of my hand. We do not heave any away; we make use of them.

39,354. Do you make use of everything you catch?—Yes, with the exception of small little things, little white belly flukes we call them. They are fresh-water little things.

39,355. But with regard to the other kinds of fish, such as soles and so forth, they are always large enough to sell?—Yes.

39,356. You never by any chance get small ones?—We may get small ones, but if they only weigh half a pound we sell them.

39,357. Is that the smallest you take?—Yes. Our nets are 2½ inches between knot and knot, and if we were to take a little sole and he could only put his head in the mesh he would go right through.

39,358. You have never been on board the large trawlers?—No.

39,359. Have you practised line-fishing here?—Yes, for hake and cod down here in the month of May.

39,360. Have you caught much haddock?—I never got much haddock.

39,361. Have the fishermen here ever got much haddock?—I recollect them having caught plenty when there were a dozen hookers belonging to Passage.

39,362. How long is that ago?—Forty years ago.

39,363. At that time were there plenty of haddocks caught?—Yes, and cod and ling also.

39,364. When did the supply of haddocks begin to fall off?—Our boats went away. They got old, and the poor people were not able to keep them up.

39,365. Then the supply of haddocks fell off because they were not fished, and not because there were not plenty of fish?—They were not fished. There have been no boats out of our place to look after them since.

39,366. If there were plenty of fish and the fishing was lucrative why was it not renewed?—The poor people owned the boats, and as they got old they were not able to replace them. They have no money to do it.

39,367. But other people do it?—Companies of gentlemen, who associate together, can do it, but it is very hard for a poor man to do so. They have no means of getting craft for catching fish. I believe that companies of gentlemen are now collecting steamboats and everything else and that they will destroy the poor fishermen altogether.

39,368. Do you think the effect of the establishment of these companies will be to destroy the poor?—The steamboat we have here is the greatest destructive that ever came to this harbour.

39,369. Does it belong to a company?—Companies have their large boats running inside Hook Head, and they are a destruction to the poor, because there are no sprats, herrings, or anything else that can come up to us, and our chief dependence is upon them from this time until after Christmas.

39,370. And do you think the trawling has stopped the supply of fish?—It has.

39,371. For how many years has the supply of herring been falling off?—For the last three or four years to my knowledge.

39,372. But trawling has gone on for the last 40 years?—Yes, but they knocked off the big boats trawling here until the steamer came, and that is worse than 50 trawlers, because a trawler has to go right up with the tide, while this thing is working backwards and forwards and right across, over this way and that way too.

39,373. The steam trawler does the business in a much more effectual way?—No man can get a fishing out of the harbour at all, it is impossible.

39,374. Do you think the same thing might result from the working of a great number of ordinary trawlers?—No, the working of 50 trawlers of 20 tons would not be half as bad as that vessel.

39,375. Does she ever trawl inside the line drawn from Credan Head to Temple Church?—Yes, when no one is looking after her, by night.

39,376. By night?—Yes; she trawls everywhere she can catch anything.

39,377. Does she work at night as well as by day?—Day and night are all the same to her, and she has caught salmon too.

39,378. Have you ever seen her trawling inside the line?—I could not swear that I have, but I have seen her from Passage above the line.

39,379. Would it not be rather difficult to make out from that point whether anybody was inside the line or not?—Yes, it is six miles off; but by my calculation she was inside the line.

39,380. You think so?—Yes. By night some of these people here drift for salmon. I have seen her up as far as the oyster bed between Credan Head and Temple Church.

39,381. She has been fishing for three months now?—Yes.

39,382. When did you begin to find the fishing fall off?—We generally fish for salmon until the last day of this month.

39,383. You are not fishing for sea fish?—Not till the last day of the month, and we get our trawling boats then put to rights. We have got a dozen yawls of two or three tons.

39,384. Then you cannot tell at present as a matter of fact whether the trawler of which you speak has done you any damage or not?—I know she has done damage because there have been an abundance of sprats at the mouth of the harbour, and this is the season for them to go up to us.

39,385. Have they not come?—No, and they came up to the deep water. With such winds as we have now we ought to have the sprats here. Formerly they went right up and we had them all the winter, now we cannot get any.

39,386. How far do the sprats come up?—I have seen them up as far as Waterford Bridge.

39,387. How far have they come up during the present year?—I have not been down as far as this for the last four months.

39,388. Then in fact you do not know whether they have come up or not?—I have not been down as far as this for the last four months.

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39,389. No further than Passage?—I have been further than Passage but not as far as Dunmore.

39,390. Then you are speaking now from mere hearsay?—There are others here who will speak of it.

39,391. Is there any kind of fishing practised at Passage which is different from that practised at Dunmore; is there any trammel-net-fishing there?—No, but there is bag-net fishing for sprats and drift-net fishing for herrings.

39,392. Is there much drifting for herrings going on at Passage now?—None at present.

39,393. How many years is it since it ceased?—Five, six, or seven years since there was any drift-net fishing.

39,394. Is that because there are no herrings?—Yes.

39,395. Are the people there in a condition to replace their nets and boats when they wear out?—No, they have no means by which they are enabled to get new ones. They have no means to get at them now.

39,396. So that they cannot tell then whether the herrings are there or not?—There may be an abundance but they have not a net to catch them, and they are not able to purchase any.

39,397. Up to five or six years ago there was an abundance?—Yes.

39,398. Did the fishermen catch many of them?—Many of them got from 1,400 to 1,600 and 1,800 in a boatload.

39,399. Do you get a ready market for your fish?—Yes.

39,400. Then you must have made a good bit of money out of them?—So we did.

39,401. Could you not out of that save enough to replace the boats and nets?—No, the famine was a great drawback to us. Flour was then 3*s.* 8*d.* a stone, and we could not support our families.

39,402. Did the fishermen get behindhand in the famine time?—Yes.

39,403. And they have not been able to make it up since?—No.

39,404. They have no spare money to invest in boats?—No, they have no spare money at all.

39,405. In former years did you contrive to keep your boats and gear in order out of the profits of your fishing?—Yes.

39,406. (*Mr. Lefevre.*) How many small trawlers are there at Passage?—There are 12 or 14 small trawlers at Passage.

39,407. How many used there to be 10 years ago?—Ten years ago I suppose there were about 20.

39,408. Then the number has been falling off?—Yes.

39,409. Do you recollect the time when there was no trawling at all at Passage?—No.

39,410. Has there been trawling there ever since you can recollect?—Yes; there was a bye-law made by the Commissioners at Dublin with regard to the trawling; we had some grievances to complain of against the big hookers coming upon the Maid; they were big trawlers of 30 and 40 tons.

39,411. That byelaw was made in consequence?—Yes.

39,412. Has it done you any good or not?—It has done us no harm; it did us a good deal of good until this steam machine came, and if she is to be left here we may as well all go to the poorhouse.

39,413. You still have the ground between the two points?—But she leaves nothing to come up to us.

39,414. Does she take the fish before they come up?—Yes, and she will not leave a vestige for us.

39,415. What is your season for trawling from Passage?—We generally trawl from the last of this month up to Christmas.

39,416. Do you not trawl in the spring of the year at all?—No, we follow the salmon fishery then.

39,417. Do you find that the soles leave the bay suddenly?—Not exactly suddenly.

39,418. Do you think they are in the bay all the year round?—They are; we can get as fine a sole up above Passage as can be made use of all the year round.

39,419. Then you do not believe that the fish leave the bay at different periods of the year?—No, they go up to spawn in the deep holes above Passage, the soles spawn there quite regularly.

39,420. Do you catch any turbot?—No, except we are below Duncannon; there are no turbot up there.

39,421. Do the hake and other fish pursue the sprats up into the shoal water here?—The hake will pursue them as far as they can go. We had them last year in abundance in our drift-nets; we used to get from 20 to 40 at a haul drifting for salmon; now the whole 42 or 43 boats drifting for salmon have not got a dozen hakes this year yet, and this is the very time when we ought to be getting them.

39,422. When the sprats get into shoal water do the hake and other fish follow them, or leave them and try to get back again into the deep sea?—No, they follow them as far as they can, and they all go back together.

39,423. Where do they go to?—To sea; it is not in upon the land that they will go.

39,424. Are there any means of catching the hake on their return to the sea?—There are no means except they catch them as they go out here.

39,425. In the trawls?—No, with lines, as they often do; I recollect 100 or 150 boats with lines being often engaged in fishing for them.

39,426. Do you think the lines would be sufficient to catch them if there were no trawls?—Yes.

39,427. Suppose the trawlers were not to come in, would the liners be able to catch them?—They would, because they would stop for some time between this and Passage; they would stop until they were "skeered" away by the trawlers.

39,428. Do not you think that the little trawlers would help to drive them away?—I daresay they might, they may be injurious as well, but their beams are only 14 feet long.

39,429. The hake is a deep-sea fish?—Yes.

39,430. It keeps well at the bottom?—Yes, at certain times; in the night time it keeps in the middle of the water.

39,431. Can you catch them with your long-lines down at the bottom as well as the trawlers can catch them?—Yes.

39,432. Is that because your long-lines are laid at the bottom?—Yes.

39,433. Then there is just as much chance for line-fishing as for trawl-fishing?—Yes.

39,434. Do you use the same boats for hooking as for trawling?—Yes.

39,435. What is the season for hooking?—We follow the salmon fishery from the 12th of January up to the last of August, and then we all turn to and get our lines and our hooks out to go fishing in the sea.

39,436. Then you trawl and hook at the same time of the year?—Yes, according as it is fine we come down with our lines.

39,437. Do you mean hand-lines or long-lines?—Hand-lines.

39,438. What fish do you catch with the hook-and-line here?—Cod, eel, and hake.

39,439. Have you found the cod falling off?—There are very few cod caught inside the harbour here, there was a place outside where we used to catch cod and ling in former years.

39,440. What distance was that?—Sometimes 10 or 15 miles.

39,441. Do you never do that now?—No.

39,442. Do you never go outside the harbour?—No.

39,443. Do you not catch as many hake as you used to do?—No; last year at this time of year we used to catch 20 or 30 a night in our salmon nets, and now although this is the very season we expect them, we cannot get any at all.

39,444. (*Professor Huxley.*) Have you a boat fit for sea-fishing?—I wish I was hired to go to Milford in her across the Channel.

39,445. Do you mean by that that you have a boat?—Yes, I have.

39,446. Is that the boat you spoke of with which you catch the hake?—Yes, and it is only of three tons; but I wish I was ordered to go to Milford, and could get a good price for it.

39,447. You have a boat in repair and with good gear?—Yes.

39,448. Is there anything that occurs to you to tell us besides what you have told us already?—No.

39,449. Is there anything the fishermen here have to complain of besides the trawling?—No; but as far as I understand they are fitting out another of these engines to trawl upon our oyster-beds.

39,450. What engines?—A steamer which is to take away all that we have had here for centuries, and our fathers before us.

39,451. Where is the oyster-bed?—Between Duncannon Fort and Credan Head.

39,452. Is there a good oyster-bed there?—Yes, as fine as ever was seen by the eyes of man.

39,453. Is it much fished?—A good deal.

39,454. How many boats go from here fishing for oysters?—We generally used to have 14, 16, and 18 of our little boats upon it.

39,455. From this part?—From Passage.

39,456. Has that been the custom of late years, up to within 10 or 12 years?—It has been the custom within my memory until within the last three years. They have now much fallen off, and I can tell you the reason of it.

39,457. Then tell us.—The reason is, that the very same man who has encouraged the steamboat here—his name is Stephens, and he comes from Duncannon—was the chief advocate for having the steamer here to torment the people. We put down his Scotch weir, and then he turned to and got two craft built for carrying stones to the Tuskar lighthouse, and he got five or six dredges made on purpose for each of these boats. He towed the boats over the oyster-beds, and where we used to get 300, 500, 700, and 800 and 900 oysters in a tide now we can never get half a hundred.

39,458. In the course of three years has he exhausted the bed?—Yes, we could not get 100 by fishing there now.

39,459. Then what is the object in fitting out a steam dredge, the people who do so will be disappointed if they go there?—It is to be ready I am told by the last of August.

39,460. But what is the use of it if the bed is exhausted?—I suppose they will find out more. He used to get 1,200 with his six dredges. We had only a little dredge and he beat us out of the field altogether.

39,461. It is the fact that the bed has been exhausted?—Yes.

39,462. Has this dredging been going on only in the proper season?—Not in the close season.

39,463. Only in the proper season?—Yes.

39,464. Is there anything else which you think is a grievance here; all we want is to hear exactly what you think we ought to hear?—I was told by a gentleman to tell you about another thing—we have no place of protection in the world at Passage, where there are 400 or 500 families depending in that little place upon the safety of their boats.

39,465. You have no harbour?—No place in the world to save our boats; our women have sometimes to get up in the night and help the men to haul them up if it comes on a gale of wind; the property belongs to the Marquis of Waterford. The Board of Works had the case represented to them and granted us 650*l.* through the intercession of our parson in Passage, and the Commissioners of Waterford granted us 150*l.*; but because the Marquis of Waterford had a Scotch weir he would not allow us to put a stone in towards making a harbour.

39,466. Who would not allow you?—The Marquis of Waterford.

39,467. Has the Marquis at present given any pledge that he will construct a harbour at that place?—I will tell you what he promised us. The Commissioners of Fisheries at Dublin wrote to Mr. Lawson and told Mr. Lawson that the Marquis of Waterford would not allow them to do anything there because he was intending to do it himself. Then they wrote to him for his plans, and he told them he would send to them at a future day, but that future day has never yet arrived.

39,468. Is what you mean to tell us this, that you could get the money advanced to build a harbour partly by your own efforts and partly by the Fishery Board, but that you are prevented from doing so by the opposition of your laadlord?—Yes.

39,469. Do we further understand that the Marquis of Waterford has promised to build a harbour himself?—He has promised to build it himself, and he said that he would send the plans to the Board of Fisheries at a future day.

39,470. If the Marquis of Waterford has made that promise of course he will carry it out?—He has so promised. He promised if I would get a memorial signed by 400 or 500 that it should be done. That was when he first obtained charge of the whole property, and he said it was to be done the next summer.

39,471. How long is it since that promise was made?—About five or six years.

39,472. A memorial has been presented to us here upon the subject?—Yes.

39,473. Does this memorial proceed from you and other fishermen at Passage?—It is from all the fishermen at Passage.

39,474. Does it represent your views?—Yes.

39,475. I will read the document, so that there shall be no mistake about it.

To the Royal Commissioners appointed to inquire into the Fishing in the Locality of Waterford Harbour.

Honorable Gentlemen,

We, the fishermen of Passage and vicinity, beg to state that we feel ourselves much aggrieved, and our families very much distressed, since the steam trawler commenced fishing in this harbour, inasmuch as during the salmon season (which is now ended) we have experienced a great falling off in the lower part of the river compared with other years during this month August, and cannot attribute it to any cause but the constant paddling and scraping during the whole week of this steam trawler.

In the small town of Passage there are over two hundred families who depend on the fishing chiefly for their support, and after the salmon season is over resort to the taking of other fish; but if this steam trawler is allowed to continue, all fish, particularly herrings, sprats, and such fish as come in large numbers, will be scared from our harbour, and this is the commencement of the proper season for them to arrive here.

Hake, that used to be in such abundance in this harbour at this season, have now deserted it, though they are to be found close by in Tramore Bay.

We are prepared to prove, gentlemen, from long experience, that trawling does destroy the spawn of all fish, and if such is the case what a large quantity of spawn must this steamer destroy with her powerful trawl, which seldom rests night or day, and we would beg that some means might be devised to put an effectual stop to such a wholesale destruction of fish, and to the very great distress of our large families, and we shall ever pray.

Passage of Waterford,
August 24, 1864.

Is it within your knowledge that this document represents the views of the fishermen here generally?—Yes.

39,476. This memorial is not signed at all?—No.

39,477. But we may take it that it represents the views of the fishermnn?—Yes.

39,478. Is there any other matter you wish to bring before us?—No.

39,479. (*Mr. Lefevre.*) Do the fishermen of Passage cultivate land at all?—No, with the exception of a very few of them.

39,480. (*Professor Huxley.*) Supposing the fishermen as they increase in number wish to get land, can they do so to build houses upon?—No.

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39,481. Is there any difficulty in the way?—Yes, they cannot get any land.

39,482. Is that the case at Dunmore also?—I do not know.

39,483. Have you any reason to believe that there are hake in Tramore bay at this time?—There was at one time, and I think that was the reason that the men belonging to Tramore used to come down to Passage for sprats for bait.

39,484. For the purpose of catching the hake?—Yes.

The witness withdrew.

P. Cox.

PEIRSE COX called and examined.

39,485. (*Professor Huxley.*) Are you an alderman of Waterford?—Yes.

39,486. Have you been engaged in fishing for many years?—Yes, for the last 40 years.

39,487. Are you a boat owner?—Yes.

39,488. What kind of boats do you principally own?—I have two large trawlers in Dunmore. They are boats of 60 tons.

39,489. And have you other trawlers besides else where?—Yes, some smaller ones; I have a small one of only 14 tons.

39,490. Have you heard the evidence which has been given before us?—I heard that of the last witness, but I did not hear the first.

39,491. Very distinct statements have been made to us as to the harm done by trawling within the headlands, and by the large trawlers; yours are large trawlers?—Yes.

39,492. We should be glad to hear anything you are able to say on the other side?—I think if the large trawlers were not allowed to fish inside the Hook Tower it would be a good plan.

39,493. Not within the mouth of the harbour at all?—No.

39,494. Do you think that would be of any serious detriment to the trawlers?—No, I think not. I always prefer my boats to go to the deep sea.

39,495. You as a boat owner do not wish them to fish there?—They do not go there generally. They find the ground very foul there, but they say the steamer has cleared the ground for them. They did not go before then.

39,496. Is it better to go in fine weather out to sea?—Yes.

39,497. But in winter time when it is bad weather is it not an advantage for the large trawlers to be allowed to fish inside the bays?—I think not, but I do not know.

39,498. You do not think it would interfere with you?—No, and if they interfere with the small boats I should prefer their keeping out in the deep sea. They are made for that purpose.

39,499. How many years have you been possessed of trawlers?—For about 20 I should think.

39,500. Have you gradually increased the number of trawlers in your possession?—Not much, I have a little. We bought two in the first instance for which we paid 1,100*l.*

39,501. Have you replaced them as they became worn out by vessels of a larger tonnage?—No, I have them still.

39,502. The same boats?—Yes.

39,503. Do you think from what you know of the trawling as it is going on now that more capital is being put into the business year by year in Waterford?—At present they do not pay. When first we commenced it they paid very well. We made 30 per cent. and did very well, but of late years they have not paid as well.

39,504. Have you any notion what the reason of that is?—They say it is the scarcity of fish. The boats go out and they say the fish are scarce.

39,505. Are there not as many fish brought in now as there used to be?—No, not at all.

39,506. Where do your boats trawl principally?—On the Nymph bank, I think, and off Dungarvan.

39,507. Is it your impression that the supply of fish has fallen off?—Yes.

39,508. (*Mr. Lefevre.*) Do they fish on that ground all the year round?—Yes.

39,509. They do not follow the Dublin trawlers up to the east coast?—No; we never go there, but the Dublin trawlers come down here.

39,510. (*Professor Huxley.*) Has the number of strange boats increased very much?—The Dublin trawlers have increased very much, I think.

39,511. For how many years did a good supply of fish keep up—how many years did it continue to be profitable to work your boats?—When I first commenced we did very well.

39,512. How long did it last?—About 10 years.

39,513. Was there any sudden increase in the number of boats?—Yes.

39,514. And then the fish fell off?—Yes, greatly.

39,515. Is there anything you wish to mention to us with regard to the condition of the fisheries?—No.

39,516. (*Mr. Lefevre.*) Do you find that the price of fish has increased of late?—Yes, it has in consequence of the English markets improving and there being more facilities for getting the fish to market.

39,517. Has it made up for the decrease in quantity?—There has been an increase in the price.

39,518. But has that increase in the price made up for the decrease in the quantity?—Not at all, nothing like it.

39,519. Is any portion of the fish sent off from Waterford?—A great deal of it by steamers; in fact, nearly all.

39,520. It is not sent by rail to Dublin?—There is not much of it that goes by rail except when the Dublin boats come here. We sell our fish in Waterford, and it is sent off by the persons who purchase it to England.

39,521. Have you observed any diminution in the number of Dublin trawlers off here?—No, there has rather been an increase, I think.

39,522. You have not found any falling off in the season?—They are more expert and are larger boats, and have better gear than our boats, and when they come here they take a great quantity of fish.

39,523. Do you find much difference in the take of fish according to the season?—I do not think the season makes much difference in the catch.

39,524. Do the Dublin boats make any difference?—I do not think so.

39,525. Do you think that the fish are less off the coast here?—Yes.

39,526. Is it your opinion that the decrease in the number of boats has arisen from the withdrawal of the privilege of piloting?—At that time there were a good many boats, hookers, which all ceased in consequence of the withdrawal of the privilege.

39,527. I presume the fishermen made money by piloting?—Yes, between piloting and fishing together.

39,528. Were the fish not sufficiently abundant to remunerate them for fishing alone?—They had permission to do both, and they did both. They fished and then they piloted.

39,529. But if the privilege of piloting upon being withdrawn put an end to the boats going out, it is to be presumed that the fishing alone did not pay them?—Yes.

39,530. How far did those boats go?—They were hookers of about 14 tons.

39,531. How far did they go?—Beyond Tramore and along Dungarvan along the coast; they were not fully decked, but were open boats.

39,532. They could not go out to the productive deep-sea grounds?—They went out as far as the Helvick Head and to Tuskar light.

39,533. They were pilot-boats which also practised fishing?—Yes; they were fishing-boats and occasionally they piloted.

39,534. Could they not make a good living by fishing after the pilotage privilege was withdrawn?—I think not, because the business fell off.

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The witness withdrew.

WILLIAM HEARN called and examined.

W. Hearn.

39,535. (*Professor Huxley.*) Have you been trawling?—Yes, I have.

39,536. In the large vessels?—I have in smacks, such as those in Dunmore.

39,537. Have you ever been trawling in the large smacks when a number of vessels have been following one another?—No, I never was. We have trawled off the Nymph bank and Helvick Head.

39,538. Then you cannot tell whether the quantity of fish the last vessel will get is as much as that which will be got by the first one?—I don't think it would be.

39,539. How have you observed that?—I have been trawling off this harbour in a hooker of 16 tons belonging to my father when we have come close after one another, but in that case we should get nothing except by chance while those who were first might have a good deal of fish.

39,540. Was that with the small boats in the harbour?—Yes.

39,541. Not with large smacks?—No.

39,542. You found when you were following in the wake of another vessel that you got no fish?—No, we could not expect it.

39,543. How far would you be off the other vessel?—Perhaps one-fourth of a mile, or less.

39,544–5. I have asked you these questions because we have received directly contrary evidence elsewhere?—That is my experience.

39,546. With regard to hake being taken now in Waterford harbour, is it your opinion that they have fallen off?—We have been following the salmon fishery and there has not been a time during this month that we have not got an abundance of hake, ranging from seven dozen to eight dozen in the course of a night up to 10 and 20 dozen.

39,547. That used to happen formerly?—Yes, last year and the year before that and every year until the stream trawler came. I have only seen one or two this summer.

39,548. Have you been down in Tramore Bay?—Yes.

39,549. Are there any hake there?—I heard that there were plenty.

39,550. But you do not know that of your own knowledge?—No, only by hearsay.

39,551. Have you heard the evidence which has been given by the other witnesses?—Yes.

39,552. Do you agree with it?—Yes.

39,553. With regard to the hake, is it not rather early for the hake?—There are always good shoals of hake in the harvest time.

39,554. Do you agree with what the other witnesses have stated?—I do.

39,555. Is there anything else you wish to bring before us? Is there any complaint the fishermen have to make?—In regard to spawn, I have been in an old trawler and I have been taking spawn of different kinds out of my nets often.

39,556. What do you call spawn; what is it like?—Some of it had a red cast and some a white cast and some a yellowish cast.

39,557. Were they long things?—Some were the length of my arm.

39,558. Did it hang in bunches?—Yes, and sometimes you would see the fish alive in it.

39,559. Do you know squid spawn from fish spawn?—Yes.

39,560. What is squid spawn like?—It is a white thing, something like blubber, and it is quite soft.

39,561. Is that squid spawn?—Yes, I am sure it is.

39,562. What sort of shape is it?—It is a long thing with two ends; it is long and narrow and hanging in bunches altogether.

39,563. (*Mr. Lefevre.*) Have you taken that in the small trawl?—I was never up here in this river.

39,564. Where then did you take it?—Away outside the bay, off Tramore Bay.

39,565. Do you belong to Tramore?—No, to Passage.

39,566. (*Professor Huxley.*) Do you know the herring spawn when you see it?—Yes, I do.

39,567. What sort of stuff is it when it is down at the bottom?—It is much the same as you see it coming out of a herring. If you have gutted a herring with spawn in it you will have seen it. It is much the same as that.

39,568. Have you ever seen it taken up in the trawl?—Not to my knowledge.

39,569. Do you think that the herrings spawn anywhere about the bay?—I do not know. I think the herrings spawn on rocky ground.

39,570. What have you to say with regard to the small fish taken in the trawls; have you seen them taken to any great extent?—Yes.

39,571. In what sort of trawls?—The beam-trawls you have mentioned.

39,572. Has that been when they have been working inside the bay or in the outer part of it?—Outside. I have seen an abundance of small fish taken. Those craft which are fishing near take an abundance of small fish and spawn and heave them overboard.

39,573. Have you seen the trawl of the steam trawler taken up?—I have not seen it taken up myself, but the people belonging to my place have seen it taken up and have seen the men on board pitching the small fish and spawn over with their shovels.

39,574. Small fish and spawn?—Yes.

39,575. Have you been fishing with a small trawl higher up the bay?—No, I never fished with a small trawl.

39,576. Do the large trawlers take up a good deal of small fish?—Yes.

39,577. Then do they throw it overboard?—Yes they do.

39,578. Do you think the large trawlers do much harm when they are working inside the headlands?—I think there cannot be a greater injury to the poor people of this country.

39,579. When you were trawling in a large trawler did you care much about coming inside the headlands?—No, not in a decked boat. We generally kept outside.

39,580. When it was bad weather would you go inside?—No, we would not risk a trawl inside.

39,581. You had plenty of water here, had you not?—We never tried.

39,582. Then as a practical trawler are you able to say it would be no hardship to you to be shut out of the bay altogether?—I know if I had a decked vessel I would never come inside the harbour to look for fish and to destroy the ground for the small craft.

39,583. How long is it since you have been fishing in a large trawler?—It is 23 or 24 years ago now.

39,584. Then you cannot tell us much about the fishing in the large trawlers now?—No, I do not know much about them at the present time.

39,585. (*Mr. Lefevre.*) Did you fish over the Nymph bank at that time?—Yes.

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W. Hearn.

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39,586. Did you take up small fish then?—Yes, small fish, such as cod and ling and sole.

39,587. Did you take as large a proportion of small fish there as elsewhere?—Yes, we took a great proportion of all kinds of fish.

39,588. Did you get as many small fish as you did elsewhere?—We used to get small fish and large.

39,589. Had you at any time the privilege of piloting?—I was piloting ships to Ross.

39,590. Did you find that of much advantage?—I certainly did.

39,591. When was it stopped?—The Ross branch was stopped about 10 or 12 years ago.

39,592. Did you go on fishing whether you got any piloting or not?—Yes, it was while we were in the act of fishing that we fell in with the ships.

39,593. When you got no ships to pilot were you much worse off, or did you make a good living by trawling?—We could make a living by trawling.

39,594. Was trawling the chief thing or piloting?—The trawling when I was at it, but the piloting was the chief thing when I dropped the trawl.

39,595. What have you been doing since you left off trawling?—Fishing.

39,596. What have you been fishing for?—Salmon, sprats, herrings and hake, and various kinds of fish.

39,597. But not with a small trawl?—No. I never shot a small trawl in my life.

The witness withdrew.

W. Kelly.

WILLIAM KELLY called and examined.

39,598. (*Professor Huxley.*) Where do you belong to?—To Rinnashark.

39,599. Do you know anything about the fishing in Tramore Bay?—Yes.

39,600. Have you been fishing there lately?—Yes.

39,601. Are there any hake there now?—No, there are not.

39,602. Have there been none for the last week or 10 days?—No.

39,603. Have you never seen any there this season?—No, I never saw a worse season for hake.

39,604. Do you mean to say there are no hake there at all?—No, there are not. We cannot catch them.

39,605. You say there are none whatsoever there?—No.

39,606. (*Mr. Lefevre.*) How many fishing boats are there at Tramore?—There are five hookers.

39,607. Are there any small trawlers?—No smaller than yawls.

39,608. Are there no small trawlers?—No. The hookers can trawl. They have trawls of their own.

39,609. Have the trawlers caught any hake or not this year?—No.

39,610. Is there any herring-fishing there?—No; there is no herring-fishing there neither.

39,611. (*Professor Huxley.*) Were there formerly herring-nets there?—Yes, there were herring-nets there at one time, but not within my remembrance.

39,612. Did they catch plenty of herrings then?—do not know.

39,613. Have you ever heard anything said about it?—I have heard them say that they did.

39,614. How is it that they set no herring-nets now?—I do not know.

39,615. (*Mr. Lefevre.*) Do your boats only fish in the Bay of Tramore, or do they go outside?—They go outside with lines to the deep.

39,616. How far out?—Into about 28 or 30 fathoms of water.

39,617. Would that be about six miles out?—Yes, from six to 10 miles out.

39,618. And do they trawl only in the bay?—They trawl only in the bay.

39,619. (*Professor Huxley.*) Is there any complaint the fishermen of Tramore have to make?—Yes, they have a complaint to make.

39,620–1. What is it?—They do say that the trawlers are after picking up all the spawn outside and that they are killing all the small fish.

39,622. What else do they complain of?—That is all I hear them complain of, namely, that the large trawlers pick up all the spawn out in the deep, and that they destroy all the small fish.

39,623. (*Mr. Lefevre.*) They do not think that the small trawlers in the bay do any harm?—I know very well they do not.

39,624. (*Professor Huxley.*) Do they ever get small fish in the small trawls in the bay?—They do, and they heave them over again directly. The trawl is not down for more than half an hour, and the small fish they take up are not killed. The plaice ground is very short.

39,625. Do the big trawlers allow their trawls to remain out much longer?—Yes, sometimes for four, five, six, and eight hours.

39,626. Do the fish come up dead in their trawls?—Yes.

39,627. Is that why you think the small trawl does no harm and the big trawls do?—Yes.

39,628. Is there anything else you wish to tell us?—No.

The witness withdrew.

J. Whittle.

JOHN WHITTLE called and examined.

39,629. (*Mr. Lefevre.*) How long have you been a trawler?—I have been trawling for about 35 years.

39,630. And you are now captain of one of Mr. Cox's boats?—Yes.

39,631. Have you always trawled off this port here?—I have always been trawling.

39,632. And over the same ground?—Yes.

39,633. How far out do you trawl?—About 20 miles off the land, and 25 sometimes.

39,634. Is that over at the Nymph bank?—No; we do not go exactly to the Nymph bank.

39,635. Short of the Nymph bank?—We go into 35 fathoms of water.

39,636. Is that the bank you have trawled over ever since you can recollect?—Yes. We trawl in from 30 to 40 and 45 fathoms of water.

39,637. Have you found any falling off in the quantity of fish you have taken lately?—Yes.

39,638. As compared with ten years ago are you able to say what your take is now?—The fish were much more plentiful then.

39,639. Do you catch half as many fish now as you did then?—Not now.

39,640. Do you meet a great many more trawlers off there now?—Yes, we do.

39,641. More than you did ten years ago?—No, we do not, only in the winter time. We stop here for about a month or two.

39,642. Do you take a great number of small fish?—Yes, we do.

39,643. What are they?—There are hake, plaice, and haddock.

39,644. Then are they small fish, young fish?—Yes, about the length of my finger.

39,645. Do you take any small sole?—Yes.

39,646. Did they come up in the trawl dead or alive?—They came up alive.

39,647. Then do you throw them overboard again?—Yes, we throw them overboard, they are of no use to us.

39,648. What is the smallest sole you take ashore?—About five or six inches long.

39,649. Anything below that do you throw overboard?—Yes.

39,650. Do you think they are not the worse for it?—I cannot tell, I do not think they are.

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39,651. When you throw them overboard are they still alive?—Yes, they are alive.

39,652. Have you trawled at all within the headlands of the bay?—Yes, I did.

39,653. How often do you do that?—I have not trawled there for two years.

39,654. Why have you given up trawling within the headlands?—It was not worth trawling with our boats. The men who keep outside are better off.

39,655. Did you find there was a falling off of fish inside the headlands?—No.

39,656. But you used to trawl inside?—Yes.

39,657. What made you give it up then?—We thought we were injuring the poor people here.

39,658. Then it was not because you found you got less fish?—No, I could catch as much as would pay me, but I thought I was injuring the poor people.

39,659. In what way?—By catching the fish and frightening them out.

39,660. Do you think the large trawlers frighten the fish more than the small ones?—Indeed they do. One large trawler is worse than 15 small trawlers.

39,661. In what way?—Their gear is so heavy and they make such a show upon the bottom.

39,662. Do they disturb the ground more?—Yes, they tear everything up.

39,663. How far off the headlands do you trawl now?—Somewhere about 20 or 25 miles.

39,664. Is there no ground between that and the headlands?—Not for trawling.

39,665. Is it rough ground?—Yes, spotty ground.

39,666. How many men have you in your crew?—Two men and a boy besides myself.

39,667. Do you share the result of the trawling?—Yes.

39,668. Do you find that you make less than you did 10 years ago?—I do make less now. The fish are scarcer in every place now.

39,669. You do not make as good a living as you did?—I can live well enough now.

39,670. Did you ever have the privilege of piloting?—I had some time ago; but I have not been piloting for two years now.

39,671. Why is that?—I did not meet a ship.

39,672. Did the fact that the pilotage was put a stop to make any difference in your earnings?—No.

39,673. Did you not consider it a valuable privilege?—No. Many a time when I was coming in, piloting, I would lose more than I gained.

39,674. Do you think the whole quantity of fish taken by the trawls off the banks you have been speaking of has been less than it used to be?—It is less now at any rate.

39,675. But there are considerably more trawlers in number than there used to be?—No, there are less here.

39,676. There are less here?—There are only four or five here now, but there were 12 and 14.

39,677. But are there many Dublin trawlers fishing off here?—There is only one.

39,678. But during the winter season they come down here?—Yes.

39,679. In greater numbers than formerly?—Yes, from 15 to 25 sometimes.

39,680. Do you think the whole quantity of fish taken during the season is greater than it used to be?—There are plenty of fish in the winter time.

The witness withdrew.

Captain Simon Newport called and examined.

Capt. S. Newport.

39,681. (*Professor Huxley.*) You wish to make a statement to us?—Yes, in consequence of my name having been alluded to, to some extent, by Mr. Cox, I felt desirous to corroborate some of his statements. I was a proprietor of trawlers with Mr. Cox several years ago. I also had a private trawler of my own.

39,682. What sort of a boat was it?—It was a small boat in which I fished personally, and therefore I became acquainted a good deal with the state of the fisheries on this coast. In former times I knew Waterford to be remarkably well supplied with fish. At times it was glutted with it, but of late years the supply began gradually to decrease. I was an old member of the former corporation of Waterford, and I moved for a committee of inquiry into the cause of the decrease in the supply of fish to the Waterford market. They granted the committee, which consisted of the Mayor and four others, of whom I was one, and we at that time took the evidence of the most experienced and oldest fishermen on the coast of Waterford, at Dunmore, Passage, Cheek Point, and other places. At that time there were about 35 well equipped hookers, which were half-decked boats, and were in the habit of trawling on the coast of Waterford.

39,683. Did they fish out of Waterford itself?—Yes, out of Waterford as far as the Nymph bank and Helvick Head.

39,684. From the port of Waterford?—Yes, all of them.

39,685. Were they hookers or trawl fishermen?—They were trawl-boats and hookers. They were general fishing boats.

39,686. The same boats fished with the hook-and-line?—As far as my knowledge goes, they were all well equipped fishing boats.

36,687. Were they equipped with trawls and lines?—Yes.

36,688. Were they trawling at one time of the year and lining during the other?—Yes, and I think it an opportune moment to put you in possession of a copy of the proceedings which took place before the committee which was appointed by the corporation.

39,689. (*Mr. Lefevre.*) In what year was that?—In 1839. There is a report attached to the evidence. I have taken great interest in the fisheries of Waterford because it was formerly to my knowledge a great nursery for young lads who were brought up to a seagoing life, and when we consider that England is in a great measure defended by her seaman, I think it a pity that anything should occur to ruin that nursery.

39,690. Was it within your knowledge that the men in the fisheries often took service in men-of-war?—Yes, and they were in the habit of piloting ships of war up the Irish channel to Belfast and other places.

39,691. Since that time has the fishing fallen off?—Yes, because they all agree that the privilege that they had at that time of going out many miles off the coast in search of ships and at the same time trawling, as is practised in America with great success, acted as a premium and encouragement to many of them. It rendered them capable of keeping up good boats which enabled them to go to a considerable distance from the coast of Waterford.

39,692. Is it your opinion that men who were engaged in fishing during part of their lives were as good pilots as men who give their whole time and attention to it?—They were perfectly; but unfortunately my relative, Sir John Newport, in 1816 brought in a bill to establish a Board of Harbour Commissioners which gave them the exclusive right of piloting vessels into the harbour of Waterford.

39,693. Did they set up a body who were nothing else than pilots?—Yes, who were nothing else but pilots, and they only pilot the coast within the Hook Tower. They seldom go beyond that, whereas the former fishing boats used to go 20 and 30 miles out.

39,694. Are the fishermen now not permitted to pilot boats?—I think not.

39,695. Not as far as the heads?—I think not.

The witness withdrew.

DUNMORE.

Samuel Mitchell recalled and examined.

S. Mitchell.
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39,696. (*Professor Huxley.*) You are a master pilot?—Yes.

39,697. What is the mode in which the pilotage is conducted now?—Any vessel can go down until it meets with a pilot, and then when it gets within the pilot's district the pilot takes charge of it.

39,698. What is the pilot's district?—From the Great Saltee Island to Newton Head.

39,699. They are at liberty to pilot down to that?—Yes, provided the captain will take them, but they are not compelled to take them. If the fishermen fall in with a ship in heavy weather the captain will generally give them a few pounds to induce them to bring him in.

39,700. How far is the line from the shore where the pilot's district extends?—From Newton Head to the Saltee Island.

The witness withdrew.

Capt. S. Newport.

Captain Simon Newport recalled and examined.

39,701. (*Professor Huxley.*) The privilege granted to the Waterford pilots only extends to the line of coast which has been defined?—Yes.

39,702. Has the refusal to allow fishermen to take ships up there operated injuriously to the fishing?—Yes.

39,703. Was the difference between what they gained by fishing and what they gained by piloting so great that it would be worth their while to lose their time in going up to Waterford?—They only sent one man in with the vessel. They would have an extra man on board in order to do that.

39,704. That would involve extra keep and wages?—Yes.

39,705. Was the assistance the fishermen derived from piloting in that way so very great that the fishing became unprofitable when that additional source of profit was taken away?—That is their evidence, and I believe it is correct.

39,706. This was done away with in 1816?—The Bill I think was in 1816. The investigation on the subject took place in 1839, and the present corporation thought it so important that they ordered the whole of the evidence to be printed.

39,707. Is it the fact that the number of fishermen and trawling vessels has somewhat increased within the last 20 years?—That may be from the Skerries, but not in Waterford. They have decreased so far as my knowledge goes.

39,708. The tonnage of the boats and their size and the general expense of them I think we have been told have increased?—I do not think they have.

39,709. Alderman Cox stated just now that within 10 years after he commenced trawling it was so profitable that it paid 30 per cent. upon the expenses?—I daresay it did.

39,710. Under those circumstances the fishermen would not require any piloting in addition?—That was with the large trawlers.

39,711. To what boats do you refer; are they the small boats which were in the habit of acting as pilots?—I mean hookers, half-decked boats.

39,712. They were vessels half decked?—Yes.

39,713. Could they keep the sea very well?—Right well.

39,714. Did they go far out to sea?—Yes, they went out for 35 miles.

39,715. And they were in the habit of keeping the sea for 35 miles out?—Yes, the same as the Kinsale hookers.

39,716. Has that class of boats died out?—Yes.

39,717. For how many years?—They have been gradually dying away from the year 1816.

39,718. In consequence of that has the supply of fish at Waterford fallen off?—Decidedly.

39,719. Has not Waterford been supplied by trawlers?—It has, but in very small quantities.

39,720. But during the time that, according to Alderman Cox's evidence, so much fish was taken and about 30 per cent. was paid upon the outlay, was not Waterford well supplied with fish?—It might be in comparison, but since 1816 it has been by no means so well supplied as it was previously.

39,721. Is that because the fish has been sent away to other markets?—No, it is because the boats have gradually fallen off.

39,722. In consequence of their having been deprived of the privilege of piloting?—Exactly.

39,723. This particular class of boats has fallen off?—Yes.

39,724. But it would make no difference to the Waterford market if the fish were brought in from other sources; it would make no difference how they got the fish if they did get it?—No.

39,725. Then do you think that Waterford got its fair share of the fish taken in the large takes mentioned by Alderman Cox?—It did previous to 1816.

39,726. Our evidence relates to what has taken place since 1816 and has no reference to a period as long ago as that, and it goes to prove that at one time there was an abundant supply of fish by the trawlers?—There always has been a supply of fish off the coast of Waterford, and there is still.

39,727. Did not the addition of a number of trawlers make up for the falling off in the number of hookers?—No, I think they all fell off. You will find that from the evidence here. They have all fallen off gradually since the privilege of piloting was taken away from them.

39,728. Your statement only relates to that class of boats?—Yes.

39,729. But it makes no difference to the supply if it is got by hookers or by trawlers?—Certainly not.

39,730. Then I do not comprehend how it is, if this abundance of fish were taken by the trawlers, that Waterford market should not be as well supplied with fish as it was at an earlier period by the hookers?—I cannot say anything about that.

39,731. Is there anything further you wish to say?—Nothing, except I wish to give you a copy of our report, and I think you will derive a good deal of information from it.

39,732. (*Mr. Lefevre.*) Do you recollect the inquiry that took place here in 1836?—No, it was in 1839.

39,733. There was an inquiry here in 1836 by the Commissioners of Fisheries?—I do not recollect that.

39,734. According to the evidence given before that inquiry it appears that at that time there were three hookers and 30 boats from 19 to 20 feet keel?—I believe there would be 35 boats at that time—in 1836.

39,735. What was the tonnage of those boats?—From about 15 to 25 tons.

39,736. Then there appears to have been a considerable extension from 1836 to 1839 if that was the case?—In 1839 the inquiry took place in order to show how it was that there had been a decrease of fish to the Waterford market.

39,737. But in 1836 according to the numbers given here there were only three hookers of from 14 to 18 tons?—In 1839 there were 29 vessels in all, and some additional vessels made the number up to 35.

The witness withdrew.

JAMES CULLEN called and examined.

DUNMORE.

J. Cullen.

24 Aug. 1864.

39,738. (*Professor Huxley.*) What place are you a native of?—Just here at Dunmore, or very handy to it.

39,739. Are you a fisherman here?—I am a fisherman.

39,740. Have you been fishing all your life?—Yes, since I was 18 years of age, and I am now about 56 or 57.

39,741. Have you heard the evidence that has been put before us?—Yes.

39,742. Do you agree with it?—I only heard very little of it.

39,743. What is there that you wish to mention to us particularly?—I will tell you. Before the present time when I was fishing I could manage to support my family out of my boat, when once I took my boat out and was engaged in the act of fishing. I can get plenty of evidence to show that at that time I could support my family during the summer.

39,744. What sort of a boat have you?—A large yawl.

39,745. How big is she?—She is a boat of four tons.

39,746. Is she undecked?—She is an open boat.

39,747. Where have you been in the habit of fishing?—Here in the harbour.

39,748. In the bay?—From the Maid up handy to Duncannon.

39,749. Not further?—No; I have perhaps been 10 miles off the Hook scalloping, but not line-fishing.

39,750. What kind of fishing do you practise besides line-fishing?—At that time I had a trawl.

39,751. How long is that ago?—Since I dropped trawling?

39,752. Yes.—It is about 16 years ago.

39,753. Have you not trawled since?—No.

39,754. What size was your trawl; how big was your beam?—18 feet I think.

39,755. And have you found the fishing falling off of late years?—Yes.

39,756. What has been the reason of that?—I will tell you to the best of my opinion: Since the time that those large trawling boats came here to trawl off this harbour, we have found the fish reducing all through, until we were obliged to drop our own trawling in the small boats. There were especially two hookers which belonged to Duncannon, and they swept the harbour all the way up to Duncannon, and even further too. At that time I could catch and I did catch 55 pair of soles in my little trawl from Credan Head to the first westward buoy on the Scarp.

39,757. They were hookers from Duncannon that interfered with you?—Yes.

39,758. Had they trawls on board?—Yes.

39,759. Then they were trawling?—They were not hooking.

39,760. Were they trawling inside a line drawn from Temple Church to Credan Head?—Yes, but I do not know whether that line was drawn at that time.

39,761. How long ago is that?—It is about the time I told you.

39,762. About 16 years ago?—Yes; and perhaps less too. I did not trawl in my boat 12 years ago.

39,763. Do you think trawling outside the heads does you any harm?—I do not say that. If they go into deep water I have nothing to say with regard to them.

39,764. Would you like to keep the heavy trawlers outside the heads altogether?—Yes. And besides that, I have been in the act of fishing since the time I have told you of. I remember being here on the 15th of July. I never slept a wink that night. Between 10 and 11 o'clock I took my supper, and I went into my boat at 2 o'clock. I went out then and I came to an anchor between the two lights in the centre of the bay—Dunmore Light and Hook Tower Light. Then when the day broke I could see this steamer we have here shooting her trawl. She was coming down from Credan Head and dragging down our shores here. When she came off the Black Knob the pilot boat was three-fourths of a mile to the southward, and we were at an anchor. He returned between the pilot-boat and our stern. When I saw him facing us and coming close to us, I waived to him; and the more I waived to him the more he closed upon me.

39,765. Would he not go outside the boundary?—No.

39,766. If what you state is true it is against the existing law, because the law here states that "no "boats exceeding five tons measurement shall trawl "within a line drawn from Credan Head to Temple "Church." You say that the steamer was working inside that line?—She was working inside that line.

39,767. A line drawn between Credan Head and Temple Church?—Yes; I have no wish to give any evidence with regard to that. What I wish to say is, that when I was working down between the two light-houses here in the mouth of the harbour I was frightened at his coming so close. I called out to him and told him that if he swept across us he would do us some damage. Nevertheless, he swept away round and he carried our anchor and our lines away.

39,768. That is a matter for the police. Your statement is, that the steam trawler has recently fouled you and carried away some of your gear?—Yes.

39,769. Have you anything else to say?—There was never anything that was likely to put an end to this harbour for fishing until this steamer was allowed to come in and trawl here. What she does is much more ruinous than anything a sailing vessel could do. I think we might as well burn our boats altogether as attempt to fish if she is allowed to remain here. She comes down here between daylight and sunrise in the morning and drags all over the ground the whole of the day.

39,770. What you want to tell us is that the steam trawler interferes with you very much, and that if she goes on fishing in the harbour you will be prevented from continuing your fishing?—Yes.

The witness withdrew.

JOHN ALOYSIUS BLAKE, Esq., M.P., called and examined.

J. A. Blake, Esq., M.P.

39,771. (*Professor Huxley.*) You are Member of Parliament for the city of Waterford?—Yes.

39,772. I think you wish to make some statement to us with regard to some of the evidence which has been brought before us to-day?—I am anxious to make an observation with regard to the remarks of Tobin, the fisherman, with respect to the inconvenience the fishermen labour under at Passage in consequence of having insufficient accommodation for bringing up their boats there. These fishermen for the most part are engaged in the capture of salmon. They are also engaged in sea fishing to some extent, and the place is so badly adapted for bringing up their boats, that these men suffer very great injury in consequence. The bottoms of the boats are frequently almost knocked out in bringing them up upon the beach, and sometimes when they come in at night it is necessary for the women to get out of their beds to assist in hauling the boats up. The Harbour Commissioners of Waterford were for a long time impressed with the necessity for something being done to afford these fishermen increased accommodation, and the Rev. Mr. Lawson, the Protestant pastor of Passage, sympathising very much with these men, petitioned the Board of Works to make some small advance in order that a jetty might be constructed there. The Board of Works said that if in the locality a fourth of the sum required was raised they (the Board of Works) would give the remainder. The Rev. Mr. Lawson then brought the case before the Harbour Board and they

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gave 100*l.*, and Mr. Malcolmson proposed 100*l.* The cost of the work amounted to 500*l.* The Board of Works were unwilling that there should be any outlay of their money until the Marquis of Waterford had made over the place to them, so as to place it under their control. Lord Waterford for some time objected to do that, as he contemplates very extensive improvements in Passage, and he was afraid that this jetty might interfere with them. However, as the requirements of the fishermen were so very manifest, there were some contemplated legal proceedings on the part of the Board of Works to enable them to carry out the making of the jetty. So the Marquis of Waterford about two months since said that if he was permitted he would make the improvements himself, because the plans as projected by the Board of Works would interfere seriously with his plans. The Marquis of Waterford has, therefore, made a positive promise to carry out the improvements himself. The improvements have not yet been carried out, but I do not mean to imply that the Marquis does not intend to carry them out. If he does not, it will be an act of great injustice to the fishermen, and a breach of faith to myself and others, who have taken an active part in the matter. I was the medium through which the matter was brought before the Board of Works on two or three occasions. I entirely confided in Lord Waterford, and I have suspended my action; everybody has done the same and so the matter remains. I think his Lordship is bound within a reasonable time to carry out his promise. At present these poor fishermen suffer great hardship as their fishing operations cannot be carried out as satisfactorily as they otherwise would be. That is so far as Passage is concerned. In the course of this investigation you have expressed some surprise I think that at Dunmore there has not been a greater amount of fishing. That arises from the want of a fishing population, and the impossibility of getting sites for the building of small houses here which the fishermen could inhabit. Whatever chance there might be of obtaining sites for houses required by these humble men, the price required for the ground puts it wholly out of the question that they can obtain it. Some time ago, being quite sensible of the very profitable fishing operations which might be carried on off the coast of Dunmore, I got up a public meeting in Waterford, and made a statement to the meeting of the great opening there is here for a fishery. Following upon that meeting, I got an offer from one gentleman of 1,000*l.* He offered to take a share in a company to the extent of 1,000*l.*, provided I would take an active part in the management of it. Mr. Nathaniel Hyland said he would take shares to the extent of 500*l.* I found in the course of a few days that I could have got ample funds, together with the name of Mr. Malcolmson, who offered 1,000*l.* to begin with. Indeed I could have got much more money than would be required for establishing a fishing company, and such a company would have been established and carried into operation but for the cause I have mentioned. In the first place, crews could not be got here; they do not exist. Alderman Cox has given you evidence about his boats, and if he were to increase his fishing boats, and have three or four more of a smaller tonnage than those he has now he could not obtain crews for them. It is really a very great evil, and a great misfortune, and a great public loss that the fishermen cannot obtain from Lord Waterford sites for the building of houses which they could occupy. I then spoke to the Board of Works to know if they would give us a portion of the public ground here. They have reserved a portion near Lord Waterford's residence. I asked them for it for the purpose of erecting houses for the fishermen and curing houses. They said the contract they had entered into with a predecessor of Lord Waterford, his father I believe, was that if the land was not required for the purposes of the pier it should be handed back to him and that it should not be used for any other purpose. So that, in point of fact, at Dunmore at present no company could attempt operations. If fishing boats are brought here to work the fisheries, the men would have to be prepared to live altogether on board, and if they wanted a curing establishment they would not even get a site for that.

39,773. Would not the prosperity of the town of Dunmore be a matter of great advantage to the landlord of the soil?—I think his lordship has other views besides that of fishing, and that Dunmore will become an important place by-and-by for other purposes. There is an unwillingness to have houses here of such a description as would be required by the fishermen, and hence it is that any company experiences difficulty in regard to the fisheries here. I have endeavoured from time to time, to get up a company, and there is a new one in contemplation this moment at Passage, which is the only place where the fishermen could live; but it is impossible to obtain ground, so that the starting point must be Duncannon; that is miles up the harbour, and the consequence would be that the boats would have to go out six miles and come back every evening after they had finished their fishing operations.

39,774. Has any request been made to the Marquis of Waterford for land by a new company here?—I have not heard that any company has asked him.

39,775. No application has been made from a company?—Not that I have heard of.

39,776. (*Mr. Lefevre.*) Is there no other fishing village besides those you have named?—As you go round the head there are Crowbally, Portally and Ballymacaw.

39,777. Is it the case that other noblemen besides Lord Waterford have property there?—Yes, but not so conveniently situated.

39,778. Who has the right of the foreshore here?—The right of the foreshore suitable for boats coming in belongs wholly, I think, to the Marquis of Waterford.

39,779. Who built the harbour here; there is a very good harbour here at present?—Yes. I believe it was built by Government grant for postal purposes.

39,780. And not with any reference to fishing?—No, the boats put in here from Milford Haven, but the Milford steamers have been given up for some time.

39,781. Then has the Board of Works done anything at all for the fishing?—No.

39,782. Have any applications been made to them?—I am not aware that there have been. In point of fact the Board of Works could not well do anything here. There are ample facilites for fishing boats coming in if there was only proper accommodation afterwards.

39,783. Is there plenty of room for them?—Yes, that is the only thing you could ask the Board of Works to do. The great difficulty, however, is that the men cannot get habitations.

39,784. Is there room for more population than exits?—There is ample room and plenty of ground.

39,785. But not enough of houses?—No, most of them are for bathers and visitors who come here, and the rent would be too heavy for the fishermen.

39,786. Are the fishermen in this place so much engaged that they would not be induced to hire themselves to any company that came?—I think there are too few of them.

39,787. It has been represented to us that there are something like 100 engaged during only a portion of the year in fishing; could they not be induced to leave their other occupations and hire themselves to a company?—I think they might, but most of them have a home and a little piece of land which they farm during a portion of the year while they fish in the remaining portion of it.

39,788. Are others so well off already that they could not be induced to go?—They are not so well off but it is not their habit, and here the fishing will not succeed unless the boats can remain out for three or four days.

39,789. Would it be necessary to bring men from a distance to prosecute any fishery so extensive as you speak of?—If you have it on an extensive scale you must have strange fishermen. I must confess that as a beginning, if it were desired to carry out the fishing

in a satisfactory manner, it would be advisable in the first instance for a company establishing themselves here to have a portion of their crews Cornish fishermen. Those men are accustomed to a mode of fishing which is the only mode which would be successful here, but which is not practised here at present.

39,790. You think the fishery on this coast is capable of great extension ?—I am quite sure from the information I have been able to obtain from them that there is a great amount of fish to be caught off the Nymph bank.

39,791. (*Professor Huxley.*) The fishermen here complain that they are being ruined by the practice of trawling in the bay. If that is the case there ought to be a great quantity of disposable labour for those who choose to seek it ?—Yes.

39,792. If the men here are being ruined by trawling in the bay, they would be glad to take to any other occupation offered to them which would pay them as well as a company would ?—Yes.

39,793. Has it occurred to you to consider that difficulty ?—Which ?

39,794. If the men are being ruined by their present occupation, one does not see why they should not be ready to give their labour to a new company that would engage them ?—They ought, certainly, but there are very opposite opinions as to the ruin done by the trawling. In reference to it, not being a practical fisherman myself, I am unable to express any opinion. People here, however, will fully satisfy you that that mode of fishing is very destructive, and on the other hand the men engaged in it deny that. I think it would be desirable for you to have the evidence of Mr. Wallace, the captain of the steam-boat of which they complain. You might hear his evidence.

39,795. Is he not here ?—No. He has given us evidence of a very opposite character; he says that since he commenced fishing he has not taken up an ounce of spawn.

39,796. Is there any record of his evidence ?—No.

39,797. What prevents him from coming here ?—I don't know. I wrote to him that you were to be here.

39,798. We wish to hear all sides, and we are desirous of getting at the truth of the matter ?—I cannot say what keeps him away.

39,799–800. Is it within your recollection that a boat from another part of Ireland came here and fished and cured the fish, and that the Board of Works granted her the use of the pier and other facilities ?—Yes, they granted the use of the cellars of the pier.

39,801. For how many years was that the case ?—I heard of the boat coming here and getting that convenience ; but I also heard that the smell of the fish was objected to by the visitors, who said that they could not walk on the pier on account of it. I think the permission given by the Board of Works was subsequently withdrawn, on the ground that the cellars had become a nuisance.

39,802. Have the Board of Works power to grant the use of the pier to any persons who may demand it ?—They have it in their possession. The harbour-master at Dunmore is storekeeper to the Board of Works.

39,803. There is great difficulty, after all this evidence, in arriving at the true state of the case. On the one hand we are assured by the fishermen that they cannot get proper employment, and that they are on the verge of ruin, and on the other hand we learn that you cannot obtain a sufficient number of hands here to work a new company ?—If I were to bring a number of boats of 60 tons here, and these are the only description of boats that you can employ in the deep-sea fishery, and they can remain out for a week at a time and not come in at all during that time, we should want a large number of good able hands. A steam tender would take the fish on board from the fishing vessels and carry it off to England. I think if we had a dozen boats of that description the population here would not form efficient crews for that purpose.

39,804. They would not require more than seven or eight hands each ?—They would require about eight hands each.

39,805. So that as far as the number of the men goes, if the fishing has fallen off to the extent stated, there must be that amount of disposable labour here ?—Yes.

39,806. Would you not find them willing to follow that kind of fishing ?—No.

39,807. Is it the case that the fishermen here are for the most part employed in fishing only during a part of the year ?—Yes.

39,808. The rest of the time they are engaged on the shore ?—Yes.

39,809. So that they are not thorough seamen in fact ?—No. Mr. Good, from Dublin, comes here and makes a successful fishing. I asked him why he did not come and make a permanent settlement here, and he said he would be glad to come, but the fishermen would wish to bring down their wives and families. As they cannot get accommodation for them therefore they do not come.

39,810. (*Mr. Lefevre.*) Is it owing to that that the Dublin trawlers do not remain stationary here ?—Yes, they must live on board their ships when they come here.

39,811. Is this steam trawler which has been spoken of owned in Waterford ?—There is a good deal of dispute about that. It is stated that Mr. Stephens is part owner of her.

39,812. I mean is she owned in Waterford by a company ?—I think so.

39,813. Is it contemplated to put more of these steam-trawlers upon this coast ?—I have heard with great satisfaction that it has been contemplated to have a deep-sea fishing company here.

39,814. Of steamers ?—No; of sailing-boats. I have been trying to get up one for some time.

39,815. Is it contemplated to add to the number of steam-trawlers ?—No, I think not; but if such a company as I speak of were established, they would have a steam-tender with them.

39,816. (*Professor Huxley.*) The Commissioners of Fisheries have power, when they see reason, to suspend the permission to trawl, and to prohibit trawling within certain limits; has any action been taken before the Board of Works on that subject ?—I believe that strong representations have been made by the fishermen at Passage and Duncannon to Mr. Barry. He stated that if the steamer was fishing illegally the Coastguard were the parties to set the matter right.

39,817. Clearly, she is not fishing illegally at present ?—No; all that can be said of her is, that she herself is doing the work of half a dozen trawlers.

39,818. I am not expressing my opinion as to the propriety of suspending her from fishing here or otherwise, but it is quite clear that the fishermen have the power of applying to the Board of Works who again are competent to prohibit any kind of fishing which appears to them injurious ?—Yes.

39,819. Therefore they have power to take action in the matter when they choose; have they done so ?—I know that part of the duty of the Coastguard is to prevent illegal salmon-fishing, and also to prevent illegal sea-fishing. If these men, keenly opposed to this vessel as they are, had any idea that she was fishing illegally, no doubt steps would be taken to interfere with her.

39,820. We regret that we have not had the captain of the steam-trawler here; we should have been glad to hear the evidence he could give us upon the other side. At present we have only had *ex parte* statements given. Would it be practicable to obtain information from him ?—I think he would be able to give you very important information.

39,821. Then if he thought fit to memorialise us on the subject, we should be glad to receive his statement? —I will see that he has that information.

39,822. (*Mr. Lefevre.*) He would be able to tell us the quantity of fish he has taken ?—Yes.

The witness withdrew.

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ABRAHAM STEPHENS called and examined.

39,823. (*Professor Huxley.*) Are you a trawl owner?—Yes.

39,824. Have you been engaged in that occupation for many years?—Yes, for many years.

39,825. Have you increased the number of trawl-vessels in your possession?—I am at present engaged in a company who are purchasing large deep-sea trawlers.

39,826. From your experience do you consider that the yield of fish from that kind of fishing has kept pretty constant?—On this coast it has not. That is because it has been badly trawled. There are very few trawlers compared with what there are at Dublin.

39,827. But with regard to those who have worked on the coast, are you able to say that the supply of fish has remained pretty equal, or has it fallen off?—From my knowledge of the coast I think there is a mine of wealth untouched outside.

39,828. Do you consider that trawling is as profitable and that it yields as good a return as it did 20 years ago?—Formerly I had deep-sea trawlers, and I sold them because there was no market for the fish. Now there is a market for the fish on account of the daily communication we have with London.

39,829. There were plenty of fish to be caught at the time you sold your trawlers?—Yes; plenty.

39,830. But you gave them up on account of the want of a market?—There was another cause also.

39,831. What was that?—The want of men to work the vessels. When I commenced deep-sea trawling about 12 years ago I brought Englishmen over, but one after another they fell off. I supplied their places with Irishmen but I could not get them to work properly, and I was obliged to sell the boats.

39,832. Did you increase the tonnage of the vessels or the length of the beams?—My advice is, that the size should be increased. I have been at Hull within the last fortnight and I have seen what they are doing there.

39,833. Did you see large trawlers there?—Yes, I have purchased some from that place.

39,834. You think there is plenty of fish if the people would only look after them?—Yes, plenty.

39,835. There is no falling off?—I have had a small sized trawler working in the harbour for the last two years. The week previous to the steam trawler coming here she told me that there was no fish on the ground, whereas the moment the steam trawler came here she brought in some tons the very next day, showing that my men had no experience.

39,836. (*Mr. Lefevre.*) What fish were they?—Soles, turbot, plaice, and various other kinds of fish.

39,837. Were they got where your men said there were no fish?—Yes.

38,838. (*Professor Huxley.*) Are you acquainted with the mode in which the steam trawler works?—I am.

39,839. What is the tonnage of the vessel?—About 50 tons.

39,840. What steam power has she?—Thirty horse power.

39,841. What is the size of the trawl-beam?—From 40 to 42 feet.

39,842. That is not larger than is commonly used?—No, it is not larger than is used by a sailing trawler.

39,843. What is the weight of her head-irons?—They may be a hundredweight each.

39,844. Not more than that?—No.

39,845. What is the kind of net used?—Precisely the same net as that which is used in a sailing trawler.

39,846. Is the ground rope covered with lead?—No.

39,847. It is merely wound round?—Yes, with rounding.

39,848. It is the common beam-trawl in fact?—Yes, propelled by steam instead of by sails.

39,849. How many knots will she steam when she is trawling?—Not more than three miles an hour, I think—three or four.

39,850. The assertion made here is that the head-irons are excessively heavy, but if the heads of the beam are not more than what you mention you cannot trawl beyond a certain rate, because otherwise you would lift your trawl off the ground?—Yes.

39,851. Then though the vessel works with steam power, it is impossible for her to work at a greater rate than a sailing vessel does?—Yes.

39,852. If she did it would lift her trawl off the ground?—Yes.

39,853. Is the size of the mesh the same as in an ordinary beam trawler?—Yes, precisely the same. The trawl-beams were brought from Hull, and they were made by the men who make the sailing trawl-beams and nets.

39,854. Having this steam power they have no occasion to trouble themselves about the tide?—They do pull against the tide, but they do not catch much fish going against it.

39,855. Do they work backwards and forwards like a sailing trawler?—Yes.

39,856. (*Mr. Lefevre.*) What is the depth of water in the harbour?—From Credan Head but, I suppose it will be from 5 to 10 fathoms.

39,857. Is that the average depth on which she trawls?—Yes

39,858. (*Professor Huxley.*) Does she not trawl outside?—Yes, yesterday she was outside near the light-ship.

39,859. Has she been much outside?—It is only yesterday.

39,860. Is she not capable of working outside?—I think she is.

39,861. But you find it more satisfactory to work inside?—They can find sufficient fish inside.

39,862. What fish do they get?—Soles, turbot, and gurnards. There have been very few hake this year.

39,863. Any haddock?—No haddock.

39,864. Anything else—cod?—No cod.

39,865. Any dories?—Yes, plenty.

39,866. Has she at all times got an abundant supply of fish?—She has been able to supply the Waterford market.

39,867. Has she been trawling every day and night?—Yes.

39,868. Working over the comparatively limited space of ground between the line drawn from Credan Head to Temple Church and the headlands?—Yes.

39,869. Have you kept any account of the quantity of fish taken day by day?—That could be ascertained from the manager's report. Last week she caught more than 20*l.* worth in the week, and the catch has extended at times to 37*l.*

39,870. Can you furnish us with reports of the quantity caught in order that we may ascertain whether she has got the same quantity comparing one day with another?—For some time she was stopped by an accident.

39,871. Allowing for that, does she still get about the same quantity?—Not if there is a heavy sea on the ground.

39,872. But take one week with another?—I think for the last three weeks there have been gales of wind.

39,873 But apart from that?—I have no doubt that the manager can supply you with a return that will be able to show what you want.

39,874. (*Mr. Lefevre.*) Does she haul up her trawl by steam?—Yes.

39,875. How often does she haul it up?—Every four or five hours.

39,876. Does she take up any quantity of small fish?—A very small portion, and they are generally sold for some 2*s.* or 3*s.* every day.

39,877. It is not thrown overboard?—No, it is sold to the people connected with Dunmore.

39,878. How many men are there on board?—Four men and an engineer and fireman.

39,879. Is she a screw steamer?—No, a paddle steamer.

39,880. (*Professor Huxley.*) Then she is a trawler made after the fashion of the Hull trawlers, but fitted with steam propulsion?—Yes.

39,881. It is an application, as in many other kinds of business, of steam machinery to fishing?—Yes, she can trawl in calms when the sailing boats cannot go out.

39,882. We have had a great deal said to us about the evil she does. I presume from her answering so well that you do not agree with that?—No.

39,883. We have had strong statements made to us that she is tearing up the ground. You tell us that the fishing has been carried on for six weeks pretty much over the same area, and that she has caught plenty of fish every day?—She brought plenty of sole and turbot in this morning.

39,884. In all other branches of trade it is permissible for traders to use exactly what sort of machinery they please?—Yes; they employ steam if they like.

39,885. Would you think it a hardship if you were prohibited from using steam in connexion with the fishing?—I think it would be very wrong of the Government to interfere in the matter.

39,886. On that ground?—Yes, and the markets would feel it.

39,887. The consumers are very much benefited by steam-trawling?—Yes, very much.

39,888. On the other hand, it must follow that the fishermen who fish with imperfect apparatus must be excluded from the market by it in the course of time?—I don't think that. I think the small boat fishermen are getting a better price for their fish than they used to do.

39,889. Is there an increased taste for fish among the community?—I don't know that but when they bring their fish into the market the country people will give a better price, and will flock in for the fish. I was told the other day that they get double the price for the fish that they did formerly.

39,890. So that so far from doing harm you think it has done good?—I think that every fish that is taken out of the sea and reaches the country does good.

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39,891. To the fish consumer?—Yes. Some of the fishermen grumble about it, but we cannot help it.

39,892. Would you place the fishermen who use imperfect materials in the same category as the hand loom weavers who continued to follow that occupation after machinery was applied to the cotton manufacture?—I think I would.

39,893. You think there is no more ground for interfering in the one case than in the other?—No.

39,894. (*Mr. Lefevre.*) During the time the steam trawler has been working in the harbour have the other large trawlers been working in the harbour also?—Yes.

39,895. With the same size of beam and net?—Yes.

39,896. And the small trawlers also?—Yes, in great numbers.

39,897. We have been told that the season for the small trawlers has not begun yet?—There have been small trawlers connected with my place fishing all the summer.

39,898. Has their take diminished?—No, not at all. They have been doing very well in my neighbourhood.

39,899. Are the large trawlers doing very well?—I don't know much about them.

39,900. How are the men in the steam trawler paid, by share or by wages?—By wages.

39,901. What do they get?—I can't tell exactly. I think some of them get 18*s.* and others 12*s.* I have heard so, but I don't pay them. I may tell the Commission that we intend to fish the outer ground, and that we intend to use this steamer as a carrier from the outer ground to the market, but while we have been preparing for the outer ground we have been working her here.

39,902. You do not intend to employ the steam trawler on the outer ground?—We have a screw steamer which we will work on the outer ground.

The witness withdrew.

PATRICK WALTER called and examined.

P. Walter.

39,903. (*Professor Huxley.*) Are you a fisherman here?—Yes.

39,904. What is it that you can tell us with regard to the trawlers?—I have seen salmon taken by the steam trawl. I remember when the men came in Mr. Stephens asked them where they got the salmon and they said they got them in the trawl.

39,905. Have you ever seen the spawn of fish taken up in the trawl?—No, never.

39,906. Have you been on board the steam trawler when she was working?—No.

39,907. Then you have nothing to say about the spawn?—No.

The witness withdrew, and the inquiry was adjourned until the 25th August, at Dungarvan.

Dungarvan, Waterford, Thursday, 25th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

Mr. Anderson appeared for the Dungarvan fishermen, and *Mr. Kelly* for the Ring fishermen.

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JOHN WHELAN called and examined.

39,908. (*Mr. Anderson.*) You are harbour-master here?—I am.

39,909. How long have you known this harbour?—For the last 40 years.

39,910. Do you remember prior to the year 1836?—I do.

39,911. Can you state how many fishing-boats there were in Dungarvan at that time?—In the year 1843 there were 80 fishing-boats here.

39,912. How many men were there on board those fishing-boats?—From six to eight.

39,913. What was the average number of the fishermen's families?—Some of them were unmarried as well as married, but I think four would be a fair average, including the fishermen and their families.

39,914. Can you tell us how many fishing-boats there are at present in the harbour of Dungarvan?—Twenty-five.

39,915. How many men are there on board?—Five; some have six, and some only four.

39,916. What will be the average number of each family now?—Five will be a fair average. The young men have gone away and married, and many of the men have left, and the average number of each family is about five.

39,917. Do you remember the state of the fishing in 1843?—Yes.

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39,918. What was the quantity of fish taken then?—The quantity of fish taken then was immense. Some of the boats have taken as much as 1,000 hake. I have often seen as many as 40,000 or 50,000 hake on the quay from a night's catch.

39,919. That was in 1843?—Yes.

39,920. What is the average quantity they take now?—From about half a hundred to four score. The week before last they had only 50 for a whole night's take.

39,921. How do the Dungarvan men principally fish?—With the hand-line.

39,922. Formerly did they adopt any other mode?—Some of the Abbeyside boats had trawls, and a few of the Dungarvan boats had long-lines for catching haddock.

39,923. Do you think that the fishing has increased or decreased?—In the hand-line fishing it has decreased, but it seems that the trammels take a great deal of them.

39,924. Why do you consider that the quantity of fish taken by the hand-line is less than formerly?—I know that if the trammels were not there the hand-line men would take more hake. If the fish get entangled in the trammel net how can the hand-line men catch them when they are making towards them?

39,925. What is the objection to trammels?—That is the objection, that they set them every time it answers their convenience from four o'clock in the afternoon, and that they leave them there all night, and go home again to their houses.

39,926. Where is the fishing-ground; where does it lie?—At present it lies between Mine Head and Ballyvoyle Head, all over the bay, for a distance of four, five, or six miles.

39,927. From the land?—Yes.

39,928. What is the farthest they go out?—The men in fishing for ling and cod go from 10 to 15 miles. In former times, when they had good crews in their boats, they were in the habit of going to the Nymph bank.

39,929. How far is the Nymph bank?—About 35 miles.

39,930. How does the tide run outside?—It runs nearly east and west, and takes a direction east north-east and west south-west. It sweeps in the direction of our harbour to Ballyvoyle Head.

39,931. (*Professor Huxley.*) Will you describe the trammel-net?—I cannot tell you what the mesh is, but I should think it would be from four to five inches. The net is about three fathoms deep and from 30 to 40 fathoms in length.

39,932. Is it corked?—There are stays. There are stones fastened to the net, which keep it on the ground.

39,933. Is the net loaded at the bottom?—There is no lead upon it, but there are stones.

39,934. Is it anchored at one end?—I am not positive whether there is an anchor attached to them or not.

39,935. Where do they put these trammels?—In all parts of the bay where they think they can get fish.

39,936. As a matter of fact, how many trammels have they on board each boat?—In former times not more than 12 or 13, but now they have adopted larger boats of six or seven tons. The yawls take from 18 to 22 nets in each boat.

39,937. What is the average length of each net?—From 30 to 40 fathoms.

39,938. How many yawls are there belonging to them?—Between 40 and 50, but I do not see now more than 20 or 22 or 23. They may use them if they have had a heavy take of fish, but they are rather too small for their convenience.

39,939. What do you conceive to be the objection to the trammels?—Our fishermen say that they come when they are lying at anchor, and put those nets close alongside of them and surround them. They have to haul up their anchors, and go away and leave the ground to the trammel-men. When they get fish at night they say that the Ring men find out they have got fish, and come and take a position on the ground and set their nets upon it. It is said "Why do "not the Dungarvan men go outside of them?" What is the use of that? They will tell you that wherever they go and manage to get fish one night, these parties will come after them on the following day and set their nets there, so that they are obliged to take to another quarter.

39,940. In what depth of water can the trammel-nets be set?—In any depth of water, from 20 to 25 fathoms.

39,941. Can they set them in any part of the bay?—Yes, where they think they can get fish.

39,942–3. Is your present evidence to the effect that the trammel-nets interfere with the hand-line fishing, so that the hand-line fishing cannot go on where the trammel-nets are set?—Yes, it is their complaint to me, which I suppose they will prove by-and-by.

39,944. Are trammel-nets set within limits defined by the Fishery Commissioners?—I do not know.

39,945. With regard to the trammel-net, a fixed or moored net is prohibited within the space lying between a line passing due east and west to the northernmost point of Helvick Head and a line passing due east and west to the southernmost point of Ballinacourty Head?—They do not set them there; they would be useless there; it would be useless to set them inside Ballinacourty and Helvick heads.

39,946. (*Mr. Anderson.*) Have you ever seen the fish coming to market?—Yes, I have seen them coming to market.

39,947. Do you know if the fish taken in the trammels are as good as those taken by the hand-line?—No, they are not.

39,948. Is there any difference in the market price?—There is a penny more.

39,949. You see that every day?—Yes, but many of the country people cannot distinguish them. They cut off a piece of the tail, so that they may think they were killed by the hand-line, but every one who has had any experience in the subject will know a trammel-caught fish from one caught by the hook and line.

39,950. What is it that makes the difference?—The shaking and tearing of the fish. When he gets into the net he is continually striving to get out again until he kills himself, and in this way loses his scales.

39,951. Then the difference is in the quality?—Yes.

39,952. The trammel-fish is I apprehend perfectly fit to eat?—Of course; it is used by the poorer people, and when there is a scarcity of fish the better class buy it, but that is only when there is a want of other fish.

39,953. The poor principally buy the trammel fish?—Yes, and the more wealthy people at times.

3,9954. You were at one time engaged in the trade between this and England?—Yes.

39,955. Were you in the habit of taking hake across?—Yes, I used to buy hake from the Ring people at 13*s.* per six score, and also from our own people. I gave our people a pound, and I found that I was more a gainer by giving 20*s.* for the six score to the hand-line men than I was by giving 13*s.* or 14*s.* for the six score to the trammel men, because the weight was not in the trammel fish.

39,956. Could you distinguish between dried hake killed by the trammel and killed by the hand line?—Not very well when they were dried, but when they were fresh it was easy to tell, because they lose their scales.

39,957. Then how was it you got so much better a price?—On account of the weight. The fish caught in the trammels are of a smaller description, and those caught on the hand lines of a larger description.

39,958. There is another byelaw here with regard to the time of fishing with trammels?—Yes.

39,959. Do you know anything as to the time at which they should put the trammels out?—I was out the other evening, and they left about four o'clock,

and returned at six o'clock after setting them. That will be about six weeks ago.

39,960. Have you been at any time fishing there yourself?—No.

39,961. Then the statements you have made to us are not those of a practical fisherman, but are from hearsay?—Yes.

39,962. General report?—Yes, but I have seen them come in with them.

39,963. The statements you have made as to the quality of the fish are from your own observation?—Yes.

39,964. What evidence can you give us as to the trawling?—I have seen them come every day from February. They are constantly trawling on the fishing-ground which the hook-men occupy.

39,965. Do you know the ground on which the trawlers work?—Yes, I can see them working upon the ground.

39,966. Where do they trawl?—On our men's fishing-ground.

39,967. Where is that?—About a mile or two from Helvick, and nearly abreast of Stradbally. There are two trawlers belonging to Abbeyside.

39,968. Do they trawl at present?—They did. There were more once. The principal trawling is being done by the Ring people.

39,969. Do they trawl inside the harbour at all?—Yes, in the month of February when they want bait for their long-line fishing

39,970. Do you see them trawling inside the harbour?—Yes, in the month of February.

39,971. Trawling in the bay anywhere else?—Quite outside the rocks everywhere from Mine Head down to Stradbally. They keep upon that tract of ground from one to four miles off.

39,972. (*Mr. Kelly.*) Have you examined the trawls as they came in in the Ring boats?—No.

39,973. Have you ever fished with a trawl yourself?—No.

39,974. Are you a fisherman?—No.

39,975. I believe you acknowledge that the account you have given of what the people of Ring take and do is given from hearsay, and not from any practical knowledge?—Yes.

39,976. You say that you cannot detect any difference in the quality of the fish taken in the trammels and by the hook and line, when salted?—No.

39,977. You have never been out to see them fishing at all?—No.

39,978. (*Professor Huxley.*) In making your statement about the state of the fishery, a question was asked you about the tonnage and cost of the vessels; do you recollect what was the tonnage of the vessels in the earliest time of the fishery?—The tonnage of our largest boats was from 18 to 20 tons.

39,979. That was the case formerly?—Yes, when there was a bounty. They strove to get their boats registered as high as they could, but under the new mode of registry the boats would not be of more than 15 tons.

39,980. The tonnage of the boats has not increased?—No.

39,981. What would be the cost of one of your boats fitted up with one of your lines?—When they built them in 1839, 1840, and 1841 the cost of a good boat would be at that time about 160*l.* When they built them in former years previous to that, when timber was dear, a good boat would cost from 200*l.* to 250*l.*

39,982. As the number of boats has fallen off, and the cost has not increased, it follows that the amount of capital invested in the fishing at Dungarvan is less than it was?—I should say that it is fully one-third less. We had two-thirds more take of fish, and even ten times more take of fish in the year 1843 than we have in the present year.

39,983. You are doubtless well acquainted with the social condition of the Dungarvan people?—I think no man can be more so.

39,984. Do the fishermen here employ themselves in the fisheries altogether, or do they take to anything else?—When the fish were plentiful the young men who had come here in the month of September after a spring voyage to America, and who had been engaged in our coasting vessels, were in the habit of leaving those vessels at the time the fishing was worth following, and employing themselves as fishermen in the fishing vessels.

39,985. At the present time, and within the time over which your recollection extends, the Dungarvan men have either been seamen or fishermen?—Yes.

39,986. They are not engaged at certain periods of the year in cultivating the land?—No; if a fisherman has two or three children he endeavours to get the younger branches of them an education at the Christian Brothers' Schools. After having been for two or three years there they take them out with them to the hand-line fishing, and then they ship them in vessels as lads, and for strict honesty and everything of that description you can trust them thoroughly.

39,987. Do they go on board merchant vessels?—Yes, and they are now scattered in all parts of the world.

39,988. So that it follows from what you state that the fishing population has greatly diminished, and that the increase of population has been drafted off into the merchant service?—Yes.

39,989. I understand from your evidence that the fishing practised here by the Dungarvan men is almost exclusively hand-line fishing?—Yes.

39,990. Do they use the long-lines for fishing?—They did some years ago. In the winter time they used them for catching ling and cod, and in April and March for haddock. They would go a good distance from the land then, perhaps some 10 or 12 miles, and if it happened to be blowing hard they found it very difficult to work them. When they had good practical young men engaged in the fishing they were in the habit occasionally of taking an immense quantity of cod and ling. In the winter time two years ago we had large takes of cod.

39,991. By the help of long-lines?—Yes, and by the use of hand-lines too.

39,992. Have they practised much long-line fishing as well as hand-line fishing?—No.

39,993. The long-line fishing elsewhere has been found a profitable mode of catching fish?—Yes.

39,994. Why have they not taken to it here when they have been hard pressed?—The owners do not supply them with long-lines, and they are not used to the work. There is a certain amount of skill required for working the long-lines, so that it is not an easy matter to turn from one to the other.

39,995. The labour is greater is it not?—Yes.

39,996. Then is it your opinion that the men who have been fishing with hand-lines are mostly old men who could not turn to any other mode of fishing?—They are old men now; the young men have all gone away. I do not think you would find a dozen men here who are in a fit state to go on board a vessel to engage in the long-line fishing.

39,997. Have they any prejudices against the long-line fishing?—As far as two of a trade never agree, the Ring men have prejudices against the hand-line men, and the hand-line men have a prejudice against the trammels.

39,998. You are speaking now of long-line fishing?—Not the least; they are means for employing the people, and they have no objection to them, but the takes of fish that are sent to Kinsale and everywhere in this neighbourhood are caught by the hand-line.

39,999. If they had the long-lines would they have any objection to use them?—I do not think they would have any objection.

40,000. But the long-line fishing generally is so profitable a mode of fishing that there has not been found in other places any difficulty for enterprising men to obtain long-lines?—They could not work the long-lines here without a trawl to take bait for them;

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they are not in the habit of working a trawl, and that beats them.

40,001. What bait do they use principally?—Conger eels and plaice, and everything they can get in the nets.

40,002. Have they no mussel beds?—Yes, they have more than in any part of England.

40,003. Why do not they use them?—I do not know. They could load one of the schooners with what they could get under the arch of the bridge.

40,004. In every other part of the kingdom mussels are considered very good bait for the long-lines?—The Kinsale boats come here before Christmas, and often take away 20 tons of them; there is any amount of them to be got there.

40,005. But yet you say they are not used?—No, the fishermen here do not use them.

40,006. What is the condition of the Dungarvan men in the winter time?—The conditon of the principal part of them for the last two or three years has been such that they have been obliged to go to the poorhouse.

40,007. Does not that fact induce them to try some new modes of fishing, or adventure in other ways to get a living?—They scarcely go out of Dungarvan. Last winter the circumstances of the fishermen were so bad that down at the quay their boats were lying through the principal part of the winter. There were only four or five hookers that went out in the winter time and they had to go from 12 to 15 miles off, and then they had not the services of the young men to manage the boats and conduct the fishing; the young men had all gone away and the old men were not able to follow the fishing properly.

40,008. Did the famine which occurred here some years ago affect the Dungarvan men much?—It affected them a great deal, because before the famine year the price of fish was from $2\frac{1}{2}d.$ to $3d.$ and $3\frac{1}{2}d.$ each, and when the famine came I saw them selling on the quay for $1\frac{1}{2}d.$ each.

40,009. Has it had anything to do with impoverishing the men and preventing them from taking to new modes of fishing?—I know that it has had a very great deal to do with it, and that was one cause why the young men who were able to go and seek employment elsewhere left the place in order that they might help to support their parents and families with their earnings in some other way; some of them went as far as Cape Horn, and all over the world in merchant vessels solely with a desire to earn something to support their families. Then again, what the Dungarvan fishermen were able at one time to get $1l.$ and $2l.$ for a cwt. could be got from the Ring people for $12s.$ and $13s.$ when the take was large. In olden times one day's take would support themselves and families for a week; they salted the rest and had it as a reserve; they took it into Tipperary in the slack time and often got $30l.$ or $40l.$ for it, so that they were never short of money. When the famine came provisions were so high and so very dear that they were scarcely able to buy sufficient to support themselves and families, and then of course the young men were obliged to fly away to other employments; the old men remained and had to get assistance from the poorhouse as their boats were hauled up. The owners of the boats would not fit them out in cables and anchors and things of that description, and they were hauled up until they rotted away.

40,010. Are the boats mostly in the hands of people ashore, or have the fishermen part shares in them?—In 1839, when they took the temperance pledge, they had a little money, and there were gentlemen here who took them by the hand. The whole of them had a good character then. Perhaps they might have been fond of a little drop as they are at present; I do not dispute that. There were at that time six or seven or eight boats put on the stocks by private individuals. The fishermen themselves built them, and I believe in the course of a short time they paid for them.

40,011. The fishermen themselves?—Yes.

40,012. Was that generally the case?—Of course all our fathers were fishermen; they all had boats and built them themselves.

40,013. (*Mr. Kelly.*) Do you think the misery and poverty caused by the famine took out of the people their spirit of enterprise and the means whereby they could improve themselves?—I know that they had no food often, and when I used to be loading corn at the quay many who in former times had $20l.$ or $30l.$ in reserve would be lying on the deck of the vessel waiting until the cargoes went out, when they would put their hands down in the hold of the vessel in order to take a handful away. I have known them to sleep in their boats all night for want of a place to lie down in, and in the morning they would come down and get a few pence to buy bread with.

40,014. If the trammels and trawls were altogether suppressed and done away with, what is your opinion with regard to the hookers in Dungarvan; do you think that in the course of a single year you would have a single hooker left?—Yes, the young men would return again. The men who went away to earn a few pounds would come back; if the fish were to return to the harbour all the men would come again to fish as they used to do.

40,015. If you were embarked in the fishing business yourself, would you prefer using the long-lines in order to serve your own interest?—Yes, of course I would; there are no prejudices here against the long-lines.

40,016. Only that they have not been used, and the Dungarvan men do not choose to use them?—Certainly.

40,017. Can you say why that is?—There is more labour attached to them and greater risk in fishing them, and if they happened to lose them, which the Ring men did last winter in consequence of the Dublin trawlers taking them away from them, they would not find it easy to get money to replace them.

40,018. I believe the markets in Dublin are chiefly supplied with mackerel, plaice, and ling by the Ring men?—Of course they are.

40,019. I believe the hand-line men do not bring in any part of that commodity?—No, they do not.

40,020. And the supply introduced into the market by the Ring men I believe cheapens the market?—Yes, of course the more fish there is that comes in the cheaper it is.

40,021. (*Mr. Lefevre.*) Do you recollect the bounty being given up?—I do.

40,022. That was in the year 1830 I think?—Yes.

40,023. Was there a considerable depression of the fisheries after that?—The fisheries were not so much depressed. My father was fishing at the time of the bounty and so much means did he get that in four years he was able to put a vessel of 70 tons on the stocks. He took us away from the fishing trade, having five or six children, and he put us afterwards, in vessels of our own.

40,024. Did he do that out of his profits of fishing?—From the fishing and the bounty.

40,025. Immediately after the bounty was taken away was there a falling off in the number of boats?—They did not fall off until the famine came; they counted more until the famine year. The bounty was $4d.$ a cwt.

40,026. In 1843 was there a considerable impetus given to the fishing trade?—The fishing did not fall off at the time of the bounty, but at the time of the bounty there was more enterprise. The boats too were decked boats, and they sailed with them further out to sea. They went on the Nymph bank and everywhere they could, and they cured their fish and brought it home.

40,027. In 1843 I think you mentioned that a considerable number of boats were built here?—Yes, some five or six were on the stocks here in 1840, 1841, 1842 and 1843.

40,028. Was that due to increased temperance?—A great deal of it was due to their industry. They

saved money, and the people respected them and gave them any amount of credit they required.

40,029. Has the decrease in the fisheries been continuous from that time?—No, not up to the year 1843. That was the finest year of hooking we ever saw here.

40,030. But from that time has it been falling off?—We have not seen the same takes of fish since 1842 and 1843.

40,031. From the year 1843 has the number of boats been continually decreasing until now?—The old boats which they had down to 1846, which was the famine year, were allowed to go to ruin. The boats we now use are new boats. There are a few that were built in 1840, 1841, 1842, and 1843. Those are the boats that at present remain in the harbour.

40,032. Have any boats been built since that time?—Not one.

40,033. When did the trammel men begin to use their nets?—For the last 40 or 50 years.

40,034. Have they increased of late?—Yes, they have.

40,035. When did they first come here in considerable numbers?—They have been here in considerable numbers for some years, and they are here in considerable numbers every year now.

40,036. Can you give any date to show when they became comparatively numerous?—No I cannot.

40,037. Do you think the whole quantity of fish brought into the market now is less than it was 20 years ago?—Yes, it is not a tithe of it.

40,038. Taking into consideration the fish caught by the trammel-nets as well as by the hand-lines?—The trammel-nets catch a good deal of it now, and they salt it over at home for themselves. The year before last we improved. Last year we did not do a great deal. I kept an account of it. I was a broker then. That was before I was elected harbour-master. I used to clear out twice a year in September and Christmas. There were six or eight of the hookers going to Cork full loaded.

40,039. Are there any means of ascertaining the whole quantity of fish brought in and sold at Dungarvan?—It could be done.

40,040. Can you obtain the information by referring to your books?—No, but I could tell you the amount. I think last year we imported across the Channel into Cork very nearly 200 tons of fish—of dried hake, ling, cod, conger, and all descriptions of fish, but this year we did not do a great deal. The Ring people went to Cork twice last year. The year before last we imported nearly 600 tons of salt from Liverpool for the curing of the fish.

40,041. Is there any means of ascertaining the total quantity with accuracy?—There were about 200 or 300 tons of dried fish sent from here to all parts the year before last.

40,042. Besides that a good deal of fish is brought into Dungarvan and sent to the country?—Yes, the fish market is like a fair every day.

40,043. Is there any means of ascertaining the quantity?—You might take the average of 40 boats coming in and I should say 2,000 hake would be brought in on a fair average a day.

40,044. That is speaking of the hookers?—Yes, allowing half a hundred for each boat.

40,045. Can you speak of the quantity brought in by the fishermen who use the trammel-nets?—They come in with their yawls, and the quantity of fish is according to the take. They sometimes bring in 100, sometimes four score, and sometimes a quarter of a hundred. They bring in a great deal in baskets and cars to the market and send it away. On the average the jolters will take perhaps five or six cwt. a day if they can get it.

40,046. Comparing the last two or three years with two or three years about 1843, can you say if the whole quantity of fish now brought in is greater or less than it was then?—It is less now. Last year some of the fishermen who have been here as the owners of boats, and substantial people, and who could afford to salt the fish, and to keep 30*l.* or 40*l.* worth in salt had not more than a few hundreds in salt.

40,047. Can you tell us how much fish is caught by the Ring fishermen; is that within your knowledge or not?—No.

40,048. Is it possible that although not so much fish is brought into Dungarvan and sold in the market here, yet, taking into consideration the fish caught by the Ring people and sold there, the whole quantity of fish taken in the bay is larger now than it was 20 years ago?—No, there is not near half the quantity.

40,049. Not taking the catch of the hookers and of the trammel-men as well?—The trammel-nets take a great deal of it.

40,050. Have you made any inquiry with regard to the earnings of the fishermen here?—No, I have not.

The witness withdrew.

DENNIS COLLINS called and examined.

D. Collins.

40,051. (*Mr. Anderson.*) You are I believe a Dungarvan man?—Yes.

40,052. How long have you been a fisherman?—For 40 years.

40,053. What fishing have you been engaged in?—I never practised any other kind of fishing than trawling and hand-line fishing. I have two hand-lines.

40,054. How long were you trawling?—For 32 years; I was trawling in part of each year, with the exception of the last four years, during which I have trawled none.

40,055. How many men used there to be in the boat with you?—Six, and sometimes seven.

40,056. Were you the owner of the boat?—Yes.

40,057. How long have you had the boat?—23 years last June.

40,058. What did you pay for it?—142*l.*

40,059. Do you remember when you bought the boat; what were her earnings that year?—I kept a tot of her earnings the first year I went to sea. Between the 14th of June and the December following I earned 42*l.*

40,060. She paid 42*l.* in that year in the course of six months?—Yes.

40,061. In addition to the 42*l.* as the boat's share, were you entitled to anything else?—Yes, I was entitled to my own and my son's share.

40,062. What did each man get?—Half that.

40,063. That would be 21*l.*?—Yes.

40,064. How many men had you in the boat?—Six.

40,065. Did each earn about 21*l.*?—We all shared alike.

40,066. Was that by hand-line fishing?—It was altogether by fishing with lines.

40,067. Have you been fishing for the last year or two?—Yes, and last night also.

40,068. What have been your average earnings for the last six months?—The fishing is annually getting worse and worse, and I can get nothing by it now.

40,069. Are you able to support yourself?—Scarcely.

40,070. What is the boat's share?—Nothing. It would not buy gear and bait for me.

40,071. And what is the average quantity of hake that you take with your boat?—I was outside for three nights this week and I did not catch more than 85 hake.

40,072. Each night?—No, in the three nights. It was four score and five that I got.

40,073. Is that your own take?—No, the entire take between us all.

40,074. What did the other boats take?—Some less and a few of them more.

40,075. What is the greatest take that any Dungarvan boat has had for the last three months?—There

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is not a boat during the last three months that has killed 300 hake in any week nor 200 either.

40,076. Not 200 in any week?—No, during the five nights of the week.

40,077. Are you out on the average five nights in the week?—Yes, if the weather permits.

40,078. Has the quantity of fish taken by the Dungarvan men since you got your boat first increased or diminished?—It has been every year getting worse.

40,079. What do you ascribe that decrease to?—It strikes me that we do not get a quarter of what we used to get.

40,080. What is the cause of that?—I do not know whether it is the will of God or the destruction by the trammels, but every man in the same trade in the south of Ireland will blame the trammels.

40,081. What do you consider to be the objection to trammels—where are they set, and what is your objection to them?—They set them east and west.

40,082. Where?—Outside in from 12 fathoms of water to 30 fathoms.

40,083. What is the objection to them, and how do they interfere with the line-fishing?—Provided they give us a fair berth, or plenty of room, we should never murmur much about it, but these men can leave their own homes any time they like and go on board a vessel and shove their trammel among my lines where they like, and the consequence is that I have to go away and get to a fresh berth.

40,084. How do they interfere with your fishing; what injury do they do to you?—Sure they prevent me from catching fish.

40,085. How is that?—Because it is not there for me to catch, and another thing I will tell you I do not think any good fish will resort to where they are.

40,086. Why not?—Because the sea is infested by them.

10,087. How?—There are the relics which they bring there, bones and heads, which are very destructive to the fishing.

40,088. Are they relics of the fish which have been taken?—Yes.

40,089. Are the fish they take better or worse in quality than those you take?—Our fish when they are fresh are much better than theirs. Sometimes they will leave the trammel-nets in the water and not bring them on shore. Often their fish are not saleable, and the jolters will not buy them because the fish are sold by the skin. The fishmongers will not have them.

40,090. How are they sold by the skin?—By the colour or by the scales.

40,091. Are they better or worse than the fish taken by the lines?—When they are preserved they are good enough, but they are not so productive in weight as our fish.

40,092. Are they exhausted?—They are, and I can give you the reason.

40,093. Why is it?—Because they are exhausted by pulling and dragging themselves in the holes.

40,094. While they are in the net?—Yes.

40,095. What time do you see the Ring men setting their trammels?—They come round to Helvick to set their trammels at 12 o'clock, and four o'clock, and one o'clock, and two o'clock.

40,096. At this season of the year, what is the general time that they set their trammels?—They set them in the evening at three or four o'clock.

40,097. How long do they leave them in the water?—Perhaps until the middle of next day.

40,098. What time do they generally take them up?—There may be a blustering wind, and then they may not take them up till midday, but it is about breakfast time that they generally get them.

40,099. What is the general time they take them up?—Sometimes at six o'clock in the morning, and from that up to seven, eight, and nine o'clock; that is the time they take them up.

40,100. How close to your fishing boats do they set their trammels?—I cannot be exact about it.

40,101. About what distance?—As far as my knowledge goes, the nearest will be about 80 or 90 yards.

40,102. Do they come within 80 or 90 yards of your boats?—Yes, but I cannot be exact with regard to the distance.

40,103. They put them within 100 yards of you?—That is my guess, but I cannot be positive; it may be more or less, over or under.

40,104. Have they proper buoys attached to their trammels?—They have a parcel of corks tied together.

40,105. Have they no regular buoys?—No, there are no signs on the water but a parcel of corks tied with a bit of line and made fast to the trammel.

40,106. Do you ever see any letter mark or number upon them?—No.

40,107. Do you see any buoys attached to the trammels?—I have seen buoys attached to them.

40,108. But, in a general way, have the Ring men got buoys attached to their trammels?—Yes, I have seen them.

40,109. Have you seen them without buoys?—They can have them without their being known to us.

40,110. Did you ever see any with letters painted on them?—No, I never did.

40,111. Is not this a copy of the byelaws which were passed in reference to Dungarvan Bay in 1849?—Yes.

FISHERIES.

Act 5 & 6 Vict. cap. 100.
„ 7 & 8 Vict. cap. 108.
„ 8 & 9 Vict. cap. 108.
„ 9 & 10 Vict. cap. 114, and
„ 11 & 12 Vict. cap. 92.

BYELAWS, RULES AND REGULATIONS.

Dungarvan Bay.

1st. The use of the trammel and every other fixed or moored net (except bag or the nets for the taking of salmon,) is hereby prohibited at any time or season in the entrance of Dungarvan Bay, within the limit formed as follows, namely, the space lying between a line passing due east and west through the northernmost point of Helvick Head in the barony of Denis-within-Drum, and a line passing due east and west through the southernmost point of Ballinacourty Head in the barony of Denis-without-Drum in the county of Waterford.

2nd. The setting of any such trammel or moored net athwart or within 200 yards of any boat, which at the time of setting such net shall be moored, and the crew thereof engaged in line-fishing, is hereby prohibited.

3rd. To every train of such trammel or moored net shall be attached at least one floating buoy or board, upon which shall be printed in clear, legible characters, not less than one inch in length, in white, upon a black ground, the letter of the district, and the name of the owner to which such net belongs.

4th. On or off the coast of Waterford, to the north and east of the line aforesaid passing through Ballinacourty Head as aforesaid, and on or off the coast of Waterford to the south and west of the line aforesaid, passing through Helvick Head as aforesaid, such trammel or moored nets may be set, and remain set, or in the water, from the hour of three of the clock in the afternoon of one day until the hour of nine of the clock in the forenoon of the following day during the months of January, March, October, November, and December in each year; and from five of the clock in the afternoon of one day to the hour of seven of the clock in the forenoon of the next following day, during the months of May, June, August and September in each year.

5th. Any person acting contrary to any of the foregoing byelaws, rules, and regulations, is hereby made subject and liable to a penalty not exceeding 5*l.*

HARRY D. JONES,
J. RADCLIFF,
THOS. A. LARCOM,
J. REDMOND BARRY,
WM. J. FFENNELL,
Commissioners.

Approved by the Lord Lieutenant in Council,
31st Oct. 1849.

Dated this 4th day of July 1849,
At the office of Public Works, Dublin.

40,112. (*Professor Huxley.*) The evidence you are now giving is to the effect of showing that bye-laws have been habitually infringed here ?—Yes.

40,113. (*Mr. Anderson.*) You say that you have often seen trammels set without having buoys attached to them ?—They might have them, but I never saw them. I never did see any. They might have them unknown to me, or they might be buried underneath me without having a buoy at all.

40,114. Have you ever had any dispute with the Ring men ?—No, I never did.

40,115. Have the trammels when they have been set down interfered at any time with your fishing ?—Yes, I had a proof of that. I never caught any fish near them; where a Dungarvan hooker will catch 400 hake here at night if none of these trammels are near him, the next night they will come almost on board of her, and the hooker might then almost as well attempt to fly as attempt to fish; he will come home the very next night without catching anything at all.

40,116. How close have you seen them set their trammels to you ?—I cannot be exact about it, but perhaps 100 yards, or twice the length of this court; but I cannot be very precise.

40,117. Is there any difficulty when the trammels are shot about you in the night or in the evening, and you find you are catching no fish? Where are you injured; have you any difficulty in keeping your ground in consequence of the trammels ?—That is one of the greatest injuries they do us. In former days and until lately we were very apt when we missed the fish to remove in the night. Sometimes we would remove five times in one night in order to find out a good place, but now no one can remove unless he goes outside altogether, because where we drop down a second time and anchor we might find ourselves among their nets, so that we are obliged to haul up entirely for that night.

40,118. If you get in a place where you are catching no fish, you must remain there all night ?—Yes, that is mostly the case.

40,119. Do you think the trammels prevent the fish from coming in towards the land ?—They are set across the harbour, and the reason why they do that is that that is the best place for them.

40,120. How far do the trammels extend in the water ?—All the way round from Helvick Head up to Ballyvoyle Head to the northward.

40,121. When do they shoot them ?—In the afternoon.

40,122. What space of water is covered with the trammels when they have set them; what length generally do they cover ?—I cannot be exact. There may be 48 or 50 of them, but I do not know the length of each trammel.

40,123. They set them, I suppose, where the fish are most plentiful ?—They would know to-day where the fishermen would have been catching fish last night, and they always go there.

40,124. (*Professor Huxley.*) Do you know anything about the sprats, and mackerel, and scad; do the trammels interfere in any way with their coming upon the shore ?—I do not know the reason of it because the trammels are buried and attached to the ground, and they cannot float very high and all the small fish might float over them.

40,125. But do you think that they prevent the small fish from coming in at all ?—Seemingly they do, but I do not know how it is.

40,126. Where do you catch mackerel principally now ?—In-shore, but we meet them in deep water first.

40,127. Do you often meet them outside or inside the trammels ?—At first outside, and now they are inside.

20,128. Do you think the trammels do any injury to the hook-fishing ?—Yes.

40,129. What injury do they do ?—All I can say is that now we are enabled to catch a far less amount of fish than we did in former times. Where we catch fish one night the trammel men go and shoot their trammels the next, and then we catch none. If they leave the place and give us a berth, then we can catch fish again.

40,130. As long as the trammels are there you catch none ?—No; we give up the game because we can do no good.

30,131. When the trammels are out, is there any appearance upon the water ?—There may be a single bit of a rope, and there will be a kind of light where the net is in, added to which there is the net fixed in the water and the corks above.

40,132. Has the luminous appearance you speak of from the trammels done any injury to the fish ?—I think it has; nothing more so.

40,133. (*Mr. Anderson.*) As a matter of fact, are all the Ring boats numbered and lettered as the Dungarvan boats are ?—They are not.

40,134. Have you any difficulty in identifying the owners of the boats or trammels at any time; have you had occasion to summon any of them ?—No, I never summoned any.

40,135. Have you ever seen them throw their jackets over the number of the boat ?—No; but I have heard that they have done it.

40,136. Do you know what sized meshes there are in the trammels ?—I do not know that.

40,137. Have you ever examined the trammels ?—No.

40,138. With regard to the trawling, where do they trawl ?—From Mine Head very nearly as far as Ballyvoyle Head.

40,139. What injury does trawling do to the fish ?—When I went trawling as a boy the old people told me that it was the spawn of the fish that we used to take up. It used to be knotted together in small little bunches along with the gravel. All of it used to be in lumps. The old people told me that that was spawn, and I told the youngsters the same who came with me afterwards, but I could not say if it was spawn or not; at any rate it looks very much like it.

40,140. Have you ever seen small fish taken up in the trawls—not spawn, but small fish ?—Very little of that except flat-fish.

40,141. Where do they trawl generally; do they ever trawl in Dungarvan Harbour ?—Yes, from Mine Head.

40,142. Do they trawl in the Broad Sound ?—Yes.

40,143. Do they take spawn there ?—No. Where I have seen the spawn taken is on the hard gravelly bottom where the rumble is, not on the soft ground.

40,144. The less the ground is trawled over the less spawn you take ?—Yes.

40,145. Do the Ring men trawl at all times of the year ?—No; they do not trawl about Christmas there. They begin about March outside the land, and trawl from that time until August or September, provided there is not much hake to be caught.

40,146. Then they will trawl most of the year ?—Yes, until December.

40,147. Have you ever known any lines injured by trawling or cables, or anything of that sort ?—No, not by these men's trawls.

40,148. By any other person's trawls ?—Yes, by the trawls of the Dublin smacks.

40,149. What sized boats are they ?—They are boats of 40 and 50 tons.

40,150–1. What injury have they done ?—They have taken up some of my lines.

40,152. What sized nets do the Ring men use; what is the size of the mesh ?—I believe $3\frac{1}{2}$ inches; it is 14 inches in the round.

40,153. What is the largest size of mesh in the trawl, and what is the smallest ?—This is the largest; it is smaller at the bottom.

40,154. What is the size of the mesh at the bottom ?—$3\frac{1}{2}$ inches.

40,155. That is the smallest mesh ?—Yes.

40,156. Then what size is the mesh at the top ?—They are not very particular about that at all; when

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I worked with the trawlers my mesh used to be generally about the same all over.

40,157. Three and a half inches throughout?—Yes.

40,158. What is the difference between the trawl of a Dublin boat and of a Ring boat?—I do not know.

40,159. Do you know what sort of trawl they use?—No.

40,160. What sort of trawls do the Ring men use?—They use a trawl-net 3½ inches in the mesh and 20 fathoms on the rope. They have also two heads nearly a hundredweight each; there will be quite four stone on each besides warps.

40,161. Do they sweep along the ground?—Yes.

40,162. (*Mr. Kelly.*) You were a trawler yourself?—Yes.

40,163. For a long time?—Yes.

40,164. Did I understand you to say that you were 33 years trawling?—I was trawling 36 years ago.

40,165. How long did you continue at it?—In our town we used to begin in December and go on until the 1st of April; then we began again in June or July.

40,166. For how many years since 36 years ago did you trawl; have you the trawler still?—I had the trawler for 32 years; I sold her to the Ring men.

40,167. You parted with it to the Ring men?—Yes.

40,168. Did you consider that you were doing well with your trawl?—I was doing more good then than I am doing now.

40,169. Then I wonder why you parted with it?—I will tell you my motive. My boys left me; they said they could not be supported as they had been before, and they left me, and then I was not able to manage more than one. I kept one, and I sold the other.

40,170. Did you think the hooking the most profitable way of living?—I could not manage the two, and therefore I sold one. The one I sold I considered too delicate; she used to draw too much water.

40,171. Did you know what the law against the Ring men was in using their trammels out at sea; did you not hear what the law was, that they had no right to come near you or across you?—I did.

40,172. Did you ever summon the men whom you complain of as having so often violated the byelaws; did you ever complain to the authorities?—I will tell you my motive.

40,173. Did you ever do it?—No.

40,174. And did you know that they violated the law?—Yes, and that I could summon them.

40,175. But you never did it?—No.

40,176. Why not?—I did not wish to take them up at all for anything.

40,177. Did you not say that the trammels did not bring in any fish at all, but that they left nothing but the bones there?—That is not what I said at all. I said a part of them left bones there, but not the entire number.

40,178. Did you not say they left their bones there?—What would be the use of their shoving their nets out if they did not bring in anything?

40,179. Is it a fact that the trammels take more fish than you do by the hand-line?—Yes, that is the candid truth.

40,180. You say that the quality of the fish got in the trammel is bad compared with what is caught by the hand-line?—Yes.

40,181. Did you ever try a bit of it, or is it forbidden fruit?—I have eaten it, but I would sooner eat my own fish if I had it.

40,182. Can you say of your own knowledge of the coast here whether there has been as much fish in the harbour got here within the last two or three years as for some years past?—There has not been one-tenth part of what there was; if it was there we should catch it. We do our utmost to get part of it. We will always take it if we possibly can, and sometimes we do meet the fish, but not at all to any extent during the last two years.

40,183. Then is it your opinion that the fish are not there?—My opinion is that it is not there; that it has not come there for the last two years as compared with the quantity we used to catch in former years.

40,184. Have you any idea what quantity of fish the Ring men have been taking with the trammels during the last year or two?—No.

40,185. If they have been taking large quantities would that not change your opinion with regard to the fish not being in the harbour?—I think that is more than they could do. I do not think they catch more than half what they boast of.

40,186. Did you ever use the long line?—No.

40,187. Is not the long-line fishing a more profitable mode of fishing than the hand-line?—It is.

40,188. Could you not catch a great quantity by the use of the long-line?—Sometimes.

40,189. On every occasion could you not catch a much larger quantity by the long-line?—On some occasions I could not.

40,190. Why?—First and foremost these Ring men go to trawl on the broad sand for bait for the long-lines. If our men went to deep water with long-lines, it would be a very serious matter to them if they were carried away by trawlers. Each line will cost from about 40*l.* to 50*l.*, and it is not every poor hooker who can raise a sum like that. Secondly, if we had long-lines we could not do without we had a trawl as well to enable us to catch bait.

40,191. But when you had the trawl you never made use of it to assist you in making profitable use of the long-lines?—No, we never caught fish in it for bait; we always sold the fish we took in it.

40,192. Did you ever use mussels as bait?—Yes.

40,193. There is an immense quantity of mussels near the bridge?—Yes.

40,194. Did you ever take any part of them?—No; mussels are never put to any great use. We have generally caught small fish, and then used them for catching the big ones.

40,195. You do not put them to any great use even in the hand-line fishing?—No, we have no small hooks on the hand-line.

40,196. Did you ever use them?—Yes, we have used them to catch small fish.

40,197. Do you think that you would make more by using the trammel-net than by hand-line fishing within the proper legal boundaries?—There is a great deal of cost attending the use of trammels also. I think they are apt to rot. There are two or three men here who, if they had the craft the Ring men have, would make use of it, but they cannot get men to man the boats. Some of our boats have not been going to sea for want of men.

40,198. They would use them if they had help?—I think if I had men enough they would pay me better perhaps.

40,199. You never tried them?—No, I never saw any man who did from our port.

40,200. (*Professor Huxley.*) You think that a good deal of damage has been done by the trammel-fishing?—I am sure there has been.

40,201. Do you think that much harm has been done to the fishing by the trawlers?—They are bad on both sides.

40,202. Have the trawlers done as much harm to the fishing as the trammel-nets?—I think the trammel-nets have done most harm.

40,203. What makes you think that?—I will tell you the reason that makes me think it. The trawl is on the move. It is constantly moving over the ground, whereas a trammel net is moored and left there for good until such time as the shore men go out and take it in.

40,204. How does that do more harm than the other way?—It does, because it looks like a mountain in the night in the water.

40,205. Do not the trawl men work at night?—No, they come to an anchor like good fellows near us.

40,206. Do you think that the trammel-net frightens away the fish?—I am sure it does.

40,207. How is it then that so many are caught in trammel-nets?—Many a time I have been out fishing with my lines, and although I might catch a hake or

two many would be able to get away; but with regard to trammels, when they are down, the fish that gets among them is like a bird who has flown into a cage, he can make nothing of them, and he don't know where to find rest.

40,208. Do I understand you to say that the mischief is done by the trammels coming round you at night, or that it arises from frightening the fish or from catching it?—No, the fish are flying away from the flame.

40,209. Do the trammel men who have the trammels round about you catch any fish?—Yes, they have a moderate share like us.

40,210. Then the trammels do not frighten away the fish altogether?—No, they do not frighten them away altogether.

40,211. Apart from your objection to trammels as a mode of catching fish, I understand you to say that they do not give you room enough to fish in?—I would not speak a word against them if I had room enough.

40,212. If you had room enough to work you would not care about their destroying the fish or frightening them away?—No.

40,213. Can the trammels be set on any part of the shore?—No, there are fouls in some part of our bay.

40,214. Can you fish there?—No, I should lose my cable and anchor there.

40,215. So that the ground you want to fish upon is the same ground as that upon which the trammels are set?—Yes.

40,216. And the fact that the trammels are set there prevents you from fishing there?—Yes, I do not say that is their motive, but I believe that where they think they can do most good there they go.

40,217. Are you able to fish when the trammel nets are set?—Yes, we can fish.

40,218. Can you fish as well as if there were no trammel nets set?—No.

40,219. The reason being that you get foul of them?—Yes.

40,220. Do you say they take away your fish?—Yes, and whether they have done that or not, I blame them for it.

40,221. Did you say just now that no good fish are caught where the trammels are set?—Yes.

40,222. What did you mean by good fish?—I mean marketable fish.

40,223. Large fish?—The trammels catch large and small fish too.

40,224. Just the same size as the hookers?—Yes.

40,225. Then what do you mean by saying the fish are not good?—What I mean to say is, that they do not preserve so well unless they are big fish. They are not brought in fresh, and they are obliged to salt them.

40,226. The fish to begin with are as good as the others, but when they are caught in the trammels they do not cure as well?—No.

40,227. Is there any one here whose business it is to see that the byelaws of the Fishery Board are not broken?—I do not know.

40,228. Are there any persons belonging to the Coastguard here who look after the fisheries?—There are.

40,229 If the trammel nets are set at improper times, and are not properly buoyed or marked, would they summon the owners of the nets?—They would.

40,230. Have they done so?—I do not know.

40,231. Have you ever known of a case?—No; but if they wished they could; they can see them every night and every day.

40,232. (*Mr. Lefevre.*) Have you ever made any complaints to the Coastguard?—No.

40,233. (*Professor Huxley.*) From what you know of the fishermen themselves, are there many of them who make complaints, and have the people brought up for breaking the law?—There have been some.

40,234. Have there been persons summoned?—Yes.

40,235. And fined?—Yes.

40,236. Who was it that brought the accusation?—Tom Adams here.

40,237. One of the fishermen?—Yes, he is a fisherman, like myself.

40,238. If the fishermen find themselves injured they put the law in force?—Yes.

40,239. Did I understand you to say in the course of your evidence that all the small fish could float over the trammel-nets when they are set?—Yes, if they float aloft.

40,240. Then do they not interfere with sprats or small fish coming up the bay?—If they keep low then they are caught; but if they keep high on the top of the water they can float over.

40,241. Do the trammel-nets interfere with the sprats coming up the bay as usual?—I cannot say.

40,242. Have there been many sprats up of late years?—Not so many as there were before.

40,243. Have there been as many within the last two or three years?—No; there used to be more before.

40,244. What is that owing to?—We blame the trammels for all these things, but I do not know whether the trammels destroy the small fish.

40,245. Did you ever get any small fish in your trawl?—Only an odd one here and there.

40,246. When did you trawl?—From the 1st of April until August. We did most of the trawling in July.

40,247. And in that time did you get any considerable quantity of small fry?—Perhaps we might get a hundred during that time; small flat-fish.

40,248. You did get small flat-fish?—Yes.

40,249. Small turbot?—Yes.

40,250. Of what size?—About that breadth (*measuring*). Anything that could not get out through the holes.

40,251. Any small soles?—Yes.

40,252. Cut the quantity of small unmarketable fish was never very large?—No.

40,253. Did the small trawls ever do any harm to your lines?—No, no more than that they dispersed the fish from us. They dispersed and scattered the fish from one quarter to another.

40,254. Are you speaking now of long-lines or hand-lines?—I have been speaking about both.

40,255. And your answer now has reference to both. They would not hurt your hand-lines?—No, no more than they would drive the fish away from the boat.

40,256. Do you trawl in the same boat as you hook from?—Yes.

40,257. Did I understand you to say just now that the long-line fishing, if it were practised here, would depend on your being able to get fish for bait by the trawls?—The line-fishing would be of very little use if it was not for the trawls being able to get bait on the broad sand. If the Ring men did not have trawls they could not do any good with their long-lines.

40,258. Have you ever tried the mussels for bait?—Mussels would not do.

40,259. Would not mussels do for cod?—No, they would not catch many fish.

40,260. What is the best kind of fish for bait—small fish?—Yes; whiting are very good, and these Ring men opposite think a great deal of the conger eel.

40,261. Have you any objection to the trawling by the small boats over the bay here; do you think it does any harm?—I think the trammelling does a great deal more harm than trawling.

40,262. You do not think the trawlers do any harm?—They do. There are 12 or 13 trawling now from Abbeyside, and 30 on the Ring side. They go out trawling on Monday morning, and 16 or 17 of them will be going abreast east and west throughout the week from one headland to another; and I think the fish cannot keep in the bay.

40,263. Does that have a tendency to keep the fish out of the bay?—Yes.

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40,264. Then, if you could have your way, would you put down trawling altogether?—I think the trammels and the trawls are both bad.

40,265. As they are injurious, would you like to have them stopped?—If they were stopped I think there would be twice as many fish killed by the hookers at any rate, or even four times as much.

40,266. (*Mr. Lefevre.*) Do you fish with the hook and line all the year round?—Yes, with the hook and line all the year round.

40,267. Mostly at night time?—Yes.

40,268. What is the greatest distance you go outside the bay?—We go outside sometimes 10 miles. Last night we were not more than one mile from the coast.

40,269. What is the distance that the trammels are set?—They are often outside of us.

40,270. Do they go as much as 10 miles from the shore?—No.

40,271. Do they go as much as seven miles?—Yes.

40,272. Then you go beyond the trammel-nets?—Yes, they set their trammels in from 12 to 13 fathoms of water.

40,273. In the winter season do you fish in the bay or outside?—Sometimes outside, and sometimes in the middle of the bay.

40,274. How many men have you in your boat?—I was fishing all the year, and I had but two men and a boy.

40,275. Since your sons have left you you have two men and a boy?—Yes, my boat would take nearly 30 tons.

40,276. When your sons were with you how many were you in the boat?—Sometimes six, and sometimes seven.

40,277. And now you are only four?—Yes.

40,278. Did you find any difficulty in getting men to go with you?—Yes, but sometimes they would rather go than be idle, and then they went.

40,279. Were they old men?—Yes.

40,280. No young men?—No, when we cannot muster the men we cannot go far.

The witness withdrew.

M. Christopher.

MICHAEL CHRISTOPHER called and examined.

40,281. (*Mr. Anderson.*) How long have you been fishing?—Thirty-eight years.

40,282. What sort of fishing have you been at?—The hand-lines.

40,283. Are you or were you the owner of a boat?—I was never the owner of a boat, but I was master of a boat.

40,284. Do you remember about 20 years ago whether there were more fish caught than now?—There was treble as much caught.

40,285. Do you remember about the year 1840?—Indeed I ought to remember it.

40,286. Do you remember how much you used to earn then?—Yes.

40,287. Were you master of a fishing boat then?—No.

40,288. You were only fishing then?—Yes.

40,289. How much did the boat earn at that time?—I kept an account for 11 months. The share of the owners came to 85*l.* 13*s.* for 11 months.

40,290. That was the share of the owners?—Yes.

40,291. One-fourth of the whole?—Yes.

40,292. How many men were there in the boat at that time?—Five men and myself and a boy.

40,293. What was the average sum you earned at that time?—The half of that, nearly 43*l.* There would be that sum for each man.

40,294. What was the average quantity of hake you took in a night then on the lines?—When we sailed with five men we took frequently from 1,500 to 2,000 hake.

40,295. What is the largest number you ever caught?—We have killed 300 a man.

40,296. That would be, including yourself, 1,800?—Yes, that was in my boy days.

40,297. What was the general quantity?—Nine and 10 score; from seven or eight score to a couple of hundred.

40,298. Each man?—Yes.

40,299. Have you been fishing lately?—Yes, ever since.

40,300. Of late years, say within the last 12 months, what is the average quantity you catch in the boat?—During the last 12 months I have not caught what would support a chicken.

40,301. How many fish have you caught on the average?—I have often gone to sea and come home with two or three hake.

40,302. Is that within the last 12 months?—Yes.

40,303. Have you gone on the usual fishing ground?—Yes.

40,304. Has this last year been a bad year for fishing?—Yes, the worst year I ever knew. I had to go into the union workhouse on account of it. I have had to do that for the last four years. I came out of the union on the 25th of February last, and I took a boat to find employment for myself and three young men. I had not been long engaged in the fishing before one of the trawlers came and swept away our anchor.

40,305. What trawlers were they?—I cannot tell whether they were Dublin trawlers or not.

40,306. They carried away your cable?—Yes, we had to let it go in order to preserve our lives.

40,307. How many men have you got in the boat now?—Four men and myself.

40,308. Are they young men or old?—All young men but one.

40,309. Were you out last night?—Yes.

40,310. What did you catch?—Only 18 hake.

40,311. Between five of you?—Yes.

40,312. Is the quantity of fish outside less or more than it used to be?—When I was master of a boat, about 22 years ago, I never went in the season of the year, from the 1st of May until about the 15th of August, that I could not get fish enough to support myself along the shore, but I never earn a shilling within three miles of Helvick Head now.

40,313. Are the fish falling off from the shore?—Yes, they cannot come in.

40,314. What is the cause of that?—The trammels.

40,315. Why do you think they prevent the fish from coming in?—They are like a wall in the water. If there were a wall in this court, and you were imprisoned here you would try to get over it. That is the way the fish do, but there are as many as four or five walls to get over. Frequently, I ought to tell you, that we find a hake caught here by the head and there by the tail. They run away as fast as they can to avoid being caught in the nets, and they get caught upon the hooks in that way.

40,316. How close to each other do they set the trammels?—They set them as close as they like.

40,317. Within a few feet?—Wherever they think they will get any fish. They will watch my motions, and if they find that I am catching fish they will come to where I have been fishing. I have often killed 500 hake in a night and then when these men have come there they all go away.

40,318. How is that?—They run away the same as you would if you wanted to get out of prison. The fish have as much sense as you have in their own way.

40,319. How close to your boats do they set the trammels?—If they see me haul in a hake they come as close as they dare to me.

40,320. How close have you ever seen the trammels set?—So close that I can speak to them and

ask them if the sea is not large enough for all of us that they will not give me space.

40,321. I believe if they see you catch fish they go down to the same spot with the trammels?—Yes. Last year I had to haul away three times and at last I was obliged to go away altogether.

40,322. Why did you do that?—Because it was no good to fish among them.

40,423. The trammels were there?—Yes. First one and then another came setting their trammels there.

40,424. As often as the trammels came where you were, you had to shift your ground?—Yes, and I had to go to places where I did not care about going, and where I was not inclined to go.

40,325. Have the Ring men their trammels properly buoyed and marked?—There are some of them that never had a mark.

40,326. If you wanted to summon them would you have a difficulty in identifying the trammels or not?—I did summon one. There are two brothers, Pat and Tom. I did not know the right man, so I summoned Pat; but they swore positively that their nets were beyond the limits. The person before whom the case came did not understand the law, but yet he cast me upon it.

40,327. He did not give you a conviction?—No.

40,328. Have you a difficulty, in consequence of the nets not being properly marked, in summoning the men?—There is no number upon them.

40,329. Nor any letter?—No; I have often taken one of them up when I have had to haul up abreast of them to get them clear out of my way, and I never saw a number or a letter or anything else upon them.

40,330. What time do they generally set down their nets?—When they like.

40,331. What time of the day?—Any time they like.

40,332. What time of the day, or what is the earliest time of the day you ever saw them set?—I have seen them set at one, two, three, and four o'clock.

40,333. Have you ever seen them set as early as one o'clock?—Yes, indeed I have. I have often seen them come out in the morning, haul their nets at seven and eight o'clock, turn to and take the fish out of them, and then set them down again.

40,334. What time do they generally take them up in the morning?—They come for them when they like.

40,335. What time in the morning have you seen them take up their trammels?—I have seen them every day in the year come out at six and seven and eight and nine and ten o'clock in the morning.

40,336. Have you seen them take them up as late as nine o'clock in the morning?—Yes; that is a regular practice, and they take the fish out of them and they turn to and set them again.

40,337. Are the Ring boats properly marked; have they letters or numbers on them?—Some of them have letters and numbers, but the buoys have neither.

40,338. Have they letters and numbers?—Yes; but if they have numbers they will take off their old coats and put them over the numbers so that we cannot see them.

40,339. Have they done that when they were going to set their trammels?—Yes, and when we were going to take their trammels.

40,340. When you go out and are anchored for fishing, do they set their nets close about you?—Yes.

40,341. Have you found any difficulty in shifting your place or moving down?—Yes, where can I go to? They set about me. I have often hauled up my cable and anchor four or five times in the course of a night, but wherever I go now, there I must stop. I do not know where to go.

40,342. When the trammels are set down about you, do you find you do not catch fish with your hand-lines?—No.

40,343. Do you catch fish with your hand-lines?—Yes, but what we catch are often caught by the tail and caught by the head when they are running away wild.

40,344. If the trammels are not there, do you catch more fish?—Yes; they fly about quite wild when they get clear of the nets.

40,345. And then you do not catch fish?—No, that is the reason. We only catch them in the way I have just mentioned to you.

40,346. Did you ever fish with long-lines?—I did.

40,347. How long ago?—Ever since I was born until the last five or six years. Long-lines are what I used to follow.

40,348. Long-lines or spilliards?—Yes, haddock-fishing. They were my chief support.

40,349. How many long-lines had you?—From 900 to 1,000 and from that to 1,100 and 1,200 hooks.

40,350. Where did you set them?—From three to twelve miles off.

40,351. What bait did you use?—Mussels and lugs.

40,352. What did you catch principally upon them?—Haddock and cod.

40,353. How long is it since you discontinued the use of the long-lines?—I have not been fishing with long-lines for the last five or six years.

40,354. Why did you give them up?—Because I could not get a haddock.

40,355. Is it because you did not catch fish on the long-lines that you ceased to use them?—Yes, and they were always my chief support.

40,356. Why is it, do you think, that you cannot catch as many fish on the long-lines as you did formerly?—Because the trawlers were destroying everything in the sea.

40,357-8. Do you consider that the trawling is injurious?—Yes, there is nothing more injurious to the fish that lie on the ground, such as haddock, cod, and ling.

40,359. What harm do the trawls do?—They injure me so far that I had to go into the union-house on account of the trawling. I blame nothing else for it.

40,360. Why do you think it is injurious?—They hoist away all the seed of the haddock, the cod, and ling.

40,361. (*Professor Huxley.*) The spawn?—Yes.

40,362. Have you been a trawler yourself?—No.

40,363. Have you seen the men take up the trawls?—I have not been on board.

40,364. Have you been near enough to see them?—Yes, and I have seen plently of small, little fish in the net, not the length of that (*measuring*).

40,365. Have you seen them take the small fish?—Yes, the length of my finger.

40,366. What sort of small fish were they?—They were small fish of every kind.

40,367. Were there small cod and haddock among them?—Yes, there were regular baskets and heaps of them.

40,368. Have you ever examined those small fish?—Yes, I have had them for bait.

40,369. Were they small haddock and small cod?—Yes.

40,370. Have you seen large quantities of them?—Yes, I have often had buckets of them.

40,371. Are there any haddocks caught at all now outside?—No, and this is not the time of the year for them. About 36 and 37 years ago we had plenty, but five or six years ago we had to go to the union in consequence of the trawlers. Since I can remember we have often had 500 haddocks and sold them at 1*s.* and 1*s.* 1*d.* a score. Now, if we could get a haddock, we could get 2*s.* 6*d.* or 3*s.* for it.

40,372. (*Mr. Kelly.*) Do you consider that the trammels are the things that frighten away all the fish from the sea or in this harbour?—I do positively.

DUNGARVAN.
M. Christopher.
25 Aug. 1864.

40,373. You say you have oftentimes seen the Ring men out violating the law?—Yes.

40,374. Did you ever summon them more than once?—Never.

40,375. Knowing that they were violating the law, you did not complain to the authorities?—Yes, I did.

40,376. But only once?—Only once.

40,377. And I suppose they were violating the law every day you went out?—Yes.

40,378. Yet you never thought of appealing to the authorities for redress except on one occasion?—It was of no good for me to do so.

40,379. Why was it of no good for you to do so?—Because they will swear black is white.

40,380. Your opinion is that it is the use of the trammel that frightens the fish away?—Yes, I will positively swear that.

40,381. Did I understand you rightly when you said they take up the fish in the morning and set the nets again at once?—Yes.

40,382. If the trammels frighten away the fish, do you think the trammel men would be fools enough to set them down again when they were not likely to get fish?—They might get 15 or 16 score or so.

40,383. In the very same place that they had been used before?—Perhaps not in the same place; they might haul the net up and go on to another place.

40,384. But it would be near to the place where the nets had been down before?—Yes, much in the same neighbourhood

40,385. And you have seen them in the habit of using the trammels in that way constantly?—Yes, as well as I see you now.

40,386. And they have been getting the same quantity of fish from time to time?—I do not know what quantity of fish they can get; they have more than me.

40,387. You followed the long-line fishing for a time?—The fishing I followed is what we call small spilliards, I call them long-lines. We use them for hadoock-fishing and cod.

40,388. Do you catch hake with the long-line?—No, except an odd one.

40,389. Would you not catch more with the long-line than with the hand-line?—We should if we had bait to kill them with.

40,390. And which you never thought proper to get?—We should have to go and give a shilling for it.

40,391. You complain of being unable to live in consequence of the falling off in the take of fish?—Yes, and also in consequence of the trawls and trawlers.

40,392. You gave up long-line fishing?—Yes, I gave it up; how could I do anything else?

40,393. Did you throw away the better means of obtaining a livelihood in order to use the hand-lines?—How could I do otherwise?

40,394. Did you catch a greater quantity by the spilliards than by the hand-lines?—I can catch a greater quantity by the hand-line now.

40,395. Do you remember the immense quantity you stated that you first caught?—Yes.

40,396. About a thousand?—I never said a thousand.

40,397. How many was the most?—From 15 to 16 score, or from that to 400 and 500.

40,398. Would you catch as many with the hand-line as with the long-line?—No, not at present.

40,399. Why?—Because I am not fit to go out with them with the long-line. A long-line is always stretched from this to Helvick Head; but I can work a hand-line with my two hands. I have hauled 300 fish in in one night as my share

40,400. Can you catch more fish with the hand-line than with the spilliards?—I have seen more fish caught by them than ever, even this very month; I saw from 1,100 to 1,200 taken by every boat, when 20 years ago there would not be 40 taken.

40,401. Was that by the hand-line?—Yes, by the hand-line; they were all hake.

40,402. That was this very month?—Yes; and last night we went out and only had 18.

40,403. Would you not be able to earn your bread if you made use of a trammel?—I think if the trammels are to go on, in the course of five years Dungarvan will not be Dungarvan, but Ring will be Ring.

40,404. Do you mean that the trammels will take all the fish or frighten them away?—They will not take them all, but they will frighten them away, and they will not come the same road again.

40,405. Are they taking large quantities of fish at present?—I do not know; but they are running away altogether. I often used to see shoals upon shoals of herrings, and now there are none to be seen.

40,406. What is that owing to?—To the use of the trammels.

40,407. Do not the herrings float on the surface of the water?—They go to the ground at night.

40,408. If the trammels are set, have the herrings no opportunity of floating over them?—They can float over them.

40,409. Then the trammels cannot prevent them from coming in? Can they float along the water even where the trammels are set?—They can float aloft on the surface of the water.

40,410. And do they not do so?—Some may, but they have not done it for the last 20 years to any extent.

40,411. But they could if they liked?—Yes.

40,412. You have not been able to fish regularly for the last five or six years?—No; I have only been able to follow hand-line fishing. If I had haddocks to kill as I used to have I could support my family, but I cannot get them now in consequence of the trammels and trawlers. I told you about nearly losing my life in February last.

40,413. By some Dublin boat?—I do not know if it was a Dublin boat or not.

40,414. You stated a short time ago that you could not get away from the trammels to any other fishing ground, but that they all get round you?—Yes, I have had to haul up three times in a day.

40,415. Could you not go where you felt inclined?—So I did, but they come round me again. One morning we went to sea, and we had plenty of fish to kill; the trammel men came out and anchored outside of me. I said, "There is no good in waiting here," and I hauled up my net and went to Abbeyside, and was killing a number of hake again when five or six of them came round, and I had to go away and try some other place. It was upon that case that I summoned the trammel-net men.

40,416. You think you would be better off if the trammels were put down altogether?—It would not only be better for me, but the whole of the fishermen would be better.

40,417. Is that your opinion?—It is really my opinion.

40,418. Can you give the reason why the trammels prevent the fish from coming in?—Have I not been giving an explanation before. It is just like there being a wall; they try to get over it, and when they have done that they find there are three or four others to get over. If you were in the same fix, by the time you got over the third wall you would run away like the devil.

40,419. Are there three trammels to be got over by the fish?—Yes, and 30 and 33 trammels sometimes.

40,420. If they are able to get away from these, are you able to catch them?—I am not able to catch them at all, except what I catch by the head and the tail when they are running away.

40,421. Are they the fish of such good quality which you bring in and say are so superior to the trammel-caught fish?—Yes, there is no doubt that they are.

40,422. Is it the fish that you catch by the head and tail that you consider so much better?—Yes; the fish in the trammels are strangled, but it is not so when they are caught by a hook and line.

40,423. Is there any difference between them?—Yes.

40,424. What is the difference?—When a fish is caught on our hooks he is killed in a few moments, but

when he is caught in the mesh of the trammel-net he struggles and heaves all the flesh off him until he is strangled.

40,425. Did you ever try or test the fish caught by the hand-line and the fish caught by the trammels after they have been seasoned and corned?—Yes.

40,426. Do you consider there is a difference?—Yes.

40,427. Did you hear the other men examined here to-day?—I did.

40,428. Did you hear Collins state there was no difference between them?—I consider there is a difference.

40,429. Even when they are corned?—Yes.

40,430. Do you know that the Ring men are in the habit of exporting large quantities of fish that are caught in the trammels?—I am told so. They are well looking to the eye, but are not so palatable.

40,431. Why are they not so good?—I suppose because they are caught in the way I have described.

40,432. The substance is not improved when it is corned, is it?—It is improved.

40,433. Then does that mend it when it is corned?—It is never as good as the hand-line fish.

40,434. (*Professor Huxley.*) Did I understand you to say just now that the haddock at one time was very abundant here, and that they have since disappeared?—They were plentiful once.

40,435. And since then they have gone?—Yes, they have gone away altogether.

40,436. About what year was it that the haddock went?—For the last few years I have not seen five haddocks.

40,437. Were they plentiful before that?—Yes; I have sold 30 score at a shilling a score.

40,438. Have the cod gone in the same way?—In the same way. But we had one year long ago when the long-lines took a great deal of fish; it was a bad winter.

40,439. What year was that?—Four or five years ago.

40,440. Did you get plenty of cod then?—Plenty of cod and ling, but for the last six years we have had no haddock at all.

40,441. Have the cod and ling fallen off greatly during the last year or two?—Yes, they have gone away altogether.

40,442. Did you say that you had to go elsewhere to get mussels?—Yes.

40,443. Where did you go to?—To Waterford.

40,444. Some of the previous witnesses told us there was an abundance of mussels in the bay?—Yes, there is now.

40,445. Then why did you go to Waterford for them?—They were not here then. We were more numerous here at that time; I have counted 20 boats from this place engaged in killing haddocks.

40,446. Were there so many of you fishing for haddocks formerly that you cleared out the mussel beds here?—Yes.

40,447. And you had to go to Waterford for them?—Yes.

40,448. Was the bait expensive that you got at Waterford?—I had to give a shilling for about twice my hat full.

40,449. That would make your long-line fishing expensive?—No, because there were plenty of haddock and cod.

40,450. Are the beds of mussels all restored here now?—Yes; they are more plentiful than they ever were.

40,451. Have you left them alone for two or three years?—Yes, and they have come from Kinsale for them.

40,452. If you were fishing with long-lines now, you would get bait cheap enough?—Yes, I should have nothing to do but go down and take a basket and I should get plenty of bait.

40,453. You said that the large trawlers caught a great quantity of small fish?—Yes.

40,454. Do the small trawlers that fish here in the bays also catch a large quantity of small fish?—I cannot say whether they catch small fish or not.

40,455. Have you ever seen the small trawlers at work?—I was never trawling in any of them.

40,456. Have you seen the large trawlers at work?—I have gone to them for water, and I have seen them heaving the small fish overboard by shovels full.

40,457. I want you to explain something you said just now; I understood you to say that the trammels are set one by another, as many as 20 or 30 of them?—Yes.

40,458. Do the trammel-net fishermen always set their nets like that?—Yes, and at top of one another.

40,459. What is the use of that?—To enable them to catch the fish.

40,460. Do you suppose that the 20th trammel-net will catch fish?—I cannot say anything about it, but one will be set here, another a little further on, perhaps without knowing where the other is set; that is the way it is done.

40,461. If they could not catch fish in the hindermost nets they would not set them there?—Very frequently they do not know where the other nets are. I am probably looking on all through, and I see where they are.

40,462. Have they no notion where the trammels are set?—They look out as well as they can, but if one comes out after another has gone away he does not know.

40,463. Are there no buoys on the trammel-nets?—Yes, there is a kind of buoy, but it is good for nothing.

40,464. Suppose you were to go out in the afternoon to set trammel-nets, would you not be able to see where others had been set by means of the buoys?—Yes.

40,465. Then they do know where the others are set?—If one man goes out after another he does not know then where the other man has set his nets.

43,466. If they can see the buoy they will know?—No, there is such a distance between them that they cannot see the buoy.

40,467. (*Mr. Lefevre.*) Are you getting much less hake this year than you did last?—A great deal less.

40,468. Last year what price did you get?—A great deal less—2½*d.* or 3*d.*

40,469. Do you get a larger price now?—Yes.

40,470. What price do you get now?—5*d.* and 6*d.*, and for hake nothing near as large as those we formerly got 2½*d.* and 3*d* for.

40,471. Last year you got 2½*d.* and 3*d.*?—Yes.

40,472. You say that 20 years ago you got larger numbers, what price did you get in then?—I came in one week for the whole of the week with large quantities; I should say that I came in with 400 a day every day in the week, and I sold them for 4*d.* a piece. I had 400 fish every day for five nights of the week.

40,473. Then the price has fallen off?—Yes, since that, until within the last couple of years.

40,474. Not only do you catch fewer hake, but you get less for them?—I think if I got a great deal of the hake I should get a good price for them.

40,475. In the year you spoke of when you caught so many hake, were the trammel-nets set in the bay?—Only three or four of them.

40,476. How many are there now?—26 or 27, and they are increasing every day; they are all coming from the mountain with them, people who never went to sea.

The witness withdrew.

DUNGARVAN.

T. Adams.

25 Aug. 1864.

THOMAS ADAMS called and examined.

40,477. (*Mr. Anderson.*) How many years have you been fishing?—Over 40.

40,478. Are you a master of a fishing boat?—I am.

40,479. Have you heard the evidence given by the other witnesses?—Yes.

40,480. Do you consider that the quantity of fish taken has diminished or increased?—It has diminished by a great deal.

40,481. Do you remember what it was 20 years ago?—Yes, I do, and 40 years ago too.

40,482. Has the quantity been increasing or diminishing?—Diminishing a great deal. I had the bounty 40 years ago.

40,483. Do you remember the year 1836?—I cannot say that I do exactly.

40,484. Are you fishing now?—Yes.

40,485. What quantity have you taken in the course of the last year?—I had 14 to day.

40,486. Were you out last night?—Yes.

40,487. How many had you in your boat?—Five.

40,488. And how many fish did you take last night?—Only 14.

40,489. On the average, how many have you been taking for the last week, or the last month?—Between four and five score a day.

40,490. When the fish were plentiful how many did you take?—There was one night when I left Dungarvan and went off to Varna Head between 12 and 1 o'clock, and between that and the morning we killed 1750 hake.

40,491. How many men had you on board of the boat at that time?—Six men and a boy.

40,492. How many years ago is that?—It is now 42 or 43 years ago.

40,493. Were there any trammels on the coast at that time?—I do not think there were.

40,494. Do you recollect when trammels began to be set on the coast?—I think I do.

40,495. How many years ago is it since they first began to use them?—I do not know.

40,496. Have they used them for 30 years?—I think so.

40,497. For more than that?—Yes, I think so.

40,498. When they began to use trammels at first, how many were set?—Only a few.

40,499. Has the fish been diminishing since they began to use the trammels?—There has been a good deal of it caught since they used the trammels.

40,500. But have they not increased the trammels?—Yes, they have trebled the quantity.

40,501. And, as they have increased them, has the quantity of fish taken by the hand-lines diminished?—There is no doubt of it.

40,502. Did you hear the evidence given by the other witnesses as to where they set their trammels?—Yes.

40,503. Do you agree in that evidence?—Yes.

40,504. Have you ever had any occasion to summon them for violating the law?—Yes, once only.

40,505. When was that?—I was in the court-house and I heard there was a law-suit to take place between the trammels and some of our fishermen.

40,506. Did you summon them?—Yes.

40,507. Why?—I heard Mr. Fitzgerald say that their nets were to be hauled at sunrise, and set at sunset. I went the next day to the quay, and landed my fish, and I heard the clock strike nine. I then went from the quay to fish again, and going outside of Helvick I saw some of the people hauling their trammels, and as I knew it was after 11 o'clock I naturally thought they were breaking the law.

40,508. Then did you summon them?—Yes, I did. I said to my men "Come on deck here; these people "ought to have their trammels taken out of the water "before now." My son was with me, and when I came close to the men I found out who they were, and summoned them.

40,509. Did you summon them?—Yes.

40,510. Were they convicted?—They told me they had the law on the side of themselves and Lord Stuart de Decies.

40,511. Did you get a conviction?—I did.

40,512. Have you seen them putting down their trammels without having proper buoys to them?—Yes, frequently. I never saw a buoy.

40,513. Have you ever seen numbers or letters?—No.

40,514. And how close to your boat have you seen them set their trammels?—So near that I could speak to them.

40,515. Within 50 or 100 yards?—Perhaps so.

40,516. What do you conceive to be the reason why you hand-line fishermen are not catching as much fish as you used to catch?—It is either the will of God, or it is the trammels.

40,517. Do you agree with what the other men said as to the trammels being injurious, and in the reasons which they gave for considering that they were injurious?—Yes, I am certain that what they said was correct.

40,518. Supposing that you were to commence using trammels here in Dungarvan would the tide answer so that you could go in and out?—Certainly not.

40,519. Would it often happen that you would not be able to go out at the proper time to set the trammels?—Yes.

40,520. You would have no water?—No.

40,521. Have you ever fished with the long-lines?—No, I have never fished with any line except the hand-line.

40,522. What time do the fishermen who use the long-lines generally fish with them?—Somewhere about the month of February.

40,523. Do they use them to catch the haddock?—They use small spilliards for that. There is a difference. There is a difference between the small spilliard and the long-lines.

40,524. What is the difference?—There are large hooks on the long-line, and small hooks on the spilliard lines.

40,525. What time of the year do they set them?—Somewhere about the month of March.

40,526. And do they use them all through the summer?—Yes, until the hake come in.

40,527. They do not set the spilliards when the hake come in?—No.

40,528. (*Mr. Kelly.*) Your opinion is that the trammels are the cause of the scarcity of the fish now?—Yes, it is either the will of God Almighty, or the trammels.

40,529. Has it not been the habit to set and use them every year for a great number of years?—Undoubtedly it has.

40,530. And you consider that that must be the means of scaring away the fish from the harbour?—I am certain of it.

40,531. And yet the trammels notwithstanding that are increasing in number every year?—Yes.

40,532. Because the fish come in in less quantities there is an encouragement to increase the number of trammels, I suppose?—I did not say that.

40,533. But it is a fact that they are increasing in number?—Yes, there is no doubt of it.

40,534. How do you think that the trammels, or the use of them, scare away the fish?—I can tell you that. I was catching plenty of fish in the fore part of the night, then there would come a calm, and we had to haul in the slack of our cable, and at that very moment, in consequence of the action of the cable in the water, the fish would go away as if they were flying away from a mountain.

40,535. How long ago is it since you had that experience?—Ever since my boy days.

40,536. Then that is the effect notwithstanding the trammels had been in constant use every day since?—Yes.

40,537. And they are getting a large quantity of fish ?—I believe they say they get more than they do.

40,538. Have you any doubt that they get a large quantity ?—I have no doubt they do.

40,539. Are you not jealous of their getting more than you do ?—Not the slightest; my fishing days are almost over.

40,540. You have no jealousy towards them ?—No.

40,541. Although you consider that they encroach upon the rights of the fishery ?—Yes.

40,542. That is your feeling ?—Yes.

40,543. But you have no unfriendly feeling towards them on that account ?—There is no unfriendly feeling towards them on the part of the Dungarvan men.

40 544. Can you give us any information with regard to the catch of haddock ?—I have never fished for them in my life.

40,545. As a fisherman, do you not consider that the use of the spilliards would be far more profitable to the fishermen than the hand-lines ?—I know they would if there were fish to be had, but there is no fish to be had.

40,546. But when there were fish to be had did the Dungarvan men resort to the use of the spilliards ?—Of course 600 hooks would catch more than hand-lines.

40,547. Why do you object to the use of the long-lines ?—Because there have been no haddocks here of late years.

40,548. Why have they discontinued the long-lines ?—Because there was nothing to be gained by them.

40,549. If there was nothing to be had by using long-lines why do they go out with the hand-line ?—Because the hand-line is of more benefit to them.

40,550. Of more benefit to them than the long-lines ?—Yes.

40,551. Do they catch more by the hand-lines than by the long-lines ?—Of course, if there were fish to be had, they would catch it with the long-lines. If I had a trawl I could get bait.

40,552. If you trawled would you not be able to get a larger quantity of fish ?—No.

40,553. Do you consider that the trawlers take larger fish than the hand-lines ?—No, I am certain they do not, and they are not able to do it.

40,554. They are not able to do so ?—No, they are not.

40,555. Do the Dungarvan fishermen, the hand-line fishermen, when they catch 18 or 20 hake, catch more than the trawlers do at the present moment ?—I do not know what they catch.

40,556. Have you never heard ?—No.

40,557. If you were to use the trammels do you not think it would be a better means of support to you ?—You might as well in that case build us a breakwater.

40,558. Would not the use of the trammel be better for you ?—No.

40,559. Are they not getting fish in the trammels ?—Yes.

40,560. A large quantity of fish ?—Yes ; they say so, but I think it is only a small quantity. They say that in the present season a trammel-net has been taking 1,200 and 1,500.

40,561. Have not the fishermen at Ring taken large quantities of hake in their trammels ?—Yes.

40,562. Have they not taken considerably more than the hand-line men ?—Of course they have.

40,563. Is it because you consider that they take more than you do that you come here to make out a case against them ?—Not by any means.

40,564. Do you consider that the Dungarvan fishermen are as well off as the Helvick men ?—Yes ; they are as well off as they are.

40,565. Are the Ring fishermen as well off as the Helvick men ?—No.

40,566. Are not the Helvick men as hardy, brave, and industrious men as are to be found in the neighbourhood ?—Yes, or in the whole world.

40,567. They are not afraid to go out to sea ?—No, they are not.

40,568. And they cultivate their land at home in addition ?—I do not contradict that.

40,569. Has it been the case that they lived in a more comfortable condition than men who are going into the poorhouse ?—I was never in the poorhouse.

40,570. Then if you resorted to the trammel-net you would not be worse off than they are ?—I think I shall soon have to go to the poorhouse if the trammel-nets are to be allowed.

40,571. Your object is to have the trammel-nets abolished altogether ?—Yes.

40,572. I suppose they get a large quantity of fish in those trammel-nets ?—If they go on with them, there will not be many fish left, and they will not get many.

40,573. But suppose they are getting a large quantity of fish now, that will not be the means of driving them to the poorhouse ?—No. If they did not injure the fish for me, I would not care if they had thousands and millions of pounds. It would make no difference to me how rich they were. In point of fact it would be all the better for I might be able to get something from a rich man, whereas I can get nothing from a poor one.

40,574. You have been fishing with hand-lines all your life ?—Generally speaking I have.

40,575. How long is it since the haddock has disappeared from the coast ?—For the last five or six years. I have not caught a haddock with the small hooks for five or six years.

40,576. Up to five or six years ago has there been a fair supply ?—Yes.

40,577. Of haddock, cod, and ling ?—Yes.

40,578. But what has been the cause of the falling off ?—I cannot tell you.

40,579. May not the other fish have disappeared from the same cause, whatever it may have been ?—Certainly they may.

40,580. Do you know how many trammel-boats there are in Ring ?—No, I do not. I never minded.

40,581. (*Professor Huxley.*) Do the hand-lines catch the same kind of fish as the long-lines ?—No. I never caught anything with the hand-lines but hake and cod and ling in the winter time.

40,582. What do you catch by your long-lines ?—I never had a long-line.

40,583. You never had long-lines yourself ?—No, it is with the hand-lines that we fish in the winter time.

40,584. At the time you were fishing with hand-lines was there any body fishing in your neighbourhood with long-lines ?—Yes, the Ring men.

40,585. What do they get ?—Cod, and ling, and haddock.

40,586. Then you were catching two different kinds of fish with your different kinds of lines ?—I used to catch haddocks as well as cod and ling in the same way.

40,587. They do not catch haddocks with the long-lines ?—No.

40,588. (*Mr. Lefevre.*) When does the season for cod begin ?—In January and February.

40,589. How long does it last ?—We only fish three months in the year for cod and ling.

40,590. Do you find that you have to go further for the cod than you have for the hake ?—Yes.

40,591. Do you go beyond the line of the trammel-nets ?—Yes, a long way beyond.

40,592. Have you observed a falling off in the cod-fish of late years ?—Yes, undoubtedly.

40,593. Has that only been within the last two or three years ?—No, they have been falling off for many years.

40,594. Is it because the weather in the winter time has been so bad that you have not been able to go out as often ?—It has partly been in consequence of the weather being bad.

40,595. Do you think that the codfish are still off the coast, but you are not able to catch them ?—Yes, but there are places where the codfish was plentiful which our boats do not go to now.

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40,596. Do you attribute the falling off in the take of codfish to the trammel-nets?—No.

40,597. It is only the falling off in the hake you attribute to that?—Yes; when I was a boy we used to have boats coming in full of herrings and sprats. There were plenty of them then, but we cannot get a sprat in this place now.

40,598. You do not think the tramml-nets have frightened the codfish away, or the ling, or the conger?—No.

40,599. I think you said you received the bounty here years ago?—Yes.

40,600. In those days you went further off the land for cod?—Yes.

40,601. Did you go up to the Nymph bank?—Yes, 30 miles out.

40,602. It was worth your while to do that in order to receive the bounty?—Yes.

40,603. Is it not worth your while to go the same distance now?—We have not men to go now as they did then. All the young men have gone away.

40,604. And are the boats not as good as they were?—They are pretty good, but not as good as they were.

40,605. Are they as well found as they were?—They are pretty well found, but you have not the men to man them.

40,606. Do you think that if you had men to man them properly you could go out and catch as much codfish as you used to catch?—I have a strong imagination that the same fish are there as were there before.

The witness withdrew.

T. Dwan.

THOMAS DWAN called and examined.

40,607. (*Mr. Anderson.*) Have you heard the other witnesses give their evidence?—Yes.

40,608. Have you been fishing lately?—Yes, we were fishing last night.

40,609. What did you catch last night?—Eleven hake and about 100 mackerel.

40,610. What is the average quantity of fish you have been taking lately?—It has been very small indeed. The average is about as much as a score a night, or 30, or so on.

40,611. Is that the take of an entire boat, or the share of each man?—No, the entire boat.

40,612. How then have the trammels interfered with your fishing?—Last Thursday we got a little trifle of fish, about half a hundred weight to the boat, and we left the quay about half-past eleven the next night, and at the time we anchored there were five nets surrounding us. I had to leave there, and I went all the way to the eastern Star Head at Ballymahon, at the west side of Tramore bay, and I got foul of them nine miles further on.

40,613. Where did you leave them?—Five miles south east of Helvick Head, and then I went nine miles east north-east of Helvick, and I got foul of them again.

40,614. Did they interfere with your fishing?—I lost my night by it. I had four men in the boat, and it was the latter part of the night. I was trying to get my anchor out, but it was of no use.

40,615. You lost your night's fishing?—Yes.

40,616. How close do they put their nets to you?—That is according to whether they see me coming with any fish. They will put them at 12 to 15 and 18 yards from me.

40,617. As close as that?—Yes, quite handy if we are taking fish.

40,618. Have they done that recently?—Yes, as late as last night.

40,619. How near were they last night?—Last night there were three boats dredging and trawling close to me to the southward, and there was a trammel about 30 or 40 yards from my stern.

40,620. Last night?—Yes.

40,621. What injury do you consider the trammels do you, or do you consider that they do you no injury?—They do us great injury.

40,622. How?—They are set so close that when the fish get in them in a dark night they make such a light in the water that they scare away the fish. It is harder for us to catch fish when they are close to us than when they are far away from us for that reason.

40,623. Do you ever see any buoys or marks?—Only a few corks.

40,624. Have they any painted marks or letters?—No, only a few corks and a little line.

40,625. Can you identify the trammels if they are pretty close to you?—I cannot see them because they are at such a distance. It is impossible to see them when each net reaches near a mile.

40,626. And they have no buoy?—No, only a little cork, and there is another thing, I can ot shift in the night for them.

40,627. Why not?—Because I am sure to get foul of the nets, and then I am bothered so that I might just as well sell the boat and go elsewhere.

40,628. What is her tonnage?—14 or 15.

40,629. How many men have you on board?—Five men with myself.

40,630. Did you ever observe the time when they put down their trammels, and the time they take them up?—Generally on the average they set them about three o'clock in the day.

40,631. Have you seen them set them earlier than three o'clock?—I have, but not on the average. I have seen some set them earlier and some later, some not before six o'clock and some at two and three, and I have seen many of them taking the fish out of them and leave them in the water.

40,632. (*Mr. Kelly.*) When did you go to America?—Thirteen years ago.

40,633. How long did you remain there?—About eight years.

40,634. And have you been home here for the last five years?—Yes.

40,635. What was your occupation before you went to America?—I was fishing here.

40,636. Did you know that they were using the trammels before you went to America?—Yes, I had seen their trammels, but not a quarter as many as they have now.

40,637. How many were there at that time?—There were about 14 or 15 boats as near as I can guess.

40,638. But what are the numbers now?—I have counted 25 or 26 boats.

40,639. For the last five years have you been regularly fishing from this harbour?—Yes.

40,640. Have you found the trammel men going on and violating the law, as you say happened last night?—Yes, they do that every time I leave for the fishing, and I have the best of young men with me. Wherever I can go to catch a few fish I go, no matter what the distance is from the land. I go to fish where I like because the place is now taken up and blockaded.

40,641. How long has this happened to you; does it happen very often?—It has happened very much this last season; in the last six months it has occurred 12 or 14 times.

40,642. Did you ever summon them for this alleged breach of the law?—I do not because I have seen other parties do so, and it is very little justice they have got. Under these circumstances it is of no use for me to summon them.

40,643. I believe you know what the law is?—Of course I do.

40,644. Do you know how the trammels act upon the fish?—All I can tell you about it at this moment is that before I went to America to go fishing I would rather have had one-quarter of a boat here than the

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whole of one now, and it is all through the trammels and trawlers.

40,645. Do you use the hand-lines or the long-lines?—I use both.

40,646. Do you find it profitable?—I find the long-line most profitable if I have persons in the boat who are able to manage it, but if I buy a train of lines for them perhaps the trawlers will take them away, and then I am at a total loss, and I cannot afford it.

40,647. Then it is the apprehension that something might happen that has prevented you following long-line fishing?—Yes.

40,648. Do you consider that you would do better by the use of long-lines?—Yes.

40,649. Would that enable you to go further out to sea?—Yes.

40,650. Have you a long-line at all?—Not now.

40,651. How long is it since you discontinued the use of the long line?—I always fished with the long lines before I went to America.

40,652. Since then you have had no long-lines?—No, and I have had no means of getting them. I should not object to try my part of them, but the others who fish with me would not be able to pay for their share, and I cannot afford to be at the whole expense.

40,653. Have you fished all sorts of fish for the last five years?—Yes.

40,654. (*Professor Huxley.*) Cod?—Yes.

40,655. And ling and haddock?—Yes.

40,656. Have you got any haddock?—Yes, but only small takes.

40,657. When did you get haddock?—I got haddock last winter.

40,658. How much?—I often had a scattering few, perhaps three, or four, or five.

40,659. Do you ever go out to the deep sea with the hand-line?—I have often been as far as the Nymph bank with the hand-line.

40,660. Did you go there this last winter?—No, but I have been 25 miles off.

40,661. And did you not get the haddock then?—Only a trifle.

40,662. In your opinion has there been a greater scarcity of haddocks during the last five years than there was before?—Yes, there has been a greater scarcity, and I think the reason is the damage done by some 12 or 14 trawlers which there are belonging to Ring. They scratch along the ground, and then inside the shore, so that you cannot get a chance of fishing if you do your best.

40,663. The trammels do not act in that way?—No, but they are the worst of all. If there happen to be two or three score of hake taken in our boats they will surround the place in a day.

40,664. Which do you consider the more mischievous, the trammels or the trawl?—The trammels, because day and night they are stationed there, and they do great injury to the fish. We cannot get any bait in consequence of the trammels being right across the whole harbour.

40,665. If the men have been getting large quantities of fish for the last four or five years by the use of the trammel would you consider that there is a scarcity of fish?—I do not consider that they have caught large quantities, and I do not think they catch as many now as they did years ago. The quantity of fish caught is lessening every night.

40,666. Are there not as many caught in the trammels?—No; there are more nets, and the fish are getting scarcer every year.

40,667. That is your opinion?—Yes.

40,668. Up to the present time have they not been getting a large supply?—I do not know, but I believe they are very scarce with them as they are with everybody else. Their nets take up the small fish too; they take the small and the large; they take everything.

40,669. (*Mr. Lefevre.*) What time do you go out in the evening with your hookers?—Generally we anchor in the evening, about three or four o'clock.

40,670. Not later than that?—No, not later. We generally stop the land. We might catch a few fish for bait, and then we anchor about that time.

40,671. Do you generally anchor before the trammel nets are set?—Generally before, and then if we have to bring the fish to the quay we do not know where to go to, because we might heave out and anchor among the nets.

40,672. Do you know that the trammel-nets are prohibited from being set except in certain months of the year until five o'clock?—Yes.

40,673. Do they observe that rule?—No.

40,674. Do you recollect an inquiry that was held here in 1849?—I do, but if I summon them I get no justice.

40,675. Were you present at that inquiry?—Yes.

40,676. You know there was a line drawn by the Commissioners?—Yes.

40,677. And within that line the trammel-nets are not allowed to be set?—No.

40,678. Notwithstanding that byelaw they still set their trammel nets beyond that time?—Yes.

40,679. Then they break through the law?—Yes. I never saw a trammel-net set inside of Helvick.

40,680. Then you do not think that that regulation is of any use to the hookers?—It is of no use because they break through it.

40,681. They do not observe it?—No.

40,682. Do the hookers ever fish within the line?—Yes they do; they fish everywhere where they think they can catch fish.

The witness withdrew.

J. Murray.

John Murray called and examined.

40,683. (*Professor Huxley.*) You wish to make a statement to us?—Yes; if you have any questions to put to me with regard to trawling I should be glad to answer them.

40,684. What have you to say about it?—I consider it very destructive to the fisheries.

40,685. Why?—In the first place it takes away the seed and destroys the small fish before they come to maturity.

40,686. Have you seen the trawlers at work?—Yes, I have been heaving the small fish overboard myself.

40,687. Have you seen them taking anything else besides spawn?—Yes. I have seen small fish, but I could not tell what they were, they were so small.

40,688. What size were they?—Small as shrimps. They were so small that I could not tell whether any one of them was hake except by the feel of it.

40,689. Do you consider that trawling is injurious to the fishing?—Yes, of course it must be injurious when they are taking the young away altogether and heaving them overboard dead after they have taken them. There could be nothing more destructive than that.

40,690. Where is it that you have seen these small fish?—I have seen them taken at Brixham, where I served my time in the English Channel.

40,691. But where on this coast?—I have seen them thrown overboard at Dunmore.

40,692. By the small trawlers?—I never saw the small trawlers at work.

40,693. Have you seen the large trawlers here?—No, but I have at Dunmore.

40,694. Where do they trawl?—Three miles to the south of this at Helvick Head and right down until they come east of this place.

40,695. Is that the place where you saw them take the spawn?—I have seen the spawn attached to the nets at Dungarvan, and I have seen the same thing also in the English Channel.

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40,696. Are you a fisherman now?—I was a trawler and a fisherman.

40,697. How long have you been engaged in fishing?—I have not been fishing for the last five years.

40,698. You are now engaged in the coasting trade?—Yes.

40,699. Then you do not know what has been going on with respect to the fishery during the last five years?—Not here, but still I know the nature of the fishing.

The witness withdrew.

(*Professor Huxley.*) We have now before us the whole of the Dungarvan case. With regard to the evidence which has been adduced, it appears to be directed mainly to the establishment of three positions. I do not say whether they are established or not, but I wish to know whether we have clearly understood the tenor of the evidence. The first position is that trammels interfere with and obstruct the line fishermen; the second, that trammel-fishing is a destructive and wasteful mode of fishing and that it scares away the fish; and the third is that trammels have been used illegally. That, if I am not mistaken, is the general tenor of the evidence.

(*Mr. Anderson.*) Yes.

(*Professor Huxley.*) Evidence has been laid before us to show that there has been a breach of the bye-laws. Will you place before us the byelaws which you conceive to have been broken through?

(*Mr. Anderson.*) The byelaws of the 4th of July 1849 issued by the Commissioners of Fisheries in pursuance of the Act of Parliament. The byelaws which have been violated are the second, which says "The "setting of any such trammel or moored net athwart "or within 200 yards of any boat which at the time "of the setting of such net shall be moored across "thereto engaged in line-fishing is hereby prohibited;" the third, which says "To every train of such trammel "or moored nets shall be attached at least one float-"ing buoy with a board upon which shall be printed "in clear and legible characters, not less than one "inch in length, in white upon a black ground the "letter of the district and the name of the owner to "which such net belongs;" the fourth, which says, "On and off the coast of Waterford to the north-east "of the line aforesaid passing through Ballinacourty "Head as aforesaid and on and off the coast of Water-"ford south-west of the line aforesaid, passing through "Helvick Head, such trammel or moored nets may be "set and remain set or in the water there from the "hour of three o'clock in the afternoon one day until "the hour of nine o'clock of the following day during "the months of January, March, October, November, "and December each year; and from the hour of "five o'clock in the afternoon of one day to the hour "of seven o'clock in the forenoon of the next following "day during the months of May, June, August, and "September in each year." The first byelaw fixes the limits within which trammels should not be set, and the evidence which I have brought before you shows that not only that but all the three others have been violated.

The following witnesses were then examined on behalf of the Ring fishermen.

P. Whelan.

PATRICK WHELAN called and examined.

40,701. (*Mr. Kelly.*) You are a Ring fisherman?—Yes.

40,702. You attend here in the interests of the Ring men?—Yes.

40,703. Have you a boat of your own?—I have.

40,704. How long have you been a fisherman?—For the last 30 years.

40,705. How have you been in the habit of fishing?—I have been trawling, fishing with long-lines, with trammels, with herring-nets and with seine-nets.

40,706. You turn yourself to everything?—Yes, in order that I may get a living.

40,707. How long have you been using trammels?—I have had a trammel in use for the last 30 years. I think a trammel was the first net I owned at Helvick.

40,708. Were you ever summoned or prosecuted with regard to that trammel?—No, I always took care of myself and kept as far away from the law as I could. I have never been prosecuted.

40,709. Have you been taking a large quantity of fish with the trammels?—Yes, I have been now for the last 15 years.

40,710. Is there a greater quantity of fish taken now than there was 15 years ago?—No, but there is a greater quantity now than there was 22 years ago.

40,711. What kind of fish?—Hake.

40,712. Have you been catching a large number of fish during the season?—Last week we had a very good take of fish.

40,713. What quantity did you catch?—I got in my own hand 200 hakes in my nets.

40,714. In one night?—For all the week.

40,715. Before that what quantity were you in the habit of taking?—Sometimes we may have got half-a-score in the night, sometimes we may not have got so much and sometimes more.

40,716. Whereabouts have you been in the habit of placing your trammels?—From Mine Head to Ballyvoyle Head.

40,717. Do you generally place them about the same place?—Yes.

40,718. From year to year upon the same fishing ground?—Yes.

40,719. Do you find that after taking a quantity of fish in the trammels in one night there is any use in going to the same place next night?—If we take a good quantity of fish one night we expect that the fish will be there again the next night.

40,720. Have you ever set your trammels in the same place night after night?—I have kept on the same spot till Saturday night and I have had more fish on the Saturday than I had on the Monday morning previous.

40,721. Although you have been using trammels in the same place all the week?—Yes, I have been using them on the same spot all the week.

40,722. Do you find that the fish have been in greater abundance and more plentiful for the last year or two, or that during the last year there has been a less quantity coming in?—I have hookers, yawls, and trammels also. I have no complaint to make with regard to the yield of the trammels, but I have a great complaint to make with regard to the hooker which has not been giving me much help. Four years ago I had as much fish as I had at any time.

40,723. Would you have as much fish now as you have had if you got a good supply from the hooker?—Yes.

40,724. What do you fish with on board the hooker?—Hand-lines.

40,725. Then you do not catch as large a quantity with the hand-line as you did formerly?—Not now.

40,726. But you catch as good a quantity with the trammels?—Yes; last season we had a better season with the trammels.

40,727. Do you catch any cod or ling?—We have long lines for those fish. We begin to fish for them at Christmas.

40,728. You go out in the proper season to catch cod and ling?—Yes, from Christmas to the latter end of March. During the last three years I have got more cod and ling than I got during the three years before.

40,729. What do you do with the fish you catch ?—We always sell our fish. When they are salted, dried, and cleaned we take them to Cork.

40,730. Do you sell large quantities of fish in the season ?—We often go to Cork to sell them.

40,731. How much do you make by the sale of your fish in the season ?—There was one time I had 35*l.* worth of hake with me.

40,732. When was that ?—Two years ago, in the year 1863.

40,733. How many trammel-boats are there over at Ring ?—20 trammel-boats.

40,734. How many trawlers have you ?—14.

40,735. What is the size of the trawlers ?—Five inches to the mesh at first, and it goes down to three and a half at the bottom.

40,736. But what is the size of the boats ?—From 10 to 12 tons.

40,737. I believe it costs a good deal to keep up the trammels ?—By the time the season is fairly over it will cost us a good deal to keep them up.

40,738. Do you find that by using trammels you ever frighten away the fish ?—We have now been using the trammels for the last 35 years, and if the use of them frightened away the fish it is a wonder that they have not gone away from us before this.

40,739. Do you find that there is as good a quantity now as there was 20 years ago ?—Yes, more.

40,740. I am told that 35 years ago there was no regulation in regard to the mode in which the fishing was to be conducted ?—We were obliged often to go out with our trammels. When we expected a good night we went out and began to fish, but if we saw a sail coming down upon us we were obliged to haul up for fear of being run down. We had an understanding between curselves and the Dungarvan men, and we fished fairly and got more fish in these times than we were getting before.

40,741. You were prevented from fishing before ?—Yes.

40,742. You were afraid of fishing ?—Yes.

40,743. Are you in the habit of fishing near the hand-line fishermen—the Dungarvan men ; do you often use your trammels near them ?—We go as near them as we consider proper. We always give them a fair berth, and we would not think of going closer.

40,744. What do you mean by that ?—As long as we give them a fair berth there is no doubt that they will get fish.

40,745. Have you fished with a hand-line yourself in a hooker near any person with a trammel ?—Yes.

40,746. How have you got on when you have been using the hand-line near the trammels ?—There was one night that we got from 700 to 800 fish.

40,747. How were they caught; with the hooker and hand-lines ?—Yes.

40,748. In one night ?—Yes.

40,749. When was that ?—About four years ago ; in the year 1860.

40,750. What part of the harbour was that in ?—South from Helvick.

40,751. Off towards Youghal ?—No, south.

40,752. What had they in the trammel-nets ?—I cannot tell what they had.

40,753. Were you near the trammels when you got that quantity ?—We took the trawls up and cleared away the lines and let them down again, and as fast as we could haul them up we could catch fish.

40,754. Then you used the trawl too ?—Yes.

40,755. What kind of fish do you catch in the trawl ?—Soles and flukes we generally catch in the trawl.

40,756. Do you catch mackerel ?—Not at all.

40,757. What is the size of the meshes of the trawl-net ?—From $4\frac{1}{2}$ to $4\frac{3}{4}$ inches.

40,758. Do you know how the trammels were placed in the water ?—Yes.

40,759. Are they any prevention to the herrings and small fish coming into the bay ?—I saw as many in the bay yesterday morning as I have seen for the last three years; but if they prevented the fish coming into the harbour there would have been none.

40,760. I believe the herrings float towards the surface of the water in the night ?—Every fish floats upon the surface of the water.

40,761. Where do you generally use the trawl ?—From Mine Head to Ballyvoyle Head.

40,762. Do you send your fish into Dungarvan market ?—When we have a large take we should perhaps be too late for the regular market. In that case we salt them and send the fish to market in that way.

40,763. Are any of the persons who have trammels in the habit of sending their fish to Dungarvan market ?—They may send a little.

40,764. What do you do with the fish you get in the trawls ?—It has been sold at Dungarvan.

40,765. How far do you generally go off to set your nets ?—I cannot tell that properly, but our men say that it is about three miles from Helvick.

40,766. Is that outside the line?—Yes, from Helvick to Ballinacourt straight out towards Ardmore Head.

40,767. Do you go three miles out beyond Helvick Head ?—Yes.

40,768. Straight out ?—Yes, more or less.

40,769. What is the greatest depth of water in which you generally set your trammels ?—From five to 25 fathoms, but we seldom set them in five. They are generally set in from 14 to 15 fathoms, up to 20, and we seldom go out with them as far as 25 fathoms.

40,770. Has the take of fish by the trammels been greater or less for the last year or two ?—We have had more fish this year than we had last year.

40,771. By the use of the trammels ?—Yes, by the use of the trammels we have been able to get a good deal more fish at this time of the year than we did at the same time last year.

40,772. (*Mr. Anderson.*) Do you remember trammels when you were a boy ?—I remember them 30 years ago.

40,773. How many were there when you were a boy at Ring ?—I had three trammels in my own hand when I was a boy.

40,774. In the whole of Ring how many were there ; were there a dozen?—There were 15 or 16 boats here 30 years ago with trammels.

40,775. How many trammels had they ?—From 14 to 18.

40,776. Each ?—Yes, those who used them.

40,777. How many have they got now ?—From 16 or 17 up to 22.

40,778. Are the trammels now as large as they were then ?—They are larger.

40,779. Are they double the length ?—They may be about half as large again.

40,780. There were 15 boats in Helvick 30 years ago ?—Yes.

40,781. What fish did they take ?—It was very little they could take at that time. The Dungarvan boats prevented them putting their nets out.

40,782. How many fish were you in the habit of catching in the trammels 30 years ago ?—I remember 25 years ago my father and myself were fishing with trammels and hand lines and all we had in the house at Christmas was 300 hake.

40,783. Are you taking more in your trammels now than you were then ?—Yes.

40,784. Were there not more caught with the hand-lines then than there have been since ?—We got more with the hand-lines three years ago than we ever got before.

40,785. How many did you ever have on your lines 20 years ago ?—600 or 700.

40,786. And how many do you catch now ?—From 200 to 300.

40,787. In one night how much would you take in your hooker 20 or 30 years ago ?—In one night we might not catch 100 and then another night we might catch 200 or 300.

40,788. What is the best night's fishing you ever had 20 years ago ?—I never saw more than 400.

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40,789. Taken with the hand-line ?—Yes.

40,790. After that did the quantity increase ?—Four years ago I saw 1,200 fish in my own boat in one day and night's fishing.

40,791. So that the quantity of fish taken by the hand-line has increased ?—Yes.

40,792. Then did you find the trammels do you any harm ?—No, I think we can make a good fishing by them.

40,793. The trammels do not do you any harm ?—No.

40,794. Do you catch the greater quantity of fish on the lines or in the trammels ?—We go to fish in a hooker when we cannot get any fish in the trammel. I have seen the hookers take a great quantity of fish in a night when they have not been able to get any in the trammels.

40,795. You spoke of a night when the hooker got 700 or 800 ?—Yes, and one night we may get 700 or 800 in the trammels and the hooker may get none.

40,796. Three years ago you had 35*l.* worth of fish in Cork ?—Yes.

40,797. Was that a good year ?—Yes, but we have had better years than that.

40,798. When ?—Three years before that.

40,799. What are you catching this year—is it not as good a year ?—I am not blaming it.

40,800. What fish have you been catching this year ?—I have caught 900 hake with the trammels.

40,801. How much do you expect to get for your fish this season ?—We get 36*s.* or 37*s.* per 100.

40,802. For the entire quantity of fish you have got ?—No, for 100.

40,803. How many hundred have you ? — Nine hundred.

40,804. You are only expecting to get 36*s.* per 100 for them ?—Yes, there are two men, Welsh and Halls, who have a larger lot this year than I have.

40,805. They have a larger lot this year than general ?—Yes.

40,806. How are all the other men; has this been a good or a bad year for them ?—They have a larger quantity of fish this year than they had last.

40,807. But you have not ?—I have as much as I had this time last year.

40,808. Then this is as good a year as last ?—Yes.

40,809. What is the average quantity of fish taken now in each trammel ?—Sometimes you get more than at other times. Some nights you may only get five, six, or seven, but another night you may have a score in a trammel.

40,810. I believe the trammels are set down in rows one outside the other ?—Yes.

40,811. Do all the trammels catch pretty nearly the same; do the trammels nearest the shore catch as many as those that are further out ? — Sometimes more.

40,812. How do you account for that ?—You may go outside to fish and be the worse for it.

40,812*a*. But supposing the trammels are set will those nearest the shore catch as many as those outside ?—Many times they get more.

40,813. How do you account for the inside trammels having more fish to catch than the outside ones ?—Perhaps it might be the other way to-morrow. For instance, the fish may be inside of the trammels one night and outside of them the next; then perhaps the middle ones would get most.

40,814. Was last year a good year for cod and ling? —For six or seven years we have had very good years for cod and ling.

40,815. Where do you generally fish for them ?—We go to the extreme end of the land off Youghal. We fish 15 miles from the land.

40,816. How far out do you set your trammels ?—Four or five miles sometimes and at other times not more than half a mile.

40,817. From four or five miles to half a mile ?—Yes, we can come as close as half a mile where it is rocky.

40,818. Is five miles the furthest you go out ?—Yes.

40,819. Do the fish come in ?—Yes, and the cod and ling come in also.

40,820. Do you not find cod and ling outside the limits within which you set your trammels ?—I can get cod and ling where I set my trammels.

40,821. With long-lines ?—Yes.

40,822. Is it with the long-line you catch cod and ling ?—Yes.

40,823. Do you not set the long-lines outside the place where you set the trammels ?—No, inside sometimes.

40,824. Where do you set them ?—Two miles from Helvick.

40,825. How many long-lines have you ever set inside where you set your trammels ?—We do not fish with long-lines at the same time we do with trammels.

40,826. Do you ever go fishing for herrings ?—Yes.

40,827. At what time of the year do you fish for them ?—From September to Christmas.

40,828. Last year did you catch many herrings ?—No, we had very few last year. The weather was bad and we durst not use the seine-nets.

40,829. Do you catch them with drift-nets ?—No.

40,830. Last year was not a good year for herrings? —No.

40,831. Was the year before ?—It was better than last year.

40,832. Do as many herrings come in here as did formerly ?—No, they do not.

40,833. Do as many mackerel come in as did some years ago ?—Yes.

40,834. Do as many scads and mackerel come in as did some time ago ?—Yes; sometimes I go fishing for them, but the men don't like to work with me if they can work their trammels. They take their shot at their trammel and then they will come and have their shot with me.

40,835. (*Professor Huxley.*) Do they think that is a more uncertain mode of fishing than the trammel-fishing ?—It is too hard work.

40,836. (*Mr. Anderson.*) The herrings have not been so numerous for the last few years ?—We have had no good nights for three years.

40,837. For several years past has not the fishing always been bad ?—We are getting a good share of them. Last year we did not get much for them; they complained about that.

40,838. Towards Ardmore have they not been catching more herrings than in this neighbourhood ? —I think not.

40,839. Do they catch sprats here ?—Yes.

40,840. Have the sprats been in this harbour lately ? —Yes.

40,841. Was last year a good one for sprats ?—Yes, and this year too if they followed them. If the Ardmore men were to come here they would get as many as they get there. They go shares in a seine; 14 of them share in one. I have one of my own. They can go fishing every day if they like with their seine.

40,842. (*Professor Huxley.*) Do the people of Ring fish in the same way that they do ?—Yes.

40,843. What fishing do you practise in the beginning of the year ?—The long-line fishing.

40,844. How long does the long-line fishing continue ?—Until the latter end of March.

40,845. What do you do after the long-line fishing ? —We have the hooker then and follow it up to April.

40,846. Is it the hand-line fishing you follow then ? —No, getting seaweed is better. It pays me better than going trawling. I go out with the hooker to get seaweed.

40,847. You think that cutting seaweed gives you a better living than going trawling ?—It has done better for me this last year.

40,848. But if you were fishing you would trawl at that time ?—Yes, I have been trawling at that time until the latter end of August.

40,849. What do you do when you leave off trawling in the latter end of August?—We go off then until the latter end of May when the hake come in. I keep the hooker until I hear the fish comes in.

40,850. What time do you generally begin to set your trammels?—In the latter end of May.

40,851. How many months do you continue to set them?—From that until Christmas.

40,852. Is there mackerel-fishing occasionally?—No, we do not go to the mackerel-fishing. They catch them with their seines.

40,853. Are they seines that you drag along the shore and haul on the shore?—Yes.

40,854. Are there many such seines in Ring?—Yes.

40,855. How many are there?—Six or seven.

40,856. Do you ever fish for sprats at Ring?—Yes.

40,857. What time of the year do you fish for sprats?—From this time until Christmas.

40,858. What sort of mesh do you use in sprat-nets?—About half an inch mesh.

40,859. So that you get fish all the year round?—Yes.

40,860. Have you any land?—I have.

40,861. Do you work on it yourself?—Yes, I have three acres.

40,862. How do you find time if you are fishing for all those months to work upon your land?—I get labourers to work upon it for me.

40,863–6. You pay labourers?—Yes.

40,867. Then you do not work at it yourself?—No, my time is taken up in fishing.

40,868. You look upon yourself as a regular fisherman?—Yes.

40,869. That is your business all the year round?—Yes.

40,870–80. What kind of a trawl do you use?—It is 5 inches in the mesh at the mouth of it and from $3\frac{1}{2}$ to 4 inches at the bag end of the net at the bottom.

40,881. Is it a beam-trawl?—No, a pole-trawl.

40,882. What will a pole-trawl cost?—We make them ourselves.

40,883. What does one of them cost you?—We can get the material for about 10*s.*

40,884. And you throw your own labour in?—Yes.

40,885. What will a trawl-boat cost?—A new boat will cost over 100*l.*

40,886. Did I understand you to say that within your recollection the number of trawl-boats and nets had regularly increased in Ring?—Yes, there are more now than there were 15 years ago.

40,887. And are they of the same size as they were 15 years ago?—No, they are better boats than they were 20 years ago.

40,888. Do they cost more than they did?—I believe that the biggest yawl-boat we had nine years ago would be the smallest now. We are getting better and better boats every year.

40,889. Has more money been put into the boats and nets year by year?—Yes.

40,890–9. What sort of net is there in your trammels?—The size of the mesh is about $4\frac{3}{4}$ inches.

40,900. Do you give that measurement now from knot to knot?—No, the mesh entirely.

40,901. Drawn out?—Yes.

40,902. What will it be from knot to knot?—Something over 2 inches. Here is one (*handing up a piece of net*).

40,903. It is about $2\frac{1}{4}$ inches from knot to knot?—Yes.

40,904. Is the whole of the net of the same sized mesh?—Yes, all the nets are made of one size.

40,905. How deep is the net?—Four yards.

40,906. And how long?—Forty fathoms.

40,907. Is there a head line that runs along the top of the net or a back rope?—No, we have no rope at the bottom of it.

40,908. Have you a rope at the top?—Yes, but none at the bottom.

40,909. Do you put corks on the rope at the top?—Yes, we load the bottom with stones and that brings the nets down.

40,910–20. You wish to set the nets so that they may hang perpendicularly in the sea?—Yes.

40,921. And the fish mesh themselves?—Yes.

40,922. What is the smallest sized fish that can mesh itself in your trammel?—We always get hake.

40,923. And what is the smallest sized fish you catch?—Sprats are the smallest size.

40,924 I am speaking now altogether of the trammel-nets; what is the smallest sized hake you get?—The smallest will be about three feet.

40,925. Will any fish smaller than that get through the mesh?—Yes, a fish two feet would go through the mesh.

40,926. Do you, as a matter of practice, never get fish less than two feet long in the trammel?—No, we do not.

40,927. You do not get many at any rate?—No.

40,928. What other fish besides hake do you catch in the trammel-net?—I catch gurnards and sometimes whiting and bream.

40,929. Are they large whiting that you catch?—They are tethered by the twine.

40,930-8. They get entangled in the twine?—Yes.

40,939. Do you ever catch any considerabe quantity?—No.

40,940. One now and then gets entangled?—Yes.

40,941. What will a trammel cost?—Over a pound.

40,942. Have you a buoy at each end of the trammel?—Yes.

40,943. After you have set your trammel do you let it remain in the sea and come ashore again?—Yes.

40,944. What is the buoy made of you have at each end; is it a sheep's skin?—No, cork.

40,945. A large cork?—Four or five or six corks together.

40,946. How large will it be, is it as big as a man's head?—Yes, and bigger.

40,947. Do you paint them?—No.

40,948. Are there any numbers on them?—Sometimes we put numbers on them, but not always.

40,949. How much does a regularly fitted trammel cost you?—It costs me over a pound a trammel.

40,950. What will it cost to keep up year by year?—I have three trammels going out every night, and I may wear out nine every year; I shall wear out the three trammels three times a year.

40,951. Then your trammels cost you 9*l.* or 10*l.* a year?—Yes.

40,952. Has the number in use greatly increased since you recollect the fishing?—Yes, there are more now.

40,953. How many more are there now?—First they were not as big as they are now, and there was not as much of them in a boat as there is now. I think, take them altogether, they will be double the size.

40,954. Is there twice as much money put into the trammel-nets as there was formerly?—I think so.

40,955. Have the fishermen of Ring any means of getting money except by fishing; do they make money on the land or live by it?—They could not live by the land.

40,956. Have they any means of making money except the fishing?—No.

40,957. Then all the money invested to make these trawls and trammels has had to come out of the fishing you have followed?—Yes.

40,958. How do you set your trammels?—We set them from eastward to westward, as the tide runs.

40,959. In setting your trammels do you ever care, supposing the tide is making, to set them down the harbour so as to catch the first of the tide?—No, I should not like to catch the first of the tide at all.

40,960. Do you keep your trammel out of the tide altogether?—Yes, I always set it to the tide.

40,961. Does it swing with the tide?—No, but if I put it across the tide I am not sure the fish would not be disturbed.

40,962. Do you put it the same way as the tide is going?—Yes, on the run of the tide.

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40,963. Do you care when you are setting your trammels whether you are near the mouth of the harbour or further out?—I must keep off it because it is rocky there at the mouth.

40,964. I mean the whole of the bay?—I go from Ballyvoyle Head to Mine Head.

40,965. Suppose there were a lot of trammels set over a mile in distance, would you sooner be out at sea or more in-shore?—We do not think that the fish we are after come into the harbour at all.

40,966. I am speaking now of outside the harbour, in the bay?—We sometimes find the fishing in the bay better than at Mine Head, and sometimes it is better at Mine Head.

40,967. What distance would you like to be from another trammel?—I should like anotherman have his trammel about 20 yards from me.

40,968. Not more than 20 yards?—No.

40,969. Supposing your trammels are set in this way (*describing*), do you not care to have more than 20 yards in that direction?—No.

40,970. When another man's trammel is not more distant from you than that, does his trammel interfere with you?—It does no harm to me if he keeps that distance from me.

40,971. Do you all set your trammel-nets nearly about the same time?—Yes.

40,972. How far do you go?—It is usually two or three miles that we go.

40,973. Do you stretch over a line of two or three miles?—Yes.

40,974. But how far will each be distant from the other?—I set my trammel here and you come from the head of it, and another man will come outside, and another man will come outside that; there will be four trammels set in that way.

40,975. You do not care how you are placed with regard to one another?—No.

40,976. In former years did the men who worked the trammels at Ring have any reason to complain of the hookers interfering with them?—We did not complain of the hookers.

40,977. Did you not complain of their coming among your nets and fouling you?—Yes, we did.

40,978. Was that a common complaint?—Yes.

40,979. Did the trammel men ever complain of the hookers dragging over them, or going over their trammels and doing them damage?—Often and often, and they have brought them up to Dungarvan and cut them to pieces.

40,980. When was that commonly the case?—About 15 years ago.

40,981. Did the trammel men at that time make any complaint upon the subject?—No; sooner than be brought into the court-house they would get other trammels. I had my trammel carried away to Dungarvan, and I came for it, but they would not let me have it.

40,982. You would sooner give up your trammel than run the risk of any litigation about it?—Yes.

40,983. Was there any inquiry about 15 years ago in consequence of the complaints of the hookers and trammel men with regard to the proceedings of one another?—Yes.

40,984. Was there any regulation made then which was satisfactory to the trammel men?—There was a regulation made then.

40,985. Did the trammel men like the regulations that were made then, or did they feel that they were interfered with by them?—They were satisfied when they got liberty and leave to catch fish by law, before then they had no law at all.

40,986. Then the trammel men are satisfied with the regulations now existing?—Yes, they were.

40,987. Are they now?—No, they want other laws now; they could not take them up and set them in the evening.

40,988. (*Mr. Lefevre.*) Was it a disadvantage to the trammel men that they were not allowed to set their nets before night time?—It was; but if we could not have our nets set before sunset we think that it would be of very little value to us to set them afterwards; then we also want another hour in the morning before the fish go down to the bottom.

40,989. Did the passing of that law enable you to go out further to sea than you did before?—Yes, and enabled us to take more fish.

40,990. You want it now to be extended for another hour?—Yes.

40,991. (*Professor Huxley.*) We have it stated to us that the trammel men are in the habit of setting their trammels in such a way as to surround the hookers and prevent them from fishing; do they occupy the ground of the hookers at night?—The trammels have been working 55 years, and they have been complaining every year since of them. I have heard my father say that they were complaining in his time, and they are complaining now every day.

40,992. They complain at this particular time that the trammel men set their nets around them, that when the hookers are seen to be fishing and getting fish the trammel men come and set their nets round them; is that the practice of your Ring men?—The law compels me to give the line men 200 yards, but if I were to give them 400 they would not be satisfied.

40,993. Would it be disadvantageous to you if a regulation were made obliging you to give the line fishermen 400 yards?—If I were to give him 400 yards he would want another hundred still.

40,994. If that regulation were carried out it would be possible for a hooker to come and fish opposite Ring, or for half a dozen hookers at different intervals to come and fish opposite Ring; and supposing they did so is it against the law for you to set your trammel-nets within 200 yards of them?—It is.

40,995. Might the law then prevent you from using your own trammel-nets off your own coast?—I would not care to go within 200 yards of them.

40,996. But the state of the law is such?—Yes.

40,997. That if the hookers were fishing off Ring you would not be permitted to set your nets within 200 yards of any of them?—I would not set my nets within that distance.

40,998. Because you would not bring yourself into a court of law?—Yes.

40,999. But any other man might in the present state of the law bring you up for using your trammel-net within 200 yards of them?—They would bring me to law if I went nearer than 200 yards.

41,000. Do you find that that regulation prevents you from using your trammel-nets where you wish to use them?—Yes, I cannot use them where I should like.

41,001. (*Mr. Lefevre.*) Do you find as a rule that the hookers are already anchored when you go out with the trammel-nets?—Sometimes they will be; they will often be set before me, and perhaps I may have my trammels set occasionally before them. I cannot wait till they come out; if they be out before me I give them as much room as I can.

41,002. Where do the Ring men principally sell their fish?—Generally in Cork.

41,003. Is most of it sent to Cork?—Yes, we send up the cod, ling, and hake, and get plenty of money for them.

41,004. How are the fish carried to Cork?—In open boats.

41,005. Are they the boats ordinarily employed in fishing at other times of the year?—Yes.

41,006. Has the number of those boats engaged in carrying fish to Cork increased of late years?—If I have fish to go up I get other men to join with me, and perhaps I and four of us will work the boat up.

41,007. Has the number of boats which have gone up to Cork of late years been greater than it used to be?—Yes, there are more now than there were ten years ago.

41,008. Have you sent considerable quantities of fish to Cork for the last 10 years?—Yes, I was throwing the fish away before I managed to get at that work, and did not know how to sell it then. I was selling it for little or nothing. At last they told me how to send

it to Cork, and now I do not sell at all in Dungarvan market, but I keep it together until I have enough to send off to Cork.

41,009. Do you mean to tell us that for the last 10 years the market in Cork has been so much better than the market at Dungarvan that you have sent all your fish there?—Yes, we can get a better price there for it.

41,010. And in consequence you have not sent your fish to Dungarvan as you formerly were in the habit of doing, but have sent it to Cork?—Yes.

14,011. Do you send any hake fresh to Dublin?—No.

41,012. What do you say is the price of fish now compared with what it was 30 years ago?—We sold it fresh in Dublin at that time, and got for it from 12*s.* to 15*s.* and 18*s.* a score at that time.

41,013. What are you getting now?—We get from 22*s.* to 24*s.* and 25*s.* a score for ling and cod.

41014. Then the price has improved?—Yes, and we are keeping the Scotch people out of the Cork market with their ling. We supply that market now ourselves.

41,015. How long does it take you to set your trammel-nets?—It will take me an hour before I have them set.

41,016. How many men do you have in your boat with you?—Six men.

41,017. And how do you pay them; do you share the profits?—They will give me one out of six fish for the boat's share.

The witness withdrew.

EDWARD WHELAN called and examined.

41,018. (*Mr. Kelly.*) Did you hear what Patrick Whelan said?—Yes.

41,019. How long have you been living at Ring?—Forty-seven years.

41,020. How long have you been fishing?—For the last 30 years.

41,021. Did you hear the account that Patrick Whelan gave?—Yes.

41,022. Was it right?—It was.

41,023. As far as you know?—Yes; I think that the trammels have been working better in my time. The Dungarvan men say that they show in the water and that they frighten away the fish so that they cannot get them, but that is not the case. I can assure them that where they have as many as 30 hookers, all of them engaged in putting out their cables, they show three times the amount of fire in the water that we do.

41,024. The hookers, by moving their cables, cause more disturbance in the water and show more light than the trammels do?—Yes.

41,025. How do they cause light?—The water gets red. There is another thing I can prove, and that is that I have seen these Dungarvan men fishing with their lines in the daytime when there is not a line allowed to be down on board the hookers. If we do not have our nets set in the evening by sunset we may as well stop on shore, for the fish get to the bottom, and we get none in the morning.

41,026. Do you know whether the Ring men have been in the habit of going to sea in indifferent or bad weather when the Dungarvan men will not go out?—Yes, I am very sure of that.

41,027. Is it the fact?—Yes, and the Dungarvan men know that it is. They tell us that they would sooner go to the poorhouse than struggle as we do; but they will go out on a good evening, while we go out in all weather.

41,028. Have you been in the habit of using the trammel-nets in the same place for any continuous number of days?—Yes.

41,029. In the same place?—Yes.

41,030. Do you find whether you catch less fish at the end of the week than at the beginning of it?—We get the greatest quantity sometimes on the Saturday morning. If I had to leave a net out I would leave it out on the same spot for a week. I have had so many fish sometimes I could not get them to the shore. I remember upon one occasion leaving this town at eight o'clock; I went round to Helvick and went to sea the same night about twelve o'clock. There were three or four hookers fishing with their lines, and one of them had about 200 hake. At two o'clock or three o'clock that night I anchored, and where I anchored I took 1,200 hake. I was much more successful than the Dungarvan hookers.

41,031. Did you catch them with the hand-lines?—Yes.

41,032. And you caught more than the Dungarvan men?—Yes, I remained there afterwards till the next night, expecting the same fish, but I only caught 20 or 30 hake

41,033. That was with the line?—Yes

41,034. Are you not in the habit of going with the trammel?—Yes.

41,035. Do you find that the trammel frightens away the fish?—I can prove that neither the trammel nor anything else frightens away the fish. I have had trammels out, and have caught a good many fish outside one day; then I may have had them nearer the inside next night, and I have caught fish night after night in that way until they have come close into the shore. The hake have been gradually drawn in as it were, but they will not come in unless it is by the will of God. That is all I have to say about the fishing.

41,036. Have you caught much fish this season?—Yes.

41,037. By the trammels?—Yes.

41,038. About what quantity?—I had 10 score in my boat yesterday,—the crew and myself.

41,009. Have you any land?—Yes.

41,040. Do you till it?—Yes.

41,041. Do you till it yourself?—Yes.

41,042. How do you spend the rest of your time in the year?—When I am not fishing I am idle, walking up and down the roads, but we have different kinds of fish here all the year round.

41,043. Are you not able to go out now in bad weather when the Dungarvan men are coming in?—We go out, but it is difficult to stand out in bad weather.

41,044. But do you stand out?—Yes, both with our long-lines and our small nets, which we put from the shore. We use the long-lines in the winter.

41,045. (*Mr. Anderson.*) Your evidence is that the more you catch with the trammels the more fish you find to catch?—Yes.

41,046. And the more you catch with the lines the less there is to be caught afterwards?—I do not say that.

41,047. You caught a lot one night, and none the next?—Yes, often.

The witness withdrew.

JOHN KEANE called and examined.

41,048. (*Mr. Kelly.*) You live at Ring Over?—Yes.

41,049. Are you acquainted with the fisheries there?—Yes.

41,050. You have been acquainted with them for a long time, I believe?—Yes, for about 60 years.

41,051. Do you know anything about the use of the trammels and of the trawls there?—Yes, right well.

41,052. Have you been in the habit of using them yourself?—I used the trammels for about 30 years, and the hand-lines and a trawl besides.

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41,053. Did you find that the fish were increasing or lessening by the use of the trammels?—I have found the fish increasing for the last 30 years. There are more now than there were 60 years ago, with all the hookers and trammels together. In the year 1860 the hookers and trammels could have as many fish as they liked.

41,054. You had plenty of fish then?—Yes.

41,055. All the trammels and hookers had plenty of fish then?—Yes, and the trammels did not run away with the hooks, but they used to fish and the hookers used to fish alongside of them. The Dungarvan people know that very well. They have given a wrong account as to there being a wall here and a wall there to prevent the fish from reaching them. The trammels are only about nine feet in the water. They are about eight feet or nine feet high in the water, and there will be 40 yards perhaps between one and the other, and you will see the fish playing all over the nets. Hake will be caught by the hooks within two and three fathoms of the bottom.

41,056. Do you consider that the use of the trammels has lessened the quantity of fish here or frightened them away?—On the contrary, I swear that the quantity is daily increasing. That is what it is doing now, and it has been increasing for the last 30 years, and the heavier the draught we carry the heavier boats we have had to carry it, and notwithstanding all that the quantity of fish has increased greatly.

41,057. You do not mean to say that the more there are killed the more are alive?—There are a great deal killed, and there are a great deal alive too, and there are a great deal to be taken out of the sea yet I hope.

41,058. Do you find that there is as large a quantity of fish now in the sea as there has been for some years past?—Yes, there is generally, except in a slack season.

41,059. Are you quite sure that the trammel does not frighten the fish away?—I am fully sure that it does not.

41,060. Have you often used the trammel in the same place for more than one day?—I have used it constantly on one spot near the cliff, within 60 yards of the cliff on the same spot.

41,061. How long ago is that?—About 30 years ago I first used it, and I have been fishing on the same part for a whole week, and the last day I have got as many fish as on the first, and I have got fish also upon my hand-lines riding out from the trammels. The trammels themselves were anchored.

The witness withdrew.

H. A. Fitzgerald.

HENRY ANTHONY FITZGERALD called and examined.

41,062. (*Mr. Kelly.*) You reside in the nighbourhood of Ring?—Yes, near Dungarvan, close to the principal fishing ground.

41,063. You are acquainted with the fishermen in that locality?—Yes, well.

41,064. About how many trammel-boats are there?—There are about 20 boats with trammels, with six men in each, but the families of each may average seven; that is about the lowest. Each man uses about nine dozen of hemp in the season. The hemp costs 4*d.* a pound for spinning. No woman spins more than one pound of hemp per day. This is spun by all the poor women throughout the country. It gives employment to women seven miles away from Helvick. The fishermen pay 4*s.* for the making of each trammel net. There are 18 trammel-nets in each boat, and the hemp costs about 10*s.* a dozen. Each man uses nine trammels in the course of a season, so that it costs him 4*l.* 10*s.* for nets alone, or rather for the hemp for the nets. Taking it at 120 men, the total will be 540*l.* worth of hemp used in one year, and that of course must benefit the growers and importers of hemp. In addition to that there is the cost of spinning the hemp, which may be taken at 4*d.* a pound. The total sum paid in that way will be about 270*l*; that is for the spinning and making of the nets. On the whole I calculate that about 1,080*l* is paid by the Ring men for their gear alone; that is for their corks, nets, hemp, and everything necessary in the construction of the trammels.

41,065. Is that per year?—Yes, 1,080*l.* per year. At the present moment they say there is a decrease in the quantity of fish. Now at the present moment there is a man in this neighbourhood who has between 2,700 and 2,800 dried fish in his possession, taken this season. I think that is as much as any man has ever had before within my recollection. I may mention that to the best of my belief the reason of the falling away of the fisheries in Dungarvan is that the Dungarvan men fish merely with the hand-line; they fish with nothing else.

41,066. Are we to understand and to take it for granted that there has been a falling off in the supply of fish in Dungarvan?—Yes, decidedly, but it has not been a falling off of the fish; it has arisen entirely from the Dungarvan men using the hand-line alone. At Kinsale in 1842 they had only 15 hookers. Now they have 45 well equipped and fine sailing boats. The reason of the increase there was that when they saw the hand-line was not doing well they only took to it at a certain season of the year, and went after the herrings at another portion of the year. The long-liners go to the Nymph bank, and they are a prosperous set of fishermen there, instead of falling away like the Dungarvan men. The Dungarvan men will tell you that they have not been brought up to trawling or long-line fishing; it is too severe for them. I know an instance in which a boat was placed at their disposal for long-line fishing, and in a short time the man in whose charge it was placed had to dispose of his gear to the Ring men owing to the want of men to work the line. The Helvick men are always at some sort of fishing; sometimes lobster-fishing, sometimes one fishing, sometimes another. I have known most independent men there come here and sell seaweed at 2*s.* and 3*s.* a boatload. They would be sooner getting that for a day's work than be idle. In the year 1842 there were in Dungarvan 80 line-boats, and now there are only 25. Ten years ago the Ring men had about 10 hookers of an inferior class, but now they have 14 of a much better class. The only way in which the trammel men interfere with the Dungarvan men is in cheapening the price of fish. Certainly, to the best of my belief I can state that if the fish at Dungarvan were all supplied by the Dungarvan men, instead of seeing hake sold at from 1½*d.* to 3*d.* we should see them up to 2*s.* or 3*s.* a head. It has been stated that the cod and ling and haddock have decreased in consequence of the use of trammel-nets. Now that cannot possibly be, because they are not set at the same season of the year. There is never a trammel set after Christmas, and there are no long-line fish taken until after Christmas. Again, these fish are taken at a distance much further out than the trammels are ever set. The cod and ling fishery is greatly on the increase at Ballymahon. Last year I saw a hooker come in after one shot of his long-lines with the boat sunk down to the gunwale by the weight of fish taken. They had all been taken in one haul. The fishermen are in a much more prosperous state this year than they have been for a length of time. They are increasing rapidly in prosperity, and they are increasing their boats and gear. They have better boats of every description, and I attribute the great takes of fish to their superior way of taking it, and not to any increase in the fish themselves.

41,067. With regard to the use of the trammels—from your own observation do you consider that the trammels scare away the fish?—A fish is the hardest thing in the world to scare away. I myself have frequently in fishing lost a big hook with a heavy fish, and the next man has caught the fish two minutes after

I lost it with the same hook in his jaw. It has been said that the fish sticking in the trammels frightens away other fish, whereas in my opinion it only tends to attract more. Where you have one fish meshed in a net you will have scores attracted to the spot rather than being frightened away. With regard to the injury done by the trawlers and the injury done to the spawn, I think that is rather a question for the naturalist than for the fisherman. It is very doubtful to me whether the fish spawn on clean ground at all. It is very doubtful to me whether what the fishermen say is spawn is really spawn. I have seen it myself and I should be sorry to say whether it was spawn or not. The trammels cannot possibly injure or destroy spawn or young fish as they are merely a fence of nets standing upright in the water. The meshes being large, small fish can freely go through them. The only small fish that can mesh themselves in the trammels are gurnards, and that is owing to the formation of the fish themselves.

41,068. Their large pectoral fins?—Yes. I have frequently seen the Ring trammel men going to set their trammels when the Dungarvan men have run under their foresail. If there were no trammels, no doubt the line men would be able to get a larger price for their fish.

41,069. Have you ever had reason to know whether the supply of fish in the sea has increased or decreased?—I cannot tell you that, but I can prove that more fish are now taken by the Ring men than in former years. 4,000*l.* worth of fish has been sold every year for the last three or four years.

41,070. And sent to the Cork market?—Yes. The trawlers and line fishermen sell their fish in Dungarvan. A man named Halley, who was the man I mentioned to you just now, has 2,700 hake salted in his possession. With regard to trammels, trammels do not prevent herrings coming in as the nets are at the bottom of the water and are not permitted in the harbour, whereas the herrings and sprats move over the surface. The time for catching herrings, as proved in Dublin, is from May or June till December. Here they are not looked after or taken till they come actually into the channel of the river between the Cunnigar Point and Ballinacourty about November or October. They are then full of spawn, and it is questionable whether they ought to be taken then at all. Herrings should be caught in the deep sea, but we have no boat or gear suited for taking them there; and hence we wait till they come in probably to spawn. If there were no trammels the line fishermen would have larger prices when the supply was limited, but with small takes and low prices the line men suffer but the public are benefited. Ring men have often fished with their boat moored over their nets and succeeded as well as those anchored at a distance. If the nets are left in the water two or three nights, owing to stress of weather, almost all the fish caught the first night is destroyed by other fish preying on them; a proof that they are not very formidable. If the net owners shoot their net too close to a boat at anchor, the law provides a remedy and such boat may be punished. Ring men are hard working in all weathers. They have improved their boats within the last 10 years and can shoot their nets in almost all weathers. The take of fish continues good; though some years may be inferior the next may be better; last year was not a good one, nor this year up to the present, but it may still turn out a good one. The quantities of hake taken here are very large. They are mostly saved and sold in the Cork and London markets after Christmas. The price of the dried fish has improved of late years. The haddock have entirely disappeared. This, however, cannot be attributed to our net men or trawlers, as haddock were generally taken a long way out to sea with cod and ling. Why they have left is only a matter of conjecture; some say steamers, and others, the trawlers and such like have been the cause. The Dungarvan men will probably attribute it to the trawlers. If Dungarvan men improved their boats and gear with the times and carried in addition to hand-lines, spilliards, drift-nets, &c., so as to be prepared for every contingency, we should then have no complaints, for when one mode failed they could try another as is the case in Kinsale. With regard to the injury done by trawlers in destroying the spawn we have watched the salmon. They plough a long trench in gravel, deposit the spawn, and then cover up. If any escape it is instantly devoured by other fish. Now if other fish select dirty ground, gravel, rocks, and seaweed for depositing the spawn, no trawler can approach or injure it. If the nets occasionally take up some spawn, may not that have been uncovered, and washed out from its berth by the force of the tide and thus exposed to be a prey for other fish? There are 14 boats trawling with four men in each boat. The general time for trawling is from the 17th of March to the 1st of August. When cod and ling fishing commences the boats trawl in Broad Sound for bait for the long-lines. The dabs caught in Broad Sound are the best bait for cod and ling, and to the best of the belief of the fishermen the trawlers take up no spawn in trawling in Broad Sound.

41,071. (*Mr. Anderson.*) You are rather friendly to the Ring men I believe?—I am just as friendly to the Dungarvan men. I am friendly to every man who is industrious.

41,072. But you like the Ring men a little better?—Not a bit; it is all the same to me.

41,073. You say that cod and ling have increased?—Yes.

41,074. They are taken outside where the trammels are set?—Yes.

41,075. Do you believe that if there were a lot of nets down where they are taken the line men would be able to get as much as they do?—I believe it would be an impossibility to set the trammel nets there.

41,076. But suppose it was done?—If you give me an if I hardly know how to answer you; no man would be fool enough to set nets there.

41,077. But if it were possible would you have as many fish?—I do not think cod and ling would mesh in the net as the hake does. They are a larger fish and the mesh would have to be much larger for it.

41,078. As a matter of fact, do not the line men take a much smaller quantity of fish than they did formerly?—I believe they have done so last year and this year up to this time, but the year before I was fishing in a small boat occasionly, and I never took more than I did then.

41,079. Do you know that the Dungarvan men for years past have not taken as many as they did?—They have not the men now to take them in the first place.

41,080. But when the boats are out do they not take less in each boat than they used to take?—I believe that is the case.

41,081. Has the quantity taken by the trammel men increased or diminished?—I should say up to last year it has increased. Last year was an average year and there is a very fair promise this year.

41,082. You mentioned Halley as having the largest quantity. What is the average quantity taken by the other men?—I believe it has been the same average up to this time as in other years.

41,083. What is the average?—That all depends; some fish with two trammels and some with more. Halley has a boat to himself; he has the boat's share, and he has seven or eight trammels fishing for him.

41,084. What is the average quantity taken in each trammel?—Some days there may be 50 hake in a trammel and some days not five.

41,085. What is about the average?—I can hardly strike an average. 50 or 60 is the most I ever saw and I have seen the trammels brought in without fish at all.

41,086. Is the quantity less this year than last?—I do not think it has been up to this time.

41,087. Are they catching as many fish this year as they did last?—I think so.

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41,088. How many seasons back do you remember the fishing?—For many years.

41,089. Is the quantity taken in the trammels as much as it was 10 or 20 years ago?—The year before last was the best year I ever remember.

41,090. Have they caught as much in the trammels on an average?—Yes, there is an increased quantity, but the trammels themselves are getting larger. I remember when they were only 20 fathoms long, and now they are 40 fathoms long.

41,091. And there are a greater number of them?—Yes.

41,092. The greater quantity of trammels have taken a greater quantity of fish?—Yes, of course.

41,093. Do you know whether the fish that are taken in the trammels are as good as when they are taken by the hand-line?— Decidedly not for fresh eating.

41,094. Are they wasted?—No; some of them are right good, but they are somewhat mashed up, and the scales are rubbed off them. They are not as good when fresh as the hake killed by the line, but when they are salted I never saw the least difference.

41,095. Are they smaller fish than those taken by the line?—No, they are about the same. They will catch a hake on the line quite as small as they will catch one on the trammel.

41,096. Will the line men catch as many fish when the trammels are about as when they are not?—That all depends upon how the trammels are set; if they are above they will, if they are below they will not.

41,097. If the trammels are set within 500 or 100 yards of the boats engaged in the line-fishing, will that interfere with the line-fishing?—It does in this way; it does not frighten the fish, but it kills the fish that would otherwise come to the hook.

41,098. Has it no effect in frightening them?—Not the least effect.

41,099. Does it not turn them back or make them go on one side?—I do not think so.

41,100. But what do the hake do if they see a number of other fish caught?—I think it causes them to put their own heads in the mesh. As to the fire which they speak of as being seen in the water it is a great doubt to me whether the fish see it at all; it is a phosphoric fire, and will be seen as much from the cables of the hookers as from the trammels, but I have a great doubt whether the fish see it at all. I think that the water appears just in the same condition to the fish at all times.

41,101. (*Professor Huxley.*) You mentioned the case of Kinsale Bay just now?—Yes.

41,102. Does the comparison strictly hold; is there any trammel-net fishing going on there?—I think there is at Courtmacsherry, at the mouth of the harbour.

41,103. Did you hear Patrick Whelan's statements?—Yes, I did.

41,104. Do you agree with them?—Yes.

41,105. There is no important matter in which you disagree?—No.

41,106. On the whole you consider his statements to be fair?—Yes.

41,107. Especially as to the increase of gear and the money invested in the fisheries?—Yes, he is quite right upon those questions.

41,108. You stated that the only way in which the trammel nets interfered with the liners was by over supplying the market, but in addition to that I presume you would admit that the trammel-nets catch a great many fish which the liners might otherwise catch?—Yes.

41,109. So that when trammels ure used in the immediate vicinity of liners they do abstract a quantity of the fish which the liners would otherwise catch?—If the fish remain at the bottom they do; if the fish rise to the top of the water and take the hook the trammels have no offect upon them.

41,110. If there were no trammels there would not the hake be caught; would they escape altogether?—Decidedly. The hake may be as thick under you as they possibly could be, and yet not one of them would take the hook.

41,111. And under these circumstances the hake could not be caught by the line although they are caught by the trammels?—No.

41,112. Then in that case it is not a disadvantage to the hookers to have these fish caught?—No; the only way in which in fishing the trammel could interfere with the hookers is, that if the hake feel inclined to bite and make for the hook, and the trammel is between them and the hook, they mesh in the net and are not caught on the lines. I should like to refer to the observations made by some of the Dungarvan fishermen that they had brought some of the Ring fishermen before a bench of magistrates and did not get justice; I deny that entirely. Their case was gone into fully, and wherever it was proved that the Ring men had infringed any of the byelaws they were punished, and severely punished too, as the records of the court-house will show.

41,113. (*Mr. Lefevre.*) Have there been any convictions?—Yes.

41,114. Is it within your observation that the byelaws are generally attended to?—No, decidedly not. I am sorry to say that the Ring men do infringe the byelaws, but when it has been proved that they have done so the magistrates have punished them, and it always lies in the power of the Dungarvan men to punish them wherever they are found infringing the byelaws.

41,115. (*Professor Huxley.*) Apart from the catching of fish that the liners might otherwise catch, are you of opinion that the setting of the trammels does not interfere with the working of the line-boats?—It is not clear that the liners can work over or under them without carrying them away. If a line man goes out at night he cannot see the trammels and he anchors upon them, it is then a hardship upon both parties. He loses his night's fishing, and the trammel is torn to pieces with his anchor.

41,116. But if the trammel be set during the daytime would not the situation of the trammels interfere with the working of the lines; is it practicable for the lines to work over or under the trammels?—There is plenty of room for both if they kept out of the way of each other. There is a byelaw upon that point which ought to be insisted upon, and the Ring men ought to be made to keep 200 yards from every hooker.

41,117. I want to ask you a question about the operation of that byelaw; if it be rigidly enforced might it not be possible for half a dozen or a dozen liners to take possession of any fishing ground they choose? Suppose they made their way down before sunset, and began fishing over ground stretching for a couple of miles, any law that would prevent any trammels from coming within 200 yards of them would give them the absolute occupation of the ground, would it not?—Yes, of that ground, but not if they, the trammel fishermen, have plenty of room to keep away from the hookers.

41,118. You do not think that is a hardship then?—Not to the trammel men, certainly not.

41,119. But are not the hake in the habit of going together in bodies?—Yes, but it is all chance who gets them.

41,120. Are the shoals of hake so local that they might by careful attention on the part of the liners be monopolised in the way I have mentioned?—No, certainly not. It would be no hardship upon the Ring men to be obliged to obey that regulation.

41,121. Is it any hardship on the Ring men to obey the further law?—There is no hardship about their having the trammels up. At one season of the year,—the herring season—the Ring men not only fish with trammels for hake during the season, but during the night they fish also for herrings; you will see them take their trammels on board and go out and shoot their nets. The women and children at Helvick have the herring-nets hauled up on the little quay there; they are ready to be put on board the boats. The men

come in after fishing all night, get rid of their herrings, and then go off again with the trammels. I think, however, it would be a hardship to keep them to a particular hour of the morning and then punish them if the trammels are not up.

41,122. But if they were not up would it not be impossible for the line men to fish at all?—The line men haul up at the same time and go to Dungarvan. They fish every night, and in the morning haul up and go to Dungarvan with the tide.

41,123. Are they off the ground earlier so as to allow the limitation of time to be somewhat extended?—Yes, in the daytime they kill nothing. Perhaps an odd time, after a storm or something of that kind, they may kill a hake in the daytime, but that is an exception.

41,124. You are of opinion that trammel-fishing is not a wasteful mode of catching fish?—Decidedly not, except that owing to a stress of weather the fish are sometimes caught in the nets and are not taken out until they are altogether destroyed, as the boats are not able to get at them. But, as a proof that the fish are not frightened by dead fish in the nets, I may say these trammels will sometimes lie out for three or four nights owing to stress of weather, and when the fishermen go to them they will find live fish mixed up with the dead ones in the nets.

41,125. Do you agree in the statement made by Patrick Whelan that fish below a certain size could not be taken in the trammels?—Yes, except gurnard.

41,126. And not whiting?—Whiting may be taken by the teeth, but they are an unimportant branch of fishing here. They are mostly used for bait when they are caught.

41,127. With respect to the trawling, does the working of the trawls interfere with the liners?—They do not work at the same time. The liners fish at night and the trawlers in the daytime.

41,128. Do the trawlers injure the fish except by taking them largely?—I think not.

41,129. What is the average size of the mesh in the trawls?—I have not measured them lately. When I did I think it was about three inches at the bottom and from that to four and a half and five inches in the wings.

41,130. That is on the diagonal, pulled out?—Yes.

41,131. Some we measured this morning were from two and a quarter running down to one and a half?—That is decidedly too small.

41,132. Is that smaller than the ordinary run?—Yes.

41,133. I speak of two and a half inches from knot to knot, not pulling out the mesh?—The only thing would be that a net of that sort would catch small fish that were not saleable, but if the size you mean was only two and a quarter from knot to knot, without pulling out the mesh, perhaps it would not be too small.

41,134. Then this net was not too small?—No.

41,135. Have you ever worked with the trawl yourself?—Yes.

41,136. The trawl used here is of a different description from that used by the heavy smacks?—Yes.

41,137. It is a pole-trawl?—Yes; a rope goes along with the trawl with iron things attached to it like hammers. The other description of trawl is a beam-trawl, which has a kind of scraper. There is a trawl here called the otter-trawl.

41,138. (*Mr. Lefevre.*) Do the Dublin trawlers trawl off this coast at all?—Yes.

41,139. What distance do they come in?—Within three or four miles, and they do an immense amount of damage.

41,140. In what way?—They take away the long-lines; and then again it is the spawning season of the year when they come here, and, although I cannot say whether they destroy the spawn or not, still, if they do not destroy the spawn, they destroy the spawning fish.

41,141. You think then that the larger class of trawlers do damage but not the smaller class?—Not if they trawl at a particular season of the year, but at the season of the year when they do trawl they do damage.

41,142. What is the season?—All during the winter, which is the spawning season for the fish.

41,143. For what fish?—I have heard it said by the fishermen that down at Dunmore they have seen basket-loads of small haddock thrown out by the trawlers when they come in there.

41,144. That is small fish, not spawn?—Yes, but the spawning fish will be there too. There will be the mother and the young.

41,145. What fish spawn then?—Haddock, cod, and ling, I think, are spawning then.

41,146. Have you yourself observed the fish taken by the trawl?—Not by that trawl.

41,147. I mean by any of the larger trawls?—Not by any of the larger trawls. I can only speak from hearsay.

41,148. How long ago is it since Ring became an important fishing village?—Since the famine year.

41,149. To what do you attribute the increase in the prosperity of the fishermen at Ring, and the decrease in the prosperity of the fishermen at Dungarvan?—I attribute it to the Ring fishermen being a hardier and more daring set of men in the first place, and to the Dungarvan men getting encouragement in 1847 and not availing themselves of it.

41,150. Have they any facilities of position?—They have very good landlords, who give them a house and a plot of ground.

41,151. Is their village better situated?—It is nearer the sea than Dungarvan.

41,152. Have they a harbour?—Only a small one.

41,153. Are there any other small villages inside the bay like Ring?—Yes, Ring, Helvick, and Ballymagowrie.

41,154. Are they inside the bay?—Yes, and near each other.

41,155. Is there anything more until you get to Ardmore?—No.

41,156. What sized place is that?—It is a nice little village not as big as Dunmore.

41,157. Are there any trawlers from there?—Eleven.

41,158. Have they trawl-nets?—Yes, but they do not go outside their own bay. They are only small yawls, about 16 or 17 feet long.

41,159. Do the other trawlers trawl in the bay at night at all?—No.

41,160. Are there any oyster beds here?—Just here immediately at Dungarvan there are.

41,161. Are there as many oysters as there used to be?—I do not think there ever were many there, but I believe there are about the same quantity now. I believe there has been an Act obtained by two gentlemen for laying down oysters here.

41,162. Is that within the last two or three years?—Only this year, within the last few months I believe.

41,163. Do you know at what season of the year the hake spawn?—You will see them spawning from September.

41,164. Do you think they come into the bay for the purpose of spawning?—I think they come into the bay in chase of other fish.

41,165. Do they run in close?—Yes, they run in so far at times that I have seen them killed with the seine-net from the rocks; I have seen hake killed within 20 fathoms of the rocks.

41,166. Where are the Ring fish principally consumed?—I think they go to Cork, and some of them go to the London market.

41,167. To be consumed by the poor?—I believe so.

41,168. Is it possible to get anything like a reasonable notion of the quantity of fish taken into Ring in the course of a year?—I think on the average there is 10,000*l.* worth of every sort of fish killed by the Ring men.

DUNGARVAN.

H. A. Fitzgerald.

25 Aug. 1864.

41,169. Are you of opinion that the putting down of trawling and trammel fishing would put an end to that supply of fish?—If that were done it would destroy between 700 and 800 people, and bring them to the poorhouse; they have no other earthly means of living.

41,170. But if the trawling and trammel net fishing were put down, could the supply of fish now obtained from those sources be obtained from line-fishing?—Certainly not.

41,171. Will you give us your reasons for coming to that conclusion?—At one time the line-fishing was carried on at Dungarvan by as many as 80 boats; they supplied the Dungarvan market and the inland market, but now the supply is so great that not only does it go to Dungarvan for consumption here, but it goes to Cork; whereas the 80 boats were only able to supply Dungarvan and the neighbourhood with fish, the 25 boats now at Ring are able to supply a great deal more.

41,172. Do you wish to see any restriction put upon the larger trawlers?—I think they ought to be restricted to certain seasons of the year, except in the Broad Sound.

41,173. You would not place the same restriction on the small trawlers?—Yes, upon every sort of trawler. They ought not to be allowed to trawl from the 1st of September until the 1st of April.

41,174. On the ground that at that time they destroy the young fish?—Yes, and spawn. It would, however, be a hardship to stop trawling in the Sound during the cod and line season, as they depend upon it for a supply of bait.

41,175. Then you would put a stop to the larger class of trawlers, but not to the smaller class?—I would put a stop to all except in the Broad Sound.

41,176. (*Professor Huxley.*) Is there any further statement you wish to make to us?—No.

41,177. Does the occupation of small portions of land in any way diminish the industry of the Ring fishermen?—Not at all, it adds to it; but these men will not themselves stop the fishing in order to till the land.

The witness withdrew, and the inquiry was adjourned until the 26th of August at Kinsale.

Kinsale, Cork, Friday, 26th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

KINSALE.

R. Lander.

26 Aug. 1864.

ROBERT LANDER called and examined,

41,178. (*Professor Huxley.*) Are you a resident in Kinsale?—Yes.

41,179. What is your occupation?—I own some vessels here, and I have property. I have been living on the quay, and I have taken up the fishing business for the last nine years, more as a matter of amusement than anything else.

41,180. Have you interested yourself in the fishermen, and in their modes of living?—Yes, for the last nine years.

41,181. Can you tell us what kinds of fishing are practised here?—Mackerel-fishing from the end of February and March until the middle of July, which is the only remunerative fishing we have. They are now engaged at the hake-fishing, but they would not be able to exist out of that.

41,182. What time do they begin hake-fishing?—After the mackerel leave; they are, however, so low in price that of itself the hake-fishing would not remunerate them.

41,183. Then from July until what month do they fish for hake?—Until about the month before Christmas, some of them continue it up to Christmas.

41,184. Is there no herring-fishing here?— It commences at that time.

41,185. At Christmas?—Yes.

41,186. And goes on until when?—Until February, or until the mackerel come in, when they take the herring nets ashore.

41,187. Do they follow any long-line fishing here?—Yes, about a month before Christmas they get mussels for bait. The only remunerative fish they have taken in that way has been the haddock, and the mussels they have been obliged to get from Kenmare.

41,188. Up to what time does that fishing last, from November until when?—Some of the boats continue at it until the mackerel time; if the weather is suitable or the tide they continue it until about that time. If the sea is boisterous and there is bad weather they may not get two nights in a month to fish for herrings.

41,189. Is there any oyster-fishing here?—There is some little oyster-fishing, but I do not know much about it.

41,190. Is there any lobster-fishing?—Very little; the boats go to the eastward to Ballycottin, and to the westward to Glandore.

41,191. How many fishing boats are there in this port?—I am not quite certain.

41,192. What is the ordinary tonnage of the boats?—They are now about 25 tons, from 25 to 30 tons.

41,193. And are they decked boats or half-decked?—They are open boats.

41,194. Altogether open?—Yes; there are four seats for the men to work the lines, and they are all open for the nets.

41,195. Is there any hand-line fishing here?—The hake-fishing is all hand-line fishing.

41,196. Is there any trammel-net-fishing here?—Yes; not in this harbour but to the westward, and our men complain much about it.

41,197. Is it carried on in the bay?—Yes, between the Old Head and the Seven Heads.

41,198. Is there any seining?—Yes.

41,199. Are the mackerel caught by seining or by drift-nets?—By drift-nets.

41,200. Do they seine for sprats?—Yes, when they come in they have large circle-nets which they shoot round them and take great quantities.

41,201. Are pilchards ever seen here?—Yes, but they do not come in, they are seen by the men at sea.

41,202. Do they not fish for them?—No.

41,203. You have known the fisheries here for some considerable time?—Yes, within the last nine years I have had three boats.

41,204. You have owned boats besides?—Yes.

41,205. Can you tell us if within your recollection the number of boats has increased, speaking generally?—As to the number there are a much better class now than there were formerly.

41,206. But has the number increased?—I think it is about the same.

41,207. But the class of boats is much better?—Yes, much superior.

41,208. Do the boats cost more money?—A great deal more.

41,209. Have you any reason to believe that the supply of fish here of different kinds is falling off?—With regard to the hake this year I believe the fishermen never recollect a worse season.

41,210. But taking one year with another has there been any falling off?—I should say the hake are falling off decidedly, and the seine-fish are decidedly falling

off. The mackerel have increased, but that is in consequence of the new system of fishing. One boat now will have as many nets as the whole fleet had formerly. They merely had them formerly for the purpose of getting bait, but now they have long strings of nets extending a mile and a half in length.

41,211. Then the gear of the mackerel boats has increased considerably?—Yes.

41,212. And it has increased in value also?—Yes.

41,213. They are not fished for with seine-nets?—No, unless they come close in-shore, when the fishermen catch them with what we call "school" seines.

41,214. They are not caught with the hook-and-line?—Not in any quantity. They never think of it. Sometimes an individual may go hake-fishing and throw a line out and get a dozen or two in that way.

41,215. Is the mackerel-fishing the most remunerative kind of fishing?—Yes; the only thing we have to pay us here is the mackerel-fishing.

41,216. Are the men engaged in fishing all the year round?—Yes.

41,217. Have they no other occupation than fishing?—No.

41,218. Have they no land to cultivate?—None.

41,219. Are they frugal and saving in their habits and in the habit of saving money?—No; they are very improvident, and very few of them own boats at all. Formerly they did, but they do not seem to have any ambition to own boats at all now.

41,220. Then who have put money into the boats?—Mr. Dawson, myself, and others.

41,221. People on shore?—Yes.

41,222. Very few of the boats are owned by the men?—Yes; there are only two owned by them, and they are very inferior.

41,223. Formerly the fishermen did own boats?—Yes.

41,224. When was that?—Twenty years ago.

41,225. Before the famine?—Yes.

41,226. Was the habit of owning boats by the fishermen diminishing before the famine, or did the famine have any effect?—It was diminishing then.

41,227. Did the famine hasten the crisis?—I think not.

41,228. What was the reason?—Our men are a hardy race of men, but they are most improvident, and they have no wish to get shares or to become owners of the boats. When I first commenced I wished them to take a part, but they only laughed at the notion. They did not care for it; they would rather take wages.

41,229. (*Mr. Lefevre.*) Did the young men continue fishing?—Yes, but some have gone away occasionally.

41,230. (*Professor Huxley.*) Do you think the hake-fishing has fallen off?—Yes, very much.

41,231. What becomes of the hake which are brought in here?—They generally find their way to Cork market. There are other parties who take them in a small way, such as jolters.

41,232. They are sold fresh?—Yes.

41,233. Not cured?—They do cure them when there is a quantity towards the end of the season, when they cannot get a price for them, but none have been saved this year.

41,234. They are caught by the hand-lines?—Yes.

41,235. Is the trammel-net-fishing also directed to catching hake?—Yes, but there are no trammels here.

41,236. You have no trammel-nets?—There is not a trammel-net except to the westward. There are some at Courtmacsherry.

41,237. Do you think the trammel-fishing has had any effect on the take of hake by line?—Our men complain of it, and I have no doubt that it would have some effect. A large wall of nets in the water will scare the fish off, no doubt. There was a law made that all the trammel-nets only should be used at a certain time, but they do not stick to that. They were not to set them until sunset, and they were required to haul them by sunrise; there is a law to that effect.

41,238. (*Mr. Lefevre.*) Have there been any convictions?—Sometimes our fellows if they get near a trammel will take it on board, and there is a law about it, but they seldom go to law upon the matter. If we could adopt some other fishing than hake-fishing at the time the mackerel come in-shore, I think it would be much better for us.

41,239. (*Professor Huxley.*) Are you practically acquainted with the trammel-net-fishing?—Not at all.

41,240. But you know the result of it?—I have heard the fishermen complain of it.

41,241. Have they complained as to the number of fish caught?—I have seen them going into Courtmacsherry with a great number of fish when our boats have had nothing.

41,242. Do you think they catch what the other men would catch?—Yes.

41,243. Then it is the same to the consumer in the long run?—Yes, the hake will sell in the market just the same although inferior.

41,244. (*Mr. Lefevre.*) Do they bring it into Kinsale?—No; they salt them themselves and cure them. They are mostly farmers who use them. In fact there are no fishermen at all who have these trammels, but countrymen living on the coast.

41,245. (*Professor Huxley.*) The herring fishery you say takes place from Christmas until February?—Yes, until the mackerel come here.

41,246. Do you use the same boats for the herring as for the mackerel-fishing?—Yes.

41,247. But different nets?—Yes, different nets.

41,248. Do they use the inch mesh?—Yes, for herring, but a larger size for mackerel.

41,249. Are the herrings brought in fresh here?—They go to Dublin generally.

41,250. Do none of them go to Cork?—Yes, some of them, but the larger number goes to Dublin.

41,251. Is there a large number of men employed in the herring fishery?—Last year there has been, but they have not kept up the nets.

41,252. Are many of the nets owned by fishermen?—None at all.

41,253. They are merely used by the fishermen?—Yes.

41,254. That is an unusual circumstance, is it not?—Yes, but it is so here.

41,255. Have you paid any attention to the condition of the herring at the time it is caught here, from Christmas to February? Is it a fat fish or a full fish?—At Christmas they are in a bad state.

41,256. Are they full of milt and roe?—No.

41,257. Are they shotten fish?—Up to about the month of November they are very good, and after that they begin to get worse.

41,258. Are there many long-lines employed here?—Most of the boats have long-lines.

41,259. The fishermen are the owners of the long-lines, I suppose?—No, they do not own anything except it may be the hand-lines.

41,260. They do not own the long-lines?—No, the owners find all except the hake-lines.

41,261. Have you observed that the supply of hake has remained the same for years past?—Last year it was better than usual, but heretofore it has certainly been on the decrease.

41,262. Up to last year it was on the decrease?—Yes.

41,263. (*Mr. Lefevre.*) Are there any trammel-nets owned in Kinsale?—No, I believe not.

41,264. Are there any other small villages in the bay in which they have trammel-nets?—They may have a trammel in the Lower Cove.

41,265. Is it quite within recent years that that mode of fishing has been practised here?—No, it has been practised for a long time.

41,266. Has there been any increase?—They have more trammels in the westward than they had, about Courtmacsherry.

41,267. What distance do they fish out?—Between headland and headland.

KINSALE.

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41,268. What distance do the boats go with the long-lines?—They go according to the season. Sometimes they go to the westward off the Nymph bank, and sometimes coastwise on.

41,269. Has there been any application by the trammel-net fishermen for a modification of the law?—There have been complaints of the fishing with the trammels.

41,270. Is there any trawling from this bay?—Very little. A few come from Cork, but there are none belonging to the harbour here.

41,271. Within what distance do the Cork boats come?—I have seen them trawling in the harbour.

41,272. What sized boats are they?—From 10 to 15 tons.

41,273. Are there any of the large-class boats fishing here?—No.

41,274. You have never seen them here?—Never. I believe there was one belonging to a buyer here which came down and went into Crookhaven, and said it would not do; the ground was not clean enough for a trawler.

41,275. Is the ground outside the harbour mostly rocky?—There are patches of clean ground for trawling.

41,276. But not to a considerable extent?—No.

41,277. Inside the harbour is it clean ground?—Yes.

41,278. Have you heard of any complaints against the small trawlers for interfering with the other fishermen in the bay?—No, I have not, because it is seldom practised here.

41,279. Is there any export of fish from Kinsale?—Do you mean of salt fish?

41,280. Yes.—Yes, it goes to Cork and elsewhere according to the winds.

41,281. Do any of the fishermen send off the fish by rail?—Yes.

41,282. Where to?—Dublin, Cork, and all parts. The mackerel are sent to London, Limerick, Birmingham, and various places.

41,283. Are they sent away fresh?—Yes, iced.

41,284. Do the Isle of Man boats come to fish here?—Yes.

41,285. Do they land their fish here?—Yes, and buyers come. They have a steamer from Cork here, and they use the rail also.

41,286. How many boats have been here this last season?—About 28.

41,287. What is the season?—The end of February, and they remain until the end of May, until their own herring-fishing commences.

41,288. Do any Cornish boats come here?—On one occasion there was one or two here.

41,289. Do you know what number of boats from this port are engaged in the mackerel fishing at that time?—All that can muster the netting—about 32.

41,290. Do they use the same nets that they use for the herring?—No, they use a different mesh. It is a larger mesh for the mackerel.

41,291. What is the mesh for the mackerel?—Three inches, or three and an eighth, but the Manx men use cotton.

41,292. That is the mesh pulled out?—Yes.

The witness withdrew.

J. Hayes.

JOHN HAYES called and examined.

41,293. (*Professor Huxley.*) Do you belong to Kinsale?—I belong to Scilly, a little village off here.

41,294. Are you a fisherman?—Yes, I am.

41,295. How many years have you been fishing?—About 40.

41,296. What kinds of fishing have you practised?—Mackerel-fishing and long-line fishing.

41,297. And hand line fishing?—Yes.

41,298. Herring-fishing?—Yes, until the herrings failed.

41,299. Have you ever been trawling?—Never, only for a few days along with a gentleman.

41,300. Have you ever used a trammel-net?—Yes.

41,301. Where did you use a trammel-net?—I have not used one these seven years.

41,302. What was the mesh of the trammel-net?—Four and a half inches.

41,303. That is two and a quarter from knot to knot?—Yes.

41,304. How long was the net?—About 200 fathoms.

41,305. And how deep?—About five yards.

41,306. Was it made in the ordinary fashion with corks above and a weight below?—Yes.

41,307. And anchored at one end?—At both ends.

41,308. How do you set it, with the tide?—If the current runs strong we set it with the tide.

41,309. What time did you set it?—About the 1st of October.

41,310. Did you set the trammel because you could not catch hake with the lines?—Yes.

41,311. Did you succeed with the trammel?—No.

41,312. Then you got them neither way?—No, neither way.

41,313. Is that the only occasion upon which you tried trammel-net-fishing?—I left the hooker in that season and was in a small boat. I always followed a hooker with the exception of that season. When I dropped the trammel-fishing I took to the trawl for Mr. Dawson.

41,314. You found the trammel did not answer?—Yes, so I returned to the hooker back again.

41,315. Do you find the supply of hake has continued the same one year with another?—No. For the last seven or eight years there has not been the same quantity that there was formerly.

41,316. In the bay here?—Yes, from the Old Head to the east of Cork Head.

41,317. What do you think is the reason of that?—The firing of the garrison. There is not a pound of fish to be found in consequence.

41,318. When does that artillery practice take place?—This year it commenced on the 1st of May.

41,319. How long does it last?—It has lasted up to the present time.

41,320. Does it go on all the year round?—About six months.

41,321. How many times a week?—Every day except Saturday, I think.

41,322. Do you think that frightens the fish away?—Yes.

41,323. You get mackerel, do you not?—We don't fish for mackerel where they fire the guns, except about the 1st of June. We fish for mackerel about 50 miles from the land; then we haul in in June, and we can often hear the reports of the guns 9 or 10 miles from land where we shoot our nets.

41,324. Have the codfish fallen off?—I have often caught a great lot of cod, but I can see none nowadays. I have caught 9 or 10 score a day, and I cannot get 9 or 10 single ones now.

41,325. Did you get plenty of haddock when they were not firing?—I have been taking 700 in a day.

41,326. On the long-lines?—Yes.

41,327. When did that supply of haddock begin to fall off?—I have not got any for 14 years.

41,328. How many years has the firing lasted?—About seven or eight years.

41,329. Then it is quite clear the haddock were not driven away by the firing?—There has never been a haddock caught in the harbour, or any other fish that swims the sea. Haddock is a deep-sea fish, and we never caught a haddock in the harbour.

41,330. Where were you in the habit of catching them?—Eight or nine miles from land, in January or February.

41,331. Within the last 14 years you have not been able to catch them there?—Not in the same quantity as we were in the habit of catching them formerly.

41,332. Have they fallen off very much?—Yes, we should think it a good day if we got 60.

41,333. What is the reason of that?—I cannot say.

41,334. Is there much trawling about here?—A good deal. There is a great deal on the coast of Ireland altogether. This is like a half-way house for them.

41,335. How far off in the sea?—About four miles out.

41,336. Do they trawl over the haddock ground?—No, they are not accustomed to do that.

41,337. Have they never trawled there?—No.

41,338. Do any of the large trawlers come down there?—No, I never saw any, except the boats belonging to Cork Harbour.

41,339. You are clear that the supply of haddock has been falling off for the last 14 years?—They have not been as plentiful as they were.

41,340. Was there a good fishing for haddock last year?—They might get 40 or 50, and so on.

41,341. But nothing like what they were in the habit of getting formerly?—No; years ago they could get hundreds.

41,342. Have you any notion what has been the cause of the falling off of the haddock?—No, unless it has been the report of the guns.

41,343. Are they not a long way out to be frightened by the guns?—We hear the report of the guns. We hear it as plain with a northerly wind as if we were in the harbour.

41,344. But the haddock is a deep-sea fish?—Yes.

41,345. In how many fathoms of water do you find them in abundance?—In about 55 fathoms of water. It is in the month of May that we catch them there; in January we catch them in 30 fathoms.

41,346. Do you think the haddocks when they are 30 fathoms down can hear the firing of guns seven or eight miles off?—I do not say so with regard to the haddock, but the herring can.

41,347. Has the herring-fishing fallen off?—There are none at all to be got, or at any rate very few.

41,348. Was there ever a great herring-fishing here?—There was not a better place in the world than this was about 15 or 16 years ago.

41,349. Did you have great shoals then?—I have seen 18 maze of herrings in a net and about 40 maze in the rest.

41,350. What time of the year was that?—The 1st of February.

41,351. Has the time for catching herrings here been in the early spring, from January to February, or the mid-winter?—I have seen them caught here in August. I have caught them here in the harbour 14 or 15 years ago, in the harbour and up in the Bandon River.

41,352. But the ordinary fishing has been from Christmas to February?—All the year round we fish.

41,353. When you got herrings in January and February what condition were they in?—They were in good order in January and February, but in March they spend themselves. You will see them as good in February as in the month of January.

41,354. Full fish?—Yes, as full as in January. We have to get the bucket and bucket the spawn overboard.

41,355. In March they are spent?—Yes. In the middle of March they drop their pea.

41,356. Do you ever see herrings in May or June?—Yes.

41,357. Are they small?—No, they are of great size. I have been catching them in June the breadth of my three fingers, as broad as mackerel.

41,358. Were they spent?—No, they were in first-rate order. I have been taking three quarters of a hundred of them in the mackerel nets, 40 or 50 miles from the land.

41,359. I suppose they had not much roe in them; they were fat fish?—They had no roe in them but they were lined with fat.

41,360. That was their condition in June?—Yes.

41,361. In July and August what condition are they in?—They come to gather the pea then and lose the fat.

41,362. Then they lose the fat about July?—About the latter end of July.

41,363. The beginning of August they are in roe again?—Yes.

41,364. In September are they spent?—They begin to spend then.

41,365. In the latter end of September and October in what condition are they?—They have roe in every month except three.

41,366. What months are those?—March, April, and May.

41,367. But you get a good many spent fish in September?—Yes, according to the light and dark. With the light they will spend themselves, and then with the dark they are full again.

41,368. What do you mean by that?—As the moon increases they become full.

41,369. Then about the time of the new moon are they spent?—They land their spawn in the new moon, and when the dark comes on again they will be full again.

41,370. You have noticed that?—Yes.

41,371. You get most spent fish in March?—Yes, at that time of the year they are all spent.

41,372. All spent together?—Yes, in March and April.

41,373. Then in September you get a considerable portion of spent fish?—You see them in September.

41,374. There is very little trawling about here?—There is no trawling at all from our port, only from Cork harbour.

41,375. Is there much sprat-fishing here?—There was formerly, but not now.

41,376. What is the cause of that?—We think it is owing to the firing from the garrison. They formerly came in, in great abundance.

41,377. And when the report of the firing is heard does it send them back?—Yes.

41,378. In what month of the year did you get sprats?—From the 1st of June until the 1st of December. We used to get them here during those six months.

41,379. During the whole six months?—Yes.

41,380. What kind of net did you catch them with?—We had a different mesh on their account.

41,381. Had you a half-inch mesh?—No; it used to be $3\frac{1}{2}$ towards the end, and in the middle it went quite small.

41,382. Did it go down as low as half an inch?—Yes, and less than that.

41,383. Was the catching of sprats a source of great profit to the fishermen?—Yes.

41,384. For how many years has it fallen off?—There have been none these eight or nine years as compared with what there was formerly.

41,385. Is there anything you have to complain of here except the firing?—No.

41,386. (*Mr. Lefevre.*) What time of year do you begin the hake-fishing?—I do not begin hake-fishing here until the latter end of June, but others begin it on the 1st of May. We continue mackerel-fishing as long as we can catch them.

41,387. But as soon as the mackerel falls off you begin hake-fishing?—Yes.

41,388. Do you use the long-line or the hand-line?—All hand-lines.

41,389. Did you never try the long-line?—No, I never fished with the long-lines for them, although we might get a few of them by that means.

41,390. At what distance did you fish?—Sometimes at eight or 10 miles.

41,391. What distance do you call the harbour here?—It extends from the Head of Kinsale to Hangman Point.

41,392. Is that beyond Oyster Haven?—No, it is just inside Bullman Rock.

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41,393. Have you observed any increase in the number of trammels of late years?—I have seen a great quantity when the fish have fallen in.

41,394. How many are owned by the Ballymakeene people?—I cannot say, but there are a great quantity.

41,395. How many boats are there fishing?—I have often seen 20 or 30, and perhaps 40. There are few farmers who can purchase them who do not have them.

41,396. How many were there 20 years ago?—I do not know exactly, but there were a great many of them.

41,397. Have they increased of late?—I do not think so; they have fallen back.

41,398. Are they catching as many hake as they used to do?—In Courtmacsherry Bay?

41,399. Yes.—No, not one to a thousand. If the fish were there they would shoot their nets, but 20 years ago they used to have hake in millions there; we could not go fishing with our hand-lines for them. We used to go after them in from six to 40 fathoms of water.

41,400. During the last few years have you not observed them?—No, there are no fish there now. They would not allow us to anchor anywhere convenient to their trammels.

41,401. When did they set their nets?—I have seen them all day and all night there.

41,402. Always out?—Yes, whenever they pleased, except when they drew them ashore and took the fish out of them. As soon as they cleared the fish out they set them in again.

41,403. Do you know that the law prohibits the setting of trammel-nets between sunrise and sunset?—Yes, but they break the law.

41,404. Did you ever summon any of them for doing so?—No, but we took their nets one time and brought them in, and they made a promise that they never would do the like again; but as soon as they got their nets they shot them again.

41,405. What price are you getting for the hake now?—I had a score and a quarter, and I got 10*s.* for them to day.

41,406. What would you get last year?—The average price was 5*s.* and 6*s.* a score.

41,407. Twenty years ago what did you get?—Very much the same.

41,408. You do not think the price has increased?—No. If the fish were as plentiful as they were 20 years ago they would be as cheap as ever they were. The scarcity of the fish makes them dear.

The witness withdrew.

D. Leary.

DANIEL LEARY called and examined.

41,409. (*Professor Huxley.*) How many years have you been fishing?—About 20 years.

41,410. Have you practised all kinds of fishing that are practised here?—Yes.

41,411. Mackerel-fishing and hake-fishing?—Yes, and herring-fishing.

41,412. And long-line fishing?—Yes.

41,413. Have you ever been a trawler?—No.

41,414. Have you set trammels?—No.

41,415. Did you hear what the last witness stated?—Yes.

41,416. Do you agree with what he said?—Yes.

41,417. Is there anything you have to add to that?—No, there is not.

41,418. Do you agree with what he said with regard to the damage done by the firing of the garrison?—Yes; about two years ago I was going out of the harbour with the wind S.S.W. There is a rock outside, and in order to get away from the firing our boat took the rock and was very nearly being damaged, and we were near being lost.

41,419. Is that because you were steering to get out of the way of the firing?—Yes.

41,420. Do you agree with the previous witness as to the falling off of the haddock, in comparison with what you recollect 20 years ago?—Yes.

41,421. Was there much more haddock then?—Yes.

41,422. What is the reason of its falling off so much?—I cannot say.

41,423. Have you fished for it often within the last 10 years?—I have fished for it for these 20 years.

41,424. And have you always found it falling off?—They are not as plentiful as they were.

41,425. Are the hake falling off?—They have been doing so for a few years back.

41,426. The quantity of mackerel is much about the same?—Yes. The great injury done to us is by the firing. Many times we cannot get properly into the harbour in consequence of the firing. We have to get up our anchor and remove out of the way.

41,427. Are the guns loaded with shot?—Yes, we have to get out of the way of the shot.

41,428. Then it is not merely the noise you complain of but the actual practice at a mark?—We see the light fish on the top of the water, and when they begin firing the fish go down, and they are off out of the harbour again.

41,429. Do the guns in practising at marks ever prevent you going to the ground where the fish are?—Yes.

41,430. Did you ever actually see the fish driven out of the harbour by firing?—Yes, sometimes I have.

41,431. Can you tell us any particular occasion? What time was it that you saw the fish driven out?—From sunrise until 12 o'clock in the day.

41,432. At what time of the year?—About September.

41,433. What fish was it that you saw driven out of the bay?—Sprats and herrings.

41,434. You saw a shoal of fish and then they began to fire, and the fish fairly left the harbour?—Yes.

41,435. Can you tell us if it is the custom here for the fishermen to own their own boats? Do many of them own fishing boats?—There are a few.

41,436. Do they own the nets?—Yes.

41,437. The herring-nets?—Yes. There are only two or three boats, perhaps six altogether, besides what Mr. Dawson has got in the port.

41,438. Are we to understend that it is the ordinary practice for the fishermen to own the mackerel-nets themselves?—No, not out of this port.

41,439. Do they own the long-lines?—No, they do not.

41,440. In other places they own the long-lines and nets themselves. Is the fishing not good enough to enable them to own their own gear?—There is plenty of fishing, but with the means they have got they cannot do as well as they do in other parts. In other parts they do not give them the nets until they get the price of them and can clear them.

41,441. Do the trawlers do you any harm here?—There is but very little trawling here.

41,442. Have you any complaints to make of the trammel-fishing?—They do us great injury. Many a time there are plenty of hake to be caught, when they come out and shoot round them and we are forced to take up our anchor and go away.

41,443. Does your gear get entangled?—Yes, our lines get fast.

41,444. Do you think it is impossible to practise your line-fishing where trammel-net-fishing is carried on?—Yes.

41,445. (*Mr. Lefevre.*) What distance do you think you ought to be from the trammel-nets?—We should not be less than half a mile from them.

41,446-7. Would not 200 yards be sufficient?—No, because the cant of the tide would take us foul of their nets.

41,448. You anchor your boats when you are fishing with hand-lines?—Yes.

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41,449. And they anchor their nets?—Yes, but when we swing with the tide we get foul of their nets.

41,450. You think half a mile would be necessary?—Yes.

41,451. Are you aware of the law prohibiting the trammel men from setting their nets before sunset?—Generally they practise having them out two or three hours before sunset, and they leave them out all night and all the next day.

41,452. When do they draw them up?—Generally when they get some fish. If they get a great quantity they draw them in and take the fish out and set them again.

41,453. If they have no take of fish do they leave them out?—Yes. When they try them and there are no fish in them they drop the anchor and let the nets out again. If there is any quantity of fish they take it ashore, clear it, and then set the nets again.

41,454. Is there any harbour at Ballymakeene?—Yes, there is a kind of bay.

41,455. What kind of boats have they there?—I do not know.

41,456. Are there any turbot or sole taken by the Kinsale men?—They take turbot.

41,457. How?—By the long-lines.

41,458. In the bay or outside?—At the Old Head.

41,459. Do you find any diminution in the supply?—No, there is not.

41,460. Do you catch as many as you used to catch?—Some days they take half-a-dozen, some days only two, and many days none. On other days they may get half a score.

41,461. Do you take congers here?—Yes.

41,462. With the long-line?—Yes, and with the hand-line too.

41,463. Do you find any diminution in the conger?—The conger is a very scarce fish. It is not as plentiful as any other fish.

41,464. Is it not as plentiful as it was a few years ago?—I do not think it is.

41,465. What do you attribute that to?—To the people here from the westward. They have yawls and they set their spilliards for them every night and take a great quantity. I believe it is by setting their spilliards every night that they make the conger scarce.

41,466. Are there more boats fishing for them than there were?—Yes.

41,467. (*Professor Huxley.*) Is there any oyster-dredging here?—No, there is not.

41,468. Is there any lobster-fishing?—Yes.

41,469. Is there much of it?—They have been very scarce for the last three or four years back.

41,470. Have they been over-fished? Have there been too many of them caught?—They catch five or six dozen or eight or nine during a week.

41,471. Are the pots set about the heads outside?—Yes.

41,472. How many of them?—From 40 to 50.

41,473. (*Mr. Lefevre.*) What bait do you use for the hake?—Sprats and herring.

41,474. Do you ever use mussel?—No. Mussels are used to catch cod and haddock.

The witness withdrew.

CORNELIUS FARLEY called and examined.

C Farley.

41,475. (*Professor Huxley.*) Are you a fisherman here?—Yes.

41,476. And you are master of a fishing-smack?—Yes.

41,477. You wish to state something with regard to what it is that does the harm to the fisheries here?—Yes; they trawl here up and down the harbour when they cannot get fish in the open, and they scatter the sprats as well as the firing of the guns.

41,478. Do you agree with the other witnesses as to the effect of firing the guns?—Yes; what makes the fish become scarce is the guns firing and the trawling. All the fish follow the sprat and the herring, and if the sprat and the herring are not coming in the other fish will not be found there.

41,479. You say that the guns and the trawlers frighten the sprats and herring out of the harbour, and that the other fish go away after them?—Yes.

41,480. Are the trawlers you speak of Cork trawlers?—Yes.

41,481. What size are they?—They are from 15 to 16 and 18 tons.

41,482. Are they open boats?—Yes.

41,483. Do they often come here?—When the weather is bad and they cannot go to the westward they come here.

41,484. How many times in a month may you see them?—It is quite common to see them here. They are here sometimes all the month when the weather is bad and they cannot go to the westward.

41,485. What kind of damage do they do you?—They take all the turbot off the ground.

41,486. Are there many soles in the harbour?—Yes.

41,487. Do they catch them?—Yes.

41,488. You cannot catch the soles with a hook-and-line?—No.

41,489. If the trawlers did not come here then those soles would not be caught at all?—They would not be caught unless they were taken by the seines; they would catch them.

41,490. Can you catch soles with the seines to a great extent?—No, they only catch a few.

41,491. But not those in deep water?—No, not out of the harbour. They do not catch them outside, but some of them follow the bait in. All kinds of fish will follow the sprat and herring.

41,492. Do you think that the trawlers frighten away the sprats?—No.

41,493. How is it then that the trawlers affect your fishing, is it by catching fish you would otherwise catch?—They scrape the harbour and take the hake away.

41,494. Is that at the time you are catching hake with the hook-and-line?—Yes.

41,495. Your complaint is that they take your fish?—Yes, they take away the turbot and the hake too when they are there.

41,496. Do they catch any quantity of small unsaleable fish?—Yes, some cod.

41,497. Do they sell them?—Yes.

41,498. Do they catch any quantity of fish too small to be sold?—No.

41,499. (*Mr. Lefevre.*) What number of the trawlers you speak of have you seen in the bay?—Seven or eight of them sometimes; they do not all come together.

41,500. Are there any of the larger class of trawlers from Cork, those of 40 and 50 tons?—There are some up to 20 tons.

41,501. But none larger than that?—No.

41,502. Do you know what number of seines there are in the bay?—I suppose there are 14 or 15 seine boats, if not more.

41,503. Do they take any small fish?—Not any quantity of any consequence, only the sprats and the herrings.

41,504. Do they never catch any small soles?—No, they do not catch any small soles.

41,505. Do they take any small herrings?—Yes, but they use them for bait.

41,506. What is the smallest size they take?—They take small sized herrings about the length of my hand.

41,507. You find them of great use for bait?—Yes, it is by them that we live altogether. We should not be able to go to sea at all but for getting them for bait. They make very good bait for us. Sometimes they cannot get here in the bad weather and they

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go up the river, and if we did not get them there we should be very short.

41,508. (*Professor Huxley.*) What kind of trawl is it which is used by the hook men here?—The beam-trawl.

41,509. Not the otter-trawl?—No.

41,510. Do you agree with the previous witnesses that the guns of the fort are practising with ball over the ground which you would otherwise be fishing?—Yes.

41,511. And you cannot go on the ground where the fish are on account of the cannon shot coming there?—No, we have to knock off because we say the sprat goes down the river.

The witness withdrew.

G. Dawson.

GEORGE DAWSON called and examined.

41,512. (*Professor Huxley.*) Are you a boat owner here?—Yes.

41,513. Have you ever been a practical fisherman yourself?—No, not a practical fisherman, but I have been fishing for amusement with the fishermen.

41,514. You are interested in the fishing here?—Well, I feel an interest in it.

41,515. Have you heard the evidence which has been laid before us?—Yes.

41,516. Do you agree with it generally?—Yes, generally speaking.

41,517. Are there any matters you desire to add, or anything you wish to correct that you think erroneous?—They have said a good deal about the ball firing but I think the shells are worse. They fire shells as well as ball. I was struck by a portion of a shell about three months ago although I was out of sight of the battery altogether, and out of sight of their target. A portion of the shell sent the water into the boat although Money Point was between me and them. I went in there for shelter and supposed I was perfectly secure.

41,518. Do they lay down a target on ground which is habitually fished over by the fishermen?—Yes; the seines are shot in that direction, and the hookers fish at anchor where the balls will reach.

41,519. Have representations been made to the authorities?—We have represented it.

41,520. Is there no other ground over which they can practise?—There is no other ground; they must have the whole length of the harbour to fire over.

41,521. Could they not fire out to sea?—They do fire out to sea, but of course over the fishing ground. Their target is sometimes outside the harbour and a ball will carry much further. It will hop half a dozen times and go a great deal further.

41,522. Do they put up a danger flag?—They hoist a flag and keep it up while they are firing.

41,523. Can it be readily seen from the target?—If the wind is from you you cannot see it, but if it crosses the flagstaff you will see it at once.

41,524. How far off will the target be?—Sometimes a mile from the port.

41,525. Is the flag a large one?—It is a good-sized one, but a flag will sometimes be in such a position that if it blows towards you you cannot see it.

41,526. Is it your opinion that there should be some other kind of signal?—The signal is good enough; they know the time of day that the firing commences.

41,527. What time of day does it go on?—At different hours.

41,528. Is there no fixed time for practice?—They fix a time but they do not fire at certain hours every day. Sometimes they fire three or four times a day.

41,529. What answer has been made to the representations which have been made to the authorities?—A person from the port came to me to say they would not fire while the hookers were passing up and down. They have occasionally stopped firing on that account.

41,530. Is that the ground on which the drift-net fishing takes place?—There is no drift-net fishing by day and they do not fire at night.

41,531. Is there mackerel-fishing by night?—Yes; all the drift-net fishing is carried on by night. The hooker men are sometimes interrupted.

41,532. But it does not interfere with the seine-fishing because that takes place in-shore?—It takes place over the ground on which they fire.

41,533. Is the water so shallow that the seine-fishing can take place there?—The target is at the harbour's mouth and sometimes in the harbour where the seines would be hauled.

41,534. Is it a floating target?—Yes, but they cannot shoot round it.

41,535. In what depth of water is the target anchored?—In from five to eight fathoms of water.

41,536. Not more than that?—I may be a fathom or two astray, but it does not exceed 10 fathoms. You may say from five to 10 fathoms of water.

considerable?—Yes.

41,537–8. Do you think that the artillery practice interferes seriously with the interests of the fishing here?—Yes, it has had the effect of keeping persons outside and inside also. The boats have been delayed outside with fish and have lost the train.

41,539. Have they been afraid to come across the line of firing?—Yes, there are few of us here ball-proof.

41,540. Does the firing go right across the mouth of the harbour at times?—Not across the mouth of the harbour but fore and aft of it.

41,541. Is the line of firing in such a direction as to make it hazardous for boats to come in?—If they have a leading wind they can do so with safety, but if they have to beat about they cannot do it, inasmuch as they have to cross the target in a zigzag way many times.

41,542. Is there not a good look-out kept at the fort; will they fire across when a vessel is anywhere within the line of fire?—They will. They will fire shell when they think fit to do so, and they will strike an object which they cannot see, not knowing where the fragments of the shell will scatter. I was where I considered myself perfectly safe and yet pieces of the shell came close to me.

41,543. You were beyond the point?—Yes.

41,544. Do you agree with the evidence as to the damage done in that way by firing, that the firing drives the fish off the coast; is there any basis for that notion?—I can hardly say it would drive the fish off the coast; it may drive them out of the harbour and keep them out.

41,545. Do you think there is good evidence that the fish have been driven out of the harbour?—I have always felt that it injured the fishing in that way.

41,546. Have you ever observed a case where a shoal of fish came into the harbour and left it after the firing commenced?—I have never had an opportunity of making such an observation.

41,547. We have been told that haddocks used to be very abundant off this coast and that for years past they have been falling off, so that now the fishermen take nothing in comparison with what they were in the habit of taking?—That is the fact.

41,548. That is your experience?—Yes.

41,549. Have you any suggestion to make with regard to that falling off?—I should say that to some extent it has been occasioned by the number of small boats which in the summer time fish all along the coast and destroy the haddock when small and worthless.

41,550. What kind of boats are they?—They fish with spilliards. They use a small long-line, and they take haddocks of six to nine and 10 inches long; they also take large haddocks when they are useless.

41,551. Are there many boats practising that kind of fishing along the shore?—There are some.

41,552. How many are there between here and Cork?—There are very few; the principal portion are from the westward. There are not many spilliard

boats between this and Cork. I believe that some went latterly to the fishing westward.

41,553. What villages are they which you refer to westward from this?—Courtmacsherry, Glandore, and Clonakilty. All the headlands along there are full of spilliard boats.

41,554. Do those boats supply a good deal of fish to the people of those villages?—Yes.

41,555. Does the fishing furnish a good supply of fish to the country inland?—They get some conger and cod and haddock which are useful in-shore, but I think they destroy a good deal of the small, middle-sized fry, and that they reduce the supply when it would be valuable.

41,556. Do you think the fish they get in that way form any considerable article of the food of the people inland?—I do not know that they form a very considerable article of food, at the same time they are a source of revenue for the support of the persons who catch them.

41,557. (*Mr. Lefevre.*) Is there any trammel-net-fishing from the villages you have mentioned westward of this?—Yes, it is all trammel-fishing that is carried on from this harbour westward. There are very few trammels belonging to this harbour; there are very few here, they belong to the bay outside, to Bulman's bay and westward as far as you can go.

41,558. (*Professor Huxley.*) Do you think that trawling has had any injurious effect upon the haddocks?—No, I do not think it has, inasmuch as they do not trawl much over the haddock ground.

41,559. And there is not much trawling in-shore along the coast?—Very little except what is carried on by the Cork boats.

41,560. Is it a very rugged ground?—Yes.

41,561. And westward there cannot be much trawling near the shore?—I think not.

41,562. There has not been any great amount of trawling there?—No, not between this and Bantry. Bantry is the principal trawling ground in our neighbourhood.

41,563. Were haddocks formerly caught largely on a bank some distance out at sea?—They were not confined to the harbour but were taken generally.

41,564. Outside the heads?—From three to five and 10 leagues off.

41,565. How long is it since they began to fall off?—Perhaps 12 or 15 years. I recollect getting one day for a third part of the haddocks caught by a boat of mine which had been out four or five times 15 or 20 leagues from the land, and with such gear as you would not think would catch any haddock, 500 fish for my share.

41,566. (*Mr. Lefevre.*) What was the size of the boat?—Twenty-two or 23 tons.

41,567. What was the size of the boats you refer to as being used in the villages westward?—From four to six tons. They are all row boats of about 22 and from that to 25 and 26 feet keel.

41,568. Are there any hookers of a larger description?—There are very few fishing to the westward of this at all.

41,569. Until you get to Bantry?—There are very few there.

41,570. Are there any large-sized trawlers?—There are large-sized trawlers in Bantry Bay.

41,571. But until you get there?—No, there are no large ones until you get there, and they do not belong to Bantry but are sent there by other persons.

41,572. Trammels are used all along the coast you say?—Yes.

41,573. Has that been so for many years?—Yes.

41,574. You have always fished with the trammel-net?—Yes; if hake make their appearance in any quantity there is no lack of trammels.

41,575. Has there been a falling off of hake all along the coast?—For the last three or four years there has been a great falling off. I never knew them so plentiful as they were from four to eight years ago.

41,576. Four years ago?—I date the commencement of the failure four years ago, but in the previous four I never knew as many as there were.

41,577. Can you attribute the falling off to any cause?—I cannot say what the cause has been. We have not had so many sprats and herrings during the last four years as we had previously.

41,578. Then you think the hake follow the sprat and herrings?—Yes, and all small fish.

41,579. Do you know anything of the supply of fish to Kinsale market; has the whole amount of fish brought to market fallen off?—It has materially. I was asked for information previous to the establishment of the railway here, and I collected it; but we do not get one fourth of the fish now.

41,580. Has it been four years falling off?—Yes.

41,581. But previous to that time the supply was abundant?—Yes.

41,582. Can you supply us with any details as to the quantity?—I cannot.

41,583. With regard to price has there been any increase?—The price has varied with the take.

41,584. But has it increased as compared with what it was 20 years ago?—I should say that the price is about the same, provided that the quantity was kept up.

41,585. Is there any difference between Kinsale and other parts of the west coast which you have been referring to?—They have sprats east and west of us; when we could not procure any here we have had to go east and west for them.

41,586. And herrings also?—I cannot say. There was an immense take of sprats in Youghal, but very few herrings.

41,587. Has this been a good season for mackerel?—This has been a very fair season for mackerel, there has been a good supply.

41,588. Do the boats from here go any distance after mackerel?—Yes, they do.

41,589. Do they ever go to the Cornish coast?—No, they go probably midway; that is only when there is a scarcity here.

41,590. As the season advances do you find the fish nearer the coast?—Yes, we have to go further to the southward for them in the latter part of the winter and the spring.

41,591. And as the year advances they come nearer the shore?—Yes, but this year we have had some of the boats moving further off. They have met them in greater quantities than near here; at the same time there has been a fair supply near it.

41,592. What is the condition of the fishermen as compared with former years?—I do not think it has improved. I have known them when they were more comfortable.

41,593. Is it only within the last four years that you have observed a falling off?—I can go as far as 44 years back, and say there has been a falling off in them since then. They were more comfortable and better clad than they are now.

41,594. Was there a greater number of them then than now?—I think the number was about the same; there were more boats, but they had not as large crews. The number of men would be about the same.

41,595. Has there never been any attempt to fish with trawl-boats from this port?—I have known some few small boats owned by the fishermen which did use a trawl; but they have used it very little since I knew them, and I have had a knowledge of them for the last 40 years.

41,596. (*Professor Huxley.*) Was there ever any considerable oyster-fishing here?—Yes, I can recollect when it was much better.

41,597. It is very poor now?—Yes, it is poor and the size of the oysters is greatly reduced. There used to be as fine an oyster as could possibly be got anywhere.

41,598. How long ago is that?—I should say about 45 years ago I can recollect them, and from that to 40 years ago. I served my time alongside the hotel here and the heaps of oyster shells there were then would

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surprise you. In size I should say they were full six inches in diameter.

41,599. How many boats were employed at that time in dredging?—I cannot say.

41,600. Were there more employed then than there are now?—Yes.

41,601. How many are employed now in dredging?—Not more than four or five. I think there are about four, not more.

41,602. When did the oyster-fishing begin to fall off?—It has been falling off ever since I can recollect.

41,603. What was the cause of that?—I think they scraped the seed off the banks.

41,604. Did they dredge at all times of the year?—No.

41,605. Have they always observed the close-time here?—I do not know that they observed it very strictly; they dredged for oysters as long as they found it profitable to do so.

41,606. Is it not the case that at one time there was a Local Act or regulation passed to suspend oyster-fishing here?—I was not aware of that. I never knew anything like a summons issued against anyone, of the law put in force.

41,607. You never recollect the law being put in force?—No.

41,608. But there was an Act?—There might be, but I never knew it enforced.

41,609. You would have been likely to have known if it had been enforced?—I should have heard of it I think. They commenced the oyster-fishing when they could not fish outside, in the winter time.

41,610. (*Mr. Lefevre.*) I see that a licence has been granted to a gentleman to establish an oyster bed at Oyster Haven?—Yes, to Mr. Cramer.

41,611. Do you know anything about it?—No.

41,612. Is there any ground here that is particularly fit in your opinion for the laying down of oysters?—I believe there are suitable grounds.

41,613. But you do not know of any case except that in which an application has been made for a licence?—I believe one was made but it came to nothing; there was no bed established.

The witness withdrew.

D. Donovan.

DANIEL DONOVAN called and examined.

41,614. (*Professor Huxley.*) Are you a fisherman here?—Yes, for the last 35 years I have been seine fishing.

41,615. You never practised any other kind of fishing?—No.

41,616. What sort of seine do you use here?—It has a mesh which varies from two inches to half an inch.

41,617. What is the length of your seine?—It is about 60 fathoms long.

41,618. Do you use the same sort of seine for mackerel-fishing as for sprat-fishing?—No, a different one.

41,619. What is the smallest mesh in the sprat seine?—Half an inch.

41,620. What is the smallest mesh in a mackerel seine?—Two inches.

41,621. Do you make your seine with a pocket?—No, only a bunt.

41,622. How do you work the mackerel seine, with two boats?—No, we haul it in with a boat.

41,623. One boat?—Yes.

41,624. You pay it out and haul it in?—Yes.

41,625. How long do you say it is?—From 60 to 100 fathoms long.

41,626. In that case you cannot work your seine more than 600 feet from the shore?—No.

41,627–8. So that if they are practising at a mark a mile out you have not the smallest chance of catching it in the seine?—No.

41,629. Are both ends of the seine made fast with warps?—Yes.

41,630. Then is the fixed end of the seine made fast with a warp as well as the other?—Yes.

41,631. How long will the warp be at the fixed end?—Both are alike.

41,632–5. What is the length of each warp?—Each warp is about 80 fathoms long.

41,636. Do you ever find the target in your way when you are shooting the seine?—Yes, we must keep clear of it; we are obliged to drop fishing altogether when they are firing.

41,637. And besides that the fragments of shell fly about you?—Yes, and frighten the fish away from us.

41,638. Is that when you are seining for mackerel?—No, for sprats.

41,639. Are there any sprat seines as large as that?—They are about 60 fathoms long.

41,640. Where do you seine for mackerel?—We have school seines for mackerel. We do not go on the headlands at all but we stop in the harbour.

41,641. Are they made in the same way as the sprat seines, except that they have a larger mesh?—Yes, in the same way, but they are deeper and larger.

41,642. Do you follow the seining all the year round?—No, only from June till Christmas.

41,643. What do you do the rest of the year?—I work on the land.

41,644. You do not go to the herring-fishing?—No.

41,645. Do you get the same quantity of fish now that you got formerly?—Not half nor a quarter of it. We were fishing one day before the ball firing commenced and we caught half a boatload of fish in one haul, and just as we were laying down our nets a second time they began to fire and we did not get another sprat.

41,646. The fish all went away?—Yes, the report of the firing frightened them away.

41,647. Do you recollect when that took place?—About two years ago, but it is mostly every year that that takes place.

41,648. Had you a considerable shoal of sprats half enclosed in your net?—Yes.

41,649. And as soon as the firing began they all vanished?—Yes, they all went away, the report of the guns did it.

The witness withdrew.

M. Kelly.

MICHAEL KELLY called and examined.

41,650. (*Professor Huxley.*) You have heard the statement which has just been made by the last witnesses?—Yes.

41,651. You were present at the time?—Yes.

41,652. Were you working the seine along with him?—Yes.

41,653. And you say that you had enclosed a good many sprats in your seine?—Yes.

41,654. Before the firing began?—Yes.

41,655. Then the firing began?—Yes.

41,656. And the fish went away?—There was not one to be got.

41,657. All the fish vanished?—Yes.

41,658. You saw it?—Yes; they would frighten the devil away, those guns would.

41,659. (*Mr. Lefevre.*) How many of you were there working the seine?—Nine men in a boat.

41,660. Do you work the seine every day?—Yes, every day during the season.

41,661. Do you ever work it further out in the bay?—We go further out, below the target.

41,662. Do you ever go outside the bay altogether with the seine?—No, we do not go outside the bay, only to the harbour mouth.

41,663. There are seines used in the bay?—Not our seines; they are long school-seines, but we never go out there.

41,664. Can you give us any cause for that?—It is the gun firing I am sure.

41,665. The gun firing does not extend far out in the bay?—But the report of it does.

41,666. Do you know anything of the Courtmacsherry fishing?—No; we always used to have plenty of fish every year until the guns began to fire.

41,667. (*Professor Huxley.*) To whom do you sell your sprats principally?—We sell them in the market here.

41,668. Is there any great demand for them for bait?—To be sure there is. The fishermen would die if it were not for them. There are 400 people depending on them.

41,669. Are there as many as 400 people dependent on you for bait?—Yes, the whole town depends upon us.

41,670. All the long-line fishermen?—Yes.

41,671. And the hand-line fishermen?—Yes, and all the hook men.

41,672. How many men are there engaged in seining during the season?—There are about 100 men and families depending on the seines.

41,673. With regard to price, have you found that the price of fish has increased?—If the fish were there we should get a price for them.

41,674. What did you get the last season; has the price improved of late years?—The price has been very much alike. The farmers would come to the town and buy the fish of us, but they have fallen off. When they hear there are no fish here they do not come.

41,675. Then the only market you have is for bait?—Yes, and we only get 4*d.* or 6*d.* some days.

The witness withdrew.

Mr. James Redmond Barry called and examined.

41,676. (*Professor Huxley.*) You can give us some information, Mr. Barry, about a Local Act which was passed relative to the oyster-fishing here?—Yes.

41,677-8. Will you tell us what you have to say upon the matter?—In the year 1844 on the 2d January a letter was written to me by one of the most respectable inhabitants, and I believe the last sovereign before the Reform Bill of the town of Kinsale. He was an intelligent gentleman bred up to the law, and well acquainted with the general circumstances of Kinsale. This is his letter:—

My dear Sir,

By the Kinsale Local Act, 49 George III. cap. 74 section 27, a power was given by the Sovereign and grand jury of the corporation from time to time to make bye-laws for regulating and properly conducting the seine and other fisheries, and the dredging for oysters within the harbour, and by section 42 such byelaws were not to operate until they were approved of by the next going judge of assize at Cork. On the 17th July 1809 a byelaw was made, and subsequently was confirmed, prohibiting the dredging for oysters within the harbour from the 1st of January 1810 until the 1st of January 1813. The effect of this prohibition was the complete renovation of the then existing beds and a consequent good supply for some years after. They are now, however, almost destroyed, and of course oysters have become very scarce. But very few are taken, and they are of the excellent quality which you remember them. You would confer much benefit upon us, and render a service to the boatmen themselves, if you could have the fisheries so regulated as to allow the oysters to increase. I apprehend this Local Act is virtually, though not expressly, repealed, inasmuch as the authorities thereby authorized and enabled to enforce its enactments have now ceased to exist.

Believe me to remain, &c.

W. Newman.

That letter was addressed to myself, and upon receiving it I suggested the propriety of making an application for the exercise of the power of our board for establishing what we are in the habit of calling a jubilee, to prevent the capture of oysters for three years. If that were done means might be adopted for restoring the fishery by means of the oyster spat or brood and the suspension of dredging; but that never was called for and never was carried out. I look upon it, however, as an interesting proof given upon respectable authority of the beneficial effect which had resulted from such a suspension of fishing even for a short time in a previous year.

41,679. (*Mr. Lefevre.*) Do you know anything of the Oyster Haven bed?—There is scarcely any bed.

41,680. Was it a failure?—It has been a failure, I am sorry to say. You are speaking of Mr. Cramer's bed, are you not?

41,681. Yes. There was an attempt made to lay down a bed, but it proved a complete failure. He got a licence and he incurred some expense, but he has been quite unsuccessful. I believe the place is not favourably circumstanced for the purpose for which it was required.

41,682. Were there any applications made from Kinsale for a licence to plant oyster beds?—Yes, and they were refused, on the ground of there being a public right.

41,683. (*Professor Huxley.*) That of course would not extend to the power of the board to enact a jubilee?—No, it would not restrain them.

41,684. Because the 91st section of the 5th & 6th Victoria gives them power over all sorts of fisheries, whether public or private?—Yes, but there are special Acts of Parliament, the 8th and 9th and the 13th and 14th Victoria, which have reference to oysters, and which enables the Commissioners to establish a jubilee for a time not exceeding three years in any place where they shall judge expedient, after a public meeting, and I know of no place more desirable than Kinsale.

41,685. I suppose the ground is small?—Yes.

41,686. And it can easily be fished out?—Yes.

41,687. By the 20th article of the 8th and 9th Victoria, it is within the power of the Fishery Board to lay down almost any regulation they like in regard to the fishing of oyster beds?—Their powers are very extensive, but they cannot interfere either with public rights or with private rights.

41,688. Not with public rights?—No, where there is a beneficial oyster fishery, and I confess I was of opinion they were over fastidious in refraining from permitting some individuals who claimed licences to have them in Kinsale Harbour, because I looked upon Kinsale at the time as an utterly exhausted ground. I thought if the individuals who sought the licence were permitted to plant oysters in particular localities the effect would be to spread the oysters over the whole of Kinsale Harbour.

41,689-90. Is there not power given under the 20th section of the 8th & 9th Victoria, chapter 108 which says, "And be it enacted that it shall and may be lawful for the said Commissioners from time to time to make and ordain in the manner and with and under the powers and regulations in the said first-recited Act mentioned, such bye-laws, rules and regulations as to them the said Commissioners shall seem expedient to prevent the destruction or removal from the natural beds of small unsizeable oysters, and to fix by any such bye-laws, rules or regulations the size or dimensions of the smallest oysters which may be removed from such beds, and to appoint such means to be adopted in the dredging and culling of the oysters on the fishing grounds as will secure the return to the sea of all oysters of less dimensions than those to be so fixed, and during any part of the close time, or in places where in pursuance of said second-recited Act dredging for oysters shall be prohibited for a certain period, to prohibit, if they shall so think fit, that any boat shall have on board a dredge or other implements for the taking of oysters, and to make such other rules

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" and regulations as to them shall seem fit for the in-
" crease, improvement and protection of the oyster
" fisheries."

Does that not give a power over any public bed?—Clearly, but a restraining power is not a power to transfer property.

41,691. But having in view this particular case of Kinsale Harbour, it appears to me to be in the power of the Commissioners, according to this particular clause of the Act, to make any regulation which may appear expedient to them to restrict undue fishing; is not that so?—Yes, it is. There is a special section either in that Act or the 13th & 14th Victoria, permitting them to make an absolute jubilee and to interdict the taking of oysters altogether.

41,692. But the point put to us just now by Mr. Dawson was, that it was of no use enacting the jubilee because when the jubilee was over the public were apt to come and fish the oyster beds and carry away the oysters, and that the beds would be just as badly off as if there had been no jubilee at all; whereas it appears to me to be competent for the Fishery Board to enforce a jubilee, and after that time to make such regulations for the fishing of the bed as would prevent a destructive fishing?—You are quite right with regard to what Mr. Dawson means. The privilege of taking oysters from a public bed would enable persons fishing completely to exhaust the bed, and they probably would do so. That is what is feared here. My own opinion is that a regulation might be made to protect the beds after they have been improved.

41,693. Suppose, for example, that all oysters less than $2\frac{1}{2}$ inches in diameter were regularly returned to the sea, the oyster bed would not become exhausted?—Quite true.

41,694. And in a harbour you ought to be able to carry out regulations of that kind?—Yes.

41,695. If the powers given to the board were judiciously carried out it seems to me the people of Kinsale ought to have the thing in their own hands?—I quite agree with you, and yet Mr. Dawson and others think that in Kinsale, if anything is done except on the ground of creating private rights, the people will exhaust the beds notwithstanding any regulations that might be made.

The witness withdrew.

J. Leonard.

JOHN LEONARD called and examined.

41,696. (*Mr. Lefevre.*) Can you give us any information as to the state of the oyster bed in the harbour here?—It is the lobster men who dredge for oysters after the lobster season is over; they have no other way of getting a livelihood except by dredging, and they told me last year that the oysters they were dredging were of a better description and more in quantity than they had had for many years previously.

41,697. What number of men are there dredging for oysters?—I think there are six or eight boats.

41,698. Had they been continually dredging for oysters in previous years?—Yes, I believe so; they commence in October and end in the middle of November, they do not find it pay for the labour after that. I had two lobster boats myself last year and they went dredging for oysters; I have four this year and they go dredging for oysters after the lobster season is over.

41,699. In your opinion do you think it desirable to grant a jubilee for the oyster beds?—I think it is.

41,700. (*Professor Huxley.*) If a strict regulation were made and carried out for culling the oysters, and returning all those below a certain size to the sea, do you think that in that way the oyster bed might be preserved?—I think so.

41,701. And the oyster bed being situate in the harbour could be thoroughly supervised?—Yes, perfectly so.

41,702. (*Mr. Lefevre.*) What is the extent of it?—About 100 yards in one part of it, and higher up it would be something about the same; there are two or three spots where they can get oysters.

41,703. Do the beds extend all over the harbour?—No.

41,704. What is the length of them?—Taking the entire length, it would be about 300 yards in different places.

41,705. But from 50 to 100 yards in width?—Yes, that is the existing bed, but the whole harbour was almost an oyster bed at one time.

41,706. What would be the effect on the lobster men of granting a jubilee for three years?—They would very likely be out of employment for that time; they would have nothing to do in any other way; if you were to allow them to dredge the large ones and throw the small ones over, I think you would gain all the advantage you require.

41,707. You think that would have the effect without granting a jubilee?—I think so if there was a proper supervision.

41,708. At present there is no regulation as to the size of the oysters that may be taken?—No, there have been several times complaints made by the lobster men, who depend for a livelihood upon the fishing, that the Coastguard at the different stations fish for lobsters.

1,709. Is that not permitted?—I think not.

41,710. Do they fish for their own consumption?—They tell me they sell them.

41,711. (*Professor Huxley.*) That is a matter for the Coastguard authorities. If a grievance of that kind exists it should be laid before them?—Yes.

41,712. (*Mr. Lefevre.*) Are there any mussels here?—Yes; those who dredge for oysters dredge for mussels for bait for the long-lines. The mussels they get along the harbour and upon the river, and they bait the long-lines with them. The long-lines have about 1600 hooks on each of them.

41,713. Is the supply sufficient for the long-line-fishing here?—It has not been latterly, but there are only four spilliard boats of a large class here.

The witness withdrew, and the inquiry was adjourned until the 29th of August, at Kenmare.

Kenmare, Kerry, Monday, 29th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

KENMARE.

W. Goodwin.

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WILLIAM GOODWIN called and examined.

41,714. (*Professor Huxley.*) Where do you reside?—Within two miles of Kenmare, at a place called Reen.

41,715. What modes of fishing have you practised?—I followed trawling for a season, as a seaman and not as a fisherman. I was simply in a fishing craft.

41,716. Besides that have you been a trammel-net fisher?—I have been engaged in seine-fishing and in herring-fishing.

41,717. What is the mode of fishing you practise now most particularly?—I do not fish now, I have knocked it off; I found that it would not pay. We could not fish with the craft we had. Herring-nets

are principally what I have, and I had to drop them because I could get nothing to do with them.

41,718. Has the fishing yielded you pretty much the same since you have known it, or has it fallen off of late years?—It has fallen off.

41,719. What kinds of fish did you take generally?—The deep-sea fishing was altogether outside of the river.

41,720. By the river I suppose you mean the whole of the bay here?—Yes, inside the headlands we call the shoal-water fishing.

41,721. What fish do you catch in this inland fishing?—Plenty of flat-fish, soles and sometimes sprats and herrings.

41,722. What do you catch with your trammels?—Flat-fish, principally soles, and a few, though only a few, large white fish; they are mostly all ground-fish we get.

41,723. Do you get any hake with them?—No, very few. They use a different kind of trammel for them only 10 meshes deep, while the big ones are 40 meshes deep.

41,724. What is the size of the mesh?—6½ and from that to 7 inches; the widest will be 7 inches.

41,725. From knot to knot?—Yes.

41,726. Not when it is pulled out?—Yes, when it is pulled out.

41,727. What is the square of the mesh?—3½ inches.

41,728. How long will the trammel be?—From 80 to 90 fathoms; some may be more and some less.

41,729. Have they corks on the top?—Yes.

41,730. Are they leaded at the foot?—Yes, there is a small portion of lead at the bottom to keep them on the ground.

41,731. How do you set them?—They are principally set when the tide runs. They are sometimes put lengthwise on the tide, but principally across the tide. Here is a net (*producing one*). The mesh is 3½ inches.

41,732. Is that the mesh throughout?—Yes.

41,733. There are no smaller?—No.

41,734. The corks float at the top?—Yes.

47,735. What water can the net be set in?—It can be set in 10 fathoms. We never set it deeper than that, but it can be set in from 10 fathoms down to two.

41,736. What do you catch in them principally?—Flat-fish.

41,737. Soles?—Yes, and an odd turbot at times.

41,738. How do they mesh themselves; a sole will get through a mesh of that size, will it not?—They twist and roll themselves in it.

41,739. Then the net is hanging very loose in order to enable them to twist themselves in it?—Yes, the net cannot be but very loose. The tide takes it on and off occasionally.

41,740. Are the fish which you catch commonly of that kind which is not to be caught by the hook and line?—They are often taken with the hook-and-line, but not in shoal water. They are taken with spilliard lines.

41,741. Do you take soles with spilliard lines?—Yes.

41,742. Do you take large soles with them?—Yes, soles of all sizes.

41,743. What bait do they take?—Their general bait is lug or sea worms, which the fishermen take upon the coast.

41,744. Is that a productive mode of fishing; do you get many fish by it?—Yes, many poor people get a livelihood from it. Many of them have had to desert the place and go to the workhouse in consequence of using those nets.

41,745. Are the people who use them mostly fishermen; do they cultivate land as well?—They have no ground, unless they may take a bit in the early part of the season to grow a few potatoes. In that case they must pay for the ground with the produce of their little nets.

41,746. Then do they live altogether by fishing?—Yes.

41,747. They are in the habit of setting their nets out here from the shore as far as 10 fathoms of water?—Yes, and from that up to two fathoms.

41,748. Will they be out in the middle of the channel, as far as Rossmore Island?—They don't fish as far as that. The Seal Rock is as far as ever we see them fish.

41,749. How far down the river do they use that kind of net?—They use them as far down as Fuross, and occasionally up to Corrig. It is principally inside of that rock that they fish.

41,750. Inside of the Drimbulge rock?—Yes.

41,751. All above that is less than 10 fathoms of water?—Yes, it varies from 10 fathoms to two.

41,752. So that trammels can be set all over the water?—Yes.

41,753. When the trammels are set it is impossible for anybody else to fish there; the line men cannot fish there?—Yes, they can.

41,754. Between the trammels?—Yes, it is not injurious to the line-fishers to have trammels set at all.

41,755. Do not their lines get entangled among the trammels?—No, there are only very few of them. They seldom put them out where the line-boats go at all.

41,756. Can trawlers go where the trammels are set?—They do trawl, but it does great injury to the craft.

41,757. Then trawling cannot properly go on where trammel-nets are set?—No, they cannot go on with trawling without injuring the craft in a great measure.

41,758. Was there ever much trawling practised in that part of the river?—Much more than there is at present. I am not out when trawling is going on, but I have seen as many as eight of them in this narrow river.

41,759. Have you been trawling yourself?—Yes.

41,760. What sized boats are used in trawling?—From five to 10 and 12 tons.

41,761. Are they open boats?—Yes.

41,762. What kind of rig have they; are they cutter rigged?—Yes, the boats we generally have here are what we call hooker rigged.

41,763. What kind of trawl is it they use, is it a pole-trawl or a beam-trawl?—A beam-trawl.

41,764. What is the size of the beam?—That is according to the length of the boat. Some are 17 and some 20 feet.

41,765. What is the usual size of the mesh?—From 3 to 3½ inches I think, but it is less than that in the cod of the net.

41,766. That is about 1½ in. from knot to knot?—Yes, it is 1½ in. from knot to knot. The net is from 3 to 3½ inches measured when the net is pulled out.

41,767. Is the mesh smaller in the pocket of the trawl?—Yes.

41,768. You have been fishing with a trawl?—Yes, with a pocket, in the Kenmare River.

41,769. Did you notice whether any small fish were caught in the trawl?—No, it was not the season of the year to get anything but flat-fish.

41,770. Was any large proportion of small unsizeable fish taken in the trawl?—Yes, a good many.

41,771. How much would there be thrown away as not saleable out of the whole?—I don't know that I can be exact about that.

41,772. Would one half be thrown away?—No, not one half.

41,773. A third?—Yes, perhaps a third. There was some portion that was not fit for the market.

41,774. (*Mr. Lefevre.*) What were those fish?—Small flat-fish.

41,775. Flukes or soles?—Plaice, dabs, and other small fish, and small soles.

41,776. (*Professor Huxley.*) Were there any small turbot amongst them?—No; I never saw small turbot taken up.

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41,777. Did you ever see any spawn taken up?—It was not the season for it. It was in June, July, and August that I fished. That is a different season from the season when the spawn of the fish is deposited.

41,778. Have you any reason to think that the spawn of fish is deposited up in the Kenmare River as high as the trammels are set?—I think it has been.

41,779. Have you ever seen it?—I have seen it in roots and weeds and pieces of the branches of trees that might be taken up from the bottom. I have frequently seen that.

41,780. How did you know it was the spawn of fish; what kind of looking stuff was it?—It was like jelly. I have frequently seen spawn lying in the bottom of the boat after the herrings have been taken.

41,781. Was this stuff you speak of like that?—Yes, it was, something similar to it

41,782. Then you are in the habit of practising herring-fishing as well?—Yes.

41,783. Do the herrings come up as high as Drimbulge Rock?—Yes, it is a nursery for all kinds of fish. The hookers cannot be fishing at this time of the year without getting lots of small fish.

41,784. Do the herrings come up in great quantities?—They did so formerly but not lately.

41,785. How long is it since there has been a great take of herrings here?—Ten or 12 years. They were then in great quantities in Bow stream and we got some seines for them.

41,786. You were speaking just now of catching sprats, do they come up here in great quantities?—Yes, they used to do, but of late very little has been taken since I came here. The people have the craft on shore and don't use them. Many of the fishermen have them, but they have not been able to use them for the last 10 or 15 years.

41,787. Is that because the sprats have not come up?—If they have come they have not been allowed to stop here.

41,788. What is the reason?—I think it is in consequence of trawling being carried on to such an extent that the fish cannot stop. We like to breathe fresh air ourselves, and the fish like to have clean water.

41,789. Do you think the trawlers disturb the bottom so much that the fish cannot remain in it?—Yes, I do.

41,790. What time do the sprats come up?—In August, September, October, November, and even December.

41,791. Does much trawling go on then?—Yes.

41,792. Is the water salt up in the higher part of the Kenmare River?—That is according to the freshes that run down. If there are great falls of rain the water will be more fresh. It is salt, and if there are no falls of rain it will be quite salt.

41,793. Have there been unusual quantities of fresh water?—There were last year and the year before. This year we have found it as salt as we ever had it. It has mostly been salt in every part of the river.

41,794. Do you think that any other kind of fish have fallen off except sprats—have soles fallen off?—I am certain they must have fallen off, although Colonel Holden has taken great quantities in the nets he has for his own use. I never saw so many taken.

41,795. Is that the case with the trammel fisheries generally?—Yes; they would take a great many, but they cannot use their craft. Some of them have given their boats up altogether.

41,796. I do not quite understand you; you say that great quantities have been taken, but the people are not able to use their trammels?—No, they have not been able to use them.

41,797. How is that?—On account of the trawlers.

41,798. They have been prevented by trawling?—Yes.

41,799. There have been persons prevented using the trammel-nets by trawling?—Yes.

41,800. (*Mr. Lefevre.*) Have the trammels been given up?—They have partly been given up.

41,801. (*Professor Huxley.*) Was there not some regulation made by the Fishery Board some time ago on that subject?—I don't know whether there was or not.

41,802. Was there an inquiry held here?—Yes, a short time ago.

41,803. Was anything done?—Nothing more than usual.

41,804. Was there a complaint made to the Fishery Board that the trawlers interfered so much with the trammel men that they could not fish?—It was stated, but not by me.

41,805. But it was stated by other persons?—Yes.

41,806. Is that the general complaint of the trammel fishermen?—Yes.

41,807. That they are prevented from fishing by the trawlers?—I think in their evidence that that will appear.

41,808. Has the hook-and-line fishing fallen off? In the first place let me ask what sort of hook-and-line fishing is practised here; is it long-line fishing or hand-line fishing?—Hand-line fishing.

41,809. Do you fish towards the mouth of the bay—where do you go to fish with the hand-line?—We fish off here.

41,810.—Up above Drimbulge Rock?—Yes, they have only weak boats and the crews here are not strong.

41,811. What kind of fish do they get here?—Bream, hake, and cod and ling sometimes.

41,812. Is there much codfish?—No.

41,813. Do not the people go further down to fish?—No, they cannot. Their little boats are not suitable for that. The poor men have only small boats, and they are not able to go out to fish. They are not furnished with sails or anything of that sort, and they can do very little off here.

41,814. Do they set long-lines as well as hand-lines?—I believe there is only one who has spilliard lines.

41,815. Where does he set them?—About the Dinish Rock.

41,816. Do the trawlers interfere with the lines at all?—I don't think they do, because they are out of the way of them.

41,817. They are on the hard ground?—Yes.

41,818. Where the trawlers cannot work?—Yes.

41,819. Do the trawlers interfere with the hand-line fishermen?—I cannot say.

41,820. What is your opinion?—They will injure the fishermen if they come across them.

41,821. Do the trawlers interfere with the hand-line men?—I once had to haul up because they trawled under the stern of my boat. I had to do that one time.

41,822. Then the trawlers interfere very little indeed both with the trammel-net fishing and the hand-line fishing?—They must interfere to some extent. When they trawl upon the same ground they must trawl upon them.

41,823. Do you think that they have simply occupied the ground or diminished the supply of fish?—They occupy the ground, and I think they scatter the fish; that is my opinion.

41,824. Does not the line-fishing go on throughout the length of the river further down than Drimbulge Rock?—No; but I think the bay is well furnished with fish if the fishermen went out.

41,825. Then nobody goes down from Kenmare to fish down this great length of river?—Not one, except a trawler or two.

41,826. Do the trawlers work down inside of this ground?—They work from Rohancorrig to Dawros Chapel.

41,827. That is not above 45 miles from Kenmare?—That is all.

41,828. Is all the ground outside of that absolutely unfished?—Yes.

41,829. It is not fished all the way from there to the headlands?—No.

41,830. Neither by line-fishing, trawling, or any other kind of fishing that is carried on there?—No, except by people from the shore who come out.

41,831. Do they set trammels along the shore?—Yes, hake-trammels.

41,832. Are there many hake-trammels set down there?—Yes.

41,833. That is the principal fishing which goes on there?—Yes, trammel-net fishing for hake is the only fishing practised there. I am sure if the fishing were supported there as it is on the west coast of Ireland they would knock a good livelihood out of it. If they could only get good boats, craft and lines, they would then be able to stand out to sea and work their long-line spilliards.

41,834. You think there is a good fishing if they had enterprize enough to work it?—Yes.

41,835. Is there much sea there?—At times there is a good sea, but when they have good spirited crews they are men prepared to encounter a heavy sea.

41,836. They want good boats?—Yes, boats that would not come in from the Saturday till the Monday.

41,837. Is there a good market for fish at Kenmare; could you sell any quantity you could get?—They sell as many fresh as they can, and what is not sold they salt and store up.

41,838. If there was plenty of fish could they sell all they catch?—They could sell a great deal more than they do now. I never saw a day in Kenmare market on which they could not sell more than they do.

41,839. (*Mr. Lefevre.*) How many trawlers are there fishing on the ground you speak of?—Not more than four at present.

41,840. Are there not more than that in the season for trawling?—I believe there are.

41,841. Do they not fish on the same ground you have been speaking of?—Yes, I have seen boats from Blackwater and Westport trawling there, and there may have been others which I did not see.

41,842. Do you think the trawlers prevent the herring and sprats from coming up the bay?—I cannot say.

41,843. Do you think the trammel-nets frighten the herring and sprats?—The hake-trammels do, but they are only set here very seldom. There may be a glut of fish when they will be set for a fortnight or three weeks.

41,844. Do the trammel-nets set for hake prevent them from coming?—We were always of opinion that they did injury to them in shoal water, but I cannot say positively; we never had any certainty with regard to it.

41,845. What time of the day do you set your trammel-nets?—The hake-trammels when I have seen them have been set between four and six o'clock in the evening, and they haul them up according to the weather. Perhaps if the weather is bad they will not haul them until next day.

41,846. When are the trammel-nets set for flat-fish?—Generally in the evening. They have been taken by the Coastguard.

41,847. For fishing in the daytime?—Yes.

41,848. How long ago is that?—It was in the first of the season. I think it was in June.

41,849. Do you think it is disadvantageous to the fishing to prevent them setting their nets in the daytime?—I think that would be better than to have them out at night.

41,850. Do the trawlers fish much in the night-time?—Sometimes they do, particularly if there is a moonlight night.

41,851. But not habitually?—No.

41,852. How many of these trammel-nets were there set this last season?—There would be something like 20 of them.

41,853. How many are owned in Kenmare?—I cannot tell.

41,854. Have some gone out of use?—Yes, some have left the country altogether.

41,855. In consequence of the trawlers?—Yes, and other things. If they lose their nets they lose their fishing altogether, and they are never able to get their craft together again. Small as they are they are not able to muster others. They are only a poor class of people, and they cannot buy a net if they lose the one they have already.

41,856. What is the cost of a net of that sort?—About 1*l.* or 25*s.*

41,857. Are the nets owned by the fishermen themselves?—Yes.

41,858. Are there any mussel-beds in the bay?—Yes.

41,859. Where are they?—About three miles from Kenmare. I believe they are mostly about the north side of the river.

41,860. Are there many men employed in collecting the mussels?—Not many.

41,861. Do they export any great quantity?—Yes; when the Kinsale fishermen come here they take them for bait.

41,862. Do you use them for bait for the long-line fishing or the hand-line fishing?—For the hand-line fishing and for tusk and cod.

41,863. Are the beds as plentifully stocked as they were?—I don't know that they have diminished very much; the fish are always spawning, and consequently the beds are kept up.

41,864. Are there any oysters-beds here?—Yes.

41,865. Where do they lie?—Mostly from Dinish Island up the river.

41,866. Quite high up the river?—Yes.

41,867. How many boats are there employed dredging the beds?—I believe there are seven from this place, but there are more from other places; perhaps there will be as many more.

41,868. Do they observe a close-time?—Yes.

41,869. Have the beds increased or diminished since they observed a close-time?—I don't think there has been any diminution; I rather think they have increased. The oyster fishermen have done a great deal better this season than formerly.

41,870. Has the number of boats fishing increased?—Not at present.

41,871. Are there about the same?—Yes, but there was more deep-sea fishing when I came here 20 years ago; I don't know the reason why it fell off, but it is getting up again now.

41,872. Do you catch in your trammel-nets any small flat-fish?—No.

41,873. What is the smallest fish you catch?—The smallest flat-fish we catch are never less than five inches on the square.

41,874. Five inches across?—Yes.

41,875. Was that fluke and plaice?—Plaice. They would not be taken if it were not for the fish getting across the net; fish of that size are very rarely taken.

41,876. What is generally the smallest?—The smallest sized fish we catch are generally from 6 to 8 or 10 inches.

41,877. Ten inches across?—Yes.

41,878. Do the trawlers catch more small fish than you do?—Yes.

41,879. Of all sorts?—Yes, anything they come across when fishing.

41,880. I suppose in the night-time, even on a moonlight night, the trawlers cannot see your buoys?—No, they cannot. The distance is about 90 fathoms, and they are small buoys.

41,881. How many have you?—Two.

41,882. One at each end?—Yes.

41,883. They are so far apart that the trawlers cannot see them?—Yes, they are at a distance of 80 or 90 fathoms apart, and the trawlers cannot see them in the night-time.

41,884. Would it not be possible to have larger buoys?—Yes, but if the injury is done what is a poor man to do; how is he to get redress?

The witness withdrew.

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DANIEL TEAHAN called and examined.

41,885. (*Professor Huxley.*) Are you a trawler here?—Yes.

41,886. How many years have you been trawling from this place?—About 16 or 17.

41,887. What sized vessel do you use for trawling?—The boat in which I trawl at present is I think 8¼ tons.

41,888. It is an open boat, I suppose?—Yes.

41,889. Has it any half-deck forward?—It is about one-third or a quarter decked forward, not entirely from the mast, but about a foot from the mast.

41,890. What kind of trawl do you use, a pole-trawl or a beam-trawl?—A beam-trawl.

41,891. How long is the beam?—About 24 feet.

41,892. And what is the size of the mesh in your trawl?—About 5 inches.

41,893. That is the back,—the upper part of it?—We have them all made of one-sized mesh in this river.

41,894. Is not the pouch of the trawl smaller?—No.

41,895. Then the size of the mesh is 2½ inches from knot to knot?—Yes.

41,896. Do you have the rope of the trawl loaded?—Yes, the foot-rope.

41,897. What is the weight of the head-irons of the trawl?—About 18 or 20 pounds.

41,898. Not more than that?—No.

41,899. What is the ground over which you fish when trawling?—From Roancorrig to Dawros River, that is where we make the greatest hand of the fishing; at other times we go down as far as Dinish Point.

41,900. The length of the ground you trawl over, then, is about two miles?—Yes.

41,901. And the width about half a mile?—I cannot say, it will be thereabouts.

41,902. And there do not seem to be more than four or five or six fathoms of water on it?—The depth of water varies from two and a half to seven fathoms.

41,903. It is nine down at the outermost end of it, and from that down to two?—Yes.

41,904. Have you been trawling over that ground for a number of years?—Yes.

41,905. For how many years?—Sixteen or 17 years.

41,906. Do you trawl all the year round?—No.

41,907. How many months of the year?—It commences on the 1st of July and we fish up to the 20th of January, or so on.

41,908. Why do you not fish all the year round?—The fish are spawning in February and March, and we do not think they quite recover until June or July.

41,909. What leads you to believe that the fish are spawning there in February and March?—That is the time when we find the pea coming full in them—about the 20th of February.

41,910. What kind of fish are you referring to now?—Plaice.

41,911. Do you find plaice full of roe in January?—Yes.

41,912. And in February?—Yes; I have fished for them in February and found them in a poor state.

41,913. Were they shotten?—They were quite thin and soft, and I believe they were after spawning.

41,914. Have you any reason to think that those fish spawn on this ground at that time?—It was not upon this ground that I got them.

41,915. Have you reason to believe that the fish spawn upon the trawling ground?—No, I do not think so.

41,916. Then what makes you leave off trawling then?—The fish go in-shore to spawn.

41,917. If you were to take the fish would you obtain any price for them in the market?—No, I think not.

41,918. Then is not that the reason why you leave off fishing them?—No, it is not.

41,919. What is the reason?—They would not pay for the wear and tear of the nets.

41,920. You mean that you would not get price enough for them?—No, we should not.

41,921. You do not trawl over this ground for more than six or seven months in the year?—No.

41,922. Do you trawl every day in the year?—No, we cannot trawl every day.

41,923. Why not?—If we have too much wind or if we have none at all we cannot trawl.

41,924. Do you occasionally get too heavy a sea up here?—Yes, we frequently get a very heavy sea and very heavy squalls of wind.

41,925. How many days in the week do you trawl, on the average?—Some weeks we trawl every day.

41,926. Do you think that you trawl three days a week on the average?—Yes, about that time.

41,927. Do you work at night as well as in the daytime?—Yes, upon a moonlight night.

41,928. But not upon a dark night?—No, because the place is full of foul ground, and we cannot go over it on a dark night or even when there is a fog or a mist.

41,929. How many sail will there be fishing in addition to your own boats?—Sometimes six or seven and at other times there may be none but myself.

41,930. Taking one day with another will there usually be three boats working over the same ground?—No, I do not think so.

41,931. Will there not be as many as that?—No; some days there may be three or four or five, and I recollect having seen six or seven.

41,932. You think there will not be more than three fishing there, taking one day with another?—I do not think there will be.

41,933. What would you consider to be a tolerably good catch of fish; how much for a day's work?—Something like a dozen score of fish.

41,934. Of plaice?—Yes, of plaice and soles.

41,935. Do you get anything besides plaice and soles?—Yes; cod, hake, turbot, ling, and john dorey.

41,936. Do you get them in great numbers?—No, very rarely.

41,937. Do you ever get skate?—Yes.

41,938. On the average two or three boats have been fishing there two or three times a week for the last 15 years?—Yes, that will be so, speaking roughly.

41,939. You say that you have been fishing there for about 16 years?—Yes, 16 or 17 years.

41,940. Has the number of boats engaged in fishing there increased since you began?—I do not think there has been any increase in the number of boats.

41,941. Are there about the same number now?—Yes; there are about the same number of boats on the river, but I do not think they have stuck to the trawling.

41,942. Do you think there has been pretty much the same number of boats during that time?—Yes.

41,943. Taking one year with another, have they got as much fish as they did formerly?—No; they do not take as much as they did when I began fishing. For the first five years I began they took a great deal more. I remember when there were six or seven trawlers fishing upon the river. They stuck to the ground, and cleaned it for the fishing. There was a great deal of broken seaweed and stuff upon the ground, and when that was the case we would not take the fish. Our foot-rope will not lie upon the ground among it.

41,944. Is it because the fish are not there, or that you cannot take them, that you do not get them?—I cannot say.

41,945. Do you think that the more trawling goes on within reasonable limits the more fish you get?—Yes.

41,946. Because you keep the ground clear?—Yes; the more they trawl over the ground the more the fish will lie upon it.

41,947. Do you ever get many small fish in the trawl?—No.

41,948. You do not catch many unsaleable fish?—We catch some, and the reason we take them is that they are among some of the broken weed. They get among the broad leaves of the weed. We find such

things as small plaice and sand dabs. I do not think I ever saw many small plaice among the fish, but we get what we call small dabs.

41,949. Is there no other ground fit for trawling but that small spot ?—It is very foul elsewhere.

41,950. Is it rocky ground ?—Yes.

41,951. Are there no good trawling patches further down the river ?—I never saw any.

41,952. Has anybody ever been to try ?—I never tried any myself.

41,953. This patch of ground, of which there is not more than a square mile, altogether, has yielded to a couple of boats a fair living for the last 16 or 17 years ?—Yes.

41,954. Taking one year with another ?—Yes, and a very fair living, too.

41,955. How many men do you have in each boat ?—Two or three, and some have four.

41,956. Supposing there was no trawling going here, would the line fishermen be able to catch the soles which you catch now ?—I do not know. I am not expert at line fishing.

41,957. Did you ever see them take any soles with the line ?—I think they get plaice, but I do not know whether they get soles.

41,958. Is there a good market for the fish you catch in Kenmare ?—Yes.

41,959. When the weather is too bad for you to fish do the line men fish ?—No, I do not think they do; on the contrary, I think we fish when the line fishermen cannot go out. Perhaps they might fish if they increased the size of their boats, but it would be difficult then for them to come out and go in.

41,960. What sort of a supply of fish do you get to the market as compared with the line fishermen ?—We supply a greater quantity than they do.

41,961. Do you supply very much more ?—Yes; three or four times as much, I should say.

41,962. And that is the case now ?—Yes. There has not been much of a price this year, and we have not trawled much; but the time is now coming on, I think, when we may fish. The winds have been very light all through this year.

41,963. (*Mr. Lefevre.*) Have the trammel-nets for soles been used ever since you have been fishing for soles ?—Yes.

41,964. And as many as ever ?—Yes.

41,965. Do you often get your trawl entangled in the trammel-nets ?—Yes; I have carried them away on some occasions when I did not know that I had them. The buoy which they put over the trawl is no buoy at all—it is only a bit of a grass lath stuck over a stick.

41,966. A little stick rising from the centre of two crossed sticks ?—Yes.

41,967. What distance can you see it ?—If there was not much of a ripple on the water I should see it for very nearly a quarter of a mile.

41,968. Not further than that ?—No.

41,969. Do you find that these nets are set at all in the daytime ?—Yes.

41,970. Then they do not observe the regulation with regard to setting them at night ?—They did not until the Coastguard seized them.

41,971. The Coastguard interfered with them last year ?—Yes.

41,972. Previous to that time they set them in the daytime ?—Yes, at all hours of the day.

41,973. If they are set in the night time do you find it easy to observe the buoys in the water when you are trawling ?—If they were not very close to me I could not tell them; but if they were kegs lower down the river I might see them.

41,974. If they used larger buoys do you think you could keep clear of them ?—Yes; kegs are used all up the river, but here the buoys are different.

41,975. Do you ever come across the trammel-nets which are used for catching hake ?—Yes; sometimes I have done so.

41,976. On the ground you speak of ?—Yes.

41,977. Do they use larger buoys than the trammel-nets used for catching soles ?—Yes.

41,978. Notwithstanding that you have dragged them away sometimes ?—It is against our conscience to drag them away, because it is an injury to ourselves as well as to them; but frequently they are standing right across the passage of our trawl. We avoid them if we possibly can, but sometimes a wind will catch us from the shore and drift us upon their nets. It is of no good to us to get among them and come foul of them, because we take no fish then and only cause ourselves a delay.

41,979. Do you always look out for them ?—Yes.

41,980. With regard to the price of fish, do you get as good a price for your fish as you were in the habit of getting 16 or 17 years ago ?—It is three times as good.

41,981. Then your fishing is more successful than it used to be ?—Yes; and there are not as many people following that occupation now compared with the number which followed it years ago.

41,982. Why is that ?—I think it has proceeded from the failure of the potatoe crop.

41,983. What do you do in the rest of the year when you are not trawling ?—I go about and turn my hand to anything I can earn a shilling or a pound by.

41,984. Do you use your boat for long-lines ?—No; there are no long-lines used up this part of the river.

41,985. Are there any hookers at all now from Kenmare ?—Yes.

41,986. How many ?—I believe there are three or four.

41,987. Do they fish over the same ground as that upon which you trawl ?—Yes, they do.

41,988. Do they go further out ?—They do not, but these four are not used in the fishing at present; they may be before the season is over.

41,989. (*Professor Huxley.*) Have the trammel men no ground to fish on except the ground you trawl over ?—Yes.

41,990 Do they set their trammels close in-shore where you cannot trawl ?—Yes.

41,991. If they kept out of the trawling ground you occupy would they have ample space to fish in ?—Yes.

41,992. It would seem from the map that they would have as much area as you have to trawl over ?—Yes, but we must keep clear from the shore.

41,993. Are there any good marks by which you could make sure of keeping to the middle ground, supposing you were limited to a particular space ?—I do not know of any. We could have marks at each end of the trawling ground very easily.

41,994. Supposing you were limited to a ground bounded on the north by a line drawn from Rohancorrig to Dunkerro, and on the south by a line drawn from Brennan to Dinish Island—would that suit you ?—Yes.

41,995. If you were limited to that and not allowed to go within any of those lines would that be ground enough for you to trawl over ?—Yes.

41,996. You would not wish to be anywhere else ?—No, we would not desire to be anywhere else.

41,997. Is there anything else you would wish to suggest ?—No.

41,998. (*Mr. Lefevre.*) Do any trawlers come from a distance to fish in this bay ?—Very seldom.

41,999. Do they come from Cork ?—I do not think so. I saw a boat there once when I was fishing.

42,000. Do you never see the large trawlers fishing further out in the bay ?—There are one or two that come out in the week and then go away again.

42,001. Are they as small a class of trawlers as your own ?—Yes.

The witness withdrew.

KENMARE.

W. Goodwin.

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WILLIAM GOODWIN re-called and examined.

42,002. (*Professor Huxley.*) Supposing a line were drawn from Rohancorrig to Dunkerro on the north, and another from Brennan Island to Dinish Island on the south, and if you as trammel men were forbidden from fishing in the said channel between those lines, would it be a hardship?—I could not fish there.

42,003. Is the ground to the north and south of those two lines too rough?—There are very few fish that frequent them in-shore there. It would be useless for a poor man to try to get a living by his nets there.

42,004. Then you want to fish on the very ground that the trawlers wish to fish upon?—Yes, and we might as well give over fishing altogether as give it up.

The witness withdrew.

D. Casey.

DANIEL CASEY called and examined.

42,005. (*Professor Huxley.*) How long have you been fishing here?—Off and on ever since I was able to fish.

42,006. What kind of fishing?—Line fishing.

42,007. But have you been trawling as well?—Yes, I was trawling too for a short time.

42,008. Have you ever worked with the trammel-nets?—Yes, I have a trammel-net which I used for two years. It is one of the small-fluke trammels.

42,009. Did you hear what was stated by Goodwin about trammel-net fishing?—Yes.

42,010. Do you agree with what he said—do you think it was right?—I cannot say whether it was or not, but I think these small nets have nothing but the shallow ground from Rohan Island to fish upon—they cannot trawl anywhere else.

42,011. Do you think, then, that the ground upon which the trammel men wish to set their nets must be the same as that upon which the trawlers want to trawl?—Yes.

42,012. They both want to work over the same ground?—Yes, and they trawl more over that ground than any other ground.

42,013. Is there any complaint you have to make with regard to the fishing here?—Yes, I have a complaint to make.

42,014. What is it?—I do not think it is fair for us poor people to go out in the evening to set our nets and in the morning to take them in again when these trawlers are allowed to go over them and take the nets away.

42,015. The trawlers work over the ground and carry away the lines?—Yes, they will carry the lines out of a man's hand if he is fishing in some of the small yawls.

42,016. Does that often happen?—I only heard of one man to whom it occurred.

42,017. Did you ever work with the long-lines?—No.

42,018. Do you work with hand-lines?—Yes, off and on.

42,019. Have you ever had your lines carried away by the trawlers?—My net has been carried away, but not my hand-lines.

42,020. Your trammel-net?—Yes.

42,021. Is there anything else you wish to state to us?—Yes.

42,022. What is it?—I wish to say that it is of no use for us poor people to have nets there if they are allowed to trawl there both by day and night. They do great injury to the hookers as well.

42,023. Do you mean to say that neither trammel-net fishing nor hooking can go on as long as the trawlers are at work?—I mean to say that they are trawling every day in the year; when the hookers are idle they are at work.

42,024. Then in your opinion the trawling is putting a stop to all the other kinds of fishing?—When the bag of the trawl is full of muck and dirt and other things everything it comes across it injures, even the oysters.

42,025. Do you think that it damages the supply of fish?—Yes, I think it destroys everything it comes across.

42,026. What you say is that trawling is destroying the fishing?—Yes; since the trawlers came here we have got no fish.

42,027. But the trawlers get plenty of fish?—Yes.

42,028. They get them year after year?—Sometimes they do.

42,029. They seem to find it answer very well?—I do not know that.

42,030. They cannot drive the fish away, then, if they contrive to catch them?—I suppose the fish try to shun them as well as they can.

The witness withdrew.

T. Husbands.

THOMAS HUSBANDS called and examined.

42,031. (*Professor Huxley.*) Were you a fisherman here for many years?—Yes, I fished for more than 20.

42,032. What kind of fishing did you practise?—Flat-fish and net and line-fishing.

42,033. With trammels?—Yes.

42,034. Did you use the trawl at all?—Never but one evening. I never made more than one scrape with the trawl.

42,035. Do you think the fishing is falling off in the river?—Indeed it is.

42,036. Do you speak now of trammel-fishing and line-fishing?—Yes.

42,037. What do you think is the reason of it?—When we first got these trammels in the river 30 or 40 years ago anywhere they were put out a man could live well by the fish he took. There was no trawling then, but since the trawling commenced the fish have fallen away; even the sprats and herrings and the pilchards and all kinds of fish are falling away.

42,038. But the trawlers contrive to make a very good thing of it?—They are not taking anything in comparison with what they were taking then.

42,039. Still they contrive to get fish enough to pay them?—I cannot say that.

42,040. Did you not hear that stated just now?—Yes.

42,041. It would appear from that that they do not drive the fish away?—A trawl must frighten the fish.

42,042. But the question is whether it does or not; have you any good evidence that it does?—The trawlers perhaps do not drive the fish away, because the trawl takes everything that comes across it.

42,043. What other harm does trawling do besides frightening the fish?—I believe that it destroys the spawn.

42,044. What spawn do you mean; the young fish?—Flat-fish and other spawn.

42,045. Do you mean young fish or the pea?—I mean young fish and eggs as well.

42,046. Do you think that the fish spawn in the centre of this river?—I will not say that, but they may spawn on both sides of the river and in the centre equally.

42,047. Have you ever seen a trawl when it was hauled up?—No; I never had occasion to trouble myself much with trawling except once.

42,048. And what did you get then?—About a dozen flat-fish.

42,049. Then what you say is from report; you have no knowledge of the matter yourself?—No, but every man here blames trawling for the falling off

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of the fishing, because there were plenty of fish before trawling commenced in the river; then we had whiting and all other kinds of fish that can be hooke after. We had plenty of hake too.

42,050. (*Mr. Lefevre.*) When were trammel-nets first introduced here?—About 30 years ago.

42,051. Was it immediately after the bounties were given up?—I do not know that, but it was 30 years ago.

42,052. When was trawling introduced here?—About 30 years. I recollect the first trawl being put down in Kenmare River. I towed the yacht which put out the first trawl.

42,053. When was it the trawlers first began to trawl over the ground we are talking about?—It will be 20 years ago at least. There are eight or nine of them that go trawling there now. They go out at the night time too, and upon very dark nights as well as moonlight nights.

42,054. When did you observe the diminution in the fish begin; how long ago?—It has been diminishing for the last nine or 10 years; it has been falling off all that time. With regard to sprats and herrings and pilchards, they were about here in considerable quantities 20 years ago, but there is nothing of any consequence to be got now.

42,055. Do you know anything about the pollack or bream-fishing here?—No, very little. A few pollacks are taken here, but I only fish with a hand-line.

42,056. You are quite sure that the trammel-nets do not frighten away the fish?—No, they do not.

42,057. They have not kept the shoals of sprats and herrings out of the bay?—No, because they are laid on the bottom and the fish come in on the surface.

42,058. Do the trammels that are set for the hake do it?—I will say nothing about that because I never had one myself.

42,059. There are a great number of them set in the bay?—No, unless upon the Marquis of Lansdowne's property. They are not set on this side.

42,060. Have you formed any opinion whether the trammels which are set for hake frighten away the fish?—No, nothing that is stationary will frighten away the fish unless the weed is scraped up.

42,061. Do you think it is only the trawls that frighten the fish?—Since they began to trawl the fish have decreased.

42,062. And you attribute the falling off in sprats and everything to that?—Yes.

The witness withdrew.

THOMAS SPILLANE called and examined.

T. Spillane.

42,063. (*Professor Huxley.*) Have you been all your life engaged in fishing?—Yes, all my life, as far as 30 years at any rate.

42,064. What kind of fishing?—All sorts of fishing, unless it is hake-fishing.

42,065. Have you practised trammel-net fishing?—Yes, fluke trammel-net fishing.

42,066. Do you think that the supply of fish is remaining about the same, or that it is falling off?—I know very well it is.

42,067. Is what? is it falling off?—Yes, we have got no fish in this river for the last 15 or 20 years.

42,068. No fish at all?—Nothing to signify. We have had nothing in comparison with what we got formerly.

42,069. What is the principal fish you got 20 years ago?—Sprats, herrings, and flat-fish.

42,070. Soles as well as plaice?—Both soles and plaice.

42,071. Did you get soles with the line?—No, I never took one with the line.

42,072. How did you get them?—With the trammel-nets.

42,073. What is the reason of the falling off?—I do not know. Of course we only blame the trawlers for it.

42,074. How do you think they do you a mischief?—By destroying the spawn. They are the only persons who do us an injury. The fish come into the river into water which runs from 2½ fathoms to 6 fathoms deep and that is no trawling ground at all. No trawls ought to be used in such shallow water.

42,075. We are told that the trawlers do not work in the spawning season; that they do not work from January until July?—But they do, and their net is able to take any kind of spawn that it comes across.

42,076. When you use the word spawn do you mean the eggs of fish or small fish?—The eggs of fish.

42,077. Do the trawlers work between January and July?—On or about Christmas the fish come into this part to deposit their spawn, and when the ground is trawled over during that time they cannot help but destroy the spawn.

42,078. We only know what we are told; the trawlers tell us they do not work after the beginning of January?—Yes, they do; they work every day in the year that it answers them to work.

42,079. You tell us they do?—Yes, I tell you just the reverse of what they have told you.

42,080. They do work during those months?—Yes, every day they have a mind to work they work.

42,081. Have you seen them working in the months of February and March?—Yes, at all times, except for a short time in the spring.

42,082. I ask you particularly whether you have seen them working in those two months?—Not in March and April.

42,083. Do they do it in January and February?—They do.

42,084. Have you seen them yourself trawling in February?—Yes, I often have. I am on the sea every day in the year, and I have a good opportunity of seeing them. They cannot go anywhere down the river without my seeing them.

42,085. You think it is from January to July that the fish are spawning on the beds?—Yes.

42,086. Do you find the fish full at that time?—Yes, and dropping the pea.

42,087. What fish do you refer to?—Herrings.

42,088. But the trawlers do not catch herrings?—No, they do not.

42,089. But you think they destroy the spawn of the fish there?—They destroy the eggs when they have been deposited.

42,090. Do you think that the soles and plaice deposit their spawn in the winter time?—Yes, on the very ground they work over between Horse Island and Dinish Island.

42,091. But the soles are not full until a later period?—After Christmas and from then up to the 1st of January; about that time.

42,092. Do the herrings come in to deposit their spawn in the middle channel or above Perch Rock?—Yes, they do.

42,093. What makes you think they deposit their spawn there?—I often see a little of it.

42,094. Do you see the herrings there in great quantities at that time?—No; but I see the eggs tied to little bits of wood at that time.

42,095. How do you know they are the eggs of herrings?—I have seen the pea dropping out of the herrings when I have taken them.

42,096. And this is very like it?—Yes.

42,097. Are there no herrings found up there at that time?—No; they are not frequent in the river at any time now.

42,098. Then if the herrings do not come there, how is it that the eggs are found?—They have not been found of late, but they were formerly.

42,099. How many years ago?—From 15 to 20 years ago.

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42,100. Do you think the trawlers have carried off all the herring spawn, so that no more herrings come?—They will clear everything they come across. They have a large beam and a heavy foot-rope, and they will take the lead-line that a man sails with, or an anchor, and everything they come across.

42,101. Is not the spawn small enough to get through the mesh?—No, when it is dirty like manure. They will also take oysters. I have sold more than 2*l.* or 3*l.* worth of oysters for them in the Cork market with my own.

42,102. Then this trawling has been going on for the last 20 years?—Yes, and more.

42,103. If they have been doing so much mischief every year to the spawn of the fish, how is it that the fish have not come to an end altogether?—The fish are rapidly coming to an end. Nobody cares about fishing now, because it is not worth their while.

42,104. But the trawlers go on catching fish enough?—It is paying them because we have drawn back from the fishing and they are getting a good price for the fish they sell. If we were fishing now as we did some years ago they would not get the price they are getting now. It is the increased price that is paying them. They are not getting one-tenth part of the fish they got formerly, but they are getting a very good price for it.

42,105. Do you mean to say that the trawlers get a better market because the hookers do not compete with them?—Yes, we drew back and they are now getting a good price for their fish, although they are not selling one-fifth of that which they formerly took. The reason of that is that the fish are not there for them to catch.

42,106. Then according to your account the trawlers are destroying the fish in the river?—That is my opinion.

42,107. Then do you think that trawling ought to be put down altogether?—I think this is not a fit place for trawling. It is only a little river and the water is very shallow. If they want to follow trawling they ought to trawl away off the headlands.

42,108. But if there was no trawling going on you could not catch the soles which they catch now, could you?—I could catch them with the trammel-nets.

42,109. But could you supply the market with as large a quantity of soles as is now supplied if there was no trawling?—Yes, I could supply the market with soles and plaice, and I should have in addition an immense lot of sprats and herrings.

42,110. Do you think the trawlers have driven the sprats out of the river?—I cannot blame anything else for it, because they have not frequented the river ever since trawling took place. I have a share in three seines of the value of 50*l.* and I have got nothing by them for the last 20 years.

42,111. What is there about trawling that drives the sprats away; are the sprats frightened?—Going through a shoal of them with the trawl drives them away; they are driven from one place to another.

42,112. (*Mr. Lefevre.*) How long is it since you had a good season for herrings?—It is 18 or 19 years since.

42,113. How far up the bay were they in the habit of coming?—Within half a mile of the town, up to the pier head.

42,114. Did you use the drift-net?—No, we anchored four nets. We had an anchor and chain rope to them tied fore and aft.

42,115. Your herring-nets were anchored?—Yes, we could never fish in the river without anchoring; there is far too rapid a current.

42,116. How long is it since you had a take of sprats?—I have not seen any since that time.

42,117. About the same time as the herrings?—Yes, I think there was a little in this year, but it was too late and we did not think it worth while to go after them. They did not come in until after November, and that is all the sprats I saw to my recollection.

42,118. Previous to that were you accustomed to have a good take of herrings and sprats?—Yes, mostly every second year. If we did not have them one year we had them another. They followed after each other with two years between. We took them so largely that we were enabled to live by that fishing.

42,119. Have you not used your seine-nets since then?—No, they are quite worn out and rotten.

42,120. What have you done since that?—I have lived by oysters and the help I get from the little nets, and now the Coastguard prevents us from setting them here by day. We always were in the habit of setting them before, both day and night.

42,121. Have the Coastguard prevented you from making a livelihood by the trammel-nets?—Yes, we could not get liberty to put them out day and night.

42,122. Have you any trammel-nets of your own?—I have four.

42,123. Did you not set them this year?—No.

42,124. Is that in consequence of any regulation prohibiting you from setting them in the daytime?—Yes.

42,125. Why cannot you set them at night?—They are too dangerous and bothersome, and it would not be worth while to set them. Besides we could not kill the fish in the night time with them; the water burns and the fish see the net.

42,126. You do not catch as many fish in the night time as you do in the day?—No, not nearly half the quantity.

42,127. (*Professor Huxley.*) Are the matters you have mentioned the principal complaints the line fishermen have to make here?—Yes, they are. I may state another thing about hooking. They often take away my anchors and my hand-lines for fishing in the bay. Mr. German has taken them away and brought them down to Barnycorrig.

42,128. Do the trawlers working over the ground trawl up your anchors?—Yes.

42,129. Have you ever had your lines carried away?—They took away my anchors. I asked them to haul up two or three times, and they did not notice me. They were going on before a breeze of wind.

42,130. (*Mr. Lefevre.*) Do you think that trawling ought to be put a stop to altogether?—I think this is not a fit place for trawling to be carried on.

The witness withdrew.

MARY DOWNING called and examined.

M. Downing.

42,131. (*Professor Huxley.*) How long have you been a fish dealer here?—Nineteen years.

42,132. Have you been buying fish all that time?—Yes.

42,133. Have you bought all sorts of fish?—Yes, every sort that comes in my way.

42,134. Who do you buy most from, the line fishermen or the trawlers?—I buy a deal from both of them. I buy a good many from the line fishermen and I always buy from the trawlers as well.

42,135. Do you buy much from the trammel fishermen?—Of late years I have not bought half as much from them as I used to buy.

42,136. When you began business 19 years ago did they supply you with more fish than they do now?—There was a great deal of trawled fish then. There was a great deal of soles and they had a good deal larger price then for the fish got by the set nets.

42,137. What kind of fish did you get from the trawlers?—Sole and turbot and beautiful plaice. When a fisherman named Mahoney fished in this river I bought more from him than I have ever bought since

42,138. Was he a line fisherman?—No, a trawler; he was the first who ever trawled in this river.

42,139. You bought a good deal from him?—More than I have ever bought since from anybody.

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42,140. Do you often buy soles from the line fishermen?—Not from the line fishermen but from the set-nets.

42,141. From the trammel-net fishermen?—Yes.

42,142. Do they supply you with plenty of soles?—None of them can supply me with plenty of soles. Sometimes I will be a month and get none and at other times I may get 30 pair from the nets. But they never supply me with as much as the trawlers.

42,143. When the people are trawling do you get plenty of soles?—Yes, in the proper season, but not at this time of year.

42,144. What do you think is the proper season?—In the winter.

42,145. What time of the year are you in the habit of getting fish from the trawlers?—When the rough weather sets in.

42,146. Do you buy from them after Christmas?—About Christmas we get most of the trawled fish.

42,147. In February and March do you get many?—Not in March.

42,148. Do you get any in February?—Yes, but think I am mistaken. I do not think I get any in February.

42,149. Then in what months do you get fish from the trawlers; do you get it in February, March and April?—No.

42,150. Are they not working then?—No.

42,151. Do they work up to Christmas and beyond it?—Yes, until a fortnight after Christmas; but down to this time after that they do not kill any fish.

42,152. Has the quantity of fish you have got from the trawlers during the last 19 years increased on the whole or remained the same?—It has been more on the decrease than on the increase, I think.

42,153. It has fallen off?—There is not half as much fish as was formerly caught either by nets or by trawlers.

42,154. The supply from the trawlers has fallen off?—Yes, as compared with what it was some years ago.

42,155. Do you pay a higher price for fish now than you did in former years?—Yes, a great deal higher price; I have paid 3*s.* and 3*s.* 6*d.* a score for the little fish. There have been no large fish to be got.

42,156. You pay a higher price and do not get as many fish?—Yes, if the fish were plentiful I should not pay as high a price. I should only in that case pay from 2*s.* to 2*s.* 6*d.* the score.

42,157. What kind of fish are you speaking of now?—Plaice and sole.

42,158. If they were plentiful you would only pay 2*s.* a score for them?—Yes, we pay more when the fish are scarce. There may not be many soles sometimes and we give the price according to the supply.

42,159. You are quite sure that you have bought less fish and that you have paid more money for them?—Yes.

42,160. Do you get less fish from the trammel fishermen?—Yes.

42,161. And do you pay more for it?—Yes.

42,162. And do you get less fish from the line fishermen?—Yes.

42,163. And pay more for it?—Yes.

42,164. Then you get less fish from everybody?—Yes.

42,165. And you pay more for it?—Yes.

42,166. Do you get any lobsters here?—Not out of this bay, but we get them from near Sneem.

42,167. What is the cause of the falling off of the fish?—I cannot tell. I believe it is that the fish are not upon the ground at all.

42,168. If trawling were put a stop to would that mend the matter for you?—I do not know; I cannot tell.

42,169. Would it increase the supply of fish?—I cannot tell you that because I do not know.

42,170. (*Mr. Lefevre.*) When did you first observe the falling off?—The fish have not been as plentiful as they were formerly at all.

42,171. Has the decrease been gradual; has there been a falling off every year?—It has been falling off, by degrees. The fish I could buy last year for 3*d.* a pair I have had to pay 3½*d.* and 4*d.* a pair for this year. A shilling I pay for a pair of soles. If I could buy as many fish as I did at one time from the trawlers I should not have to pay as much.

42,172. How long is it since you bought herrings in any quantity?—We buy herrings from Sneem, but the herrings are not caught here. It was seldom however in years past that they were not taken.

42,173. They are still caught in the bay but not as high up?—They do not come here at all.

42,174. Is the market supplied with herring?—Yes, they are taken in the west and come here.

42,175. Is that the case every year?—Yes, both herrings and mackerel.

42,176. You do not think the supply of them has fallen off?—They have been a little dull for a couple of years.

42,177. But generally has the supply been as good as it was formerly?—They have taken them this year.

42,178. But do not they come as high up the bay as they did formerly?—No, but I do not know what the cause of that is; perhaps the salt water is not salt enough and strong enough.

42,179. What is the price you pay for herrings?—3*s.* 6*d.* a hundred, but they would not be as dear as that if I took a horse and car and went for them.

42,180. Has that generally been the price of herrings every year?—They are cheaper than that when they are taken, but if they bring them to this town they charge a higher price.

The witness withdrew.

T. Trench.

Townsend Trench called and examined.

42,181. (*Professor Huxley.*) You are well acquainted with the fishery here?—I have known it for some years.

42,182. Have you heard the evidence which we have had brought before us to-day?—Yes.

42,183. Is there anything you wish to add or correct in what has been stated, from your own knowledge or opinion?—Yes, with regard to the differences which exist between the trawlers and the trammel fishers. The differences which exist between them and the whole subject was put forward, I think, in a petition presented by the trammel fishers some time ago. They complained that the Coastguard seized their nets when they found them set during the daytime. The chief hardship in the trammel fishery seems to be that they are prevented from fishing during the daytime. If a particular locality were allotted to the trawlers, and the trammel fishers were allowed to fish everywhere else except in that locality, and at all times, it seems to me that all parties would be satisfied.

42,184. The great difficulty appears to be that the productive ground for both trawlers and trammel-net fishers is the same?—I do not believe that to be the case. I do not believe that the trammel ground is at all confined to the trawl ground. In fact I am quite sure it is not.

42,185. Is it not the fact that the trawling ground is that which is most productive to the trammel men?—I think that might be; but the difference is this, that is the only spot on which the trawlers can fish, whereas there is other ground nearly equally as productive all over the bay which might easily be fished by the trammel-net fishermen.

42,186. It would be no great practical hardship for the trammel men to be excluded from that place?—

KENMARE. I think it would be a just division of the ground. If the trawlers are excluded from that they will be annihilated. That would not be the case with regard to the trammel men, because there is plenty of other ground upon which they can fish.

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42,187. (*Mr. Lefevre.*) Their complaint is that they are practically excluded from that ground through fear of losing their trammels?—What prevents the trammels from being put out now is this: as the law stands they cannot have their trammels set during the daytime, and if they put them down in the night-time and neglect taking them up in the morning they are seized by the Coastguard. It is not a geographical difficulty but one of time.

42,188. (*Professor Huxley.*) There is no different geographical locality where the trawling might be practised?—No.

42,189. We put the question clearly and definitvely to the witnesses. I presume you mean by trawling ground the ground I defined?—Yes.

42,190. The replies of the witnesses were very definite indeed, namely, that it would not be worth their while to set the trammels if they were excluded from that ground?—With great respect for that witness, I may say from the sworn evidence heard before Mr. Barry some time ago, and my knowledge of trammels having been taken up by the Coastguard in other places, it is impossible that that can be true. The Coastguard will tell you that they have themselves seized the trammels in other places, which quite contradicts the statement made by the witness.

42,191. The witness did not say the trammel-fishing was impossible, but that it would not be profitable anywhere else?—Perhaps it might not be.

42,192. If the trammel-net-fishing goes on as it does now, and they are set on the trawling ground at the peril of the trammel-net fishers, they taking their chance like other people, would there be any difficulty in the matter?—I think there would. It would be making a law which would lead to fights and broken heads.

42,193. That would be a police difficulty?—Yes, it would no doubt lead to difficulties of that nature.

42,194. Then there occurs to you no other plan than a geographical limitation of the kind which has been mentioned?—No.

42,195. And in spite of what has been said, from your own knowledge of the facts you are inclined to think there would be no particular hardship in that?—I do not think there would be, because I think that all parties are entitled to a fair division of the spoil.

42,196. You heard of the falling off of the fish since the trawlers came here, what is your opinion on that subject?—I do not offer any opinion upon that. I am not able to account for the diminution which has taken place in the quantity of fish.

42,197. Do the trawlers supply the market here?—Yes, the trammel-fish is for the home consumption of those who catch them, but the trawl-fish comes into the market. When the trawlers are not trawling we never get any fish.

42,198. Can you give us any reason why the line fishermen do not fish outside the district which has been defined to us?—They do fish, and there is evidence in this court-house to show that they do. There is evidence, I believe, which will show that one man caught 90 bream in a single night outside that ground.

42,199. I presume there must be favourable places for fishing all along this bay?—Yes.

42,200. Then how is it that unlike other places there are no long-lines set here?—They are set to a certain degree, but the population is not altogether a fishing population. All along this bay there are small farmers living on the arable land at the foot of the mountains, and these small farmers have some spare time which they devote to fishing. They get a sufficient quantity of fish to supply themselves, but it would not be worth their while to neglect their farms entirely for the sake of the fish.

42,201. Then in reality the greater part of the bay is unfished?—I think it is unfished by trammels since the Coastguard took the matter up so warmly. Formerly they took no notice of the matter and the law was trampled underfoot, but now the ground is unfished to a certain extent with regard to trammels; but it is fished with long-lines.

42,202. There ought to be a large supply of fish got by the long-line on this vast area from the heads up to Perch Island?—Yes.

42,203. But there appears not to be any?—Nothing extensive.

42,204. Does that arise from the want of enterprize on the part of the people or the want of capital to enable them to set up boats? Can you give us any reason for it?—I cannot; I think it is because they are chiefly occupied upon their farms, and because there is none of the population entirely dependent on the fishing.

42,205. If there were a fishing population one would expect that finding the fish fall off in this small area they would take to fishing outside?—Yes.

42,206. But if they are occupied in other ways it would not be worth their while?—No.

42,207. And of course the interest of the trawlers in that case becomes somewhat greater than that of the other class of fishermen?—Yes, certainly.

42,208. (*Mr. Lefevre.*) Have there been any differences between the trammel fishermen and the trawlers?—Nothing material, because the trawlers were the stronger party, and it was not worth the while of the trammel-net fishermen to have any controversy.

42,209. Do you anticipate the same difficulties in the event of the trammel-net fishermen being allowed to fish throughout the day?—If they are allowed to fish on the trawling ground—or rather I would put it in this point of view, if there is to be a change in the law it might be amended so as to do justice to both parties.

42,210. Then do you anticipate difficulties?—I do, of course.

42,211. Are there any other fishing villages in the bay near to Sneem?—There is not a great deal of fishing there; the village of Sneem is too far inland. The chief fishing villages are Reen, Ardea, and Colorus.

42,212. Are they fishermen all the year round, or chiefly of the class you have referred to?—Chiefly of the class I spoke of; but they are more dependent on fishing at Reen than anywhere else.

42,213. Is there any herring-fishing now?—No.

42,214. Do not the herrings come within the bay at all?—No.

42,215. From what place is the market here supplied with herrings?—We hardly ever get any. We have not caught herrings here I think for five years.

42,216. Has there been the same application on the part of the hake-trammel men to be permitted to set their nets in the daytime?—I believe the petition chiefly emanated from the small-trammel men.

42,217. Has the same desire been expressed by the hake-fishermen?—I do not know whether it has or not.

42,218. Is the law observed by them with regard to fishing during the daytime?—The law on the subject of trammel-fishing was disregarded until within the last six months, and then the Coastguard commenced to do their duty.

42,219. Do you know how far they extended the carrying out of that duty?—I believe they seized trammels as far down as Colorus.

42,220. The hake-trammels as well?—Yes, if they found them there in the daytime.

The witness withdrew.

RICHARD JOHN MAHONEY called and examined.

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42,221. (*Professor Huxley.*) Are you a resident here?—Yes, I reside within five miles.

42,222. Have you interested yourself in the fishing for years past?—With regard to this special question, I was the originator of the memorial which was sent up.

42,223. Do you wish to make some statement to us with regard to it?—What I wish to say is, that the question has completely altered from what it was originally. It has eventuated in an attack upon the trawlers which was not contemplated when the petition was sent up.

42,224. What was the original intention of the petition?—It was to relieve the trammel men from excessive disabilities operating upon them at that time in consequence of the enforcement of the Act which had been passed long before, but which had remained in abeyance to a certain extent.

42,225. The Act 5th and 6th of Victoria?—Yes. From some cause, in consequence of some report that went from here to head-quarters, directions came down to enforce the Act strictly, which led to a very great loss of property to those poor people. Their nets were seized.

42,226. What measures did they take in consequence?—Nothing was done until this memorial was got up.

42,227. What was the purport of the memorial?—It applied for permission to those men to fish during the hours forbidden by the Act. They were not allowed to fish, I think, during the entire day.

42,228. Not from sunrise until sunset?—No, and in the summer that came very badly upon them.

42,229. What was the result of the memorial?—An investigation took place here the other day before Mr. Barry.

42,230. What occurred then?—Then the original character of the memorial was completely lost sight of. The evidence on the part of these men showed a spirit of hostility to the trawlers and an anxiety to do away with trawling altogether.

42,231. In fact in seeking for liberty for themselves they endeavoured to restrict the liberty of other people?—Exactly. In fact there seems to be a question between the two which involves the very existence of the trawlers.

42,232. You heard the limits proposed for trawling; a line drawn from Rohancorrig to Dunkerro on the north, and from Brennen to Dinish Island on the south?—Yes.

42,233. Are you of opinion that if the trammel-net men were allowed to set their trammels only outside those lines, that is to the north and south of them respectively, they would still find abundant room for their nets?—They would certainly find nothing like the fish they would find on the ground cut off from them—that is the best ground.

42,234. Then would they be greatly injured by being confined within those limits?—They could nto take anything like what they would take upon the ground cut off.

42,235. Then practically it would be a considerable hardship upon them?—Yes.

42,236. Would they prefer taking the risk of having their trammels occasionally carried away by being allowed to set them on the trawling ground?—They have the option of that now.

42,237. Looking at the matter from the trammel-men's point of view, what would be the fairest measure to adopt?—That is a question which it is very difficult to answer. I should make the same proposition as that which has been made by Mr. Trench. That was the object of the petition that was sent up to the Board of Fisheries, namely, to give them full licence to fish during the day everywhere except within those limits.

42,238. Was that the object of the memorial?—Yes.

42,239. Have you a copy of that memorial?—know that that was exactly the purport of it.

42,240. To be allowed to fish during the daytime?—Yes.

42,241. Everywhere except upon the authorized trawling ground?—Yes.

42,242. So that at that time the trammel men did not seem to think it a hardship to be excluded from that ground?—I suppose they were glad to get what they could.

42,243. (*Mr. Lefevre.*) Did they contemplate at that time being excluded altogether from that ground?—Yes, that has been understood. The object was simply to relieve them from a present difficulty, which is not a geographical difficulty at all.

42,244. (*Professor Huxley.*) In their memorial did they state they would be altogether ruined and it would not be worth their while to set their nets, if they were excluded from fishing upon the trawling ground?—No, because a great number of them were fishing at that time outside the limits of the trawling ground.

42,245. They were fishing at that very time outside the trawling ground?—Yes. The occasion of the memorial was as I have stated. Some nets were seized for fishing at an illegal time, and it appeared to be quite a hardship.

42,246. And at that time they would have been quite satisfied if the prayer of their memorial had been granted?—Yes.

42,247. And the prayer of that memorial was to allow them to set their trammels outside the lines which have been referred to?—I cannot say that, because the present position they have taken shows that they were not satisfied with it.

42,248. Is it not that having been successful so far they thought they might go a little further?—Perhaps that may be so. I think they wish to open the question again.

42,249. Do you think they desire to open the whole question?—Yes.

42,250. It appears to be impossible for the two modes of fishing to go on together on the same ground?—Yes. The ground upon which each should fish should be defined.

42,251. But one of the trammel-net fishermen said that if the trawling ground were cut off from them it would be so great a hardship and so oppressive that they might as well give up fishing altogether?—Yes, I heard that stated.

42,252. Practically they have the power of fishing where they like now, except that they have no right to set their nets during the daytime?—Yes.

42,253. So that if they had the right to set them in the daytime, they would be in reality much better off than they are now?—Yes.

42,254. (*Mr. Lefevre.*) Is it a fact that they do not set their nets over the trawling ground at present?—I think they do sometimes, because I passed one the other day, but there are only very few who do.

42,255. They will not run the risk of having them carried away?—No.

42,256. (*Professor Huxley.*) Is there anything else you wish to state?—With regard to there having been any diminution of fish in consequence of trawling, I do not think that is the case. I remember trawling in my father's yacht 30 years ago, and though I cannot speak definitely as to the number of fish taken, I remember that we did not then take more than I am in the habit of taking now in a trawl. I have only just begun the year and I have taken a score and a half at one haul.

42,257. What fish?—Plaice and sole. There have been about four or five brace of sole in a haul, and there was not more than that at the time I was trawling with my father's yacht. My impression is that the fishing is pretty much about the same as it was then; and with regard to the sprats, I have seen them in great quantities of late years. I have seen them in such shoals three or four years ago, that we could take them out by buckets-full.

42,258. One witness told us that he considered they had not been in the bay in any quantity for the last 20

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years?—That is not so. I have taken them up myself. They were driven in by another fish they call the scad.

42,259. That is the horse-mackerel?—Yes. And with regard to line-fishing, I have seen some of them out with their lines 14 miles to the westward from this town.

42,260. With what kind of lines?—Hand-lines. There is not a spilliard in the bay.

42,261–2. There is no long-line fishing?—Not within 25 miles of the town. I think there is further out west, but out there the men live more exclusively by fishing. They are far more dependent on it than they are here, and the fish come in in great shoals.

The witness withdrew.

Col. H. Holden.

COLONEL HENRY HOLDEN called and examined.

42,263. (*Professor Huxley.*) Have you been resident here for any length of time, Colonel Holden?—I have been here about four years.

42,264. Have you occupied your attention with the fisheries?—Yes, a great deal, and I consider that over this disputed ground the trammel men and the trawlers will never agree. If the trawl men are allowed to trawl there the trammel-net men would not be able to set their nets, and that is the best part of the ground. I have tried it as far as Blackwater Bridge and as far as Collorus. I have tried every part of the river with flat-fish nets, and I have the only long-line on the river.

42,265. And you are of opinion that that is the best ground for the fishing?—Yes.

42,266. You heard the trawling area defined by a line to the north and the south—what is your opinion as to trammel-net fishing being confined to the space outside those lines?—The fish they would get outside are of a bad quality; they are what are termed river flukes.

42,267. They are not soles?—There are some soles, but nothing like the number that are to be found on the trawling area.

42,268. Would the fish outside those lines be so little profitable that it would not be worth while to set the nets there?—It would not be worth while to send them to the market. The ground for the trammel-nets is very limited. It is all inside the islands of Dunkerro.

42,269. Why is that?—It is rocky ground, and there are no fish except skate, which are to be found in great numbers. The ground is dirty and rocky.

42,270. We understand at present that the condition of things is, that the trammel-nets are not set on the trawling ground to any great extent?—Not unless they run some risk. I always ask the question if there are any trawlers out, and then if I set them I run the risk of having them taken away.

42,271. Do many of the fishermen do the same as you do?—I do not think they could afford to lose a net.

42,272. So that practically there is very little net fishing on that ground?—Yes. There is an old man who runs the risk very often.

42,273. Is there a good deal of fish taken by the trammel-nets now?—I believe I am the only one taking any great quantity. I have a number of nets, and I employ a boat entirely for that purpose. I have a book in which I have kept an account of the number of fish caught for the last three years.

42,274. Is it your opinion that the fishing outside these lines could not be profitable to the trammel-net fishermen?—I do not think it could be unless they got a great number of small fish.

42,275. Can you suggest any mode of getting out of the difficulty? It seems that two fishermen who pursue modes of fishing which are incompatible with each other want to fish over the same ground?—Yes.

42,276. Then how will you get over that difficulty?—I do not know, unless you were to divide the river across from north to south instead of dividing the ground up the centre. You could then allow the trawlers to take one-half, and the trammel-net men the other.

42,277. But the whole of the ground is not a square mile in area?—No, it is very small; but it is a matter of perfect indifference to me. The persons whom it will most affect are the Reen men, who are the poorest description of fishermen in Kerry, and who get their living entirely by fishing.

42,278. By trammel-net fishing?—By trammel-net fishing and by the hand-line. I do not think the fact of the Coastguard taking their nets makes any difference in their putting them down in the daytime. I think it is very wrong; but if they wish to put them down they do not care for the Coastguard at all, but they sink their nets.

42,279. Do you think the practice of setting their trammels by daytime is a bad practice?—Yes; I think they ought to be taken up at a certain hour. To have a net down for 24 hours is, in my opinion, very wrong.

42,280. Why is it, then, that the fishermen desire so much to have the trammels down in the daytime?—With one or two exceptions they do not keep them down. It is having to draw them so early in the morning and put them in so late at night that causes the difficulty.

42,281. If they had from six o'clock until six o'clock would they not mind?—No, I think not.

42,282. It is getting them up at sunrise that they object to?—Yes. If they keep them in very long in the daytime it rots their nets, and the fish caught in them are very often eaten by the larger fish.

42,283. Then do you think that the night is a better time for setting the nets?—I think it would be quite enough to set them at six o'clock in the evening and leave them until six or seven o'clock in the morning—that would be quite long enough for the nets to be in the water.

42,284. Suppose the trawlers had the 12 hours in the day, from six o'oclock in the morning until six o'clock in the evening, and the trammel-net men had from six in the evening until six the next morning, how would that arrangement work?—That would work very well for the men, but I cannot say how it would interfere with the fishing.

42,285. I speak purely of it as a police question?—I do not think there would be any disagreement of that kind if you were to let the trammel men take their chance. If they were prohibited from setting their nets in the daytime that would alter the case; but if they were allowed to set them and run the risk, there would be no quarrel.

42,286. If they are allowed to set their nets over the trawling-ground at the same time that the trawling people are trawling, would there not be constant collisions,—constant quarrels and breaches of the peace?—I do not think they would set their trammels there in the daytime.

42,287. Between six o'clock in the morning and six o'clock at night?—No, not generally.

42,288. Then you think that practically there would be no hardship if they were excluded from setting their nets from six o'clock in the morning until six o'clock at night?—I think it would be better if you gave them six o'clock in the evening to set the nets and seven o'clock in the morning to draw them.

42,289. If they are anxious to avoid breaches of the peace and other inconvenience, they, the trawlers and the trammel-net men, cannot be actually working at the same time on the same ground?—No.

42,290. If they are they will come into collision and a bad feeling will arise?—Yes; it is quite impossible to put down a string of nets when trawling is going on. I think it was stated by one of the witnesses that the trammel-nets might be put east and west instead of north and south in the run of the channel, but they trawl across the channel very often.

42,291. It appears to be necessary either to adopt some geographical restriction, or some exclusion, according to time ?—Yes.

42,292. If a geographical restriction is adopted, one party or the other must be excluded from the only ground which is available ?—Yes.

42,293. Then comes the question whether a restriction as to time can be adopted, and whether it would be a hardship to the trammel-net men to be confined to six o'clock in the evening for setting their nets and six o'clock in the morning for drawing them, and to the trawlers to be confined to working only from six o'clock in the morning until six o'clock in the evening? —I think that would be better than any geographical arrangement.

42,294. (*Mr. Lefevre.*) Did I understand from you that the only effect of the seizures made by the Coastguard has been to induce the trammel men to set their nets without buoys ?—I know that has been done in one or two cases; the law of the case has nothing to do with it, they have nothing to do but to set the nets without buoys and the Coastguard may be for three weeks trying to find them without success.

42,295. Do you think that has been done on the trawling ground, namely, that nets have been set in the daytime in that way ?—I do not know whether it has been done on the trawling ground, because two or three trawls might take them up, or the lines might take a string of nets up. So far as the line-fishing is concerned, I can say that has fallen off wonderfully during the last four years; I used to go out night after night and catch nothing.

42,296. What do you attribute that decrease to ?—I cannot say.

42,297. Has the trawling remained as before ?—Yes; as to long-line-fishing it is utterly useless to try it, and I have put it by.

42,298. You cannot give any reason for the decrease? —No, the whiting are very scarce also.

42,299. Do you think the hand-line fishermen have found the same decrease ?—There is a general complaint near me that the hand-line-fishing is very bad.

42,300. Is that the case all along the bay ?—I can only answer for two villages near where I live, namely, Templetown and Reen.

42,301. Are they near the trawling ground ?—Yes, opposite to it.

42,302. Do the men fish near the trawling ground ? —Yes, just off it.

42,303. On the trawling ground or beyond it ?—On the trawling ground, in every part of it, they principally fish on the trawling ground; the very centre of the channel is the best place for the hand-lines.

The witness withdrew.

DANIEL MACARTHY called and examined. *D. Macarthy.*

42,304. (*Professor Huxley.*) You wish to say something about the hake trammel-fishing I believe ?—Yes.

42,305. What is it ?—The people who have hake trammels might as well drop them if trawling is to be continued in the channel at night; if they are allowed from seven in the evening until seven o'clock in the morning to set their nets the trammel men would do very well provided the trawls were stopped during that time, but if the trawls are out at night we shall only find the nets torn to pieces in the morning.

42,306. Those are the large trammels you are speaking of ?—Yes.

42,307. Where are they set ?—On the trawling-ground, from the very place where they commence trawling up to the spot where they end it.

42,308. You are not speaking of the small trammels? —No.

42,309. But the hake-trammels ?—Yes.

42,310. Then beside the trawling and the small trammel-net fishing, there is hake trammel-net-fishing going on also ?—Yes.

42,311. And the trawlers carry away the nets by night ?—Yes.

42,312. Do the hake men set their nets at night ? —Yes.

42,313. Do the trawlers often work at night ?—Yes, on moonlight nights.

42,314. Do they not carry away the trammels ?— Yes.

42,315. Is that the matter of complaint you wish to bring before us ?—Yes.

42,316. (*Mr. Lefevre.*) What sized buoy do you use? —A keg.

42,317. Could you not use a larger sized buoy ?— Yes, but what would be the use of it. They cover the trawling ground and they could not avoid our nets.

42,318. Do you catch many hake on the trawling ground further south in the bay ?—Yes.

42,319. Do you think it is the best ground ?—Yes, when the hake come in it is the best killing ground.

42,320. Are the trammel-nets all over the bay ?— Yes.

42,321. Are they not as productive as those on the trawling ground ?—There are some very good places on the coast, but they would be inconvenient for us to go to.

42,322. How is the ground on the other side ?—It is mixed up with rocks, and if the trammels get upon them they are torn; a storm or anything of that sort would do that.

42,323. But the bottom of the trammel-net used for hake does not touch the ground, does it ?—The bottom is from a foot to 8 and 10 inches from the ground.

42,324. Must you set the nets on the smooth ground? —Yes.

42,325. Will they not do on the rocks ?—No; if a storm comes on they would be cut away.

42,326. Do you mean if the rocks are high up from the ground ?—Yes.

42,327. Are all the nets along the coast set upon a smooth bottom ?—In some cases they are, but further to the west there are rocks, and they often get the nets torn there.

The witness withdrew.

EDWARD MILTON called and examined. *E. Milton.*

42,328. (*Professor Huxley.*) Are you in the Coastguard service here ?—Yes; I am chief boatman.

42,329. Are you acquainted with the seizures which have been made during the last four or five years ?— I am acquainted with those which have been made during the last two years.

42,330. Did you receive orders to look sharp after the trammel nets ?—Yes.

42,331. Was that without any previous warning given to the trammel-net fishermen ?—I cannot say what warning they had before I came up, but I warned them myself. I warned a man before I seized his net. I saw him haul up a trammel-net at 12 o'clock in the day and I told him I would take it from him.

42,332. How many did you seize altogether ?—I only took three.

42,333. How many were seized altogether ?—We took eight in Blackwater and the cutter took 12 last year.

42,334. Then there have been some 20 nets seized ? —Yes.

42,335. Were they seized for being down in the daytime ?—Yes.

42,336. What hour of the day ?—From half-past two to three o'clock or half-past three. Sometimes they kept them down all day. They hauled in the nets and then set them again.

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42,337. Have any of the nets been seized early in the morning?—Never, not earlier than 12 o'clock in the day.

42,338. Then it has not been a case of mere negligence in which the fishermen have left the nets in the water for an hour or so?—No, I am never particular to an hour or two.

42,339. Has one net been seized earlier than 12 o'clock in the daytime?—No, and not as early as that.

42,340. In what parts of the bay have you seized those nets?—I seized Colonel Holden's at the east end of Dunkerro Island, and the nets of Sullivan were seized at the north end, inside the trawling ground.

42,341. Were those nets on the trawling ground or beyond it?—To the north of it.

42,342. Outside of it?—Yes.

43,343. Have you seized any on the trawling ground?—No, never.

42,344. Have you noticed it to be a customary thing for the nets to be set outside the trawling ground north and south of it?—I have seen them set late in the evening and I have seen the trawling ground left open, the trammel-nets being set on each side of it at the east end of Dunkellin Island.

42,345. Do the nets catch fish as well there?—They tell me so, but the nets I took up had nothing in them.

42,346. (*Mr. Lefevre.*) Had they been down all night?—Some had, but Colonel Holden's had been just set.

42,347. Were they set for hake or for flat-fish?—For flat-fish. The cutter took some that were set for hake.

42,348. Where were they taken?—Off the east end of Rossmore Island and the others were seized in Collorus Bay.

42,349. That is a long way below the trawling ground?—Just below Dromore Castle.

42,350. Is the regulation not observed throughout the bay with regard to setting the trammel-nets?—Yes, since I came here.

The witness withdrew.

W. Berry.

WILLLIAM BERRY called and examined.

42,351. (*Professor Huxley.*) Do you belong to this place?—Yes, I belong to Kenmare.

42,352. Have you been engaged in trawling here?—Yes.

42,353. How long have you been occupied in trawling?—It is now 20 years since I came here, and I have been mostly engaged in fishing.

42,354. Did you hear what the witness Teahan stated about trawling?—Yes.

42,355. Is there anything you wish to remark upon?—Yes; there are a few things, I think, that would relieve a great deal of difficulty. In the first instance, the small trammel-nets have but very little buoys upon them, just cross sticks and a bit of wood set up. No man can see them if he is many yards distant from them. A trawl-boat is right upon them before they can be seen.

42,356. Suppose the buoys were larger could you avoid the nets?—We could avoid them if they were not set across the river. If they leave 20 fathoms between each we could avoid them very well. One man stated that there are no hake-trammels on the north side, but there are some thousands of fathoms of hake-trammels from Sneem to Kenmare.

42,357. There are some thousands of fathoms of trammels from Sneem to Kenmare?—Yes, I am sure of it. I lived in a place called Tarley and there is hardly a family there without a hake-trammel, and some of them have three or four.

42,358. Are you speaking now of the large trammels?—Yes. I simply state this because one man in his evidence said there were no hake-trammels on the north side, whereas I say there are some thousands of fathoms of hake-trammels there.

42,359. I think you misunderstood the answer. The question was if the small trammels were used on the north side of the trawling ground, and the answer was that it would not be worth while to set them if they had not liberty to use them on the trawling ground?—I see.

42,360. You tell us the trammels are used on the north side of the trawling ground?—Yes.

42,361. Small trammels as well as large?—Yes, often.

42,362. Are they used in great numbers?—Yes.

42,363. Do they appear to take a great supply of fish?—I often saw them set down there in preference to setting them in the centre.

42,364. Do you think the middle of the bay would be more advantageous for setting them?—I entirely agree that that is likely to be the best place, but at the same time it does not follow that there are no fish on the north and south sides. Sometimes through accident when we have been trawling on a dark night we have got too near the shore, and we have got plenty of fish on those occasions, although we ran the risk of losing our gear. I have found fish as plentiful on either side of the trawling ground as in the centre. There is not one bit of difference.

42,365. Well, what is your next point?—If there is a limit to be fixed relative to trawling, we who are trawling will be satisfied with anything in reason. We want to live in a fair honest way by our labour, as we have lived now for a good many years chiefly dependent on that. I never did a day's labour with the spade in my life. I am a pensioner and I am an independent man with my trawl, and therefore it behoves me to look to the trawling. If there was a limit made as Colonel Holden has proposed across the river, I think we could do with that either.

42,366. That is supposing the trawling ground was cut into two parts?—Yes, provided it was not so limited as to give us too little room to work in. If a point was drawn from Claywick to the west of Dunkerro Island, and across to the opposite point towards Dinish Island, leaving us the mouth of the bay at Dinish Island clear to go in with our hookers, we should be fully satisfied with that.

42,367. You would like to have the ground west of that?—Yes, but we would give them the north and south sides of it; we are asking almost nothing.

42,368. Would you be satisfied with that? The whole trawling ground is not much more than a mile and a quarter long?—I should be fully satisfied, and I think that every man who knows me will say that I am stating that which is quite reasonable. There is no man who has any conscience at all but would say that we should be badly off with less than that in which to work our boats.

42,369. Would that give you enough ground in length to work your trawl?—We should only be able to work it very badly, but I would sooner do that than have constant quarrelling.

42,370. How long does it take you to haul up your trawl?—Half an hour.

42,371. This would not give you much more than a mile, and will you not drift more than that in half an hour?—Yes, sometimes; by the time we have hauled up we should sometimes be down on the trammels; we should have nothing to spare from the time we commenced hauling.

42,372. You would have to haul every three quarters of an hour?—Yes.

42,373. How often do you trawl now?—We take about seven scrapes in the day; that is as much as we are able to take.

42,374. You work eight or nine hours?—We work from six until six.

42,375. That is 12 hours?—Yes, we haul according to the wind. If we have no wind we should be longer hauling.

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42,376. With the limit you were fixing just now you would not give yourself much more than a mile and a half to trawl over, and you would drift that?—I would sooner do that than be in a war with those chaps every second day.

42,377. But would it not amount to a prohibition? Would it be worth your while to haul up your trawl in that time?—I say it scarcely would be worth our while, but I would rather have that than go on as we have been doing. If we catch hold of their nets we lose our day. They impede us just as much as we do them.

42,378. (*Mr. Lefevre.*) Do I understand that when you go to the eastward of that line you come across the trammel-nets now? I mean a line drawn from the east of Dinish Island. Do you find now that when you go to the eastward of that line you come across the trammel-nets?—We come across them in all parts.

42,379. But more there than in any other part?—As much there as in any other.

42,380. Not more?—No.

42,381. (*Professor Huxley.*) Have you any other point you wish to bring forward?—Nothing more than that I should like every man to speak the truth. I heard one man say that he had fished with a hand-line boat at Skelling, but that cannot be done.

42,382. What is the size of your boat?—About 11 tons.

42,383. Have you ever fished further out in the bay than this trawling ground we have been speaking about?—Never in trawling.

42,384. Is there no other ground fit for trawling?—I do not think there is. There has been none yet found out where we could trawl with safety.

42,385. The soundings on the chart give the same bottom in the bay as over that trawling ground?—Our light boats would not be able to haul a trawl in deep water.

42,386. What is the deepest water you trawl in?—From eight and nine to 12 fathoms. We cannot go beyond that. We find that deep enough.

42,387. Then the greater part of the bay is too deep for you?—It is. It would give us a great deal of trouble to haul up in it.

42,388. Do you find that you catch less fish than you formerly did?—Much less. I believe it is so all over the world.

42,389. Is that of all kinds of fish?—Yes. Of all kinds there is a decrease.

42,390. But the increased price you get has made up for that?—It has not made it adequate to what it was before, because I have often made 20 score in a night's fishing.

43,391. What is it now?—I have hardly fished now for some time. The fish got so scarce that I left off.

42,392. What was your best catch last season?—I have taken 13 score in a day and night.

42,393. How would it be if you were prohibited from trawling in the night-time?—It would be a great disadvantage. Upon many moonlight nights we take a good deal of fish; but, in point of fact, if the ground were limited, we could not work at all in the night-time.

42,394. Then it would be about the same if you were restricted from fishing in the night time as it would be to be restricted from fishing on the ground you have been speaking of?—I believe if every one was well-minded every man could live as he always did, and they could keep out of each other's way.

42,395. Why should the trammel men be prevented from setting their nets in the daytime?—With regard to the trammel-net men I know nothing of them.

42,396. Have you any objection to that?—I have no objection to let a poor man get a living as he can, but they have more than they can do to fish day and night.

42,397. You have no objection to the trammel-nets being set in the daytime?—No. Mr. Trench suggested one thing which if it were kept in view would enable us all to live very well. We should have no objection for them to set their nets with the stream.

42,398. You stated that a great number of trammel-nets are set on the coast further down the bay?—Yes. Between Tarley and Sneem, all along to the Blackwater, there is an immense number of trammels; but there are more trammels down at Rossmore than at any other part.

42,399. Have they increased of late years?—Yes.

42,400. Does every farmer along the coast have a net?—There are very few who do not have them. Most of them who are convenient to the shore have a net.

The witness withdrew.

T. Croly.

Timothy Croly called and examined.

42,401. (*Professor Huxley.*) What do you wish to tell us?—I have a trammel of my own at Dinish Island by which I used to make sometimes 10*l.* in a night, and now I cannot set it. When the hake come in I cannot go out with it.

42,402. Why not?—On account of the trawlers, and the ground they want for trawling is the only ground for hake-fishing in the season.

42,403. On account of the trawlers working over that ground you cannot catch any hake?—No; and they take my anchors, and they take my fish away from me. I have seen them take up their trawls full of mud and dirt. They scrape all the bay up.

42,404. Have you anything else to tell us?—No; but if they were done away with more poor people would be able to get plenty of fish.

42,405. Would you like the trawling to be put down from Michaelmas to December?—Yes, that is the only time for the hake-fishing.

42,406. (*Mr. Lefevre.*) Are there as many hake on the ground as they used to be?—I cannot say. When they pull our nets about all they do is to laugh and joke at us. I was once dragged a mile and a half by a trawler.

42,407. Did you know the boat that dragged you a mile and a half?—Yes, and I went to Mr. Trench about it.

42,408. Was anything done in the matter?—Yes; but all he offered me was 5*s.*, and I would not take it from him.

The witness withdrew, and the inquiry was adjourned until the 30th of August, at Bantry.

Bantry, Cork, Tuesday, 30th August 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

BANTRY.

D. Leary.

30 Aug. 1864.

DANIEL LEARY called and examined.

42,409. (*Professor Huxley.*) Are you a resident here in Bantry?—No, I reside at Whiddy Island.

42,410. Are you a fisherman here?—Yes.

42,411. Do you do anything else besides fish?—I carry on farming and fishing at intervals.

42,412. How many months in the year do you fish?—We generally fish from July all through the year up as far as March.

42,413. You do not fish in April, May, and June?—No, only very little. There is very little fish to be had then and we fish very seldom.

42,414. You fish when you are not employed in farming?—Yes.

42,415. What do you fish with,—trammel-nets?—Trammel-nets and herring-nets.

42,416. With drift-nets?—Yes.

42,417. And besides, do you fish with the hook and line at all?—Sometimes, but very seldom.

42,418. Do you use spilliards?—No, I have no spilliards.

42,419. With hand-lines?—Yes.

42,420. Are there many trammel-nets employed in Whiddy Island?—Yes, a great number of them.

42,421. What will be the number do you suppose?—I cannot tell that because I do not know the number of boats.

42,422. Can you not give us a notion. Are there 100?—There are eight nets or from six to eight generally in each boat.

42,423. How many boats are there do you think, at a guess?—I do not know whether there are 30 boats in the fishery there or not, perhaps there may be between 30 and 40.

42,424. What size are your trammel-nets, how long are they?—They are 40 fathoms each on the rope and every boat carries from six to eight of them.

42,425. What depth of water do you set them in?—We set them sometimes in 18 fathoms of water and sometimes in 20 fathoms.

42,426. You set them in water as deep as that?—Yes, down as low as 14 fathoms.

42,427. Is 20 fathoms the outside depth you set them in?—It is the greatest depth I set them in because I live pretty far in the bay.

42,428. Do other fishermen set them deeper than that?—Yes, those who live in the outside parts do.

42,429. What is the greatest depth of water any of the fishermen set them in?—24 or 25 fathoms.

42,430. What is the size of the mesh of the trammel-net from knot to knot?—It ranges from about $4\frac{3}{4}$ to 5 inches.

42,431. Is that from knot to knot or pulled out?—Pulled out they run from $4\frac{3}{4}$ to 5 inches.

42,432. Then that will be between 2 and 3 inches from knot to knot?—Yes.

42,433. What do you catch in those nets?—Hake and many other kind of fish which come in our way.

42,434. Are hake the principal fish you set them for?—Yes.

42,435. Do you catch soles?—Very seldom, unless we get an odd one.

42,436. What other kind of fish do you catch?—Bream and scad and pollack.

42,437. Is the principal fish you catch hake?—Yes.

42,438. That is what you set them for mostly?—Yes, without a doubt.

42,439. How many years have you been fishing with a trammel-net?—I have been fishing with a trammel-net ever since I was a boy of about 14 or 16 years of age.

42,440. That will be about 40 years ago?—Yes, I have been 40 years at the business, I have no doubt.

42,441. Do you catch as much fish now as you were in the habit of catching when you began?—No, I do not.

42,442. Is that the case with the other trammel-net fishermen as well as yourself?—Yes, it is the case with most of them, I think.

42,443. Has the falling off been very great; do you think that you catch half as much now as you were in the habit of catching then?—No, nor anything like half.

42,444. What do you think is the reason of that?—I do not exactly know I am sure.

42,445. Has the number of trammel-nets very much increased since you were a boy?—No, I think there were more when I was a young man than there are now.

42,446. You do not catch as many with them now as you did then?—No; at the time the loan fund was given out and they used to give a bounty upon our fish there was a greater number of nets and boats out fishing than there are now.

42,447. Do you think the reason why you do not get as many fish now as you did at the time of which you speak is that the fish are not there?—If the fish were there I suppose we should not be able to avoid catching them.

42,448. Are there many trammel-nets used all down the shores of the bay?—Yes.

42,449. All the way down the bay to the sea?—Yes.

42,450. On the north or on the south shore?—Yes.

42,451. On both shores do you mean?—Yes.

42,452. Is it at all the case that the men employed in the fishing or a proportion of them work on the land as agricultural labourers?—Yes, they work on the ground, they have bits of land and they take an acre of ground.

42,453. Are there any people who live altogether by trammel-net fishing and do nothing else?—They live by trammel-net fishing and by herring-net fishing and by line-fishing at times, and they have a bit of a garden for themselves which they attend to in another part of the season.

42,454. Do you get herrings here in abundance?—There have not been many herrings here for some years past. The herrings have not resorted to this bay for a long time as they did formerly.

42,455. How many years is it since there were plenty of them here?—I do not recollect how many years it is now since we got them in the season out in the bay.

42,456. Are you able to say whether it is 20 or 30 years ago?—Perhaps it may be about 30 years since they began to forsake the place.

42,457. Are there many drift-nets now in the possession of the people about Bantry?—Yes.

42,458. Then have they not been able to use them much of late years?—They use them when they can get fish.

42,459. But there has not been fish for them to catch?—Not this last season and there was not much last year.

42,460. How was it the season before that?—I believe they got some the season before.

42,461. Did they get them in any quantity?—They took a reasonable quantity at times.

42,462. Can you give us any information about the hand-line fishing; is it as good as it used to be?—No, it is not one-tenth part as good as it used to be. In this little harbour there were a good many hookers,

when I was a little boy, and all of them were employed in the hand-line fishing.

42,463. Are they not employed in hand-line fishing now ?—No, they are all going out of it.

42,464. Is that because they cannot get fish ?—Yes.

42,465. What kind of fish did they formerly catch, cod ?—Cod, ling, hake, and various kinds of fish.

42,466. Did they get haddock as well ?—Yes, they used to take a good deal of haddock off Bear Island.

42,467. Are there any caught now ?—There is a boat that goes to that kind of fishing now.

42,468. You say that you got plenty of fish by trammel-net fishing 20 or 30 years ago ?—Yes, and a good deal was got in that way three years ago.

42,469. At the time there was a good fishing here did you set your nets where you liked day and night ?—Yes.

42,470. Has there been any regulation against that?—I have heard that for a great many years the law has been against the setting of the trammel-nets day and night.

42,471. When do you commonly set your trammel-nets; at what time of the day ?—Mostly in the evening.

42,472. After sunset ?—Sometimes we set them before sunset.

42,473. Some years ago was there any regulation enforced here which prevented you from putting down your trammel-nets before sunset ?—Yes.

42,474. When was that ?—I do not clearly recollect how many years ago it is but I know that there was such a regulation made.

42,475. When you were a young man fishing with trammel-nets did you set your nets at what time you liked ?—No, I dare not do that.

42,476. Why not ?—Because the Inspectors of Fisheries were here watching us with their boats, and we dare not set them at such periods of time when they were on the watch.

42,477. Was it the law, that you should not set them in the daytime ?—Yes, it was.

42,478. Has that always been the law here ?—I believe there is a law of that description.

42,479. Then that has always been the case ?—Yes.

42,480. Ever since you can recollect ?—Yes, ever since I can recollect; ever since the Board of Fisheries began. They made a law, I believe, that trammels should not be shot before sunset.

42,481. Was there also a regulation that they should not be in the water after sunrise ?—That was the law too, but they could not be hauled before sunrise sometimes as I told the Commissioners of Fisheries. The draft was sometimes so heavy that they could not be hauled at so early an hour.

42,482. Then that regulation could not always be carried out ?—No, it could not.

42,483. Do you know of any instance in which a trammel-net has been seized, because the people using it have been guilty of a breach of that regulation ?—Yes.

42,484. Have many seizures been made ?—Yes, there have been a few made.

42,485. When you say that a trammel-net cannot be hauled before sunrise how is that; can they not find the nets ?—The strings are too long and the time is too short to enable us to haul them from daylight to sunrise. Sometimes the fish in them cannot be packed at all during that time, but Mr. Barry said that if we were in the act of hauling them at sunrise that would do pretty well and they would not be seized.

42,486. Have any trammel-nets been seized on account of their being hauled in after sunrise ?—I do not know whether they were ever caught in that way or whether the boats have taken them for hauling in after sunrise.

42,487. Have you ever had your trammel-net carried away by trawlers ?—Yes.

42,488. Does that commonly happen?—It does often happen.

42,489. Do the trammel-net fishermen complain much of that here ?—They have complained of it very much.

42,490. Was that why Mr. Barry came down here to hold an inquiry ?—I believe that it was partly the reason.

42,491. Were the trawlers in the habit of trawling at night as well as during the day ?—No, not in general.

42,492. But did they do it sometimes ?—It is only seldom they do it. They have done it, and I believe they have done harm at night.

42,493. If they only trawl during the day they would not interfere with you ?—Yes, they would interfere with us when the trammel-nets are shot out before them in the daytime. They would tear them away.

42,494. But if you have no right to shoot your trammel-nets during the day they would have no business to be there ?—But there would be some days when we could not go out to haul them in. Their boats would be able to go to windward and go close down before the wind when our boats would not live.

42,495. Is what you mean to say this, that the weather is so bad at times that with the best will in the world you cannot get out to haul them in ?—Yes.

42,496. And then the trawlers work over them in the daytime ?—Yes.

42,497. Are there any buoys made fast to your trammel-nets ?—Yes.

42,498. How big are they ?—They will be from about 2½ to 3 feet long.

42,499. What are they made of ?—They are made of timber.

42,500. Are they made of large pieces of timber ?—Yes, about 2½ or 3 feet square; they are crossed on each other by another piece of timber.

42,501. Do they stand up in the water ?—Yes, they rest on the water with a staff of timber out of the centre and a big lump of rag tied upon the top of it.

42,502. What height will they be ?—From 2½ to 3 feet.

42,503. Can you always see those buoys ?—Yes.

42,504. You make them that they may be easily seen, so that you may find the nets yourselves ?—We make them so that they may be seen as easily as possible.

42,505. Is it not to the interest of the trawler to get out of the way of the trammel-nets himself if he can do so; if he gets foul of them does that not damage his own nets ?—I am told that they injure themselves if they come foul of the trammel-nets. When they tear the trammel-nets and take them away, they stop the fish from going into their own nets as well.

42,506. Is it any hardship to you to be obliged to take up your trammel-nets during the day; would you like to set them during the day ?—I would at times, and at other times I would as soon bring them away.

42,507. Does it depend on the weather ?—Yes, if the weather is bad I would rather bring them away.

42,508. Is the ground in the greater part of the bay here smooth ground ?—Smooth ground ?

42,509. Yes, smooth ground, suitable for trawling over ?—Yes, with the exception of a few ledges. Do you mean the outer part of the bay ?

42,510. I speak of where you want to shoot your trammel-nets ?—It is all smooth there, except a few ledges of rock under the water.

42,511. Then you want to fish on the same ground the trawlers fish upon ?—Yes.

42,512. What is good ground for you is good ground for them ?—Yes, it is.

42,513. Would you find it any hardship in the short summer nights to be obliged to keep off that ground from sunrise until sunset ?—We do not take the trammel-nets out in the summer time at all.

BANTRY.

D. Leary.

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42,514. Is that because you are working on the land?—Yes, now.

42,515. Or is it because there are no fish there?—There are no fish to be got in the summer time.

42,516. You say that you have not been doing much in the way of line-fishing?—Very little. I have only been trying it at intervals for fancy's sake.

42,517. Do you think that trawling has had anything to do with the falling off in the supply of fish? I cannot say that I do, but I have heard persons say that trawling is injurious to the fisheries, and that it destroys the spawn.

42,518. Have you ever seen spawn taken up in the trawl?—No, I have never seen it, because I was never on board one of them to see them work.

42,519. When did the trawlers begin to work in the bay?—Only a few years ago. I think Mr. Curtayne was the first.

42,520. How many years is it since they first began to work?—It is now about seven or eight years ago.

42,521. Then was there no trawling before that time?—There was one resident of the place trawling then, I think. Mr. Tisdale used to trawl here for fancy's sake, but not as a general thing.

42,522. Was there no trawling here before that time for the market?—No, I think not.

42,523. There has been no considerable trawling here altogether within the last eight or nine years?—No.

42,524. But you tell us that the fishing has been falling off for the last 20 years?—Yes.

42,525. Then did the fishing begin to fall off before the trawling was practised here at all?—The herring-fishing has been falling off for many years, and the trammel-net fishing has been bad for the last 20 years.

42,526. Has the herring-fishing fallen off altogether?—Yes, very much so.

42,527. (*Mr. Lefevre.*) When was your last good season for the hake?—I can hardly tell you that, I am not a man that comes out always for the fishing. There are some who have nothing else to do, and are not so much in the land business as I am. They follow up the fishing more regularly, but I believe that about five or six years ago we had a good season.

42,528. Is it only since then that it has begun to fall off?—It has begun to fall off very much since then.

42,529. Do you recollect the time when the bounty was given here for fish?—Yes, I do.

42,530. Was it given for fish taken in the trammel-nets?—It was.

42,531. Was there any great decrease of trammel-nets about the time the bounty was given up?—Yes.

42,532. Has it gone on decreasing from that time?—It has not increased up to this time.

42,533. Has there been a decrease of late years in the number of trammel-nets?—Yes; but I believe there is not as great a number of people round this bay as there was then. We have not such a population at all.

42,534. Did the decrease take place about the time of the famine?—It did, and in the fishing generally. As soon as the Board of Fisheries was broken up the men broke off from the fishing.

42,535. What do you do with your fish?—We sell it here in Bantry.

42,536. Do you get a better price for your fish now than you did years ago?—We get a better price now than we did at the time of the famine.

42,537. But comparing it with the time before the famine, do you get a better price now than you did then?—I do not think that we get as good a price now as we did in the time before the famine. I can recollect the time when 100 hake would sell for 2*l.* 10*s.* or 2*l.* 15*s.*

42,538. What has the same number of hake been fetching this last season?—34*s.* or 35*s.*

42,539. Do you know where the hake spawn?—I declare that I cannot exactly tell where the hake spawn, but I have heard the people here say that they go along the mouth of the bay in the winter time and spawn there.

42,540. When you take the hake at the beginning of the season are they full fish or not?—No, not in the beginning of the season. There may be one with pea in it, but they are not ready to spawn then.

42,541. When do you observe them full of spawn?—Later in the season; the spawn then fills up.

42,542. Do you think they leave the coast before they spawn, or do they spawn off the coast?—I do not think that they spawn here in the bay. It is my opinion that they generally spawn in the mouth of the bay, but I have heard people say that they spawn in the bay.

42,543. Is there any sprat-fishing here; do any shoals of sprats come in here?—But very few of them have come in of late years. I believe that great quantities of them came in in former days.

42,544. Have any of the men in Whiddy Island got a seine for catching sprats?—No, there is not a seine in Whiddy Island.

42,545. Do they seine for any kind of fish?—No, there are no seines there at all. There are only trammel-nets and herring-nets.

42,546. Have not some of them got seines for flat-fish?—They have small seines for flukes.

42,547. (*Professor Huxley.*) Is there anything you trammel-net fishermen have to complain of here; have you any complaint to make?—We complain when our nets are torn by the trawlers; that is, we should complain if it was of any use to do so.

42,548. Is there anything else that interferes with you?—No, there is nothing else, I think.

42,549. (*Mr. Lefevre.*) Have you yourself ever lost any trammel-nets?—Yes.

42,550. How long ago?—About three years ago.

42,551. Did you lose them in the daytime or at night?—Some of them were carried away by a storm, and some of them were carried away in the middle of the day.

42,552. Were any of them carried away by the trawlers?—Yes, some were carried away in the middle of the night by the trawlers, and also in the middle of the day. One of the trawlers came up and got into the middle of my nets, and tore them.

42,553. I suppose you would not shoot your trammels in the daytime if you saw the trawlers trawling off the coast?—I should not be fond of doing so; but the Coastguard are authorized to take up trammels which are there in the daytime, and the cutter was here last season and took up some trammels; I believe they were fined.

42,554. Do you think that generally along your bay the men who have trammel-nets observe the regulation with regard to not shooting their trammels in the daytime?—Some of them do, and some of them do not.

42,555. Do the Whiddy Island men observe it?—Some of them do, and some of them do not.

The witness withdrew.

W. Tisdale.

William Tisdale called and examined.

42,556. (*Professor Huxley.*) Are you interested in the fishing here, Mr. Tisdale?—I am.

42,557. How many years have you been occupied here?—Off and on about 17 or 18 years.

42,558. What kinds of fishing have you practised?—Principally trawling and salmon-fishing.

42,559. How many years have you had a trawler here?—When I first commenced I had a small boat of my own, and I trawled principally for amusement. I was constantly at it however.

42,560. How many years have you had it?—About 12 years ago I got it.

42,561. At that time were there any other trawlers here?—No, except Mr. Fail's boat at the time of the famine; there was his boat here for some time.

42,562. Did he fish here for many years?—He fished here for about three years, and he trawled all down Bantry Bay, from the mouth of the bay to Glengariff.

42,563. Has there been no systematic trawling within the last 10 or 12 years?—No, except by small hookers of 12 or 13 tons; they were trawling here nine or 10 years ago.

42,564. Is that boat of yours a beam-trawler or a pole-trawler?—It is only a small pleasure-trawler, a small beam-trawler.

42,565. How long is it since the large trawlers came here?—I think about four or five years ago; there has been an occasional trawler coming into the bay for some years, but there have not been trawling boats belonging to the bay.

42,566. Up to within the last four or five years there has been no trawling on a large scale here?—No.

42,567. When you began, 12 or 13 years ago, did you get plenty of fish?—Yes, I got an immense quantity.

42,568. Have you gone on trawling since?—Not steadily, but I have from time to time.

42,569. Are you able to get as much fish now?—Yes, we can; we have larger and finer boats and they go further out.

42,570. Are you able to get as much fish in the places in which you used to fish?—No, I think if we tried there we should hardly be able to get any.

42,571. Do you think that the quantity of fish in the bay has fallen off?—Yes I do.

42,572. Does that hold good with regard to all kinds of fish?—Not with regard to all trawl-fish, we can get as much out in the open sea; sometimes with a boat of ten tons we can take two tons of fish at one scrape.

42,573. In what part of the bay?—Close to Whiddy.

42,574. Is the whole of Bantry Bay fit for trawling?—No, three-fourths of it is soft mud and the rest is composed of ridges and odd rocks here and there.

42,575. Is the soft mud fit for trawling over?—It is not as good as a hard ground.

42,576. You do not mean rocky ground?—No, hard sand.

42,577. Is there much hard sand in Bantry Bay?—No, except close to the shore where we cannot trawl.

42,578. In that case there is very little good trawling ground in Bantry Bay?—Yes, two-thirds of the ground in the bay is good for trawling, but it is close in-shore and the trawlers cannot go there.

42,579. You said there was muddy ground?—Yes, we fish upon that.

42,580. You do fish upon the muddy ground?—Yes, but it is not as good as the hard ground.

42,581. Do you think the quantity of fish in the bay has fallen off?—What kind of fish do you mean?

42,582. I mean trawl-fish more particularly?—I think there are as many soles far out in the bay as ever there were, but in the bay it is hardly worth trawling.

42,583. Are you of opinion that the ground has been over-fished by the trawlers?—I do not think it has.

42,584. Then to what do you ascribe the falling off of the fish?—I cannot say why the trawl-fish have left the bay. There are limits within which we are prevented from trawling now, but where we did trawl formerly.

42,585. What are those limits?—From Crowdy Point, to Carrigskye Rock, and from thence to Reenavanny Point on the north shore of Whiddy Island.

42,586. Whereabouts is that?—Up towards Glengariff.

42,587. Is that the little arm of the bay from Carrig up to Glengariff?—Yes, down to Carrigskye Rock.

42,588. (*Mr. Lefevre.*) When was that regulation made?—Mr. Barry made it here some six years ago.

42,589. (*Professor Huxley.*) What was the reason that regulation was made?—It was made on account of the complaints of the seine owners that trawling interfered with the spawning ground. A commission was sent here on account of those complaints, and there was then a limit fixed.

42,590. What limit was struck out?—That was one of them.

42,591. Are there any other limits in Bantry Bay?—Yes, from the southern point of Whiddy to a place we call the Bull.

42,592. That shuts out Whiddy Harbour altogether?—Yes, but they cannot trawl in any case; the ground is rough.

42,593. Is all the east of the harbour open?—No part of the harbour is open.

42,594. Is all the coast of the bay open?—Yes.

42,595. Is it true that all kinds of trawl-fish have fallen off?—I do not think in this bay that the trawl-fish have fallen off in a proper sense except inside the bay. When the weather allowed us we got as many fish last year as ever we did, but of course in bad weather we cannot expect to take the same quantity.

42,596. When you have been trawling, have you taken a considerable quantity of small fish in your trawl?—We always take more or less small fish, but I do not think we ever take much small fish that is not saleable.

42,597. I am speaking of unsaleable fish?—We never take any large quantity of unsaleable fish, but of course we take some.

42,598. What do you suppose would be the proportion of unsaleable fish taken in a haul?—Sometimes I have taken from 70 to 80 pair of soles in a day and five or six score of plaice all of which would be good marketable fish. The small fish which would be thrown over would be about a score or so out of the lot.

42,599. Have you ever in working the trawl yourself seen spawn, in the sense of the eggs of fish, taken up in the trawl?—I never saw it to my knowledge and before those limits were marked out there was a good deal of trawling carried on on the very ground on which they say the fish spawn.

42,600. You never saw spawn taken up in the trawl?—I can safely say that I never did, and I know what herring spawn is very well.

42,601. You are no doubt aware that there are many things called spawn by the fishermen which are not spawn at all?—Yes, I have seen large quantities of spawn in the boats when the herrings have been taken late in the season. The herrings in point of fact have discharged it in the boats.

42,602. We understood from a previous witness that the herrings have forsaken the bay for some years, is that the case?—Yes, I think they have done so.

42,603. How many years it it since there was any considerable shoal seen in the bay?—It is within my recollection that there were 12 seines in the harbour all getting a great quantity of fish, but now there are only two seines in the place. They have most of them been given up because they could not get fish.

42,604. Was it the practice here to catch the herring with seines?—Yes, with seines and with drift-nets. Those were the only ways in which they caught herrings here.

42,605. Do they work the seines as circle-nets, or do they haul them a-shore?—They worked them as circle-nets.

42,606. When was the circle-net fishing practised here?—It has been practised on a small scale up to the present day.

42,607. That is whenever the herrings come in?—Yes.

42,608. Have you ever had occasion to observe the condition of the fish which have been taken in that way?—All the fish which I have seen taken in that way appeared to be fine fish.

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42,609. They were good marketable fish?—Yes, there are very fine mackerel here to-day.

42,610. But I am speaking now with regard to herrings, were they good saleable fish?—Yes.

42,611. Are there many mackerel taken here?—Not generally; they do not generally come down as far as this in large quantities.

42,612. Have you ever paid attention to the hake and line-fishing?—I have not paid attention to it myself, but I have seen it carried on by other people.

42,613. Is the produce of the hake-fishing as good as it was?—No, not by any means.

42,614. Has it all fallen off?—Yes.

42,615. Is the line-fishing mostly hand-line-fishing?—Yes, and it has fallen off for different reasons. In the first place the fish are not there, and in the second place if they were the people are not there to catch them.

42,616. Are there not as many persons employed in the fishing as there were at one time?—Not by any means.

42,617. And you say that the fish are not there?—They are not there at all in the same quantity.

42,618. What do you consider to be the reason of that?—I declare I cannot tell you the reason; I can only give you my belief.

42,619. And what is that?—My own firm belief is that the herrings and sprats would be more plentiful down in the shallow water if it were not for the hake trammel-nets which are set across the bay and stop the shoals from coming up. We all know that the hake feed upon the herrings and sprats, and when the herrings and sprats do not come up they are not followed by the hake.

42,620. If that was the case, would not the herrings and sprats come up all the more because they would be safe?—I do not think so. They stop out in the open water. I have known the bay full of herrings and sprats when none of them would come up to the harbour.

42,621. Do you think it is the case that there are plenty of herrings and sprats, but that they do not come up?—Yes, I have seen the bay swarming with them.

42,622. Do not the people go down after them?—They have no means of fishing in the open water.

42,623. Cannot the drift-nets go out?—They are fished from open boats which are not fit to go out.

42,624. Are there plenty of these fish out in the mouth of the bay?—Yes, and if some of the Isle of Man boats were fishing here they would get a large quantity.

42,625. What induced the large trawlers to come here first?—I believe they came here because they heard the character of the bay and that there was a very large quantity of trawl-fish in the bay.

42,626. Have those who came here been doing well?—They have taken great quantities of fish, but they are far from the market.

42,627. Where is the nearest place they can take them to to reach the market?—Brandon Bay, and then they send it on to Dublin.

42,628. Does it go on by cart?—Yes. It costs three-farthings a pound to send it on to Dublin.

42,629. Is there no market at Cork?—It is very fluctuating; it would not do to send any quantity of fish there.

42,630. Then in that way is there practically a limit to the number of trawlers that come here?—When there is a number of trawlers here they join together and hire a car. It costs just the same money to send away one hundredweight of fish in a car as it does to send away ten hundredweight.

42,631. Are there any restrictions upon the trawling which you think are in any way injurious?—No, the ground we are prevented from fishing in we do not care about.

42,632. At present you are free to trawl anywhere else you like in Bantry Bay?—Yes.

42,633. Is the trawling ground only a limited area?—It is too confined for large boats, but it does very well for boats fishing for amusement.

42,634. (*Mr. Lefevre.*) Is there any means of ascertaining the quantity of trawl-fish brought in here?—Not exactly, but I can give you a fair idea.

42,635. It is now five or six years since trawling began on any considerable scale here?—Six years ago there was no trawling going on here, but for the last four years it has been steady work.

42,636. Can the quantity which has been brought in here by the trawlers since then be arrived at?—I have known one boat which I had the management of bring in more than 700 pair of soles in one week.

42,637. How many trawlers are there in the bay?—There are five belonging to the bay and there were four strange boats last year, three from Galway and one from some other place.

42,638. Were they all of a large class?—Yes, the Galway boats are first-class boats.

42,639. Were they of 30 tons and upwards?—Yes, they were of 40 or 50 tons.

42,640. Are there any trawl-boats owned in Bantry now?—Yes, there are five boats.

42,641. Of what size are they?—From 20 to 40 tons.

42,642. Those which come from Galway are larger?—Yes, they are large first-class boats. Mr. Sweeny sends out first-class boats now.

42,643. What is an average take per day by the Bantry trawlers?—No trawler would think he had had a good day unless he got from 40 to 50 pair.

42,644. Besides other fish?—Yes.

42,645. Do they rely mainly on the soles for profit?—Yes, they are the principal profit.

42,646. What other fish are there?—There are a few turbot and brill, and a fair share of hake.

42,647. Do you agree with the witnesses who have already given evidence that the hake have fallen off?—Yes.

42,648. Have the trammel-nets fallen off in number?—I think they have within my recollection. I believe they were more numerous formerly.

42,649. How long is it since you had a good herring season here?—Three years ago there was a great quantity taken here.

42,650. And you attribute the failure of the last three years to the great number of trammel-nets that are set?—Yes.

42,651. The trammel-nets have been used in great numbers for some years past?—Yes.

42,652. You do not find in former years that they prevented the fish from coming up?—In former years they were more plentiful certainly. I believe there is a natural falling off in the fish.

42,653. The regulations made by the Fishery Board were made before the larger class of trawlers came into the bay?—Yes.

42,654. At that time were there any small trawlers fishing in the bay?—Yes, there were a few little small things here.

42,655. How many of them were there?—I had one trawler which I used to work for amusement, Mr. Pyne had two, and there was another gentleman who had two.

42,656. Have they been discontinued?—Yes.

42,657. Did the enforcement of the regulations prevent them from being worked to a profit?—No; they got out of repair, and the big trawlers came in.

42,658. Have you observed any improvement since those regulations were established?—No, I have not.

42,659. But they do not much affect the fishing of the larger class of trawlers?—No; we trawl outside in the open part of the bay where the other fishing is not much carried on.

42,660. Then in your opinion the regulations are powerless for good or for evil?—I do not think that they affect any person much.

42,661. (*Professor Huxley.*) Are there any oyster beds here?—Yes, there are a great many oysters; they are spread entirely over the harbour.

42,662. Is there any large bed ?—Yes.

42,663. Are they worked ?—No; I do not think they are preserved, or that there is a profit to be made from them.

42,664. Is that because there is no market for oysters ?—There is a good market, but I do not think they are sent to the market.

42,665. Does anybody take the trouble to dredge them ?—I do not think there are any oysters dredged for. It is on the natural bed they are got. Some people have bought them at a small price to put them on other beds.

42,666. Oysters have been taken to transfer them to other places ?—Yes.

42,667. Where have they taken them ?—To Cork. Mr. Pyne had an oyster bed there, and Lord Bantry has one at Glengariff. There are two up at Bearhaven Harbour.

42,668. Are you aware that the privilege offered by the Fishery Board has been taken advantage of, namely, that of letting particular portions of ground to persons for converting into oyster beds ?—No, with the exception of Mr. Pyne.

42,669. Has that oyster bed been stocked ?—Only by the natural stock; we put no oysters there.

42,670. There is really no trade in oysters here ?—No.

42,671. (*Mr. Lefevre.*) Is there any seine-fishing from Bear Island ?—There is only a similar class of seines to those they have here.

42,672. Are they drawn up on the shore ?—I cannot say.

42,673. Are there any trawlers at Bear Island ?—No.

42,674. At what period of time do the trawlers from a distance trawl in this bay ?—We do not send out our boats until the 1st of December; the fish do not come upon the ground until then, and from that up to January, February and March we have the best season.

42,675. Do you lay up your trawlers after that ?—Generally, when the weather gets hot, and we cannot send the fish to the market on account of the distance.

42,676. Would you trawl all the year round if you had a better market ?—Yes.

42,677. Are there fish to be found here all the year round ?—Not in the same quantity; they usually leave the bay about the middle of May, but we should find it worth our while to fish if we had a constant market.

42,678. Do the Galway trawlers fish all through the year ?—No, they go away in the middle of April.

42,679. Do your trawlers go round to Dunmanus Bay ?—No; that bay has not been trawled to my knowledge.

42,680. (*Professor Huxley.*) Is there any lobster-fishing here ?—Yes; Captain Chambers between this and Glengariff has carried it on.

42,681. Are there many fish ?—Yes, a great many; he has boats employed.

42,682. How many boats ?—Seven or eight row boats, and a small sailing boat of about 30 tons which attends upon the others.

42,683. What is the market for the lobsters ?—I do not know where he sends them. He has tanks in which he collects them, and he sends them away in large numbers.

42,684. (*Mr. Lefevre.*) Is there any reason why the trammel-net fishermen should not be allowed to set their trammels in the daytime ?—There is a substantial reason.

42,685. What is it ?—Trawling and trammel-net fishing never can go on together.

42,686. If the trammel-net fishermen were allowed to set their nets, would the trawlers have to desert the ground ?—They could not trawl if the trammel-nets were set.

42,687. But the ground is very wide ?—You cannot divide the bay. The only way would be to have a different season for each. The best thing would be to give the trammel-net men their season when they might fish during the whole day and night, and then to give the trawlers theirs. The season that suits trawling would not suit the trammels, and the season that suits the trammels would not do for trawling.

46,688. What season would you give to the trammel-net fishermen ?—From the 1st of June to the 1st of December; that would not take away one month in which they care about fishing.

46,689. That would give them a great part of the season when they do not fish at present ?—No, it is the time they do fish.

42,690. Do you think that the regulation with regard to setting their trammels in the daytime is observed ?—Not strictly; it is observed by some, and it has been observed more strictly since the cutter has been placed here to watch them.

42,691. How long has the cutter been here?—Since last year.

42,692. You were speaking about the bay being divided, has it ever been proposed that the bay should be divided between the trawlers and the trammel-net fishermen ?—Do you mean with regard to the limits within which each should be practised ?

42,693. Yes ?—I think the portion of the bay from Sheelane across the bay is not worth much to the trawlers, and up to League Point on the south side.

42,694. Was a proposition of that kind made on behalf of the trawlers ?—I made a proposition of that kind to Mr. Barry from the Fishery Board at one time. I proposed that he should give the trawlers their season and the trammel-net fishermen theirs.

42,695. But with regard to the division of the bay between the two, was any observation made to that effect ?—Two-thirds of the fishing in Bantry Bay are carried on inside that line.

42,696. Is there not a considerable amount of trammel-net fishing in Bear Island, and on that coast ?—I have hardly ever met a trammel west of the river.

42,697. Would the trawlers be content if this portion of the bay were taken away from them ?—You would take away the most valuable part to us. We require very powerful boats to fish in the open part of the bay, and if you take the other portion away it would amount to doing away with trawling altogether.

42,698. Do your trawlers often carry away the trammel-nets ?—Yes, in the daytime they cannot avoid it. It is impossible for a large 60-ton boat, even when they see a trammel buoy, to avoid it; they can only see it when they get within 100 yards of it.

42,699. Do the trawlers fish at night ?—They have a right to do so, but they do not use it; they cannot fish in Bantry Bay at night.

42,700. Do they come back into Bantry Harbour every night ?—Yes, in order to send their fish away, and to be in time for the train at Bandon.

The witness withdrew.

DANIEL LEARY recalled and examined.

D. Leary.

42,701. (*Mr. Lefevre.*) You have something to say in reference to what the last witness has stated ?—Yes. I wish to ask how, if a limit is to be drawn such as has been suggested, the men living up at the top of the bay are to come down. I think it would be the best way to appoint a certain season for each craft, and to give every one a fair chance.

42,702. You think that that would be a better plan than dividing the bay into two portions ?—Yes.

42,703. Are there a considerable number of trammel-net fishermen westward of the line which has been pointed out by the last witness ?—There are a number of them on all sides of the bay, south and north.

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42,704. Are there as many westward of that line as eastward of it?—Yes. Mr. Tisdale says that the trammel fishers are a great impediment to the shoals of herrings and sprats coming in here. I do not know how that can be; the trammel-net is a stationary net sunk in from 18 to 20 fathoms of water; it is only two or three feet high in the water, and it is sunk down on the bottom.

42,705. What depth is it below the surface of the water?—It only rises about three feet from the bottom of the sea, whereas these shoals of fish when they are making for the land come light upon the water, and under those circumstances I do not know how a trammel-net can be any impediment to them.

42,706-7. Then you do not agree with the statement which has been made by Mr. Tisdale?—No.

42,708. I do not say whether that opinion is right or not, but Mr. Tisdale appeared to say, not that the trammel-nets frightened the fish, but that they caught the hake, which consequently left off driving up the other fish; do you think that is the case or not?—Why was it not the case in former years? There were more trammels in former years than there are now, and yet we caught more herrings in one season at that time than we can catch now in four seasons. We also killed more hake and sprats than we do now.

42,709. (*Mr. Lefevre.*) Do you find that when you have had a good herring season you have also had a good hake season?—It has generally been the case, because the herrings generally bring the hake after them.

42,710. Is it also the case with regard to the sprats?—Yes.

The witness withdrew.

D. Morton.

DANIEL MORTON called and examined.

42,711. (*Professor Huxley.*) Are you employed in the fishing here, Mr. Morton?—Yes.

42,712. Are you engaged in trawling?—Yes.

42,713. You have heard the evidence which was given by Mr. Tisdale?—Yes.

42,714. Do you agree with it?—Partly. I did not hear the whole of it, but I agree with the great part of what I heard.

42,715. Is there anything you wish to tell us which he did not remark upon, and which you think it is necessary we should know?—I think a little more of the bay might be given to the trammel-net men. The trawlers might go further down the bay without injury to them. In my opinion the further we go down the bay the more fish we get, and I think that the boats which are now fishing the bay are too large to work in the upper part of it. If you were to draw a line from Shot Head across to White Horse Point, I think that would do.

42,716. That would cut the bay in half?—Yes; I would propose that all the trawlers should work into Lawrence Cove, instead of coming here at all.

42,717. You would keep the trawlers outside of the line?—Yes.

42,718. And the trammel men would come here?—Yes; and I would keep a carrier to go with the fish every night.

42,719. Have you any objection to the arrangement proposed by the trammel-net men, namely, to allow the bay to be open for trammel-fishing in one part of the year, and for trawl-fishing in the other part?—I suggested that to the Reverend Mr. Shea two years ago, and I named it also to Mr. Barry, from the Fishery Board.

42,720. Do you think it is a good plan?—Yes; and I would give them seven months of the year. There are only five months in which I would care to fish.

42,721. Would you give them from June?—I would give them from the beginning of May.

42,722. But they do not want to go in May?—The month of May is of no use to us for trawling, and it would be better for each that we should have different months to carry on our work. At present neither can get a living, when both are in dread of each other. It is impossible for a trammel man to haul his trammels before we are out, and it is impossible for us not to get foul of the trammels if they are out in the bay. We are no sooner clear of one trammel than we are foul of another, and it only causes ill-feeling on both sides.

42,723. Then do you think that arrangement would answer very well?—I am certain it would. I have taken the opinion of the majority of the fishermen on the subject, and they all agree in saying that they would be very much satisfied if I could get a law to that effect passed.

42,724. Are you interested in the trammel-fishing at all?—No, only as far as I have a regard for the poor fishermen who are engaged in it. Most of the trammel men I know are at the slate quarries now. The fishermen on the north shore chiefly depend upon trammels.

42,725. Do you agree with Mr. Tisdale as to the effect of the trammel-nets in preventing the hake from driving the sprats up the bay?—Yes, it is just like a policeman chasing a mob. The hake are the enemy, and if you stop them from coming up the bay the shoals of fish will stop too.

42,726. How do you meet the argument of Mr. Leary, that an abundance of herrings came up in former years?—I do not believe that there was anything like the quantity of trammel-nets in former years that there is now, and they were in the habit of fishing then in shoal water, in 6 or 7 fathoms of water. They had only about three fathoms over their nets. They have been known to fish inside of Whiddy Island, which ought not to be allowed at all.

42,727. What harm do they do when fishing near the surface?—The more they fish near the surface the more chance they have of taking the shoals of fish which are chasing other fish up. If you allow them to fish in shallow water you will soon see the effect it will have on the fishing.

42,728. Are the trammels at the mouth of the harbour so set?—There are not one to 10 there, taking a line from the White Horse; they are generally above it. The majority of the trammels are on the north shore from the White Horse up to Whiddy.

42,729. It has been stated to us positively that the trammel-nets are more numerous than formerly; you have stated that a great many of the trammel-net men have gone to the slate quarries?—Yes, that has been within the last two years; we have not had the slate quarries working to any extent until then.

42,730. Then you do not agree with the previous witnesses that 20 years ago there were more trammel-nets than there are now?—No; I came here in 1848. I have fished on and off ever since. I have been constantly in this bay for the last 12 years. I think that the chief reason that the herring fishery has gone to the bad is on account of their having lifted the coral sand out of the herring beds, where the fish are known to spawn.

42,731. Where was that?—At Trakall and the back of Whiddy Island. Trakall is on the top of White Horse Bay. All round the upper part of the bay is a spawning ground, and I think they ought not to be allowed to be interfered with by the sand-boats.

42,732. What do you mean by the sand-boats?—I mean the boats which are constantly dredging up sand.

42,733. What do they get the sand for?—For manure. It produces a great deal of money in this bay, and it is a question whether it is better to stop the fisheries or the sand-lifting.

42,734. The sand you say is used for manure?—Yes.

42,735. Is it a kind of lime sand?—Yes.

42,736. Coralline sand?—Yes.

42,737. Is that a considerable trade here?—Yes, there are more sand-boats than fishing-boats.

42,738. Do they work with dredges?—Yes.

42,739. How many sail are there employed in that way?—There are upwards of 40 sail in Bantry now.

42,740. Always working over that ground?—Yes, in the summer time.

42,741–2. How far do they work?—I cannot say, but I know they visit Trakall more frequently than any other place. In former years there were hundreds and thousands of herrings taken, but they are not taken now. Of course, if you were to prevent the boats from lifting this sand that would put a stop to a practice which is the means of producing a great amount of money in this place. It is alleged that trawling is the great ghost that is frightening all the fish away, but I do not believe that.

42,743. With regard to these sand-boats, are there many of them worked on the south shore?—Yes.

42,744. And also along the north shore?—Yes, about an equal number.

42,745. How can they work if the trammel-nets are set?—They do not go there; they go into the little nooks where the fish have always been in the habit of spawning.

42,746. They do not work over the trammel-nets?—No, they could not do it.

42,747. What depth of water do they work in?—From eight and nine fathoms up to 25 fathoms, but they generally work in from eight to 10 fathoms of water.

42,748. How many years have they been working here?—Longer than I can recollect.

42,749. Have they been working here for the last 20 years?—There were sand-boats here before I knew Bantry. I believe that the origin of that trade is due to some Frenchmen who came into the country and set the boats working.

42,750. Has it been going on for the last 100 years?—May be it has.

42,751. Has the number of boats engaged in that trade very much increased of late?—Yes, and it is likely to increase more if the railway comes, because the traffic in sand will be very large.

42,752. Is there any evidence that it does harm to the fishing?—I have heard a report from the herring fishermen and from the fishermen generally of this locality that the herring-fishing has been destroyed since the sand-boats came.

42,753. Has any spawn been seen in the sand-boats?—I believe so.

42,754. I suppose this sand-lifting was going on at the time that plenty of herrings were got years ago?—Yes, it was, but these places were not frequented for sand-lifting as they are now.

42,755. But still the practice was going on?—Yes, in the bay.

42,756. And yet there were plenty of fish here?—Yes.

42,757. Is there anything else you would like to remark upon in refererce to trawling?—No. If the trawlers are to have a certain time for trawling, and the trammel men a certain time for setting their trammel-nets, I should like each class to be allowed to fish day and night, because they could not injure any other fisheries, and one night's fishing when it can be obtained is generally worth two or three days' fishing. Let the trammel men fish day and night during their seven months, and allow the trawler to do the best he can during the five months that would be left for him.

42,758. Do you think that that would meet the views of both parties?—I think if there was a general meeting called of the fishermen on this coast the majority would vote for it.

42,759. Was that proposition not brought before the notice of the Fishery Board?—I mentioned it to Mr. Barry, to the Reverend Mr. Shea, and others.

42,760. Had they any reasons for not carrying it out?—Mr. Barry said we should call a meeting, and then petition the Fishery Board to pass a byelaw to that effect.

42,761. Has such a meeting been called here?—No, no meeting has been called as yet.

42,762. Why is that; is there nobody here who takes sufficient interest in the question?—I did not make it my business to ascertain whether they were sufficiently interested in the question or not.

42,763. (*Mr. Lefevre.*) Are you the owner of a trawl-boat?—Yes, I own more than one; I may say that I have two.

42,764. How many men do you employ in each?—Four men in each.

42,765. What do these men do in the other part of the year when they are not trawling?—I send them away coasting or trading in butter.

42,766. How many months of the year do you fish now?—It is not worth while to fish more than five months in the year.

42,767. Is that mostly on account of the difficulty of sending your fish to the market?—We are no doubt too far away from the market, and we have not a sufficient number of boats working here to make it worth our while to put in ice, and go to the expense which would be necessary in order to conduct the business properly. It is only done in a pettyfogging way here. Instead of having ice-houses, and sending the fish to Birmingham and London, and having large trawlers, we make use of a market like Cork, where we get a low price, and where the price comes down to 2*d.* a pound. In point of fact, it is hardly worth while sending them there.

42,768. If you had a railway here do you think it would be better?—Yes, I think we should do well with large boats here then, and we should do better if we went further outside to Roaring Water Bay and Cape Clear down to Dursey. I think we should do better then. We should only have to shift further out, and give the men the bay for trammel-net fishing. We have a strong current running outside the headlands, and in the summer time it would be of little or no consequence to fish in the bay. There is little or no wind; the bay is covered by the mountains. Sometimes we have a gale of wind, and next day none, and the boats are in the harbour three or four days a week.

42,769. Is that in the summer time?—Yes, and generally in the winter. We make only three or four days fishing, and if the boats did not get a good quantity of fish it would not pay them.

42,770. Do your boats fish at night?—Not to my knowledge, nor is it by my wish or sanction that they do. I have heard that one or two boats have tried it upon two or three moonlight nights, but it is against the supposed byelaw, although it was never ratified by the Lord Lieutenant. There is an impression among the fishermen that they must not fish at night, but I believe the law to that effect was never sanctioned.

42,771. You would allow trawling outside a particular line for five months in the year, and give the trammel men the other seven months of the year for working their trammel-nets?—Yes; we must go somewhere, but I do not think it worth our while to fish here at all in the summer time, considering the distance we are from the market, the heat of the weather, and the want of conveyance.

42,772. But would it not be worth while to fish here all the year round if the markets were better in consequence of the railway being brought here?—If we had a fleet of boats, and could command a steam carrier, then I think the boats would have no business to come here at all.

42,773. With ice?—Yes, we should take out ice, and come in every night to meet the train. The boats do not get in till 12 o'clock at night now, and it is 12 o'clock before they get out again, when all the best of the day is gone.

42,774. How do you pay your men, by shares?—They have half the fish.

42,775. Are they natives of Bantry?—Yes, all the men are natives of Bantry. We have one stranger here, who happened to come in a vessel as a pilot

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from Wales, where she belonged to, and who was induced to stop here.

42,776. Have you had any Cornish or Dublin or Galway boats here?—We had one here to see whether any improvement had been made in the fishing, and he is coming here in his own boat next winter. There are many boats coming from Wales.

42,777. Are there no small boats under 10 tons in the bay?—No.

42,778. Do you recollect the time when there was any considerable line-fishing in the bay?—I recollect when Mr. Bell's company were here from Peterhead. They carried on a smoking business here, and they caught cod, haddock, and whiting.

42,779. When was that?—Twelve or 14 years ago.

42,780. Has it quite come to an end now?—I believe the fish are there still, but the men have emigrated, and there are only two or three good line-fishermen left, and they do not think it worth their while to go out. They get so little for the fish that when they get it it does not pay them.

42,781. Is that still the same question of the want of a market?—Yes.

42,782. Are there no cod brought into Bantry?—No.

42,783. Are there plenty off the bay?—There are plenty off Bear Island.

42,784. What class of vessels is there at Bear Island?—Large yawls and small hookers.

42,785. Are they vessels under 10 tons?—Yes; there used to be first-class hookers belonging to that place but they have gone away to Jersey. They were large 20 and 30 ton boats. I believe that at one time they could number from 12 to 15 fine hookers there.

42,786. Do they send their fish to Cork or do they merely fish for the local demand?—They split and cure it.

42,787. And sell it in the neighbourhood?—Yes.

42,788. Do you know how many there are now?—No, they are reduced to a mere fraction of what they used to be but there is no doubt that there are plenty of fish here if we had the boats and the men.

The witness withdrew.

W. Tisdale.

WILLIAM TISDALE recalled and examined.

42,789. (*Professor Huxley.*) You wish to make an addition to your evidence?—Yes; I wish to say that if the trawling was confined by limits I think the limits Mr. Morton has laid down would be to too extensive, It would hardly be necessary to require the boats at all times of the year to work outside the limits he has named. The trammel-nets do not go there and it would be a pity to have the ground idle without its being fished upon in some way. If we do no tinterfere with any other kind of fishing I do not see why we should not be allowed to fish there.

42,790. (*Mr. Lefevre.*) Do you think the greater number of trammel-nets are inside of Shot Head?—I do not think there are any outside at all now.

42,791. Is there good trawling ground outside altogether?—This is the first year we ever had any experience of it. Some of the Galway boats went far out and I have found that the further we went out the better the fishing was; but it requires powerful boats and very expensive gear to enable them to keep at sea.

42,792. Could you not do so; in the North sea powerful boats keep at sea for weeks together?—We could if we had capital enough to establish the boats. If there were vessels of that class here I have no doubt that there would be a great deal of money made by them.

42,793. Do you consider that it is a good trawling ground?—As far as our boats tried it last year they did very well.

42,794. Do the Galway boats bring their fish in every day the same as you do?—Yes, they join in sending them away in cars.

The witness withdrew.

T. Curtayne.

THOMAS CURTAYNE called and examined.

42,795. (*Professor Huxley.*) You are not engaged either in trawling or trammel-net fishing here?—No.

42,796. But you have some seines I believe?—Yes.

42,797. Is there much seine-fishing carried on here?—Not lately, there has been a great falling off in the herrings and sprats.

42,798. In former times were there herrings to be caught here by seines?—Yes, in large quantities.

42,799. What is the length of the seines you use?—From 100 to 120 fathoms.

42,800. What is the size of the mesh?—Some of them are from half an inch to $2\frac{1}{2}$ inches.

42,801. Is the half-inch net used principally for sprats?—Yes.

42,802. Is it a seine without a pocket?—The meshes increase in size; the bunt is small.

42,803. Did you use the same net for herrings as for sprats?—Yes.

42,804. Is it a seine without a pocket; is there any cod in it?—No.

42,805. Only a bunt?—Yes.

42,806. Is it deeper at that part?—No, it all goes up to the same length, about 10 or 12 fathoms deep.

42,807. Are these seines drawn on the shore or are they worked as circle-nets?—They are drawn on shore sometimes and sometimes they are worked as circle-nets.

42,808. How many years is it since you had any considerable take of herrings in that way?—About five years since.

42,809. Was there a large shoal of herrings in then?—It was not a very large shoal but there was a considerable quantity of herrings taken.

42,810. What sort of condition are the herrings in that are taken in that way?—They are in very fine condition.

42,811. Are they at all damaged by the mode in which they are taken?—No, not in the slightest degree.

42,812. Are you aware that that mode of fishing has been prohibited in parts of Great Britain?—I was not aware of it.

42,813. It has been prohibited on the ground that the fish are damaged and injured by the mode in which they are caught; is that the case here?—No it is not.

42,814. Are the herrings caught in that way used fresh or are they cured?—They are cured.

42,815. Will they fetch as good a price as herrings caught by the drift-nets?—I think they will.

42,816. Do you catch herrings with the drift-net here?—Yes.

42,817. Has there been any large catch of late years?—Not of late years.

42,818. Are you ever able to catch herrings with the seine-nets when they would not be caught with the drift-nets?—Yes, a small sized herring.

42,819. How large are they?—Smaller than pilchards.

42,820. What time of the year are the herrings full here; what time have they pea in them?—From September up to December.

42,821. Was that your great fishing time here?—Yes.

42,822. Was there any summer fishing?—Yes.

42,823. What time of the year was it carried on?—In July.

42,824. And August?—In rare instances in June.

42,825. Do you get fish in August and September?—Yes.

42,826. In what condition are the fish then?—In very good condition.

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42,827. Are they full fish at that time?—No.

42,828. Have you never seen full herrings here except in October and November?—Yes, from September.

42,829. All through October?—Yes.

42,830. Have you ever had them full in February?—I do not recollect taking them full in February here.

42,831. We understand that the herrings have fallen off very much here?—Yes.

42,832. What do you consider to be the cause of that?—I cannot speak from experience but only from what I hear. They complain of the trawling. They say that there are a great number of boats trawling in the bay, and that they cut up the shoals of fish and send them away. That is the statement made by the fishermen who work the nets.

42,833. Do you ever get pilchards at the other end of the bay?—I believe that about three or four years since a lot of pilchards came in here.

42,834. But it is not a common thing?—Formerly they came in in large quantities but lately they have not.

42,835. Is the same thing also true of the sprats; did they come in in large quantities?—Yes.

42,836. How far up the bay did the pilchards come?—Just near to Whiddy on the south shore and they came inside the harbour.

42,837. (*Mr. Lefevre.*) How long do you recollect the seine-fishing?—I have been engaged at it for about 14 years.

42,838. Do the seine-nets belong to capitalists or to the fishermen?—They belong to capitalists and the men work them; they get as their share the fourth of the fish.

42,839. Do the herrings that are cured here fetch as good a price as the Scotch herrings?—No.

42,840. Is there any considerable importation of Scotch herrings here?—Not here, but I believe they sometimes get them in Cork.

42,841. What is the difference in price between them?—Good Scotch herrings will average from 5*s.* to 6*s.* and 7*s.* per 100 here.

42,842. And what price will your herrings get?—From 2*s.* to 4*s.* per 100 but it depends upon the scarcity of the fish.

42,843. Was it upon your application that the regulations prohibiting trawling in certain destricts were made?—Yes, I wrote to Mr. Barry.

42,844. When was that?—I think it is now about four or five years since.

42,845. Have you found that they have been of any use to the seine fishery?—Of course I do think it has been of great advantage to the seine-fishing.

42,846. But it has not produced any good results with regard to increasing the quantity of herrings?—No, but they still trawl in the bay, and as long as they trawl in the bay I think the herring-fishing will continue to fall off.

42,847. Do you think the limits have not been drawn far enough out?—No, I think from the light-house down across to White Horse Bay should be the limit. There should be no trawling inside of that.

The witness withdrew.

JAMES WHALEY called and examined. *J. Whaley.*

42,848. (*Professor Huxley.*) Are you a line fisherman?—Yes.

42,849. What mode of line fishing do you practice?—Hand-line fishing.

42,850. How long have you been a hand-line fisherman?—I have now been for more than 20 years at it.

42,851. What kind of fish have you been in the habit of catching with the hand-lines?—I have caught haddock with spilliards. I have been catching haddock and cod and bream with the hand-line.

42,852. Do you catch as much fish now as you were in the habit of catching formerly?—I have not caught as much fish lately and with regard to the hake they have failed us entirely.

42,853. Where do you fish chiefly?—We fish outside for bream but for hake we were formerly in the habit of fishing in 40 fathoms of water.

42,854. Do you ever go outside the bay altogether?—Yes, outside Bearhaven at the entrance of the bay.

42,855. You say that the catch of fish has fallen off?—Yes.

42,856. Did you ever catch haddocks here?—Yes.

42,857. When?—Not for the last 15 years. During that time we have not often taken haddock. We used the spilliards and when the blight came on many of the hookers were not able to keep them out.

42,858. Do you suppose there are no haddock now off the coast?—Nobody works for them from this shore. I do not know whether the Bearhaven people do.

42,859. Do you think all the line-fishing has fallen off?—Yes.

42,860. What do you think is the reason of it?—I cannot say, but it has fallen off, with the exception of whiting from December down till after Christmas. They come in-shore at Whiddy Island and there are a great number of boats after them then.

42,861. What is the reason of the falling off of the line-fishing?—I cannot assign a reason except that many complain of different "crops" being put in the water.

42,862. Different "crops"?—Yes, there are first of all the trawlers and then the trammel-nets. There were hake here for three or four nights this year and they were dispersed out of the bay by the trammel-nets. A great many of the fishermen say that it is on account of the trammel-nets that they left the bay.

42,863. Do you think the trawlers do you any harm?—Not at this time of the year; in the months of April and May they injure us when the fish are making for the land.

42,864. Do you think they frighten the fish away?—Yes, I believe they do. If a stone is thrown into the water sometimes it will frighten them and send them away.

42,865. Is there any other complaint you have to make on behalf of the line fishermen?—We were getting a good deal of hake about four years ago outside here off Whiddy Island; there was not a craft that interfered with us for nine weeks, and we were getting large quantities of fish. I killed 30 score of hake one evening, but last year as soon as they showed themselves the trammel-nets were put down and we had to come home again penniless.

42,866. Did the trammel men catch them and you not?—Yes; they shot on each side of us in six fathoms of water.

42,867. (*Mr. Lefevre.*) But they were fishing with trammel-nets in the good season you speak of?—No; they did not put a trammel down in the water during those nine weeks we were fishing.

42,868. How was that?—Because the Act of Parliament would not allow them to use them within the limits.

42,869. How long ago is that?—Four years ago.

The witness withdrew.

MAURICE HENNEGAN called and examined. *M. Hennegan.*

42,870. (*Professor Huxley.*) Are you a seine owner Mr. Hennegan?—Yes.

42,871. Did you hear the evidence which has been given by Mr. Curtayne?—Yes.

42,872. Do you agree with it?—Yes.

42,873. Is there anything you wish to add to what Mr. Curtayne has stated?—No, except that I believe the limits which have been laid down are insufficient.

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42,874. Do you think there ought to be a larger area from which the trawlers and the trammel-nets should be excluded ?—Yes, but I believe the trawlers do more injury than the trammel-nets. The trawlers pass through the shoals, break them up, and scatter the fish in every direction.

42,875. (*Mr. Lefevre.*) Are the trammel-nets prohibited within that district ?—Not that I am aware of.

42,876. Only the trawlers ?—Yes.

42,877. How can you work the seine-nets where the trammel-nets are used ?—They are never set there.

42,878. Are they in deeper water ?—Yes.

42,879. Then the trammel-nets do not interfere with you ?—Not much.

42,880. Did you not say that the trammel-nets did you harm ?—No.

42,881. You do not attribute the falling off of the herrings in this bay to the frightening of the fish by the trammel-nets ?—No, I think not. I think the fish when they are coming in would always pass over the trammel-nets.

42,882. But are not the fish frightened by the light in the water ?—I do not know that they are.

42,883. It has been asserted by some of the fishermen ; do you think it is not the case ?—I do not think it is. The trammels stand on the bottom of the water at the height of about two and a half or three fathoms, but there will be 20 fathoms of water above them, there is therefore plenty of room to enable the fish to pass over the trammels.

42,884. Then you do not think that the trammel-nets prevent the hake from driving the herrings in ?—I do not think they do.

42,885. Do you think the falling off is solely due to trawling ?—I think that trawling is more injurious than anything else.

42,886. (*Professor Huxley.*) Does trawling in the whole length of the bay interfere much with the fishing ?—At the entrance of the bay I do not think it will interfere much with the fishing, but when there are fish in the bay and they are trawling there it does interfere.

42,887. Would you object to any trawling in the bay ?—Yes ; except at the point of the lighthouse. I do not think that it frightens them as much after they come in as when they are resting previous to spawning.

42,888. We heard of the herrings being caught before they are full ; for example, in July and August they are not full fish ?—There are very few taken then. It is only an exception to take them at that time.

42,889. In what months is the greatest quantity taken ?—In September and October.

42,890. Do you ever find them full then ?—No, not until about December.

42,891. Then they cannot be spawning then if they are not full ?—But they rest in the bay before they spawn.

42,892. And you are of opinion that the trawling drives them out again ?—Yes.

42,893. You had a considerable haul of herrings here four or five years ago ?—Yes.

42,894. Yet trawling was going on then ?—Not to any great extent.

42,895. Were you taking large quantities of herrings for a long time before that ?—They were always taken more or less.

42,896. Have the herrings forsaken the bay since trawling has been practised ?—I do not say that, but I think it must interfere with them.

42,897. (*Mr. Lefevre.*) How long do you recollect the seining here ?—For 10 or 12 years.

42,898. Were there not before trawling commenced here great variations in the seasons ?—Yes.

42,899. Do you think that a line ought to be drawn from the lighthouse, and that all trawling ought to be prohibited within it ?—Yes.

42,900. Do you think that the line drawn by the Commissioners has been of no use ?—It has been of no use whatever.

42,901. You would as soon have nothing as that ?—I would very nearly as soon have nothing. I think it would be better for the trawlers themselves if they were further out.

42,902. You would have no restriction with regard to the trammel-nets ?—They do not interfere much with the seine-fishing.

42,903. How many men are employed here in seine-fishing in a good season ?—Up to the year before last I had 45 men.

42,904. Do you give them any head money ?—They get a bounty varying from 8*l.* to 15*s.*

42,905. Did you give it last season ?—I always give

42,906. In the prospect of the fish coming up the bay ?—Yes.

42,907. You have not neglected doing it because there has been a bad season ?—No ; but I have only worked one seine. I have had two lying idle.

42,908. How many were there working altogether ?—I believe there have been 64 families depending upon them.

42,909. Do you know whether any seine-nets are used at Bear Island ?—There are a few used, convenient to the island.

42,910. Would they be satisfied with the limit you have drawn ?—I should think they would ; they work inside the Island, and not outside.

The witness withdrew.

D. Morton.

DANIEL MORTON recalled and examined.

42,911. (*Professor Huxley.*) You wish to make some statement and comment upon the evidence which has been brought before us ?—Yes.

42,912. What is it ; do the trawlers not fish at the time the herrings are here ?—Never. I do not fish in the summer at all.

42,913. But we are informed that the herrings are here in September, October, and November ?—We do not fish in those months ; we fish from the 1st of December to the 1st of April, and they fish for the herrings from the 1st of July until the end of November, and sometimes not later than the beginning of November.

42,914. Then at the time that the herrings usually come here, namely, in September and October, you are not trawling ?—No ; and we do not propose to trawl in those months.

42,915. You are not doing so now ?—Certainly not.

42,916. (*Mr. Lefevre.*) Are the Galway boats coming here now ?—Yes.

42,917. Is that not for the purpose of trawling ?—Yes ; they come here for the winter fishery.

42,918. Do they begin trawling before you do ?—Yes, I suppose they will begin. They cannot fish at home. In the summer time they prefer Galway because the market there is better than our market, and they get three times the quantity.

42,919. Have they in previous years come round as early as the beginning of September ?—No, I never heard anything about the importance of the fisheries of Bantry Bay until we got up a few boats of our own. Other boats have since come here, and having done pretty well I suppose there will be a great deal more of them coming, but that is a thing we cannot prevent.

The witness withdrew.

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R. Sullivan.

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ROBERT SULLIVAN called and examined.

42,920. (*Professor Huxley.*) Have you practised seine-fishing here?—Yes, for the last 60 years.

42,921. Are you able to say if there was at any time a good seine-fishing here?—Yes, it was very good at one time.

42,922. When did it begin to fall off?—It has been falling off now for some years past.

42,923. For how many years has it been falling off?—For six or eight years.

42,924. Are you speaking now of seining for herrings?—Yes.

42,925. Was it because the shoals of herrings did not come into the bay?—I cannot say.

42,926. Have you been fishing with drift-nets at all?—No.

42,927. Always with the seines?—Yes.

42,928. What is the reason the sein-fishing does not answer now?—Because we believe the quantity there was formerly does not come in now on account of the injury done to the fishing by the trammel-nets and the trawling in the bay.

42,929. What harm do the trammel-nets do you?—They shoot them in 20 fathoms of water, and in six fathoms of water also, and even in four fathoms of water.

42,930. The meshes of the trammels are very large are they not?—Yes.

42,931. Are they not too large to catch a herring?—Yes.

42,932. Then cannot the herrings get through?—No, they cannot; if they are swimming in clear water they will withdraw altogether.

42,933. Do you think the trammels frighten the fish away?—I am certain they do when they are set in shallow water like that.

42,934. You think they frighten away the fish?—I am sure they do in shallow water.

42,935. Do you think the trammels do mischief all the way round the bay?—I do not think they do one-tenth part as much mischief in deep water as they do in shallow water.

42,936. They do more harm in shallow water?—Yes.

42,037. Do they do any harm at all in deep water; in 20 fathoms of water for instance?—Indeed I should not say that.

42,938. What mischief do the trawlers do?—The injury they do is this; when the fish are coming in they heave their trawls into the shoals and trawl in 40 fathoms of water. They were also trawling last year in four fathoms of water, and we have no redress for it at all.

42,939. Does that frighten the fish away?—Why would it not frighten them away?

42,940. Do you think that it does frighten them away?—Yes, I am certain that it does.

42,941. (*Mr. Lefevre.*) Do you think the sand-lifting does any harm to the seiners?—No, I do not think it does us any harm. I know the place where they take the sand; it was a great place for spawning once, but there is no spawning there now.

42,942. Do you think that the falling off of the fish has been occasioned by it?—I think it has had something to do with it, but we should not be able to get on in Bantry without the sand.

The witness withdrew, and the inquiry was adjourned until the 1st of September at Dingle.

Dingle, Kerry, Thursday, 1st September 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

DINGLE.

O. Moriarty.

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OWEN MORIARTY called and examined.

42,943. (*Professor Huxley.*) Are you a fisherman?—Yes.

42,944. For how many years have you been employed in that avocation?—I have been fishing ever since I was 14 or 15 years of age.

42,945. Is that for the last 30 or 40 years?—Not so long as 40 years,—about 35.

42,946. Have you always followed fishing?—Yes, until of late, but I follow it occasionally still.

42,947. What kind of fishing have you practised?—The first time I practised line-fishing, spilliard-fishing, and herring-fishing.

42,948. And after that what fishing did you practise?—After that I practised trawling. I was trawling for awhile.

42,949. When you began fishing, 30 years ago, how many fishing-boats were there here?—There were about 20 spritsail boats belonging to Dingle itself, besides those outside the country. There were fishing-boats after the herrings, and occaionally fishing in the summer belonging to the farmers.

42,950. How many regular fishing-boats were there belonging to people who did nothing else than fish?—Twenty would be about the number.

42,951. What sized boats would they be?—Some were from six to eight tons.

42,952. What would a boat of that description cost?—They varied in price. Some would cost 40*l.*, others 30*l.*, some 24*l.*, and some 20*l.*, according to the times.

42,953. Were they fitted with spilliards and with herring nets?—Line-fishing and herring-fishing were the principal modes of fishing carried on here.

42,954. With the hand line or with the spilliards?—Hand-line and herring-fishing were the principal fishings; but at times they had a short spilliard.

42,955. What was the length of the fleet of herring-nets which you carried at the time you speak of?—At that time six nets were the most we carried. Some would only carry five, and some four.

42,956. What would be the cost of those six nets?—They would cost about 2*l.* apiece—from 30*s.* to 2*l.*

42,957. Then none of your boats would cost more than 50*l.* for rigging, fittings, and nets, and all?—I should say from that up to about 55*l.*, which would be the outside. I am now speaking of the dearest boats.

42,958. So that the whole money invested in the boats would not be more than 1,000*l.*?—I think that would be the outside of it.

42,959. Was there no trawling carried on here then?—No.

42,960. Was there no trammel-net fishing?—Not when I was a boy. There were the signs and traces of them, but nothing more. They were in their infancy then, but they have become more general since.

42,961. Were not the trammel-nets used in this bay at that time?—There were one or two in the bay.

42,962. But were there only a few set?—When I was a boy there were only very few, but they became much more general afterwards.

42,963. When?—From about the year 1830 down.

42,964. At that time what were the fish that were principally caught by the hook-and-line?—Hake, I think, was the principal fish, and pollack.

42,965. Did you get any cod?—Yes.

42,966. Was there much of it?—Not a great deal, but when they used spilliard-lines they would get cod, and occasionally they would get a few of them with the hand-lines by using herring bait in the winter.

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42,967. Did you get many haddock?—In some years we got a good deal of haddock with the spilliards.

42,968. And some years did you not?—In other years they would be in great abundance, and in some years they would not.

42,969. In some years did they fall off altogether?—Yes, there were very little then.

42,970. Did you yourself fish with a spilliard-line?—I did for a long time.

42,971. Did you ever get soles with it?—We have caught soles in the summer time when we baited the spilliard-lines with worms and set them out at night. We have perhaps got a dozen or 15.

42,972. Were they large soles?—No, they were only middle-sized soles.

42,973. Were you able to make sure of catching soles in that way?—No; it was only sometimes that we did it, generally in the months of June and July.

42,974. What was the greatest number you got in that way, or at one fishing?—To the best of my belief we never got 20 pair.

42,975. Then would you have thought 200 or 300 soles a large quantity to be caught upon the spilliard-lines?—I never heard of such a quantity as that being caught.

42,976. Did you ever hear of such a quantity being taken in one fishing?—I could not swear to it.

42,977. But if you did would you reckon it a very rare thing?—Yes, most decidedly.

42,978. Then what changes have taken place in the fishing? At that time there was no trawling at all, was there?—No.

42,979. Were there no pole-trawls used in the bay?—No.

42,980. Was there any seining?—Yes.

42,981. What kind of seines were used?—Tucking seines.

42,982. With a bunt?—Yes.

42,983. Of what size were they?—They varied a great deal. Some of them would be about 120 fathoms, and from that they would go down as low as 40 or 50 fathoms.

42,984. Is that in length?—Yes.

42,985. What was the size of the mesh?—It was about the size of the herring-mesh, but a bit less in the bunt.

42,986. What description of fish were caught in those seines?—Scad, mackerel, and herrings.

42,987. You caught herrings in them?—Yes.

42,988. Was that when they came close in-shore?—Yes.

42,989. Did you use the seines as a circle net?—Yes.

42,990. Then you did not haul them on shore?—No; we had two boats. One boat would be made fast and the other would go round in a ring.

42,991. Was that the mode in which they were commonly worked?—Yes.

42,992. Were you in the habit of getting many fish in that way?—We had very large takes sometimes.

42,993. Then was it a very productive mode of fishing?—Yes.

42,994. Did you ever hear any complaints against it for frightening away the fish?—The herring-net men,—the drift-net men—complained of it.

42,995. Did they look upon it as an unfair mode of fishing?—Yes, especially when they were used in the daytime.

42,996. Did they say that it broke the shoals of fish?—They often said, when we were taking those fish in the daytime, and were making a great noise in order to get the fish into the net, that it frightened the fish away from the shore.

42,997. (*Mr. Lefevre.*) Are those nets still used in this bay?—Yes.

42,998. (*Professor Huxley.*) Did you get plenty of herrings in the bay at that time?—Yes, in the season.

42,999. And sometimes they were away?—Some years we got very few, but in other years we had a great quantity of them.

43,000. When you were working the circle-nets for herrings did you get many small herrings along with the large ones?—I was never at the working of the nets myself. They were the country boats that worked them. There were none worked out of Dingle.

43,001. There were none worked out of Dingle?—There was not a seine at all worked out of Dingle.

43,002. Then am I to understand that when the herrings came in-shore the countrymen you speak of went out with their seines after them?—Yes.

43,003. Was there much mackerel caught in that way?—Yes.

43,004. And much scad?—There were more of scad caught than of any other fish.

43,005. That was the state of the fishing when you were a youngster?—Yes.

43,006. How did it become altered as you became older?—I have seen no alteration except with regard to trawling.

43,007. When you were young you say there were no trammel-nets?—No.

43,008. When did the trammel-nets begin to be abundant?—They have been using them more largely ever since the year 1830.

43,009. What were they used for principally?—For catching hake.

43,010. Were they used by the Dingle men?—No.

43,011. Were they set at all times and seasons?—No. When the hake set in they would use them.

43,012. What time did the hake season commence?—It commences in July or August.

43,013. How long would the trammels be set?—They will use them up to the month of December if the weather holds good.

43,014. Do they set trammel-nets all over the bay?—No, not all over the bay.

43,015. Then in what depth of water do they set them in?—I suppose they set them in about 14 fathoms of water.

43,016. Did you ever go as far as 20 fathoms?—No.

43,017. What is the depth of water in the middle of the bay opposite Dingle?—The deepest water across the bay will be about 24 or 25 fathoms. It will be somewhere about that.

43,018. Then the trammels were never set right across the bay?—No, but they come very near it. They come on this side of Bull's Head.

43,019. When the trammels were first set did the hand-line men complain that the trammels interfered with them?—Yes, and they often brought them in, and there was very bad work about it.

43,020. Was there much disputing?—Yes, a great deal at times.

43,021. How was it settled?—I believe that Mr. Barry and the rest of the commissioners in Dublin made some law, but I do not know whether it was ever carried out.

43,022. There was some regulation made?—Yes.

43,023. What was it?—I do not know exactly, but I heard of it.

43,024. What was it?—They were not to use the trammel-nets before sunset, and they were to have them taken up out of the water before sunrise.

43,025. Do you think that that law was obeyed or not? Was attention paid to it?—There was not much attention paid to it. I have seen the trammel-net men putting out their nets both before and after the time.

43,026. Were the trammel-nets ever seized by the Custom House officers or the Coastguard?—Yes, once.

43,027. You say these trammel-nets were worked by the farmers?—Yes.

43,028. They were not worked by the regular fishermen here?—No, never.

43,029. Is there any oyster-fishing in these bays here?—No.

43,030. There has been no oyster-dredging at all?—No. There may be an odd one taken up, but only a few.

43,031. When did trawling first begin?—I think it was in the year 1848. It was first commenced by a company, I think, at the end of 1848.

43,032. Then the trawling was not set going here by the fishermen themselves?—No.

43,033. But by a company?—Yes.

43,034. Did they bring a vessel round here?—They brought two of them, a large one and a small one.

43,035. What was the tonnage of those vessels?—One was between 60 and 70 tons and the other between 12 and 14 tons.

43,036. What was the length of the beams of the trawls?—Between 42 and 44 feet was the longest beam; the other would only have a beam about 24 feet long.

43,037. You say that those vessels began to work in 1848 or 1849?—The first one that came here was the Hesperus, one of Mr. Good's boats. She was the first. She came here to explore the ground.

43,038. Was that in 1849?—No, it was in 1848.

43,039. Did those vessels meet with a good deal of success?—Yes, they did.

43,040. Did they find that there was good trawling ground existing largely over the bay?—They found that there was good trawling ground, but it was very limited in extent.

43,041. Is there much rough ground in the bay?—Yes.

43,042. When those vessels began to work first was there much complaint made of them?—The people were prejudiced against them at that time.

43,043. You were hooking at that time?—Yes, I was.

43,044. Did you like them much yourself?—No, I was at one time very prejudiced against them.

43,045. What did you think were the objections against them?—From what I had heard I thought they would destroy the fishing in any bay they came into. I believed they would take all the fish out of the bay.

43,046. In point of fact you thought they would sweep the fish away and take away your business?—Before ever I knew what they were and before I had seen one that was my impression.

43,047–8. Was there any statement made with regard to the trawlers taking the spawn of fish upon the bottom of the bay?—There were different statements made.

43,049. Was there much outcry against them on the ground that they took up the spawn?—It came out at the first meeting that was held about them that the fishermen complained of their taking up spawn and destroying it.

43,050. Did you complain that they did?—I cannot say whether they did or not.

43,051. But when you were a line fisherman did you believe that they took up spawn?—I could not believe it, because I had no reason to believe it. I might fancy so, or I might not.

43,052. (*Mr. Lefevre.*) Did you give evidence in 1852 when there was an inquiry held here?—Yes.

43,053. (*Professor Huxley.*) On which side did you give your evidence then?—I was on the trawling side. I thought it would be best for my own conscience to tell the truth.

43,054. What we want to ascertain is, what was the feeling of the hook-and-line fishermen when the trawling was first introduced?—The feeling of the hooking people was, that they did not wish to have any trawlers amongst them, for more reasons than one.

43,055. Was it one of the reasons that the trawlers, in trawling over the ground, would destroy the spawn?—One was, that they would take all the fish away. Another was, that their fish would go into the market in large quantities and reduce the price of the hook-and-line fish. They had such reasons as that against the trawling.

43,056. There was a very strong feeling about that for some years?—There was.

43,057. In 1852 the Fishery Board took some notice of the question?—Yes.

43,058. And there was a meeting held here at that time?—I was not at that meeting.

43,059. (*Mr. Lefevre.*) Were you at the meeting when the byelaw was made prohibiting the trawling?—Yes, I was at the meeting, then, but I was not at the last meeting which was in 1862.

43,060. Which side did you take then?—The trawl side.

43,061. (*Professor Huxley.*) In 1852 was there a meeting held here at which the line fishermen appeared?—Yes.

43,062. Was that meeting held in consequence of an application from them to the Board of Works?—Yes, there was a byelaw made prohibiting trawling from Bull's Head.

43,063. How much of the bay did that exclude from the operation of trawling?—It prevented them from trawling over more trawling ground inside than the ground they can trawl upon outside.

43,064. It cut off fully one half of the trawling ground?—Yes, it cut off more than half.

43,065. And that byelaw was made in consequence of the representations of the hookers and liners?—It was passed in consequence of the representations of the Anascaul fishermen.

43,066. Are they hook-and-line fishermen?—Yes, and they fish with the spilliard lines.

43,067. Are they trammel-net fishermen as well?—I think they are at times.

43,068. The trawling went on nevertheless outside the limit?—Yes.

43,069. Was that limit kept, or did the trawlers occasionally run inside?—I think it was well kept, except upon a few occasions.

43,070. Did the trawlers find that they could get plenty of fish on the outside?—Yes, at times.

43,071. Was it any considerable interruption or detriment to their business when they were not allowed to go inside the boundary line?—Yes, it was a great deal.

43,072. Was the ground inside particularly favourable for that mode of fishing?—Yes.

43,073. Have you any reason to suppose that there was any large quantity of fish not taken because the trawlers were not allowed to fish there?—Yes.

43,074. What kind of fish?—Soles and turbots.

43,075. Are they fish which are not commonly taken by the spilliards?—The spilliards take very few of them. The Anascaul men make the greatest practice of getting them, but our men do not take many.

43,076. How many trawlers were there in 1852 at the time the byelaw was passed?—I think there were six or seven at that time.

43,077. (*Mr. Lefevre.*) Then they had increased from 1848 or 1849 when they first began?—Yes, there were only two then.

43,078. And they increased to six or seven in 1852?—Yes.

43,079. (*Professor Huxley*). Is that boundary line observed now?—It is not.

43,080. When was the byelaw repealed?—I think it was repealed in 1862—in January 1862.

43,081. Then the byelaw was in force for 10 years and was then repealed?—Yes.

43,082. Was it repealed in consequence of another meeting having been held?—Yes.

43,083. At that meeting were both line-men and the trawlers represented?—Yes.

43,084. Then it may be supposed that the Fishery Board attached more weight to the representations of the trawlers than to those of the line-fishermen?—Yes, I was not there, but I suppose so.

43,085. And since that time has trawling gone on all over the bay?—Yes.

43,086. You say that the number of trawlers increased between the years 1848 and 1852 until there were six or seven in 1852?—Yes; in my judgment there were six or seven in 1852.

43,087. To whom did the trawlers belong in 1852? Were they all the property of the company you spoke of?—Some were and some were not.

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43,088. To whom did those belong that were not the property of the company?—Mr. Kavanagh had one and part of another.

43,089. Were the owners natives of Dingle?—Yes.

43,090. Then the inhabitants of Dingle had observed that trawling was profitable and had themselves found it worth while to invest their money in it?—Decidedly.

43,091. Are you aware whether any of the fishermen had shares in the trawlers?—I had a share in one.

43,092. At that time?—I myself was one of the first who bought a trawler.

43,093. When was that? Was it in 1852?—No, it was in 1849.

43,094. The first year after the trawling began?—Yes.

43,095. Did you approve of the trawling?—Yes.

43,096. Did you think it an advantageous and beneficial mode of fishing?—Yes.

43,097. And in consequence of that did you buy a trawler yourself?—I went in company with three others. We went to Galway and bought a trawler and fitted it up and fished with it.

43,098. Did you continue to do that for a number of years?—I did, but I got employed by the company for some years, and I sold my share in the trawler to the other partners.

43,099. Did you find in fact that you could not carry on both employments?—Yes, as I had no other hands to put in the boat.

43,100. Then you did not part with your interest in the trawler because you found that trawling would not answer?—No.

43,101. Were your partners willing to give you a fair price for your share?—Yes, and I have bought another boat for them since.

43,102. Did the enactment of the byelaw in 1852 operate so injuriously upon the trawling that it ceased to be profitable, or did it still remain profitable?—It did remain profitable, but not so much so as if the byelaw had not been enforced. We sustained a great loss by the enforcement of the byelaw.

43,103. Did the number of trawlers increase?—Yes.

43,104. What is the total number of trawlers here now?—I believe that 12 is the largest number we have had fishing.

43,105. Does the company exist now?—No.

43,106. When did it cease to exist?—I believe it ceased to exist in 1853.

43,107. Then are the trawlers which are at work now the property of private individuals?—Yes.

43,108. And partly of persons living on shore who have invested money in them?—Yes; there are some of the owners who do not fish, and there are some who have their own fish.

43,109. Are the majority of the fishermen fishing in their own boats?—No.

43,110. Then I suppose that the larger number of the owners of the boats are persons on shore who have put money into them?—Yes.

43,111-2. Are you aware of many cases where the men who were originally employed as fishermen and trawlers have by degrees become owners?—Yes, there are some in court now.

43,113. From your experience is it a likely occurrence that a temperate, industrious man may from the profits of trawling save up enough money to enable him to become the owner of a boat himself?—Yes; if he does not become the owner of a boat he may at least become a part owner.

43,114. You have practised both modes of fishing, the line-fishing and the trawl-fishing?—Yes.

43,115. From the fact of your having given up line-fishing and taken to trawl-fishing it would appear that you think trawl-fishing to be the more profitable mode of the two?—I will not say that. There are seasons for both. We give up trawling in June here.

43,116. What is your trawling season?—From October up to June.

43,117. Then what do you do from June until October?—We go hand-line fishing and herring-fishing.

43,118. (*Mr. Lefevre.*) In the same boats?—Some of them do, but they are generally hookers, open boats, which they use with the herring-net. In some of the decked boats they do not use herring-nets but hand-lines.

43,119. Do you leave off trawling in June because there are no more fish to be caught, or because the herring-fishing and long-line-fishing are more profitable?—There are two reasons. The first is, that the fish would not reach the market in good order in that warm season of the year, and the second is that we believe the herring-fishing to be more beneficial.

43,120. What do you catch with the hand-line?—Hake principally.

43,121. Do they come in in great abundance?—Yes, in July and August they are very plentiful outside the bay.

43,122. Do the herrings come in plentifully?—They did this year. In the month of May there were more than I can ever recollect.

43,123. Was not that earlier than usual?—Yes.

43,124. How many boats were herring-fishing this year?—Taking country boats and boats from other places I counted as many as 30 yawls, hookers and other boats.

43,125. Are the herring boats as large as they used to be?—No; the spritsail boats were the largest class formerly, but they follow the herring-fishing now with canoes and a smaller class of boats.

43,126. Did not the old sprit-boats answer?—It seems that the men prefer the other boats. The larger class of boats were very laborious, and took too many hands to work them.

43,127. How many men did it take to work one of the sprit boats?—Six and seven, seven generally.

43,128. Can a smaller crew work the other boats?—They have about four men in the trawlers, and at the herring-fishing or the line-fishing they have five or six.

43,129. What is the size of the 10 or 12 trawl-boats you are speaking of now?—They vary very much in size. They are from 40 tons down to 14.

43,130. They are not decked boats for the most part?—Some of them are.

43,131. The larger ones?—Yes, the larger boats are decked boats.

43,132. What will be the size of the beam of the largest boat?—About 42 feet.

43,133. What is the size of the beam of the smallest?—About 30 feet.

43,134. What do these boats cost? Take the largest size.—Mr. Jervis had a large boat here, and it was a good boat too; he said that he gave 190*l.* for her.

43,135. What will a small boat cost?—I bought a small boat of from 14 to 16 tons, and I gave 75*l.* for her without any sort of gear.

43,136. Those boats are used also in the herring-fishing?—The open boats are, but the decked boats are not.

43,137. Is the length of a fleet of herring nets used now greater than what it was in former years?—The open boats carry a larger and deeper train than they were in the habit of carrying formerly in the sprit-boats.

43,138. Then they cost more?—Yes.

43,139. So that what with trawlers and hooking boats and so forth, there must be a larger amount of money invested in the fisheries here than there was when you first began?—Yes, and the expense of one boat is more than the expense of a dozen formerly.

43,140. We reckoned roughly that there may have been 1,000*l.* invested in the fisheries when you began?—Yes.

43,141. Do you know how much is invested now?—That was not yearly.

43,142. No; I mean altogether in the plant?—The expense of a trawler is an annual expense; they have to renew their gear every year.

43,143. But with regard to the prime cost, taking the trawlers, the long-line fishing boats, and the drift boats which exist at the present moment, what would it take to set them up?—Half of the trawlers here now would buy the fleet of boats that there was here 30 years ago. I mean what belonged to this part.

43,144. Then we should not be very far wrong in assuming that there is three times as much money invested here now in the boats as there was 30 years ago?—I think you would not be far out if you include the gear there is and everything. Taking everything into calculation that would be about it.

43,145. In what condition were the herrings you caught this year?—They were in very good condition.

43,146. They were fat fish, I suppose?—Yes, they were fat fish.

43,147. Did you get a ready market for them?—Some we sold fresh and we cured others.

43,148. Would they cure?—Yes.

43,149. They were not too fat?—No; we got them in fresh and they were well handled.

43,150. What time do you get the herrings here full of spawn?—Taking the general run I should say the month of September.

43,151. Do you get any winter herrings here in February?—They formerly did so, but not of late.

43,152. Do you recollect when they were caught here?—I do; I have caught a good deal of them myself.

43,153. What condition were the herrings in then?—They were full but very greenish.

43,154. But they were full fish?—Yes.

43,155. What time were they shotten?—In the month of March.

43,156. On the whole I gather from your evidence that there is not much to complain of in the fisheries here?—No.

43,157. The Dingle men are doing pretty well?—Yes.

43,158. Of their own free will they seem to have taken to trawling to a considerable extent?—Yes. Those who can afford it have a boat or part of a boat, but there are a good many fishermen who cannot afford it.

43,159. What do you reckon to be the average catch of a trawl per day? What will be a fair average catch of fish?—That is more than I could undertake to say; I can tell you the highest and the lowest.

43,160. What do you call the highest?—A boat may catch 100 or 120 pair of soles in a day, in addition to a great lot of plaice, hake, and cod-fish and a few other fish, besides ray and some useless sort of fish. On other days when there are calms or bad weather they take less. In calm weather they may not have a fish at all, and sometimes the wind is too strong for the boats and they come in empty.

43,161. It is said that you, the trawlers, get up a great deal of small fish in your nets, what do you say about that?—I am not regularly in the habit of trawling now.

43,162. But you used to be in the habit of trawling formerly?—Yes.

43,163. When you were trawling did you get a large proportion of small fish?—We might take up a handful of small fish, but there would be very little that was not serviceable or fit for eating.

43,164. Did you ever have occasion to shovel it off the trawler because there was so much of it?—When I was on board we had no shovel on board at all. I have two boats now and they have not a shovel on board to shovel it out.

43,165. Then you think it incorrect to say that one-half of the fish taken was small and unsaleable?—One half of the fish?

43,166. Yes.—I think it very incorrect to say that a twentieth or a thirtieth part of it would be small and unsaleable. There is a much less proportion than that.

43,167. Do you sometimes take small soles and small turbot?—I have seen some small soles occasionally, somewhere about the length of my hand.

43,168. But not a large proportion of them?—No; I think I can give you an instance of that to satisfy you. I am in the habit of seeing my own fish and other people's packed into baskets for the Dublin market, and for six months I have not seen 20 pairs of soles which were not fit to send to the market.

43,169. Then it is said you take a great deal of spawn up, what do you say to that?—I have never seen anything in the trawls that I could call spawn.

43,170. Are you aware that the fishermen call almost everything wet or soft that comes up from the sea spawn?—There was a report some years ago that Ventry Strand was full of spawn, but it turned out to be only cuttle spawn washed in by the sea.

43,171. Do you often get cuttle spawn in your trawl?—I never saw it in the trawl. I have not seen anything in the trawl that I could call spawn, but if I saw it perhaps I might not know it.

43,172. You know what herring spawn is like?—Nothing more than that I often saw the pea of the herring spilt in the boat.

43,173. Did you ever take up anything like that in your trawl?—I never did.

43,174. You were a herring fisherman as well as a trawler?—Yes.

43,175. So that it is your interest to catch as many fish as you can?—Yes.

43,176. Have you ever had reason to believe that the trawlers working among them have broken the eye of a shoal of herrings?—I do not know, but this year when the trawling was carried on in the month of May I have heard the fishermen say it was beating down the herrings, yet a week and a fortnight after they came down into the harbour and we got them, although trawling was then going on.

43,177. Trawling was going on at that time?—Yes.

43,178. Then in that case trawling could not well have frightened the fish?—I cannot say that it did. I only speak of it as an instance for you to judge of youselves.

43,179. In this particular year while the trawlers were working you heard of the herrings being far down the bay?—Yes.

43,180. Then they must have come up?—Yes.

43,181. And trawling was going on all the time?—Yes.

43,182. Then they must have gone through the trawlers?—Yes.

43,183. Do you sell your fish on the beach here?—Yes, and I sometimes cure it.

43,184. Does it go by Tralee?—Yes, the Tralee fish jolters generally take it. They have a contract with the trawlers here to take up the fish.

43,185. Is it sent fresh to the Dublin market?—Yes, such fish as turbot, soles, and dories.

43,186. Prior to the trawlers coming here was there any fish sent fresh to the market?—Not to Dublin, but there was to Tralee, Killarney, and some parts of Cork.

43,187. But none to Dublin?—No.

43,188. Was there any quantity of soles sent to Killarney and Tralee then?—There was not a considerable quantity. There were none except by the spillard men, who took a few.

43,189. Has the supply greatly increased since then?—The supply of such fish has increased.

43,190. The other fish they cured and sold in the country round, I suppose?—Yes.

43,191. What number of canoe-men are there now fishing from this harbour?—There are six crews I believe.

43,192. How many men are there in a crew?—There are four in each.

43,193. Do they fish with the long-line or with the hand-line?—They fish with both occasionally.

43,194. What do they fish for principally?—For hake with the hand-line, and for haddock, cod, and gurnard with the spillard-line.

43,195. Are there no sprit-boats from Dingle now?—Yes, there are four.

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43,196. How many men are there in them?—Six or seven in each.

43,197. Has the whole number of fishermen increased within the last 30 years?—I do not think the fishermen have increased.

43,198. They have not increased in number?—I do not think they have.

43,199. Do they make more earnings than they did?—I know the trawlers make more earnings than the sprit-boats did.

43,200. Do the canoe-men make more money than the men employed in the sprit-boats formerly did?—Yes, I think so, because they go to canoes in preference to sprit-boats.

43,201. Then although the number of fishermen has not increased you think their condition has materially improved?—I think the people engaged in trawling have improved their condition, and that they are making a better living than the spilliard men.

43,202. Is there any trammel-net fishing from this harbour?—No.

43,203. Where do the trammel-net men fish from?—From the Short Strand and Minard and Anascaul.

43,204. Has that mode of fishing diminished of late years?—I think it has diminished more than increased.

43,205. Since when?—I am not in the habit of going out at that season and I cannot tell you, but I know that from Bull's Head down to this harbour they have decreased.

43,206. Is there more trammel-fishing up the bay than down the bay?—It is all up the bay. There is no trammel-fishing from this to the west.

43,207. Then when you are fishing within the line drawn by the byelaw prohibiting the trawling, you come more across the trammel-fishing than when you are fishing above that line?—Yes.

43,208. What is the extent of ground fit for trawling upon within that line?—There is a large tract of ground fit for trawling there.

43,209. Can you tell us how much?—I could only guess it, but there is a man here who can tell better than I can.

43,210. When your boats are fishing on that ground do you often come across the trammel-nets?—I cannot tell you, not being out so very often.

43,211. Do your boats fish at night?—Very seldom.

43,212. Is it only on moonlight nights that they fish?—They would sooner be out on moonlight nights, because their nets would not be then in danger from working over the rough ground in the dark.

43,213. Do you prefer trawling at night or in the daytime?—In the daytime.

43,214. Even in the case of a moonlight night?—Yes, at any time. If there were a calm day and they could not fish and they got a little breeze turning up at night they would perhaps remain out.

43,215. Would it be a serious interference with the trawlers here to prohibit trawling in the night-time?—I suppose it would be, although they make very little use of trawling in the night-time; but still if they had a calm day, and especially in fine weather, followed by a breeze towards the evening, they would strive to be out at night, so that they might make a haul. I find that they are always inclined to come in after a day's fishing, if they have made a day's work or part of a day's work. They like to be in in order that they may send off their fish to the market.

43,216 Then I may take it that as a rule they do not fish much in the night-time?—Not much.

43,217. Yet do they fish for a sufficient number of nights to make the fishing a matter of importance?—I cannot say. They do not fish a great number of nights.

43,218. Can you tell me what the extent of ground outside the line of prohibition is?—There is more ground outside the line than they can trawl inside, because it is spotty. There is a great deal of rough ground and a deal that is very dangerous, where they would tear their nets if they trawled over it, so that they must keep within limits.

43,219. What depth of water is there on the trawling ground principally?—It varies as you come in the bay.

43,220. From what?—From seven feet off the south-west of Ventry to seven fathoms. As you come in you get into more shallow water.

43,221. Do the larger trawlers fish more outside than inside that line?—They have only fished inside the line since 1852, and that too only for a couple of months—in November and December.

43,222. Was it a greater disadvantage to the smaller class of trawlers than to the larger ones?—I suppose it was a loss to them all, because when the fish were fairly in the bay there was fish enough for all. The only difference was that the larger boats would take a larger quantity than the smaller ones.

43,223. Have you seen the trawlers fishing inside that line?—Yes.

43,224. Have you observed more smaller fish taken then than when they have been fishing outside?—Yes, the fish are small.

43,225. In what seasons do they take fish within that line?—In November and December, and then in the months of May and June again. When the season for the fish falls in February, March, and April they fish outside.

43,226. The smaller fish are taken inside the line of prohibition?—Yes.

43,227. Is there a larger amount taken then?—The fish are smaller generally; the large soles are outside.

43,228. Have you also observed whether the proportion of small fish, about the size of your hand, is larger when you are fishing within the limits than when you are fishing outside; do you understand me?—No, I do not.

43,229. You told us just now that a certain number of small fish are taken in the trawl-net?—What I said was that I did not recollect 20 pairs of soles left out of the hampers and not sent to the market.

43,230. Do you observe that the proportion of small fish is increased when they fish inside the line of prohibition as compared with what it is when they fish outside?—I think they are small inside in the general run, but small fish will be got outside too.

43,231. Have there been many complaints by the trammel-net fishermen since the time of prohibition was observed?—Yes, they have always been complaining.

43,232. Was that regulation about fishing within the line observed by the trawlers?—It was except on a very few occasions.

43,233. Were any of them ever summoned for a breach of it?—No. I believe the boats were carried off once or twice by order of the Commissioners.

43,234. Have any trammel-nets been carried away within the line?—I am not able to say; I never heard of any being taken away.

43,235. I think you told us that the trawling seasons lasted for about seven months of the year?—Yes.

43,236. Would it be a great disadvantage to the trawlers if they were confined to five months in the year?—Yes.

43,237. Would that take considerably from their profits in the course of a year?—Yes, it would, and they would not have the means of keeping their boats in order.

43,238. Do your trawlers fish outside of the line drawn from the headlands of the bay?—No, nor within miles of it; the water is very deep outside there and very rough.

43,239. Have you ever tried the ground as far off as that?—No, not to my knowledge.

43,240. Then you do not know what the nature of the bottom is?—Yes, I was out there sounding it at one time.

43,241. Is there any ground fit for trawling there?—There is a great deal of ground, but the water is very deep.

43,242. What depth is it?—Some 40 or 45 fathoms deep.

43,243. Are you aware that the trawlers on the east coast of England fish in water as deep as that?—I do not know anything about them, but they have not gear as heavy as we have.

43,244. Do any of the Dublin trawlers come here?—Yes.

43,245. How many of them come here?—There were four from Ringsend at one time, and three wherries that belonged to Skerries.

43,246. What time was that when they were here?—The Skerries boats came at Christmas and the others in February.

43,247. Did they fish where you fish?—No, we went outside where they fish. Our boats go fishing further out than ever they do.

43,248. (*Professor Huxley.*) You were saying that the herring-nets and the trawlers fish at the same time of the year here?—I do; I mean the latter end of the trawling.

43,249. Does not the herring-fishing take place at night chiefly?—They always work the drift-nets at night.

43,250. Then the trawlers have no chance of interfering with the herring men if they fish by day?—Yes, the trawlers sometimes trawl in the night, but we do not fish as far as where they trawl when we are fishing for herrings.

43,251. Do you not go as far with the drift-nets?—No, our drift-nets are generally from eight to nine score, some of the hookers have them 11 score, but it would not answer generally; we have only five and six pieces 20 fathoms each.

43,252. Have you had any complaint made against you when you were trawling for carrying away the spilliards or long-lines?—Not when I was trawling, but I have heard a few complaints made against other people, although I always found that the trawlers paid for any damage they did.

43,253. Have the spilliard-lines buoys attached to them?—Yes.

43,254. What are they?—Some use a blown skin and others have corks.

43,255. Are they big enough to be seen from any distance?—The skins that are blown out can be seen for some distance.

43,256. If a trawler sees them can he get out of the way of them?—When a trawler man sees a buoy, if he knows the direction in which the spilliard-lines are he can get out of the way of them, but sometimes he thinks he is getting out of the way when really he is not.

43,257. (*Mr. Lefevre.*) If there were some limitation placed upon the trawlers, would it be more advantageous that it should be a limitation as to time or as to place?—My opinion honestly is that if there is a limitation of trawling it might as well be prohibited altogether. This bay has so much rough ground in it that if we were to be limited we might as well give it up altogether. At the same time, if there was to be any limitation at all, I would sooner have a limitation as to time than in regard to place.

43,258. But you did work a considerable time at a profit when a line of limitation was drawn?—Yes.

43,259. Would you prefer, then, that if there is to be a limitation it should be a limitation of time or of place?—I would sooner have a limitation of time; say the summer time, when the herring-fishing is going on.

43,260–1. (*Professor Huxley.*) What time would you think best?—The summer time would be the best time to knock off, if trawling be as injurious as some people say it is. I do not know whether it is or whether it is not.

43,262. In what months do you think it might not be practised?—I should say when the hake and the herring begin to fall in and the boats are fishing for them.

43,263. That would be in October and November?—We should knock off in June and not commence again until the 1st of November; that is my view of the matter.

43,264. Has the doing away of that line of prohibition been of advantage to the trawlers in this place?—Yes, it has been of very great advantage to them.

43,265. Have they made a good season?—Yes.

43,266. They have made money by it?—Yes.

43,267. Have they made more than usual?—Nearly as much again, or very near it.

43,268. Did you observe whether the quantity of fish was falling off previous to the prohibition being removed?—Previous to the line being removed?

43,269. Yes, previous to the line of prohibition being removed had you observed any falling off in the take of the trawlers?—Yes, there was.

43,270. Do you think that each boat was taking less than it was before?—Each boat was taking less fish, because when I first commenced there was only one or two boats, but now there are a dozen. There are more fish taken away altogether, but each boat then took more than each boat takes now.

43,271. In 1852 there were six or seven boats fishing?—Yes.

43,272. In 1862 there were something like 11?—Yes.

43,273. Do you think that the whole amount of fish taken by those boats was less than the whole amount of fish taken by the six or seven boats in 1852?—No; there were more fish taken, but there were more boats there.

43,274. (*Mr. Lefevre.*) Do you think that the trammel men observe the regulation in regard to not setting their nets in the daytime?—They do not, and there are people here who can prove it. I can prove it myself.

43,275. What time have you observed them setting their nets?—Sometimes an hour before sunset, and they have been taking them in an hour after sunrise. Sometimes they leave them, however, for a day or two, but that might be owing to the weather.

43,276. Would it be a disadvantage to the trawlers if the trammel-net men were allowed to set their nets in the daytime?—Yes, it would.

43,277. In what way?—The trammel-men and the trawlers would have a regular row. The trawlers would not be able to keep clear of the nets.

43,278. They would come foul of the nets?—Yes, they could not avoid it.

43,279. Do they carry away the nets now?—I never heard of it.

43,280. You told us that the trammel-net men set their nets in the daytime?—But there might not be a trawler at all in that season.

43,281. But I suppose the trawlers observe them setting their nets at all seasons?—Yes.

43,282. What time of the year do the trammel men set their nets?—From August up to the latter end of December, if the weather keeps fine. If the weather breaks early in the season they cannot put them out.

43,283. Has the take of hake fallen off?—It has increased in some places and decreased in others.

43,284. In this bay has it fallen off?—I think it has; but outside, where the hookers fish, they have taken more fish than they ever took before there was a trawler.

43,285. Have the haddocks fallen off also?—They have.

43,286. Since when? Can you give the date of the falling off of the haddock?—I cannot, although there was one year, I think it was the year 1848, when we had a great take of haddocks. In 1848 and 1849 there was a considerable quantity of haddock taken in all parts of the bay, and especially outside. Since then we have had good takes of haddock, but not such good takes as there were then.

43,287. When was the last good take you had?—Three years ago.

43,288. Do you take the haddock with the trawl?—Very few; they take them mostly with the spilliards.

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43,289. Do you take mackerel in the drift-nets?—There are very few mackerel taken at all. They have no mackerel nets.

43,290. Have you any reason to believe that shoals of mackerel come into the bay here?—Yes, because they have been seen.

43,291. You do not use your decked boats for drift-net-fishing?—No.

43,292. What is the reason of that?—You would require to have a large train of nets to keep the boat steady.

43,293. Is there no other reason?—The fishermen cannot afford to be at the expense.

43,294. Is there any other reason; would the boats be able to carry on that mode of fishing?—I know of no other reason to prevent them.

43,295. (*Professor Huxley.*) You were saying just now that the trawlers took more fish when they first began here than they do now?—Yes, they did; they took a great deal more.

43,296. Was that the case in regard to vessels of corresponding tonnage; for example, was there a vessel here of 60 tons when you first began?—Yes.

43,297. Is there any vessel of that size fishing now?—Not quite so large.

43,298. Suppose there was a vessel of that size with a similar sized beam, would she catch as much fish as then?—No.

43,299. So that taking boats of a corresponding tonnage they would not catch as much fish now as they did then?—No; we have boats equal in size now that do not take as much; but at the commencement of the trawling there were only two boats, then there were four, and then there were six. They have been gradually increasing.

43,300. The total quantity of fish taken is greater, but the quantity by each boat is not so large?—No.

43,301. Do the trawlers fish in any other bays around here?—Very seldom. The company's boats were formerly in the habit of fishing in Ballinskellig Bay.

43,302. But your boats do not now?—No.

43,303. What time do the cod and haddock spawn?—In my opinion they spawn in the month of March.

43,304. What time do the flat-fish spawn?—In March and April.

43,305. Then all these fish would spawn about the same time?—Yes.

43,306. Did you ever know of a trawl cutting or damaging a trammel-net?—I never saw it, but I have heard that on some occasions they have got foul of one another.

43,307-8. Do you think that the quantity of fish taken altogether has dimnished since the trawlers came into the bay—is it less now than before the trawlers began to work?—I recollect the time when there was three times the number of boats around this bay that there is now. They decreased at the time of the famine and starvation. Before that there was a whole lot of boats round Dingle Bay in every creek and harbour. I have counted in former times as many as seven score boats fishing for herring, and now we cannot count a score of boats. Seeing that there was so large a number of boats fishing then as compared with what are fishing now, it is not likely that the small number now fishing can take as many fish as the larger number did previous to the famine.

43,309. Do you think that the working by trawlers in the bay is injurious to the breed of flat fish, turbot and soles—I do not know; I cannot answer whether it is or not. I cannot take upon myself to say whether trawling injures the brood of fish or not; but this I can say, that the quantity of fish taken by the trawlers is a great deal, and of course it is so much taken out of the sea.

43,310. Do you think that the trawling when the herrings were being taken did any harm to the take of herrings?—I do not believe it did, because the herrings have come in even when the trawlers were trawling.

43,311. Did Mr. Hussey prevent the trawling in Ventry Bay at the time the herring-fishing was being carried on?—I think Mr. Hussey tried to do so, but I have told the skipper of my boat not to go trawling anywhere where there were herrings and hake in the bay, but to take to his lines, and then he would have no complaint.

43,312. You did that for two reasons, first because you thought it would be better for your own men to go hake and herring fishing?—Yes.

43,313. And secondly that there should be no ground of complaint?—Yes.

43,314. Quite apart from those reasons, do you think that the trawling in the bay would have been injurious to the herrings by dispersing the shoals?—I stated before that I had no reason to believe so.

43,315. Do you think that the take of cod and haddock by the hand-line and the spilliards has fallen off since trawling commenced?—Some years before trawling was commenced here there was a less quantity of fish, far less than has been taken since trawling commenced.

43,316. (*Mr. Lefevre.*) You spoke of there being a considerable number of small boats in the bay years ago?—Yes.

43,317. Were they all open boats?—They were all sprit-boats,—open boats.

43,318. Did they fish all the year round?—No; they belonged to the farmers round the different harbours in the bay, and they fished the herrings occasionally in the harvest time.

43,319. To what do you attribute the great falling off in the number?—To the famine in 1847 and 1848. The farmers themselves fell off. A great many died, and many emigrated to America.

43,320. Are you aware what was the reason which induced the company which was established here to throw up trawling in Dingle Bay and to leave it?—As far as it is right for me to say, I can satisfy you that it was not from any want of fish, but it was entirely from other circumstances which I am not in a position to enter into. It would not be right for me to state in this court what the reason was, but I do not believe it was from any want of fish.

41,321. Do you think there is room in the bay for any considerable number of trawlers more than there are at present?—There is ground outside the rough ground.

42,322. Ground that has not been fished over?—Yes, but it is very limited.

The witness withdrew.

J. O'Flaherty.

JOHN O'FLAHERTY called and examined.

43,323. (*Professor Huxley.*) Are you a fisherman here?—I was a trawler here for some time.

43,324. How long is it since you were occupied in that way?—When the Royal Irish Fisheries commenced here.

43,325. Were you employed in the Royal Irish Fisheries?—Yes, in Dingle.

43,326. Did you come from Dublin?—No, I belong to this place.

43,327. When the vessels came round were you employed in them?—I was employed as a pilot to see what were the best places for experimenting upon along this coast.

43,328. In what year was that?—About 1848.

43,329. For how many years were you in the employment of the Royal Irish Fisheries Company?—I cannot recollect, but I think it will be about two years. I was then employed as a pilot in Her Majesty's service, but I had to give that up, and afterwards I went into the employment of the company again.

43,330. Were you in their service when they ceased to work?—Yes, I was.

43,331. At what time of the year was it they ceased to work; was it during the trawling season?—It was.

43,332. What year was that?—It was the year 1848 when they commenced.

43,333. But what year was it when they left off?—I was not exactly in their employ when they left off. They went on working for 12 months after.

43,334. In the last year you were employed in trawling for them did you get a good supply of fish?—Yes, but we were fishing in Galway Bay then.

43,335. Then can you not say anything in regard to what the supply of fish here was?—Yes, it was not from any want of fish that they left here.

43,336. You yourself were not fishing here the year before the company ceased to work?—No.

43,337. During the time you fished for the company was the supply of fish well kept up?—Yes.

43,338. Did you see any falling off?—No.

43,339. Did you hear the evidence of the last witness?—I did.

43,340. Do you agree with it?—I do in some points, but every man has his own opinion.

43,341. Will you tell us any point on which you disagree with him?—I think the fish have been increasing for the last two years. I own part of a little boat myself, and for the last two years I think more fish have been taken by that boat than were taken in the two years before that.

43,342. What kind of fish?—Sole, brill, and turbot.

43,343. Is your boat one of the same size as those which were employed ten years ago?—It is of less tonnage. My boat is only of 25 tons.

43,344. Do you catch fully as much or more now than was caught by a similar boat ten years ago?—There have been more fish caught in the last two years then were caught before.

43,345. But going back to the time when trawling commenced, do you get as much fish in proportion as you did then?—No; but the reason of that is that there were not near as many boats fishing then as there are now.

43,346. Do you think that a boat of a given tonnage does not get quite as much fish now as a boat of the same tonnage would when you first commenced fishing?—No.

43,347. And the reason of that is the increased number of boats fishing?—Yes.

43,348. Is there any other point which occurs to you which you would wish to mention?—I should like to say a word with regard to the ground that was prohibited here. It was a great deal more in extent than they ever allowed for trawling.

43,349. But that limitation is not in existence now?—They have a scrape now on that prohibited place of from 10 to 12 miles in length, while upon the other ground there is not half that distance.

43,350–2. Do you agree with the previous witness as to trawling at night?—Yes, in order to get it to the Dublin market. I was along with one of the gentlemen who came down here from the Commissioners of Fisheries, and I took him over the spot where the Anascaul men say the fish spawn. I shot the trawl there and we got 21 pair of soles and nothing else, after an hour and a half's trawling.

43,353. Was the gentleman to whom you refer Mr. Holdsworth, our secretary?—Yes; we got the fish from the identical spot where they say the fish spawn. We took up the trawl after it had been down for an hour and 20 minutes. We held it up and there was no spawn in it, but there were 21 pairs of soles.

43,354. When was that?—I think it was the latter end of May. There were herrings and lobsters and soles coming in, and plenty for all the boats to fish. There had not been a trawl shot there for a long time before that and none since.

43,355. You are part owner of a trawler yourself?—I am part owner of a little boat, but I am employed by the Ballast Board of Dublin.

43,356. You are not living altogether by fishing?—No.

43,357. Do you agree with the last witness as to the want of good trawling ground outside the headlands?—When I was going in one of the company's boats we fished outside the headlands, but we could not make anything of it because the water was too deep.

43,357*a*. What depth of water was there?—There were about 60 fathoms of water. We get into deep water at once when we get clear of the heads. We were seven hours fishing and we did not get a hundredweight of fish.

43,358. Had you plenty of warp out?—Yes. The skipper was an experienced man, and he said that the water was too deep, and that there was no use in fishing there. In addition to that the ground is quite open to the Western Ocean, and there is no shelter for anything. It is a different bay from any other in Ireland. This is one of the bays where there is no shelter upon either side.

43,358*a*. Do you think the fish set into the bay at different seasons and then go out again?—I do.

43,359. Is that the case with soles particularly?—Yes, they generally come all about the same time.

43,359*a*. Are you aware if any considerable quantity of soles can be caught by the spilliards?—Not that I have ever seen.

43,360. Do you know anything about the market for the supply of fish here?—Yes.

43,360*a*. Have you ever seen the market supplied regularly with fish by the spilliards?—No.

43,361. What is the principal fish they send in?—Haddock, cod, gurnard, and whiting.

43,361*a*. But not soles?—No, I have not seen 20 pair of soles sent in by them.

43,362. Are you employed in the herring-fishing?—Yes.

43,362*a*. What is your opinion about the herring-fishing; do you think that trawling frightens away the herrings?—No, and in proof of that I may say that I have this year seen trawlers fishing when the herring boats have been catching plenty of herrings at the same time.

43,363. In what month?—About the month of May.

43,363*a*. Where was the place they were fishing?—Off Ventry Harbour, about three miles from this.

43,364. It was in May that the herrings were here?—Yes. They were sent from here to Dublin market, and they thought it very strange.

43,364*a*. You say that on that occasion you saw the trawlers working among the shoal of herrings?—Yes.

43,365. How did you know the herrings were there?—We could see them very plainly.

43,365*a*. Did you see the gannets at work upon them?—Yes, we could see the boats shooting their nets and the trawlers trawling away.

43,366. Did the herring-fishing go on in Ventry Bay itself?—Yes.

43,366*a*. And the trawlers were working there?—Yes, a little outside Ventry Bay.

43,367. You give that as a proof that the trawlers do not injure the shoals?—Yes. They do not injure the shoals to my knowledge.

43,368. Were the herrings being caught in the seines then?—No, there are no seines out of Dingle now.

43,369. Then they were being caught with the drift-nets?—Yes.

43,370. Then with respect to catching small fish in the trawl, what should you say is the ordinary proportion of small and unsaleable fish which is taken in a trawl?—I have never seen any unsaleable fish worth speaking of taken by the trawl.

43,371. Have you ever on any occasion seen the spawn of fish in a trawl?—No, never; and I was the first here who did shoot a trawl in one of these boats.

43,372. (*Mr. Lefevre.*) Can you tell us anything about the extent of ground fit for trawling in this bay?—I can give you an idea.

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43,373. Let us take first the ground outside what used to be the line of prohibition; what is the extent of ground there?—About four miles; there may be a little more in one place.

43,374. Four miles in length by how much in breadth?—Some of it will not be more than a quarter of a mile in breadth, and they could not go over it unless they had certain winds. There may be other places where the ground is from two to three miles in width.

43,375. Is that the only ground outside the line of prohibition?—There is another place to the westward of it, but it not so large in extent.

43,376. How much is it in length?—Two miles or a little more, and about two miles in breadth, but they cannot trawl there well because the place is very foul. We have been sounding and going over the place at different times, and we find that most of the bay is foul except those two spots, unless it is within the prohibited ground.

43,377. Are those the two spots the trawlers were trawling upon up to last year?—Yes.

43,378. Have you observed any falling off in the take of fish there?—There was a little falling off, and we thought that might arise from the number of boats that were fishing.

43,379. Did you think that the number of boats was too large?—Yes. They increased from 4 to 10 and 12, and the place being so small and so constantly trawled over it was hardly to be expected that the fish would remain as numerous as they were formerly.

43,380. Was it in consequence of that that an application was made by the trawlers to do away with the line of prohibition?—It was.

43,381. What extent of ground is there within the line of prohibition fit for trawling?—There is a piece of ground of from 10 to 12 miles in length.

43,382. And of what breadth?—Fully five miles.

43,383. Then the extent of ground prohibited was much larger than that upon which the trawling was allowed?—Yes, a great deal.

43,384. Do you think that the increase of fish caught within the last two years has been due to fishing within the line?—It has.

43,385. That has mainly been the cause?—Yes.

43,386. For how long during the season were your fishing boats fishing?—Two months or a little more.

43,387. Two months out of the seven?—Yes.

43,388. And five months outside the line?—If the fish fall off they go round to the other ground. They fish in the other place about the latter end of February.

43,389. Outside the line of prohibition?—Yes, they fish higher up first. There are strong easterly winds and westerly gales, and they cannot fish then. They cannot trawl down the bay. If it had not been for this place being open during the last two years there would have been a great many of the fishermen in the workhouse before this.

43,390. Do the trammel-fishermen fish over the same ground as you do?—I do not know much of the trammel-fishing, but there are trammels on the same ground.

43,391. Have you not come across their nets at all?—No, I never did.

43,392. Do they set their nets in the daytime?—I have seen them setting them a little before sunset.

43,393–4. Only a short time before?—Yes; I live about an English mile from the town and I cannot see the boats that shoot further up the bay.

43,395. Do you pay your men by shares?—Yes, by shares; the men in the trawl-boats are all paid by shares.

43,396. Can you tell us anything about the lobsters?—Yes.

43,397. Is there any considerable lobster fishery here?—There is.

43,398. Along the north side of the bay?—Along both sides of the bay.

43,399. Has the take of lobsters fallen off?—I believe they are falling off inside the bay but I cannot say how it is outside. I have not tried this year, but I was at them last year.

43,400. How long has the lobster-fishing been carried on?—There was a little carried on all through when the Royal Irish Company was here, but there was not a very great deal done until within the last two or three years.

43,401. How many men are employed in it?—They are fishing for themselves for the most part and there are a good deal of them. Everywhere round the bay there are very fine lobsters.

43,402. Do you take the lobster when it is full of pea?—I suppose they do.

43,403. Do they observe any regulation with regard to the size of the lobster they take?—No.

43,404. They take small and large?—Yes.

43,405. What is the smallest they take?—Perhaps a little larger than my hand.

43,406. Do they not take them smaller, or do they not find them smaller?—They may do so, but I have not seen them.

43,407. Do they take as many as they did?—There has been a great quantity of lobsters taken this year, but there were more taken last year than this; there were more boats and more men employed.

43,408. There have not been as many men this year?—Not as many as there were last year.

The witness withdrew

M. Stack.

MAURICE STACK called and examined.

43,409. (*Professor Huxley.*) Are you a native of Anascaul?—I am.

43,410. Are you a fisherman there?—Yes, I am.

43,411. How long have you been engaged in fishing?—For the last 15 years.

43,412. Has it been your occupation all your life?—I first followed the occupation of buying fish from the fishermen, and then I fell into the fishing. I found it more profitable to fish than to sell the fish.

43,413. You were first a fish buyer?—Yes.

43,414. And afterwards you took to fishing yourself?—Yes.

43,415. Has that been your occupation for the last 15 years?—Yes.

43,416. What mode of fishing do you practise at Anascaul?—Spilliard-fishing, herring-net fishing, trammel-net fishing, and hand-line fishing.

43,417. Are there any trawlers at Anascaul?—Yes.

43,418. Is there any harbour in Anascaul?—Yes.

43,419. For boats of what size?—It is not capable of accommodating boats of any great size. It is a very bad harbour.

43,420. What are the largest boats that can go into the harbour; of what tonnage?—About 25 tons.

43,421. What kind of boats are they principally that go there?—We principally work with canoes.

43,422. What do you call a canoe?—A canoe is made of timber and covered all over with tarred calico.

43,423. How long are those canoes?—There are many of them 18 feet long, and some of them 20 feet.

43,424. Are they such as a couple of men may carry?—Four men carry them.

43,425. Does the crew consist of four men?—Yes, we have three in a crew when fishing for herrings.

43,426. How many of these boats are there at Anascaul?—There are 11.

43,427. That will make between 40 and 50 men altogether?—Yes.

43,428. Are there other boats besides?—There are one or two others. There were about 20 boats until the time the fishing got bad.

43,429. How long ago is that?—About 30 years ago.

43,430. Were they large boats ?—There were large boats, lug boats, and sail boats.

43,431. When did they cease to be there; when were they broken up ?—I suppose they were broken up when the bad weather came.

43,432. It is not worth while for the people to take care of them ?—No.

43,433. Is that on account of the falling off of the fisheries ?—It is.

43,434. Were there any canoes at the time the large boats you speak of were here ?—Only one or two.

43,435. The canoes have taken the place of the other boats ?—Yes.

43,436-7. Is it because they cost less ?—Yes, they cost less. People were not able to keep up the other boats.

43,438. The people became too poor to keep up the old style of boats and so took to the canoes ?—Yes.

43,439. If they had been able to make as much by fishing as they did formerly would they have kept to the old boats ?—Not half of them.

43,140. Why not ?—The trawlers put them down; they took all the fish away.

43,141. If plenty of fish had remained to be caught would they have kept the old style of boats ?—I do not know that because the canoes are very easy to work.

43,442. Are the canoes as convenient as the old style of boats ?—We prefer them.

43,443. Do you prefer them yourself ?—Yes, I do.

43,444. So then if you had not been poor you would have preferred the canoes as being more handy ?—Yes.

43,445. There are about 50 or 60 fishermen at Anascaul ?—Yes, and 200 all round the coast.

43,446. Are there any trammels ?—Yes.

43,447. Has each fisherman got a trammel ?—They have a pair of them.

43,448. Has each fisherman a hand-line ?—Yes, a pair of them.

43,449. And a spilliard ?—Yes.

43,450. They belong to the fishermen ?—Yes, they have got them of their own.

43,451. What time is the fishing season for the Anascaul men ?—From the month of May, and they follow it up to this day.

43,452. Up to September ?—Yes.

43,453. What do they do when they leave off fishing in September ?—They fish with their trammels.

43,454. How long does that last ?—Up to Christmas.

43,455. After Christmas what do they do ?—They go on fishing with their spilliards on fine days outside; they do not often get good weather, however.

43,456. Do the Anascaul men do anything but fish?—No, except they cultivate a handful of potatoes for themselves.

43,457. Has each man his own bit of land ?—Each has a bit of land, but it is not his own.

43,458. It is ground they have to pay for ?—Yes.

43,459. Do they depend on the fishing chiefly for their livelihood ?—Yes, chiefly on the fishing; they have nothing else to live by except the fishing.

43,460. Was the fishing pretty good when you knew it first 15 years ago ?—It was first-rate.

43,461. Did you catch plenty of hake ?—Yes.

43,462. Cod ?—Yes.

43,463. Haddock ?—Yes, and soles and plaice and turbot.

43,464. How did you catch soles ?—With the spilliards and by using lug-worms.

43,465. You bait with the lug ?—Yes.

43,466. Did you catch many soles in that way ?—I have done so; I have seen 120 pair of soles in one basket; I have seen from that down to 80, and 30, and 20 pair.

43,467. Caught by the spilliards ?—Yes.

43,468. In one night ?—Yes.

43,469. Was it a common thing to take as many soles as that on the spilliards ?—Yes.

43,470. What depth of water did you set your spilliards in ?—From seven to 11 fathoms.

43,471. How many hooks would there be on each spilliard ?—About 700; there might be 750 on some and 600 and 550 on others.

43,472. What are the lines you have the hooks made fast to ?—We have the hooks made fast to a snood.

43,473-5. What is the size of the hook ?—Number 11.

43,476. At the time you speak of what did you catch in your trammel-nets ?—Hake.

43,477. Were they only set in the hake season ?—Yes.

43,478. In what depth of water did you set you trammels ?—In from seven to eight fathoms of water

43,479. Not deeper than that ?—No.

43,480. How far out from the shore of the bay di you set your trammels ?—That would be according to whether the fish were high up or low down; if they were high up we should put them near the shore and next to the foreground.

43,481. I see from the chart that just past Anascaul there are seven fathoms of water right across the bay?—Yes.

43,482. Then you could set your trammels the whole way across ?—Yes, when we find fish there.

43,483. You told us just now that the supply of fish has fallen off very much of late ?—Yes.

43,484. When did you first notice that the fish had fallen off ?—The trawlers took them down; before they came we had them very plentiful.

43,485. Do you mean in the year 1848 or 1849 ?—I do not know which year; it was the first year we had to contend with them; we had a great haul before then.

43,486. You began to fish about 15 years ago ?—Yes.

43,487. That would be about the year 1849 ?—Yes.

43,488. That was about the first year that trawling was introduced ?—Yes, somewhere thereabouts.

43,489. You had not been fishing before that ?—No.

43,490. But at the particular time you began there was an abundance of fish of all kinds ?—Yes.

43,491. When did you first notice that the fish were falling off ?—When the trawlers came down.

43,492. How many years had you been fishing before the fish began to fall off ?—It was two or three years afterwards.

43,493. You got an abundance of fish for two or three years ?—Yes.

43,494. And then they began to fall off ?—Yes.

43,495. Did the quantity of fish in the bay fall off ?—Yes.

43,496. What kind of fish particularly ?—We were getting sole, plaice, turbot, and brill; everything has fallen off except haddock and hake; we can get them plentifully at the proper time of fishing.

43,497. You were taking all these fish in plenty until the trawlers came down ?—Yes.

43,498-9. Then it is since then, about the year 1852 or 1853, that the supply of fish has fallen off ?—Every year except the three years I tell you of. We had a decent supply of fish last May twelvemonths, two spilliards took 38 pairs of fish; I sent them to the Dublin market and they made 3*l.* 8*s.*; there were 38 pair of fish in one night. I shot the spilliards the second night, but the trawlers had found it out from the jolters, and they came down and then we could get no more. I had a good many pairs in my canoe before they came. We were joining several of us; we went to the trawlers in the night-time, they were all outside of me and we asked them to keep away from the spilliards that night; the reply they made us was, "Why "do not you buy a lanthorn and put it over your spil-"liards for buoys ?"

43,500. You asked them to keep away from your spilliards ?—Yes, and they told us to buy lanthorns and put them on the buoys. I had three spilliards out and I had only 12 fish upon them.

43,501. Did the trawlers carry away the fish ?—Yes.

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43,502. Did they trawl over the lines?—Yes, and trawled away the fish.

43,503. In 1863 was there plenty of fish to be caught?—Yes, there was plenty, but we have not been able to catch plenty for the last four or five years since they have come down among us; before the law was broken so as to enable them to come down we were getting a good fishing, but since they have been allowed to come down we have been getting nothing.

43,504. Were you one of those who petitioned for the byelaw that was made in 1852?—I was.

43,505. Was it upon the ground of the falling off of the fish?—Yes.

43,506. Did you find that the byelaw did you any good?—Yes.

43,507. Did you get as good fishing afterwards?—Yes.

43,508. Were there plenty of soles to be had?—Yes.

43,509. And plenty of hake?—Yes, and of turbot.

43,510. And plenty of herrings?—Yes.

43,511. In fact there were plenty of all sorts of fish?—Yes.

43,512. As much as you got before the time the byelaw was passed?—It was not as large as it was the first time, but it was much better than it was when the trawlers were allowed to work there.

43,513. After the byelaw was passed did you get pretty nearly as much as you did before the trawlers came at all?—Yes.

43,514. How long was it after the byelaw was passed that you noticed the improvement in the fish; was it the next season or the season after?—The season after.

43,515. Within the year you found that all the fish had come back?—Yes.

43,516. And there remained a steady supply?—Yes.

43,517. Until the byelaw was repealed again?—Yes.

43,518. And then did they all vanish?—Yes.

43,519. Then it does not seem that trawling outside the limit does you any harm?—No. All I want is that they should stop away from me. That is what I should like best.

43,520. You are quite clear that the trawling outside the boundary line did no harm?—Yes.

43,521. It did not frighten the herrings away?—I am not sure of that. They were outside the boundary, but they did not frighten them inside.

43,522. The fish had to come from outside the boundary to get inside?—Yes.

43,523. Then they must have passed the trawlers?—Yes.

43,524. Then it is quite clear they had not frightened them away?—I do not know that.

43,525. You told us you got plenty of herrings above the boundary?—Yes.

43,526. It is quite clear that they could not have the overland?—It is on the other side we get them.

43,527. They must have come up through the outer water—they must have come up some part of the boundary?—Yes.

43,528. They must have come up through the water where the trawlers were working?—Yes, indeed they did.

43,529 Did you find there was as good a supply of haddock after the byelaw was passed as before?—Yes, there has been a good supply of haddock.

43,530. And now, since the byelaw was repealed, it has all fallen off again?—Yes.

43,531. Have the trawlers ever carried away your lines?—They have not carried away lines from me, but they have from another man here.

43,532. You never had your lines carried away?—No, I never had mine taken.

43,533. Have you ever had your trammel-nets carried away?—No, they have not taken any away from me: but they have from another man who is here.

43,534. Do you think that the trawlers destroy much spawn?—Of course I suppose they do.

43,535. Have you ever seen the trawl-net taken up?—No, but there is another man who has.

43,536. You have not seen it yourself?—No.

43,537. Do they destroy much unsizeable fish?—Yes, of course they will.

43,538. But you do not know that of your own knowledge?—No, I do not indeed.

43,539. Do you get as good a price for your fish as you did before the trawlers were working?—I do.

43,540. Does your fish sell as well as the trawled fish?—Yes, I suppose it does.

43,541. You get as much money for it?—I do, according to the market in Dublin.

43,542. Is there no difference made in the market between trawled fish and hooked fish?—Indeed I do not think there is. We all join in Anascaul and send to the market.

43,543. You do not know whether your hooked fish sells for a better price than the trawled fish?—I am not sure.

43,544. Do you get as good a price for your fish as you did when you first began catching fish?—I do.

43,545. Is it much better or about the same?—About the same.

43,546. (*Mr. Lefevre.*) Where do you sell your fish?—In Dublin.

43,547. Does it go by way of Tralee?—Yes, by mail car.

43,548. Do you send it off every day?—Yes.

43,549. Do you buy from other men?—No, we all join together, put it in a basket, and send it to Dublin. The jolters send them in.

43,550. Do you only send away the soles?—Yes, and turbot.

43,551. Do you send off a basket every day from Anascaul?—Yes.

43,552. What is the size of the basket?—Not very large. It is very little now, only about 20 pair.

43,553. Two years ago, before the byelaw was done away with, did you send more than one basket a day?—Yes, two, three, and four then.

43,554. Then the supply has fallen off since then?—Yes.

43,555 Do you think that the reason is that the trawlers catch the fish that you formerly caught?—Of course it is.

43,556. Then that is the harm the trawlers do you, namely, that they catch the fish you would otherwise catch?—Yes.

43,557. Do they do you any other harm?—They do me harm of every sort.

43,558. In what way?—They do me harm in taking the hake fish first, and then the haddock and cod and plaice and turbot.

43,559. But we have heard that the trawlers fish only for two months of the season within the line?—The first day they went down there last May twelvemonths there were five or six of them there, and they took up large takes.

43,560. Did they fish on for about two months?—As long as they could get fish and a breeze they fished there.

43,561. In what months do you catch most soles?—In the month of May.

43,562. Only in the month of May?—Yes, from the month of May up to this time.

43,563. Do you catch as much in other months as in the month of May?—Yes.

43,564-5. You observe no difference?—There was a great difference in this month and the month before. I am obliged to give up my fishing and go to the foul ground, where the trawlers cannot go. It is there that I put my spilliards now, where they cannot trawl. During the two years that the trawlers have come down here it is there I have been making my harvest.

43,565. Do you ever set your spilliards on the rough ground?—Some of them go on the rough ground.

43,567. Do you get any soles there?—No.

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43,568. Do you get haddocks there?—We may get haddocks, but there is not a sole or a flat-fish to be got.

43,569. (*Professor Huxley.*) Is there any other statement you would like to make to us in addition to what you have already stated?—I have fishermen here to prove that they have carried away our spilliards.

43,570. Is there anything you wish to state yourself?—I have nothing more to say than that the fish have been reduced by trawling, that I have had to give up my own ground and go to where the foul ground is. I have had to go to Bull's Head and Minard. I have had to leave where there is good ground and to go where it is foul ground. It is there I have had to make my season for the last two years.

43,571. Was the reason that you were afraid of their trawling over you?—No, there was no fish.

43,572. Did they fish there day after day?—Yes.

43,573. Then there must have been fish to be had there?—Yes, but it would have been of no use for me to set spilliards there when I had fished it down to three single soles.

43,574. Then the trawlers did not clear away the fish, but after the trawlers had been there the fish would not take the spilliards?—I could not catch any.

43,575. But there must have been fish there or the trawlers would not have gone on fishing there day after day?—They would get the fish and not me.

43,576. Do you mean that after the ground had been trawled over the fish would not take the spilliard bait?—I fished it six times before I left and could get none. I was obliged then to go to the foul ground to fish. As long as the trawlers continued to work over the ground I could get no fish.

43,577. And yet the trawlers think it worth while to come and fish there?—No, they did not come there They fished it up one week after another, but if they thought they could get fish there they would fish it as long as the fish were there.

43,578. After a trawler had fished over the ground did he not come there again?—No.

43,579. For how long?—From the month of May until November; that is the time we are fishing with the trammels.

43,580. Did once working over the ground clean it so effectually of fish that there were no more fish to be had for months?—I am sure of it. I put my spilliard there for a month after they went away and I could only get one or two soles.

43,581. Are there any soles there now?—No, I fished it last week and I only got three or four soles.

The witness withdrew.

JOHN O'FLAHERTY recalled and examined.

J. O'Flaherty.

43,582. (*Professor Huxley.*) I believe you told us that you were fishing in this very place this year?—Yes, on the very identical spot the witness has been speaking of.

43,583–4. When was that?—In the latter end of May.

43,585. What did you catch?—Twenty-one pair of soles.

The witness withdrew.

MAURICE STACK recalled and examined.

M. Stack.

43,586–90. (*Professor Huxley.*) Was that in the month of May of this year that you put your spilliards out on the ground of which we have been speaking?—Yes, I put them down and got no fish at all. I had to give it over.

43,591. (*To the witness O'Flaherty.*) You on the other hand tell us that by trawling over the same ground in the month of May you caught soles?—Yes, in a very short time we got 21 pair of soles.

43,592. (*Mr. Lefevre to the witness Stack.*) Where did you go to when you could not find soles there?—To the other side.

43,593. Did you find fish there?—Yes, I had a fine take of fish there.

43,594. Is that the ground the trawlers do not go to?—They dare not go there.

43,595. Why?—The foul ground is outside and the good ground inside.

43,596. Is it only a narrow strip of good ground?—Yes.

43,597. Have you not caught fish on the same ground that the trawlers have been fishing over?—No, not a bit.

43,598. Never?—No, never, and I have fished often down on the same spot.

43,599. You have never fished habitually on the ground the trawlers have been fishing over?—No.

43,600. (*Professor Huxley.*) Did I understand you to say just now that when you fish over ground outside the line the trawlers fish you do not get soles?—No, we do not.

43,601. But the trawlers do?—I do not know. I have had to go to some other ground.

43,602. Is there anything else you would like to say?—I have no more to say.

43,603. Have we now heard the principal part of what the Anascaul men have to complain of?—There is a man who would be a better witness than me; he can tell about the trawlers carrying away the spilliards and frightening the herrings.

The witness withdrew.

THOMAS KENNEDY called and examined.

T. Kennedy.

43,604. (*Professor Huxley.*) Are you a native of Anascaul?—Yes.

43,605. Have you been fishing there for many years?—Yes, for 20 years.

43,606. What kind of fishing have you practised?—Spilliard-fishing, hand-line fishing, trammel-net fishing, and herring-fishing.

43,607. Did you hear what the last witness stated?—Yes.

43,608. Do you agree with what he said?—Not in some parts.

43,609. Will you mention any particular in which you do not quite agree with him?—I do not agree with him with regard to the decrease of fish since the trawl-fishing began; the fish have decreased a great deal.

43,610. The fishing has fallen off a great deal since trawling began?—Yes, it has been falling off every day.

43,611. Do you mean since the prohibition was withdrawn?—Yes, and before that too; it has been falling off every year.

43,612. Then do you not agree with him that the fishing became much better after the byelaw was passed?—It did not. The reason the byelaw was passed was that they were taking away our trammels and our nets. There was a dispute with us one day and we went on board of one of the trawlers and we got up their bags in consequence of their taking away our nets.

43,613. And then the byelaw was passed?—Yes.

43,614. Did that do any good to the fishing?—It did to the herring-fishing.

43,615. But to the sole-fishing and to the other kinds of fishing?—No, the soles were not as plentiful as they were before, or near it.

43,616. But did the soles become more plentiful than they had been?—Not much.

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43,617. Did you get much haddock?—We must go to the southward of the shore to take haddock.

43,618. Did you get plenty of hake after the byelaw was passed?—Yes, we got plenty, but the trawlers injure all fish.

43,619. What you object to is the trawlers working over the same ground that you do?—Yes, I think the decrease in the fish is owing to that.

43,620. When the trawlers were working outside the boundary did they do you any harm?—Yes, they did.

43,621. What kind of harm did they do you?—In May when we take soles they prevent the fish from running down to us. I am quite sure that they do not let one-third of it run down.

43,622. They catch the fish that are coming down?—Yes, going down the bay.

43,623. In fact they catch the fish you would otherwise catch?—Yes.

43,624. But when they fish outside the boundary line do they then destroy the fishing in other ways?—I am sure of it.

43,625. How so?—After our spilliards had been taken away in the night we drew up their bags. There were two men and a boy on board of the boat. We hauled up the bag and emptied it out on the deck. There were lots of small turbot and spawn. I should say there would be four or five hundredweight of spawn. There was so much of it that one of the men had to get a shovel and throw it overboard.

43,626. What kind of looking stuff was it?—It was in large lumps.

43,627. Was it pretty solid?—Yes.

43,628. Did you see any fish in the spawn; would it come to life at all?—I do not think it would.

43,629. How did you know that it was fish spawn?—I knew it was fish spawn because it was much the same as I had seen before. It was in small grains, flaxy, and in large lumps. I know it was some kind of fish.

43,630. Do you know squid spawn when you see it?—I do not know.

43,631. Would you know it from fish spawn if you were to see it?—I might judge whether it was if I saw it.

43,632. You do not know at present?—No.

43,633. Do you think that the destruction done by the trawlers outside the boundary line has damaged your fishing inside?—I know that it has.

43,634. The last witness told us that he has got plenty of fish?—Not in that place; he had to go to the other side of the shore.

43,635-7. Has the fishing been affected more on one side than on the other?—Yes, because they all trawl on one side.

43,638. Do you think the trawlers keep the herrings out?—Yes, and I will give you an instance. In the year 1850 we were fishing with four or five canoes and we took from 1,000 to 3,000 herrings in a canoe. On the following day six or seven trawl boats went down the place and we did not take a herring.

43,639. Does it not sometimes happen that, if you go to the same place on a second night after a good fishing, you get no fish, without the trawlers being about?—Yes; but, if it does happen, it also happens that I get it somewhere else in the course of the week.

43,640. Herring-fishing is very uncertain. It may happen or not?—I know it is.

43,641. We have been told that they have been catching herrings in Ventry Bay while the trawling has been going on there?—Yes; I have been catching herrings there, but I could not tell whether the trawlers were there or not. We were told that the trawling was entirely off.

43,642. But we have had contrary evidence—we were told that the trawlers were working there?—I could not say that. I saw a vessel outside, but I did not know what she was doing.

43,643. Have you ever had your herring-nets fouled by a trawler?—No; but I have had my trammel-nets fouled; and, although I asked him to stop for five minutes, and told him I would take them out of the way, he would not do so.

43,644. That was before the byelaw passed?—Yes.

43,645. Has the fishing become worse since the byelaw has been repealed?—Yes, it has been getting worse every day.

43,646. For all kinds of fishing?—Yes, herring-fishing, hake-fishing, and all kinds of fishing. It has been getting worse every day.

43,647. Do you agree that soles can be caught in great numbers on the spilliards?—In the year 1851 I myself got 20 pair on one spilliard.

43,648. What sized soles were they?—They were sent to the Dublin market.

43,649. What size were they; were they fair soles?—Yes; there were some very large, and during the season I got from 60 to 100 pairs every night.

43,650. (*Mr. Lefevre.*) Have the hake fallen off?—We are catching no hake.

43,651. Did you take any last season?—Very little.

43,652. When was the last year you had a good season?—We have not had a good season for five or six years.

43,653. Do you also attribute that to the trawling?—I know that trawling has had a great deal to do with it.

43,654. In what way?—The trawlers have frightened the fish.

43,655. Have you ever fished outside the line of prohibition with a spilliard?—Yes; but I have not thought it worth while to put out a spilliard at all this year—it would not pay half my expenses.

43,656. But before the prohibition was repealed did you fish with spilliards?—Yes.

43,657. On the same ground that the trawlers go upon?—No, they cannot get at that ground.

43,658. Why is that?—It is a narrow spot running along the bank.

43,659. Did you not try that this year?—No, but the other canoes did, and they got nothing on it.

43,660. How was that, the trawlers had not been there, had they?—No; they could not fish there.

43,661. You say you lost your trammel-nets on one occasion from trawling; what time of the year was that?—It was in the year 1850. I believe a Dublin boat took them away.

43,662. Did you take the name of the boat?—No, I could not do so.

43,663. What time was it?—Before sunrise.

43,664. Was it dark?—No; we were taking them up before sunrise at the time.

43,665. How far from the shore were they?—They were about one and a half Irish miles from the shore.

43,666. What was the depth of water?—From seven to nine fathoms.

43,667. What is the deepest water you fish in with the trammels?—Nineteen or twenty fathoms.

43,668. Have you ever set them outside the line of prohibition?—I have.

43,669. Was it there that you lost them?—No, that was inside.

43,670. Then the trawler was inside the line of prohibition?—A few days afterwards there was a dispute, and we entered a trawler and took his nets and let the boat go adrift ashore. A line was struck out in consequence.

43,671. Is there anything else you would like to add to the statements you have made?—No, only that I am sure the trawling is a great destruction to the fish.

43,672. Do you think if the soles are coming into the bay, and are not caught by the trawlers, that you would catch them yourselves upon your lines?—We should take a share of them.

43,673. Do you think if the trawlers did not catch the hake outside the bay with their hooks you would catch them?—Yes, with the hand-line. We should catch what were coming into the bay. We should take our share of the hake.

43,674. Would you like the trawlers to be prohibited from hake-fishing in order that you might catch

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the hake?—No, because they cannot kill the whole of them, and I catch a share of them.

43,675. Do you think if they caught them with the hook only you would have a better chance than if they were taken by the trawl?—Yes.

43,676. What makes you think that?—Because if the fish come in and we only fish with hand-lines, we do not scatter them away in every place, and we cannot kill the whole of them.

43,677. Do you think that the trawlers in trawling catch very much more fish, or that they frighten the hake away?—They frighten away the hake.

43,678. Have you ever known the trawlers catch with their hand-lines 27 or 28 score of hake?—I have not. I am sure they have not taken that quantity in this part of the bay.

43,679. Are you aware whether the trawlers on the outside ground caught 27 or 28 score of hake last week?—They might on the outside ground, but not inside here.

The witness withdrew.

THOMAS FITZGERALD called and examined.

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43,680. (*Professor Huxley.*) Are you a fisherman at Anascaul?—Yes.

43,681. How many years have you been a fisherman there?—Thirty years.

43,682. You heard what was stated by the previous witnesses Kennedy and Stack?—Yes.

43,683. Do you agree generally in what they stated?—Yes, certainly, in some parts of it.

43,684. What do you not agree in?—I will tell you. I had a brother, an only brother, and he had been out fishing for many years. He had seven in family, when he was taken ill with the fever and became helpless altogether. I shifted for him and set his spilliards for something like more than a month, when one of these trawlers came down. I begged of him to let me haul away the spilliards.

43,685. Whereabouts was that?—Opposite my own place at Anascaul?—They did not pay any attention to me, although I was shifting to support him in his fever. They took 700 of the spilliard hooks away from me without giving me the value of one of them.

43,616. Did you know the number of the trawler?—Not at all. It was about the break of day that they came down.

43,687. Then you had no redress?—No, I got none.

43,688. When was this?—In the year 1848.

43,689. That was before the first outcry took place?—Yes.

43,690. Did you obtain any good from the byelaw when it was passed in keeping them outside the limits?—Certainly we did. We then got a reasonable share of fish.

43,691. It did the fishing good?—Yes; but it did not do us as much good as before they interfered, nor yet the tenth part of it.

43,692. Then would you like to see the trawlers kept out of the bay altogether?—Fishing is the only means I have of supporting myself and my family, and if I had my own way, above all things I should like to see these trawlers 100 miles out of my way.

43,693. You think they do you so much harm?—I am quite sure of it.

43,694. Do you agree with the previous witnesses that they do harm by catching the spawn of the fish?—Certainly.

43,695. Did you ever see spawn taken up?—I was not on board any trawler. One day a man came up trawling and did injury to my brother's gear. I summoned that man to the petty sessions of Anascaul and they asked him there what brought him down fishing inside the boundary illegally, and the answer he made was that he had not a trawl down, but that he was running adrift. I was not able to observe her at the time. I asked him why he had not his boat numbered and he said she was marked on the bottom. As I have told you I summoned him, but I could not sufficiently prove what he was doing. I was not able to make him haul his trawl so as to show that it was a trawl, but by all the signs it was a trawl he was using. The case was adjourned until I summoned one of the crew, and then by the interference of some of the gentlemen they got off.

42,696. What I ask you is whether you have ever known spawn taken up by the trawl?—No, I never boarded any of them to see.

43,697. Have you ever known herrings frightened away by the trawling?—I can say that I have fished for a few nights and been able to get from 700 to 1000 and from that to 3000 herrings in a night.

43,698. When was that?—In 1848, when four or five of these trawlers came down and trawled over every inch of the ground as hard as they could. At one place they can come within a musket-shot of the shore into 4½ fathoms of water, and they do go in there. The night after they had been there I went out and I could not get a herring, and from that time until the end of the season we did not get 100.

43,699. Did they frighten them all away?—I cannot say, but I think the cause of their going away was the trawling, and that they shifted them all off.

43,700. Have you ever had your trammel-nets carried away by the trawlers?—Yes.

43,701. Were they working inside of the boundary at the time?—Yes.

43,702. Why did you not summon them?—There was no boundary struck out then.

43,703. Was it before 1848?—Yes.

43,704. Has there been much of it since the bye-law?—I have been fishing in five or six fathoms of water when some 30 or 40 of these trawlers have come down trawling. When once they hear from the jolters passing to Tralee that we have got any quantity of fish they come down upon us the second night.

43,705. (*Mr. Lefevre.*) Have you known of any case in which spilliards or trammel-nets have been carried away within the last two years?—No.

43,706. Although the trawlers have been trawling and fishing in the neighbourhood?—They do not trawl at the same time.

43,707. You set your spilliards at night and the trawlers trawl by day?—I thought one of the men you have examined to-day told you that after setting his spilliards he asked a trawler to get out of his way, and they told him to get lanthorns and put on the top of his buoys.

43,708. Do you agree in the evidence we have had before us that the trawlers only trawl in the daytime?—I have often seen the mtrawling by night; often and often I have seen it. They go just as they choose. If they have had a calm day they will be at it at night.

43,709. Within the line of prohibition?—Yes.

43,710. But you do not know of a case in which spilliards or trammel-nets have been carried away within the last two years?—No.

43,711. (*Professor Huxley.*) What time in 1848 was it that your spilliards were taken away?—I cannot say.

43,712. It is affirmed by other persons that at the time you say these lines were carried away there was no trawling here. You say that this took place in 1848 and it is alleged that there were no trawlers here at that time. How do you account for that? Have you made a mistake in the date?—Perhaps I may be mistaken in the year. It may have been 1848 or 1849; I am not sufficiently a scholar to tell you so particularly as that.

43,713. (*Mr. Lefevre.*) You set your spilliards always at night?—Yes; we sometimes use them by day for haddock, but we only set them at night for soles.

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42,714. Do you set them before sunset?—No, after sunset, between 10 and 11 o'clock.

43,715. Do you leave them on the ground and go back and come the next morning to haul them?—Yes.

43,716. Do you leave any buoy upon them?—Yes.

43,717. What is the nature of the buoy?—Some corks.

43,718. How high are they out of the water?—They are about the size of the ball of my hat. There are some six or seven corks, and there are three or four such buoys on every spilliard.

43,719. And on the trammel-nets how many are there?—Only one and sometimes two.

43,720. What is the size of the buoys in that case?—They are about the size of a two or three gallon keg.

The witness withdrew.

J. Burke.

JOHN BURKE called and examined.

43,721. (*Professor Huxley.*) What is your employment here?—I am in the Coastguard.

43,722. Do you look after the men's nets?—Not more than sending out a boat's crew if required.

43,723. You have no particular charge of the fisheries here?—No.

43,724. It is no particular part of your business to see that the fishery laws are carried out?—No.

43,725. I suppose it is the duty of the boat and the officers to look after the fisheries?—Yes.

43,726. Have you been acquainted with the fisheries here for many years?—I am a native of Dingle, and I am a boat builder by trade; but before I was bound to the trade I was fishing.

43,727. Fishing with the hook-and-line?—Yes, hand-line, and spilliards and nets.

43,728. Trammel-nets?—No.

43,729. Did you fish before trawling was practised in the bay?—Yes.

43,730. Have you ever fished since?—No.

43,731. Have you observed the produce of the fisheries since?—I have.

43,732. Do you consider that the fishing has fallen off since trawling was introduced?—I saw more hake caught five years ago than there was formerly killed here. I should say that there was double the quantity.

43,733. Was that by the trammel-nets?—No, by hand-lines.

43,734. About five years ago you saw a larger quantity than was ever taken before?—Yes; it was the largest quantity to my knowledge; it used to be spoken of as such. They imagine that there is a particular day or a week in the year when they kill a great many. The fishing, as it were, comes to a pitch, and a man will kill seven or eight score; they term it heading the cask. I recollect the fishing 30 years ago. I am the son of a fisherman and I have been fishing myself.

43,735. Then you think that the hake at any rate has not fallen off?—No, it has not; I can give you an instance. I recollect one of Mr. Hussey's men landing close to our watch-house. I asked him if he had got much fish, and he said he had got a great deal. I said, "How much, Tim?" and he said, "I can't tell "you; I have a deal." I went to him when he had landed and I saw a great quantity of fish.

43,736. Then as far as the hake is concerned do you think it has not fallen off?—It had not fallen off five years ago.

43,737. Has it fallen off since?—I have seen it some years better and some years worse; but that was the best year, I think.

43,738. Was it better than 30 years ago?—It was better than I ever knew it.

43,739. What was the produce of the sole-fishing compared with what it is now?—I recollect, when I was fishing on the very ground the trawlers are fishing upon now, that we considered the soles were very scarce. We might get three or four pair, but it was very rare to get six or seven pair.

43,740. (*Mr. Lefevre.*) With the spilliards?—Yes; we used to remark among ourselves how scarce the fish were. When I was away from this country on board a man-of-war I corresponded with a brother-in-law of mine, and he used to mention the quantity of fish they took in the trawlers, and since I came home I have witnessed a great deal taken.

43,741. Have you ever known such a quantity of sole taken by the spilliards as was mentioned just now by one of the witnesses?—I was very much surprised at it. I have never seen it myself.

43,742. It is not in accordance with your experience of spilliard-fishing?—No.

43,743. Then with regard to the herring-fishing do you think that that has fallen off of late years?—I know the herring-fishing fell off before the trawling was introduced here.

43,744. When? Do you recollect how far back?—20 years back.

43,745. Did it get better again?—This year has been altogether an exception to late years.

43,746. Is it much better?—Yes, ever so much better.

43,747. Is it your opinion that the trawling has done any harm?—On days when I was stationed out at the harbour's mouth five years ago I saw the spilliards fishing regularly among the trawlers for cod and ling,—cod principally, and I remarked that trawling had not destroyed the ground as much as had been expected. I recollect Dr. Blennerhassett having a trawl here some years ago, and the fishermen were ready to tear it to pieces. It was thought it would destroy the bay, and surprised I am that it has not done it.

43,748. You say you have seen the hand-line fishermen going in among the trawlers?—Yes, both spilliard-fishing and hand-line fishing.

43,749. You have frequently seen them going in among the trawlers?—Yes.

43,750. Is that on the ground outside the line of prohibition?—Yes, on the western ground, as they call it.

43,751. Is there any means of ascertaining the quantity of fish landed in Dingle?—Do you mean the weight?

43,752. Yes.—Of soles?

43,753. Yes.—I have seen some trawlers take over 250.

43,754. In a day?—Yes, out in the morning and in in the evening.

43,755. What quantity of fish is sent off from Dingle every day?—I cannot say. It varies very much.

43,756. What other fishing villages are there besides Anascaul along this bay?—I am well acquainted with the coast, but I do not know any other creek. They tell me the boats have been done away with in other parts. Since the herring declined there are no boats.

43,757. Then the only other persons who follow fishing are the few farmers who live alongside the bay?—I believe they have trammels further down.

43,758. Then there is no other important fishing interest further down the bay in addition to Dingle and Anascaul?—No, I think not.

43,759. How many boats were there working down from Minard at the time you were an apprentice?—I do not know how many there were at Anascaul, but at Minard there were a few.

43,760. From there to Inch Island how many were there?—I could not tell, but I never had any notion of there being a large number.

The witness withdrew.

WILLIAM ANDREWS called and examined.

43,761. (*Professor Huxley.*) You have interested yourself very much in the fisheries of this bay?—Yes, very much, especially at Dingle.

43,762. You have heard the evidence that has been brought before us to-day?—Yes, I have.

43,763. Do you wish to make any comment upon it to us; if so we shall be glad to hear you?—Perhaps it may be as well that I should make a short statement with regard to the fisheries of Dingle Bay. I am sure we are all indebted to you and to your brother commissioner for the patience with which you have heard the evidence to-day, but I regret that there are now so many of the able-bodied Dingle fishermen absent in Cork on board Her Majesty's training ship, the Hawk. In 1862, when a meeting was held here, there was a large attendance, and also of the Coast-guard officers and magistrates. I have been acquainted with Dingle Bay for many years, and in 1844 there was a very large number of sprit boats working in Dingle Bay. They carried six or seven men each. They were large, cumbersome, open boats and were only fishing at that time with small spilliards and hand-lines, and with a small train of herring nets of no depth whatever. They only took the fish when they came into the inlets and bays upon the coast; nevertheless, the quantity of fish they took was occasionally very considerable, but they never went far out because their boats were heavy and they were not able to work out at sea very well, although very able seamen manned them. At that time I was in the habit of going out in the bay and seeing the capabilities of the bay, I turned my attention to endeavour to improve the fisheries of the place. Then soles were not known to be in such quantities in the bay, and turbot were only rarely taken by the spilliard men.

43,764. Were not soles taken by the spilliard men?—No, very rarely by the spilliard men. They were very rarely brought into the market, and it was even asserted, when I mentioned the extent of the fisheries of Dingle Bay, that it would be found to be erroneous, as the soles were not in such large quantities as I represented them. In 1848 Admiral Sir Thomas Usher, the Marquis of Lansdowne, the Earl of Clarendon, and Sir Charles Trevelyan took an interest in the fisheries, and through their exertions a Royal Charter was granted for working the fisheries on the coast of Ireland. It was proposed to commence in Dingle Bay, and in 1848 we introduced two trawlers, and the first morning we experimented with them with the assistance of O'Flaherty, one of the pilots, we took large quantities of fish. We worked with a small boat until 1849, when we brought a large trawler called the "Nelson," of 60 or 70 tons, and with a trawl-beam of 45 feet in length. The first day we sent her out to the soundings we had traced out, she took 300 pair of soles besides a large quantity of other fish. The fishery went on successfully, and the Dingle men who were opposed to trawling in the first instance saw the advantage of taking the fish to the extent in which it was then taken and joined in with the company, some of them getting boats on their own account. In consequence of the disturbed state of Ireland and from other causes shares were not taken in the company, and the charter lapsed to a certain extent or became in abeyance, and the fisheries went into another channel; but the Dingle men had obtained such an insight into the advantages of fishing with trawl boats in the bay that from time to time they added to the number of boats Their means, however, were very limited and they could not carry out the fisheries to the extent to which even now they ought to be carried out. For instance, in the spring months there are fish in great quantities off Doulus Head, but they have a heavy sea there and 30 to 40 fathoms of water, and their boats cannot work in such a bay as this in more than 25 or 30 fathoms within the headlands. The great roll setting in from the Atlantic greatly increases the strain upon the trawl when it is out. They are not like the large heavy boats they have on the south coast of England. There have been great disputes here from time to time with regard to the trawling, and a great many meetings have been held on the subject. There have been disputes between the Anascaul men and the Dingle men about the spawn. A number of substances, such as the spawn of cuttle fish and different species of sponges, have all been asserted to be fish spawn, but those are errors which have died out and the Dingle men are now all working well. Last year and in the previous season there were immense quantities of cod taken by the canoe men, on the ground upon which the trawlers work. There is one question which is a matter of great importance, and that is the disappearance of the haddock on every part of the coast. That is easily accounted for. They are a voracious kind of fish which go together in shoals, and they do not feed, like the cod and ling, extensively on herrings, the sprats, and smaller fish, but they feed on crustacea and mollusca. They feed on the ground where there are quantities of marine animals, such as the different kinds of crustacea and mollusca and the hermit crab, which in deep water is met without its protective shell. The haddock occasionally come into the bay and have been taken on the south side in great quantities. For the last two years they have moved out of Dingle Bay, but I am certain that off the islands—the Skelligs, and Blaskets, they are in as great abundance as ever. It is only in consequence of the boats not being able to go out to any distance to fish that they are not caught. Coarsovughy is a place where the haddock used to be in great abundance for years, and they were taken by the canoe men. I believe there is not a single haddock to be had there now, yet no trawlers have ever worked there. They have disappeared off certain grounds in that manner, but upon the coast and all round the coast I believe the haddocks are as abundant as ever if the boats could go to the proper grounds. I believe that the number of trawl-boats now working in Dingle Bay would never do any injury to the bay during the season they work in, nor would there be any injury caused to the bay if there were double the number working. As to the manner in which trawling is carried on, I must say that the boats now used are of too small a tonnage, with the exception of one or two, and they cannot work and take the quantity of fish the Nelson used to take with her beam of 45 feet, although in the season the soles are as abundant as ever they were. Of course they shift in the season. One of the witnesses who have been examined to-day stated that at Anascaul they were formerly taken on spilliards in November, but at present there are none taken. The soles which appear here off this part move up the bay, and their time of spawning is March and April. They spawn in the inlets in shallow water and no trawl-boats can work on the ground where they spawn. The time the Anascaul men are taking the sole in greatest abundance is April and May. The fish are actually on the spawning ground in shallow water at that time and they are taken in by no means good condition. After they have spawned they go into deep water and recover. They are taken from May to June in the upper part of the bay, and in the autumn they are out again into deep water.

43,765. Do you agree with the statement of one of the Anascaul witnesses that soles can be taken in large quantities on the spilliard-lines?—No, certainly not, and they were never known to be taken in any great numbers. Occasionally they have been taken during the time they have been running up in the bay to get upon the spawning grounds. They have been taken during the season of spawning; I believe they take the bait much more readily then than at other times. With regard to what the witness Kennedy observed, I think he stated that in 1850 six or seven trawlers went up the bay. Now, there were not that number at that time, there were only two trawl-boats and a few hookers. The same statement was made some years ago, and it was shown to be erroneous. If the men at Dingle had proper sized boats to fish during the season, from

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Christmas up to April or May, they would take soles in this bay in large quantities, and turbot also. At the same time the hook-and-line men could take cod in great quantities, as they have done this last year. With regard to the trawling frightening the fish, if the trawlers have disturbed and driven the haddocks out of the bay, why have they not also disturbed the cod and ling, which are still found in great quantities. They take the ling when they come to spawn, but in the summer months the cod and ling are in great abundance off the coast in deep water. If these men had large boats to fish for them from May until the end of August the takes of cod and ling would be enormous. They would have to fish, however, in 50 to 70 fathoms of water. Immense quantities have been taken in that way, and also a species of fish called the tusk which was not supposed to exist on this coast.

43,766. A statement has been made to us that the fishery company stopped its operations because it did not succeed in obtaining many fish?—That is perfectly untrue, because at the time that company gave up its operations in 1854 a large amount of money had been realised by the fisheries. The reason it was decided to give up the fishing was that the Limited Liability Act came into force, and the royal charter being still in abeyance, could not be carried out or exercised. The state of the country did not permit the necessary amount of shares to be called in, and consequently, the royal charter could not be made a legal document. I believe that they would have been very successful if they had had a certain number of vessels to work out the fisheries of the coast. Alluding to the places of spawning and the different localities round the coast, the fish spawn outside as frequently as within the boundary lines. The turbot spawn in a bay called Coumeenoole, opposite the Blasket Island; there are an immense quantity of turbot there and up to Beginish Island. There are spawning grounds in the shoal water at the Magharee Islands outside where the boundary line was drawn to prohibit trawling in Brandon Bay.

43,767. Have you attended a great many of the meetings of the fishermen here?—Yes, several.

43,768. Is it your opinion that the statements we have heard to-day fairly represent the arguments on both sides?—I consider that the arguments which have been brought forward with regard to the hook-and-line-fishing and the trawling by some of the witnesses are correct.

43,769. Apart from their correctness do you think they have stated all they have to say?—I think they have stated all they can possibly advance.

43,770. (*Mr. Lefevre.*) Do you know anything of the oyster fishery in Tralee Bay?—Yes, there is a very extensive oyster fishery there; there is a natural bed of oysters.

43,771. What number of boats are there there?—I know nothing of the mode of taking them, but bye-laws have been made to preserve a certain close-time and to regulate the fishery.

43,772. Are there any licences granted from the Crown for laying down beds?—I am not aware of it. I think it is a public fishery.

43,773. I believe you stated that the boats from Dingle are not large enough to work the fisheries as they ought to be worked?—No, they are not.

43,774. But they appear to be worked to a profit?—Yes, I could bring forward a man who was trained by the fishery company and who now possesses a boat of his own and is a capital seaman. We have in Dublin a society, of which I am a trustee, for bettering the condition of the poor of Ireland, and all that is necessary for a fisherman requiring assistance in obtaining boats, lines, or anything else, is to get security from some of the landed gentry, when money will be advanced to him, free of interest, to be repaid by easy instalments. The document I hold in my hand relates to that society.

43,775. Do you wish to put in that document?—Yes. It is as follows:

TRUSTEES for bettering the CONDITION of the POOR of IRELAND.—COAST FISHERIES.

We, the undersigned inhabitants of the parish of barony of and county of have been engaged in the fishing business for years, and have embarked capital for said purpose to the amount of pounds sterling. The operations of our Fishing Association extend from to and embrace the harbours of , and the number of families deriving immediate benefit from our labours are , consisting of individuals.

Being in need of some assistance at this time, to enable us more efficiently to prosecute our fishing employments, we respectfully entreat a loan of pounds sterling, from the trustees for bettering the condition of the poor of Ireland. We solemnly and sincerely declare that the sum hereby sought as a loan, or such portion of it as the trustees shall see fit to grant, together with pounds sterling in our hands, in cash, for that purpose, shall be applied solely for the construction or repairing of fishing boats, or providing hemp, flax, or twine for the making of cordage or nets, the procuring hooks, lines, tackle, and other implements used in fishing, or for the curing of fish for home consumption.

We propose as our securities of in the parish of barony of and county of being by trade or profession and of in the parish of barony of and county of being by trade or profession and we certify that the persons so named as our securities are not to derive any personal benefit or consideration from the working of this association, or by becoming securities for the undersigned.

We refer the trustees for the character of all the parties concerned in this application, and for their solvency, as well as that of the securities named, to of in the parish of barony of county of and post town .

We are willing to enter into a bond, under such conditions as the trustees may determine on, for the repayment of the loan for which we now apply, and we engage to return a faithful and detailed account of our expenditure, of the quantity of fish taken, and to afford such other information as the trustees may from time to time think it requisite to call for.

We depute of post town of as the person to whom communications for us may be addressed. (Here follow the names, residence, and occupation of applicants.)

We, the undersigned, agree to join the persons above-named in such bond as the trustees for bettering the condition of the poor of Ireland may determine on, and we do solemny and sincerely declare that we are not to derive any benefit or consideration by becoming securities for the money hereby sought, and we conscientiously believe the statements in the foregoing application to be strictly true. (Here follow the names, residences, and occupation of securities.)

I have known for years the several persons named in the foregoing application with the exception of Nos. They are persons whom I conscientiously believe to be sober, respectable, honest, and industrious, and sufficient security for pounds sterling, being the amount of their present application.

I am also acquainted with the persons named by the applicants as their securities; they are sober, respectable, honest, and industrious persons, and fully sufficient security for the loan hereby sought.

I conscientiously believe the statements in the foregoing application to be strictly true.

Signed, &c.

43,776. In what depth of water do you think the soles and other flat-fish spawn?—From three to four fathoms and less close in-shore, generally near the rough ground or rather protected by it.

43,777. There is rough ground round about it?—Yes. It is a mistake to suppose that boundary lines could be drawn to protect the spawning grounds, because the cod, ling, and many other fish spawn outside.

43,778. Are you of opinion that the trawlers in trawling in the bay do any harm to the spawning ground?—They cannot, because they cannot work upon the ground where the fish spawn. The cod and ling spawn on the rough ground where the trawlers could not work. None of the fish spawn on the ground where the trawlers trawl.

DINGLE.

W. Andrews.

1 Sept. 1864.

43,779. You advocate a close-time?—I think in regard to Dingle and Galway bays there might be a close-time. If the Dingle men had large able boats, during the summer months they could extend their line-fishing outside the headlands, for instance, off the islands in 50 to 80 fathoms during the summer months, when the cod and ling are in the highest perfection for curing.

43,780. But seeing that the boats they chiefly use are not of large size would you advocate a close-time?—We advocate a close-time, for instance, when the herrings or the hake come into the bay the same as they come into Galway Bay. I think it would be very advisable that the boats should cease trawling from the month of June till the month of November.

43,781. Is that because they might be better employed in any other fishing, or from some other reason?—There are two reasons. The first is, that they would take by the lines a greater quantity of hake in the season, and have a line-fishing that would pay them better than trawling. The market price is so low and the weather during that season is such that they cannot send their fish to market very profitably.

43,782. It is a question, then, of market?—Yes, but at the same time it would be of advantage generally, if they would turn their attention to something else and would not interfere with the men who are following the line-fishing the line-finhing and the herring-fishing at that season.

43,783. Then you recommend a close time, not because you think that the taking of sole or any other fish at that season does any harm?—No, it cannot possibly do that, because the spawning season is all over then, and in addition to that the trawlers cannot work where the young fry are. It is only seines and pole-nets that could destroy the young fish. Small as the trawlers are now they could not work where they would be able to do harm.

43,784. What is the smallest trawler?—About 16 tons; 15 or 16 tons. With regard to trawling in the night-time, I believe they cannot trawl at night; it is almost an impossibility. South of Ventry there is a certain range of trawling ground—clear ground eastward of Minard at Anascaul, but they cannot trawl on that ground unless they have clear weather and a clear light to enable them to see the headlands. There are only very narrow ranges where they can trawl, and as a regular rule they cannot trawl and work at night in Dingle Bay

43,785. (*Professor Huxley.*) Have you a map of the ground capable of being trawled over?—Yes.

43,786. Will you let us have a copy?—I will make out a map for you.

43,787. (*Mr. Lefevre.*) Does it embrace that in Galway Bay?—Yes.

43,788. Then we should like to have that too.—We are anxious here to encourage the fishermen in getting a larger class of boats. They make good pilots and are of great utility on board a man-of-war. I believe there are 70 or 80 of them so employed at this moment who come from Dingle.

The witness withdrew.

Owen Moriarty recalled and examined.

O. Moriarty.

43,789. (*Professor Huxley.*) Are you acquainted with the lobster-fishing here?—I am.

43,790. When did it begin?—I believe I was one of the first. The company had a boat here about 15 or 16 years since for a season or two, but they have dropped it since.

43,791. Were there plenty of lobsters got?—Yes. I started three or four years ago a little boat built on purpose, and I fished the lobsters for a season or two before the rest.

43,972. Did you get plenty of lobsters?—Yes, for the few boats we had we did very well.

43,792. Have you gone on since?—Yes.

43.794. Has it been increasing every year?—Yes, the fishing has been increasing.

43,795. Has the supply of fish increased?—No, it has fallen off from the constant fishing, unless they can find new ground.

43,796. Then does the old ground thus left renew itself?—Yes, the lobsters come back after a time and get better.

43,797. On the whole do they get as many lobsters per boat as they did?—I do not think they do, unless when they go to new ground.

43,798. By going from one ground to another can they get as many lobsters as they did at first?—I think they can.

43,799. Do you yourself carry on the lobster-fishing this year?—No.

43,800. Without entering into private questions can you state the reason?—I have had two canoes fishing, but I did not go myself. I had to provide the boats and gear and I send off the lobsters.

43,801. Then you are actually carrying on the fishing though not personally engaged in it?—Yes, decidedly.

43,802. Within two miles of the mouth of Dingle Harbour on each side is there anything like the quantity of lobsters there was some years ago?—No; where I could get a dozen lobsters a few years ago I shall not be able to get three now.

43,803. In that particular distance, two or three miles from the mouth of Dingle harbour?—Yes, and six miles to the west of it.

43,804. Has the supply of lobsters high up in the bay fallen off?—Yes, but after a time it recruits and comes round, so that when it comes to be fished again it is better.

43,805. You leave the ground and go back to it again and find it better?—Yes.

43,806. Do you think that the fishing could be conducted in such a way as to yield a more steady and constant supply of fish, instead of the fish falling off and coming on again at intervals?—Yes.

43,807. How would you propose to accomplish that object?—I know if a place is constantly fished and reduced as this has been it will work out, unless the lobsters come in from the sea, and I do not know whether they do that or not.

43,808. Would you have some close-time to shut up the fishing for a year or two?—I think it would protect the fishing very much.

43,809. Practically it comes to that now, because when you do not get any lobsters in one place you go elsewhere?—Yes, when we have fished one place we go to another, and then come back again and we find fish.

43,810. (*Mr. Lefevre.*) Is there a great extent of ground on which you fish?—Yes.

43,811. And there are not many men engaged in the lobster-fishing?—No, there are not a great many.

43,812. Has the number fallen off?—It appears that the number has got very low. There is one canoe fishing for a well-boat that goes round the coast.

The witness withdrew, and the inquiry was adjourned until the 6th of September, at Westport.

Westport, County Mayo, Tuesday, 6th September 1864.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

WESTPORT.

M. Tiernay.

6 Sept. 1864.

MICHAEL TIERNAY called and examined.

43,813. (*Professor Huxley.*) How many years have you known the fishing here?—I was brought up in Inishbofin in my early days, and I joined the service 33 years ago. I have been on the coast, off and on, ever since.

43,814–5. Have you been a fisherman yourself?—Yes, before I joined the service

43,816–7. How many years were you engaged in fishing in the Island of Inishbofin?—Before I joined the Revenue service, I was fishing from the time I was 15 years of age up to the time I was 25.

43,818. What modes of fishing are practised there?—They catch cod, ling, haddock, and all sorts of fish. Large herrings are caught there, and there is mackerel-fishing.

43,819. Are the cod and ling caught with hand-lines or long-lines?—With long-lines and with hand-lines, but mostly with long-lines or spilliards.

43,820. And the mackerel with nets?—With hauling nets; they seine round them. They seined the other day 15,000 at one haul.

43,821–2. Are the herrings caught in the ordinary way with drift-nets?—Yes, and sometimes they anchor the nets and get them in that way.

43,823. Do they fix the nets?—Yes, with two anchors, one on each side, and sometimes they ride with a boat at one end all night.

43,824. How many fishermen were there at Inishbofin when you knew the place?—There were as many sometimes as 1,000, and more than that.

43,825. Are there as many as 1,000 people living in Bofin Island?—There were 1,800 inhabitants there at one time between Bofin and Inishturk; but there are men there from Cork and the Skerries, and from there right round to Kinsale.

43,826. The number fishing from Inishbofin itself would only be a few hundreds?—It would be about 500, to the best of my opinion,

43,827. How many boats were there there in your early days?—I cannot recollect; but there are five quarters or five townlands, and every one had from 30 to 40 boats at that time.

43,828. (*Mr. Lefevre.*) How long ago are you speaking of?—Thirty-three years.

43,829. (*Professor Huxley.*) What kind of boats were they?—Four-oared boats.

43,830. Were they open boats?—Yes. There were generally four and five men in each boat, and there were a good many hookers as well that went with long-lines. Sometimes the fish would be within a mile of the shore, and then, if the fish retired further off, they would take to the hookers or sail-boats, of which they had from 7 and 8 to 10 and 14.

43,831. Open boats?—Half-decked.

43,832. How many of those boats would there be?—At that time there were between 14 and 15 on the island of Bofin.

43,833. Were those large boats the boats they used for herring-fishing, or were they of a smaller size?—They were used for cod and ling, and for taking herrings creeks of Galway and Westport.

43,834. Did the Inishbofin men live by fishing?—They did; for their farms would not support them.

43,835. They all had little farms?—Yes, all of them had a portion of land besides.

43,836. Did they send any considerable quantity of fish into Westport at that time?—Yes, to the quay at Westport. They sent as much fish as they could take. There were as many boats calling as the quay of Westport would hold from the dock down to the end. I have seen 50 boat loads of herrings there at one time.

43,837. Was there the same plentifulness of cod and ling?—The cod and ling were coming also; but there were fish-curers at Bofin curing them for Galway, Kinsale, and Dublin, on the beach.

43,838. Was there plenty of hake then?—There was a good deal, but they would hardly buy it in Westport.

43,839. Was there plenty of haddock?—Yes, lots.

43,840. Fine haddock?—Yes.

43,841. They were plentiful?—Yes, there were plenty of large valuable haddock, and there were turbot also.

43,842–3. What is the condition of the fishery at Inishbofin now?—I passed them a few days ago. I am pilot of the "Seamew" now, and I frequently land there from the steamer, and have a knowledge of the coast all round?—The condition of the fishing is, that if they had gluts of herrings in the winter, they have now no herring-boats to catch them.

43,844. What is the reason of that?—In the course of time, the fishermen have become so much impoverished that they are not able to buy nets, and I do not think, if the sea was swarming with herrings there, they would be able to take them. Very frequently the cod and ling they catch are full of herrings. Their bellies are as full of them as they can be, and yet they have no herring-net to take them with.

43,845. Was the principal part of their profitable fishing formerly derived from the herrings?—From herrings, cod, and ling.

43,846. Do they catch plenty of cod and ling now?—Yes; they can always catch plenty of cod and ling if they have weather that will enable them to go out, and the gear that is necessary for catching them.

43,847. You have no reason to believe that there has been any falling off in the supply of cod and ling?—If they had good weather and long-lines they could catch plenty of them, and they would catch plenty of herrings too. I say that, from the herrings which they find in the stomachs of cod and ling.

43,848–9. Have they gear to catch cod and ling?—They have no gear. There are seven or eight, sometimes ten of them, will join their gear together. They have hardly a spilliard in Inishbofin now.

43,850. Cannot they afford to set up spilliards?—I think not.

43,851. Have their boats gone to pieces as well?—Yes.

43,852. And they have not been able to replace them?—No. I have seen as many as 20 of them buying flax in Westport, in order to make up a seine net between them.

43,853. But the long-lines do not cost as much?—No; but a good spilliard will take 200 hooks, and every man in a boat ought to have two of them. It would take 1,000 hooks altogether in one boat, and it would cost from 1*l.* to 35 shillings to set up a good one.

43,854. And are they so poverty stricken that they cannot muster that?—I do not think they can. What with paying rates and buying provisions every year, through the failure of the crops, they are very much impoverished indeed.

43,855. I suppose that some of them still possess long-lines?—I am told that there are not many in the island now, and, in point of fact, there is hardly a long-line to be found.

43,856. Is there as much haddock as there used to be?—They come every year to the north end of Bofin, where they were always found, but they do not fish for them, they have not the gear.

43,857. What time of the year do they come?—The fishing commences at the latter end of January,

and would continue until the latter end of April for cod and ling.

43,858. Then you are of opinion that the quantity of fish has not diminished on the coast, but only that it is not taken?—I think, if the weather is good, the quantity of fish is still upon the coast. Last year, when I was in the gunboat, we were fishing off Achill Head, and we could get cod and ling as fast as we could haul them up.

43,859. Did you get haddocks as well?—As fast as we could catch them; they are always there with the other fish, and they continue longer in the season.

43,860. Do you know much about the fishing in the rest of the bay?—Yes, I do.

43,861. There are a good many fishermen about the bay?—Yes; there are a good many in a place called Murrisk, but they did not fish last year, for want of boats and gear.

43,862. Are they in the same condition as the Inishbofin people?—Yes; they could man a great many boats, but they have no gear. Their boats are hardly fit to go out.

43,863. On that ground the supply of fish has much fallen off?—They do not know if it is there at all. Last year, they had no gear to go fishing with.

43,864. But the supply of fish to the market must have fallen off?—It did, because they had no convenience for fishing at the time the fish were there.

43,865. Is the bay as full of fish as it used to be; are there as many fish in it?—Yes; I have seen mackerel in great shoals in the bay in the season, when I have been passing in and out in the "Seamew."

43,866. Were there plenty of herrings also?—I do not know, but there was a great sign of fish, such as gannets and gulls.

43,867. There are plenty of round fish?—Yes; not in the bay, but from Achill Head to Inishark Head.

43,868. Is there as much fish here of all kinds as there was in former years?—That I cannot tell, because sometimes at Bofin we might go out with 200 or 300 boats, and take two or three tons each. I have seen the long-lines shoot as many as a thousand hooks, and I have seen the fish floating the lines right on the top of the water. There would be a fish almost on every hook; they raised the lines and all the stones attached to them to the top of the water.

43,869. How many years ago is that?—Not many; perhaps eight, or ten, or twelve years ago. I was in the "Kite" cutter when I saw that.

43,870. Might it be the case now?—I do not know whether it might be at this time of the year or not.

43,871. But at the proper time?—If the weather, answered, I think it might.

43,872. You have no reason to think that the fish in the bay have fallen off?—I think the fish have shown themselves more in the bay than ever they did for some years past. There was a great take of herrings in Killary Bay, and the herrings themselves were nearly as large as the North American herrings. They got a great many of them.

43,873. Is it the case all round these shores, that the people are in a similar state of poverty, and unable to fish from the want of gear?—That is my opinion, and anybody who has been at Inishbofin will tell you the same story.

43,874. I do not speak of Inishbofin alone, but of all parts of the bay?—Yes. Some years I have seen boatloads of herrings caught every night, but they do not look after them now as they did then.

43,875. Have you paid attention to the oyster-fishing here?—I have seen them catching oysters here since I have been in the service.

43,876. Are there large oyster beds here?—There are oysters in every place through the islands, and they dredge every place. Last year they got oysters where I did not think there were any.

43,877. Are they all over Clew Bay?—Yes, inside the islands.

43,878. Are they not outside?—I know of no bed outside the lighthouse.

43,879. (*Mr. Lefevre.*) Do you mean the Arran lighthouse?—No; outside the Inishgort lighthouse.

43,880. (*Professor Huxley.*) Do you suppose there are no oysters out in Clew Bay itself?—I do not know. The boats they use for dredging here are too small to dredge in the bay. I know that upon one occasion we took a dredge on board of the cutter, and we took oysters up outside the lighthouse.

43,881. Does the oyster-fishing remain pretty productive?—I can recollect them getting oysters here ever since I knew the place, and I have been frequently through these islands. I had a hooker, and I used to purchase anything I could make money from until I joined the service.

43,882. Do you think the supply of oysters is as good as ever it was?—Last year was the best year they have had for oysters for these 20 years. I did not think they would get near so many. There were never as many oysters caught in the bay within my recollection as there were last year.

43,883. Do they observe the close time for oysters here?—Yes.

43,884–5. What is the length of the close season?—It is now from April till the 1st of October. Before, they were allowed to dredge in every month that had an "r" in it; now they cannot dredge in September and April.

43,886. Was there not a byelaw of the Fishery Board passed in 1860?—Yes.

43,887. What was the reason that byelaw was passed?—I cannot tell.

43,888. Did you hear anything said about it at the time?—They thought it was for the good of the bay and the fishery. I do not know whether Mr. Barry told them so or not, but I heard the fishermen say that it did improve the bay.

43,889. You have not been engaged in oyster-fishing?—No, but I have been buying them, and taking them to the County Clare, where they bed them.

43,890. Do they cull the oysters here?—They heave them out in the sea, and the Coastguard goes round to see that they do it. They go round very frequently.

43,891–2. The byelaw made by the Fishery Board says:—"All persons engaged in fishing or taking "oysters in Clew Bay, Achill Sound, and Blacksod "Bay shall cull all such oysters as shall be taken or "caught; and shall not remove from any fishing-"ground or oyster-bed any oysters of less dimensions "than two inches and one half at the greatest "diameter thereof, and shall immediately throw "back into the sea all oysters of less dimensions "than aforesaid, as well as all gravel and frag-"ments of shells as shall be raised or taken while "engaged in such fishing." Do you go about to see that the oysters taken are not less than two and a half inches in diameter?—Yes, I frequently did last year, so also did Captain Leveridge's men and the "Seamew."

43,893. The rule has been enforced since 1860?—Yes.

43,894. Have you noticed any improvement in the fishery itself since it has been established?—Last year they had more than for many years, and there have been men getting oysters down in Newport Bay and places where I never saw them dredged before. I have seen them dredged in eight or nine fathoms of water down at Inishtown.

43,895. (*Mr. Lefevre.*) Have there been any prosecutions for taking oysters of less than two and a half inches in diameter?—They heave all of them over that are not of that size.

43,896. Have you known any cases in which there have been summonses taken out against the fishermen for taking them below that size?—We met the boats several times last year, and went among them, but we could not get any oysters of that size in the boats; they had thrown them out; in point of fact, they were all saleable oysters that they had.

WESTPORT.

M. Tiernay.

6 Sept. 1864.

43,897. Then there has been no summons?—No. I have never seen any small oysters on board the boats we have overhauled.

43,898. Do they cull the oysters immediately after taking them out of the dredge?—They are taken out of the dredge, and put on a leaf in the boat. They go through them, and heave the small ones out.

43,899. Do they use a sieve?—No, they pick them by hand, and throw the brood overboard.

43,900. You were speaking just now of boats coming from the Skerries and Kinsale to Inishbofin?—Yes, I have seen eight or ten from Kinsale, and eight or ten from the Skerries.

43,901. At what season?—A little after Christmas they came and remained until May.

43,902. Do they still continue to come?—They have not come since the bounty was knocked off in reference to the fishing.

43,903. How long is it since they came?—They have not come, to my knowledge, for the last 10 or 12 years. There was formerly a bounty upon the fish.

43,904. Do the boats not come from a distance for the fishing at Inishbofin?—From Kinsale, do you mean?

43,905. Yes, or from any other part?—For the last two years I do not think there have been any boats, except those from Bofin itself and this quarter.

43,906. Are there any curing establishments at Inishbofin?—Not at present. All the Westport fishermen go down to buy the fish, and bring it up in hookers.

43,907. Do they buy it fresh?—They cure them there until the buyers go down and bring them up. If they are fresh at the time they are there, they will bring them here fresh.

43,908. There used to be a curing establishment there?—Yes, because there was a bounty upon the fish. They got four shillings a hundredweight for the dried fish, such as cod, ling, hake, and conger eel, and haddock.

43,909. Has there been no curing establishment lately?—There is not at present.

43,910. Was there one set up here at the time of the famine?—I do not think there was any curing establishment there during the famine.

43,911. There is no trawling in the Bay?—No, not about Bofin; the back of Bofin is too deep for trawlers; they could not work on it.

43,912. Is there any in Clew Bay?—The ground is too rocky for a trawl,—it is patchy.

43,913. Is there any ground fit for trawling?—Achill Sound is the only place I know, but there is not much fish there. A trawler tried it, and could not make any hand of it.

43,914. Are there any sole or turbot in Clew Bay?—There are in Achill Sound. There are sometimes plenty there, and also cod and ling.

43,915. Do they catch any turbot and soles with the spilliard lines at Inishbofin?—Yes, they catch all sorts there.

43,916. Do they catch turbot in any quantity?—Yes, there are plenty at Inishbofin.

43,917. As many as there was formerly?—Yes. I have seen some boats at Inishbofin take as many as 10, 12, and 15, and others three and four, and so on, on one spot at the east end of Inishbofin, the Ox Island Sound. If they had proper gear, they would get a lot of turbot, and hardly any other fish.

43,918. Do you speak of now or 30 years ago?—I am speaking of the present time. This is a very good time for it, with mackerel bait.

43,919. You think they would continue now to catch turbot?—Sometimes they do, if they have mackerel bait.

43,920. Then why do they not catch them now?—Because they have not the gear.

43,921. (*Professor Huxley.*) You said just now that the haddock-fishing began at Inishbofin in January; when does it leave off?—I have been catching them until the middle of May.

43,922. Would you leave off then?—Yes, or on the 1st of June.

43,923. When does the cod-fishing leave off?—It begins at the end of January and goes on through March and April. The long-lines are shot at night, and they can get plenty.

43,924. The cod-fishing lasts about the same time as the haddock-fishing?—Yes, but the cod spawn early in the season. On the 1st of March they begin to spawn; some go to the middle of March.

43,925. What bait do you use for cod?—Conger at night for cod, and ling and herrings and mackerel, if we could get them, in the daytime.

43,926. Do any of the fishermen use mussels?—No, there are none here.

43,927. Are the oysters taken by the dredgers here all brought to one quay in the harbour?—They have lately been sold in the harbour to buyers.

43,928. Are they all brought to one place?—They are brought to Captain Austin, and Mr. Williamson and others for England.

43,929. Are they all brought to one place?—Yes.

43,930. Then it is possible for the Coastguard to exercise a supervision over them?—Yes, they do.

43,931. How many boats are there sometimes engaged in bringing in oysters?—To the best of my opinion there were 300 dredging off Newport and Westport last season.

43,932. Do some go to Newport and some to Westport?—Yes.

43,933. Is there a Coastguard officer at Newport?—Yes, that is one of Captain Leveridge's stations.

43,934. Is it possible carefully to examine the contents of the boats and see that the oysters are none of them below the proper size?—We were at it last year at every place, as well as we could, but we could not be always at it; we did it as well as we could.

43,935. Is there a sufficient number of Coastguard men effectually to examine all those cargoes of oysters when they are brought in altogether?—There are not near enough now.

43,936. Then if the fishermen were so minded as to bring in oysters below the legal size, it would be hard to find them out, would it not?—It would be hard for one Coastguard boat to examine 200 or 300 boats here, and another to examine 200 or 300 boats at Newport, but such as we did examine had no small oysters.

43,937. (*Mr. Lefevre.*) How do you overhaul them?—We call them alongside, look at the oysters and measure them.

43,938. Do you have them turned over?—We measure them in the boat to see if any are under the size.

43,939. Do you see the boats unloaded?—They would not have such a large quantity in a row-boat that we would not be able to see them readily. One boat may take three buttekins, another five, and some seven.

43,940. Are the men who dredge oysters farmers as well, or are they fishermen only?—They have all some land on the several islands.

43,941. On the small islands in the bay?—Yes; they go fishing in the season. They go fishing when the herrings come in in their bay, and they mostly come in at the present time and up to Christmas.

43,942. How long is it since the herring came into the bay?—They get a little every year, but there has been a great glut of them for some years. They catch most of them down in Newport Bay, at Minishmore.

The witness withdrew.

WESTPORT.

J. Kennedy.

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JAMES KENNEDY called and examined.

43,943. (*Professor Huxley.*) You are a fish buyer here?—I am.

43,943*a*. How many years have you been employed in that way?—About 30 years.

43,944. Have you bought fish from Newport as well as from Westport?—I have bought some herrings from Newport, fresh herrings, and from all parts of the bay.

43,945. You are in the habit of buying fish from the fishermen from all parts of the bay?—Yes.

43,946. Do you know what the supply of fish has been of late years?—Yes.

43,947. Do you buy oysters as well as other fish?—No, I do not deal in oysters.

43,948. What do you deal in?—I deal in cod, haddock, turbot, salmon, trout, and various kinds of coarse fish.

43,949. Do you find that there is as good a supply of fish as there used to be 30 years ago?—Not by any means.

43,950. Has any particular kind of fish fallen off more than another, or has there been a falling off in the whole?—The most part of the fish has fallen off because the fishermen have not the means of killing them.

43,951. Do you get as many haddock, in proportion to other fish, as you were formerly able to get?—Not one quarter the quantity for the last seven or ten years.

43,952. But in proportion to the number of cod?—The cod are plentiful, but the haddock have fallen off.

43,953. Have the haddock fallen off far more than any other kind of fish?—Yes; but the men have no tackle for killing fish; many of them have gone to Scotland, and to different parts.

43,954. You say the fish have fallen off?—They have not fallen off, if the fishermen had the means of killing them and the necessary tackle.

43,955. In that case you think there would be plenty of haddock and cod?—Yes, and of turbot and other fish as well.

43,956. Then the scarcity of fish is due to their not being caught?—Yes; and last year part of the men, who had been in the habit of killing fish, had to go upon daily wages to the oyster-beds.

43,957. You heard what the previous witness stated, namely that the reason why less fish is taken now is that the people have no gear?—Yes.

43,958. Do you agree in that opinion?—Yes; there are people in Inishbofin who have no herring nets at all now.

43,959. Is that the case with the fishermen round Clew Bay?—Yes, all round about the small islands there is not one man in twenty who has nets which he can use for catching herrings. We have to go to Galway for herrings now, and have to pay a price for them.

43,960. Do you think that any mode of fishing has been practised here which has been at all hurtful to the fish?—No.

43,961. There never has been any trawling here?—No, I never saw it, except one year, and the man who began it had to give it up again. I believe it was Joe Gibbons of Inishlyle.

43,962. Did he find the bottom bad?—Yes.

43,963. (*Mr. Lefevre.*) Has the number of men fishing for oysters increased very much?—Yes, there are a great number of people working at them now. There have been a great deal more men for the last ten years. They seem to have nothing else to do now, and they have had to turn to the oysters; formerly they could not get men to buy them on this coast. The fishermen who were formerly engaged in killing the fish have now turned to oyster-fishing.

43,964. Do they own the boats they use?—They partly join in the boats and in the dredges.

43,965. They find that a more profitable mode of employing themselves than fishing outside in the bay?—Yes, but they have not the means of killing the fish now. If a poor man loses his spilliard, he may just as well stay at home, as he has not the means of purchasing another.

43,966. But they seem to have money enough to supply themselves with dredges and boats for oyster-fishing?—That does not come to much. Their oyster dredges do not cost one half or one quarter as much as a spilliard.

The witness withdrew.

H. Neils.

HUGH NEILS called and examined.

43,967. (*Professor Huxley.*) Are you a fish buyer?—Yes.

43,967*a*. How many years have you been employed in that way?—Ever since I have been able to know what fishing was.

43,968. Is that some 20 years?—Yes.

43,969. Have you bought fish from both shores of Clew Bay and from Bofin Island?—Yes.

43,970. Is the supply much less than it used to be?—There is not one-tenth part coming in now compared with what it was in former times.

43,971. Has any kind of fish fallen off more than another?—The haddock has.

43,972. Is there less haddock in proportion now than there was 20 years ago?—We do not get as much as we used to get.

43,973. Is that because it is not caught,—is it fished for in a different way?—Generally they go out in Inishbofin to kill haddock for bait for other fish. They use them for killing the cod and ling.

43,974. Do they prefer using them for bait, rather than bringing them in for sale?—They could not kill the cod and ling without having the bait for them.

43,975. Have you any reason to think the haddock has fallen off in the sea itself,—that there are not as many haddock in the sea?—I cannot say that.

43,976. You have no reason for thinking that?—No.

43,977. Has the supply of herrings fallen off like the rest?—Yes, it has fallen off considerably.

43,978. Do you agree with the previous witnesses, that it is because the people have no gear for catching them?—Yes.

43,979. Is not the price of fish sufficiently remunerative to enable those who could catch plenty of it to set up new gear?—They are getting as good or even a higher price for it now than they did formerly.

43,980. The price is higher now than it used to be?—Yes.

43,981. Is not the price of fish sufficiently high when they get a good supply, to leave a large margin of profit to enable them to set up new nets and gear?—At any rate, they are not able to set them up.

43,982. It has been said that 20 people have only one net among them?—Yes.

43,983. But if they get a good fishing does it not yield them sufficient profit to enable them to set up more gear?—I think it ought.

43,984. But they do not seem to increase their gear?—They have not the means of increasing it, and if they lose a spilliard they may as well be lost altogether; they have not the money or means to buy another, and are obliged to go to the wall.

43,985. If the price of fish is good, do not the fish yield them sufficient profit to enable them to set up good gear?—It does not.

43,986. Have many of the people who formerly fished with the long-lines taken to oyster-dredging?—I do not know of any but the men at Murrisk who have done that.

43,987. They have taken to oyster-dredging?—Yes.

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43,988. How are they able to set up the dredges?—It does not cost much for a dredge.

43,989. But it must cost as much for a dredge as for a spilliard?—I do not believe that it will cost one-fourth or one-sixth part as much.

43,990. Was the money advanced to the Murrisk fishermen to enable them to set up their dredges?—No doubt the persons who buy the oysters will advance money if it is required.

43,991. (*Mr. Lefevre.*) Do all the fish landed here go by road to Castlebar?—Some go to Castlebar and some to Ballinrobe.

43,992. Is it sold round the country?—Yes.

43,993. Is there any curing establishment here?—No.

43,994. Is it all sold fresh?—Sometimes we salt it.

43,995. Do you agree that there has not been a good herring season for some years here?—Yes; there has not.

43,996. Is it because the shoals have not come in the bay in great numbers?—No, I think it is on account of the want of herring nets.

43,997. Do you think that the fish come into the bay in as great quantities as formerly?—I cannot say that, because the fishermen have not had the means of going out and testing it.

43,998. Do you see the appearance of herrings?—There is generally the appearance of herrings every season, but the people have not a net to put into their boats.

43,999. But there are a certain number of men who fish for herrings?—There is not a man from Inishbofin who has a net fit to go out with; if they had nets they might fish.

44,000. But in Clew Bay?—Sometimes they go to look for them, and sometimes they do not.

44,001. Have they taken none for the last four years?—No.

44,002. Have not the nets been shot?—If they see any signs they may go out, but the Murrisk men have not tried for them.

44,003. How is that they have not caught any?—I cannot say; we have not bought any.

The witness withdrew.

O. Campbell.

OWEN CAMPBELL called and examined.

44,004. (*Professor Huxley.*) You are agent to Captain Austin, I believe?—Yes.

44,005. Captain Austin is engaged extensively in oyster-fishing here?—Yes.

44,006. Are the beds he fishes public or private property?—Public property. Those he fishes himself are private property, but those which he buys up are caught on the public beds.

44,007. He fishes a private oyster-bed himself and buys from the public also?—Yes.

47,008. When did the men about the bay take to oyster-dredging?—On the 1st of October.

47,009. But how many years back? Has it been a general practice here for many years back?—Yes, it has.

47,010. Have many persons taken to it of late years?—Yes.

44,011. Have the people who used to practise spilliard-fishing taken to oyster-dredging?—Yes, they think it more profitable.

44,012. How have they become provided with the means of working the oysters?—Those who cannot afford to obtain dredges for themselves have money advanced to them for that purpose.

44,013. Has Captain Austin advanced money for this purpose largely?—I know that he has advanced money.

44,014. Are the greater number of oyster dredges which are set up in reality his property?—No, not the greater number.

44,015. But a good many of them are?—Yes.

44,016. Does he pay wages to those who use them, or does he pay by the take?—By the take; he buys the oysters they bring in.

44,017. Has the supply of oysters been falling off of late years?—Not that I know. I think last season was the best I have ever known.

44,018. Do you recollect the time when the bye-law was made in 1860? Were you Captain Austin's agent then?—No; he was not in the county then.

44,019. He has only been here about two years?—That is all.

44,020. Have you reason to think that the byelaw is strictly observed—that is to say, that the people do not fish from April to September inclusively?—I heard some of them say they were going to fish on the 1st of September.

44,021. That would be breaking the byelaw, would it not?—I do not know.

44,022. Are the oysters which are taken carefully culled and the small ones put back?—I think so. Captain Leveridge's men go round to see that that is done.

44,023. Do you think that superintendence sufficient, and that the small oysters are not taken?—I think they could not take small oysters unknown to the Coastguard.

44,024. They can take no great quantity?—No.

44,025. Do you think it is a good regulation?—I believe it is a very good regulation.

44,026. Is there any demand for the small oysters?—There is for private beds.

44,027. Do people come here from England for the purpose of buying them, in order that they may be laid down on private beds?—No, they do not; they take them first as they are caught and culled. I never saw them look after them in any other way. They do not ask the fishermen to go and take small ones, but they buy those which are taken.

44,028. Supposing the law did not exist, would there be plenty of people calling here willing to buy the small oysters?—I have not heard anything of that.

44,029. Is there anyone besides Captain Austin who works the oyster fishery in the same way? Does Mr. Williamson, from London, come here?—He buys them, but he has no private beds.

44,030. Does he buy oysters largely?—Yes.

44,031. Does he advance money in the same way to the fishermen?—I have no doubt that he does.

44,032. Do most of the oyster dredgers work on the same principle,—that is to say, that funds are advanced to them to buy dredges, and that they then work on shares?—Yes.

44,033. Is that the case with all oyster dredgers?—Yes, except with regard to those we employ on the private grounds; those are paid wages.

44,034. What private grounds are those?—Those at Murrisk.

44,035. Whose property are they?—Mr. Francis Christopher Jervie's, who is lessee.

44,036. (*Mr. Lefevre.*) He has had a licence from the Commissioners?—Yes.

44,037. (*Professor Huxley.*) Are they artificially made oyster-beds?—Yes.

44,038. Oysters taken from the outside and laid down there?—Yes, they are oysters which have been brought in and laid down there.

44,039. Are they oysters which have been bought from the fishermen?—Yes.

44,040. Are they full-sized oysters that are laid down there?—Yes.

44,041. Would it be of any advantage to the proprietor of those beds to be able to obtain small oysters, and lay them down there until they get large?—I believe it would be for the advantage of the proprietor, and for the advantage of the country at large.

44,042. Are those beds between high and low-water marks?—They are.

44,043. Are they above low-water mark?—Some of them are dry at low-water mark.

44,044. Are they all above low-water spring tides? Are they all dry then?—Our boats could not float to dredge them at low water. Some parts of the beds are quite dry, and upon other parts our boats could not float, even one of our small row-boats.

44,045. So that you may say that, for the most part, they are above the level of low-water spring tides?—Yes.

44,046. Would there be any advantage in having such beds in deeper water?—I do not know.

44,047. Do you find they do well where they are put down now?—Yes.

44,048. What is the extent of ground occupied by them?—I do not know exactly.

44,049. Do the oysters breed there?—They do.

44,050. Is there any considerable spat formed every year?—There is in some parts.

44,051. Is the ground good for the spat?—Some parts are very good, and other parts very bad.

44,052. Is that according to the nature of the bottom?—Yes, it is.

44,053. What is the best bottom?—Where we find it hard and clean. If there is any sludge and dirt they die upon it.

44,054. What time of the year do you lay the oysters down there?—We begin on the 1st of October.

44,055. Do you take them upon the ground in boats at high water, and just scatter them down?—Yes.

44,056-7. How long do you allow the oysters to remain there?—We laid a lot last year.

44,058. Were they natural oyster-beds to begin with?—I do not think there was much upon them until Mr. Jervie planted them. Captain Austin has been engaged in planting them too. Mr. Jervie bought oysters and planted them there several times.

44,059. Then the oysters, you tell us, breed on the beds?—They do on the hard bottom.

44,060. What time do you find the spat there?—We find it just about the 1st or the middle of June.

44,061. Do you take any measures for separating the spat from the old shells and distributing it over the ground?—We never do anything of that kind until they grow a year or so older.

44,062. Do you then detach them and spread them about?—Yes.

44,063. Do you find that in that way they multiply very fast?—Yes, and they grow in a better form.

44,064. Then does it seem to promise to become a good fishery there?—Yes; but those which are left alone grow very rough and nasty.

44,065. There has been a considerable increase in the quantity of oysters upon the beds in that way?—Yes.

44,066. Do you use any tiles or bundles of twigs, or anything of that kind, for catching the spat?—No, nothing of that sort.

44,067. Do you prepare the ground before the season of the spat?—Yes. We had some boats there some time age clearing it for the spat, and clearing the weeds away too.

44,068. Do you make any dam, so as to enclose the oysters always within water?—We have made a pond for that purpose.

44,069. Do you find them better in that way?—Yes.

44,070. Do many of them die in the winter?—The sludge and dirt kill them sometimes.

44,071. Does any fresh water come down in that region?—Yes.

44,072. Do the oysters do better not far from the fresh water?—Yes, I find them looking somewhat better.

44,073-5. Does it keep the beds cleaner?—Yes, and the shell looks brighter, and is harder.

44,076. (*Mr. Lefevre.*) What depth of water do you find that the oysters breed in?—Between tide marks.

44,077. Where the oysters are left dry at low tide?—Yes; but that is at a spring tide. They must not be a long time dry, or the spat would die.

44,078. Is there no work done at all upon the beds between the 1st of February and the 1st of October?—No, except to keep the beds watched.

44,079. Do you clean them?—We drag the weeds out which we find floating. We pick the oysters off and put them in again.

44,080. Do you remove the oysters from one part of the beds to another during the close time?—No, we do not.

44,081. Do the boats which are used by the oyster dredgers belong to them, as a general rule?—I believe they do. There are one or two joined in a boat; perhaps there may be three, and they each take a share.

44,082. Then they have not had money advanced to them to supply them with boats?—No.

44,083. They have only had money advanced to them for the dredges?—Yes, that is all. Some of them use their own dredges.

44,084. Can you tell us what size those oyster-beds are?—No, not exactly.

44,085. Are there any other private oyster-beds besides those of Captain Austin?—Not that I know of.

44,086. Can you tell us how many oysters he buys in the course of a year, for the purpose of having them laid down on these beds? How many boat-loads does he buy?—I think he has laid down about 14,000 buttekins since he has had the beds.

44,087. Does he sell them fit for eating after they have laid down there for six months or a year?—Yes.

44,088. They are then fit for the market?—Yes.

44,089. The oysters which are dredged without being laid down in that way are not fit for the market, are they?—No, they are not.

44,090. They are all bought for the purpose of being laid down on other beds?—Yes, most of them.

44,091. Has the price of oysters improved of late years?—It has.

44,092. What is it now?—We have paid 2*s.* 6*d.*, 2*s.* 9*d.*, and 2*s.* 10*d.*

44,093. For how many?—Six stone. We formerly sold them, before Captain Austin came here, for 2*s.* and 2*s.* 6*d.*

44,094. That is two years ago?—Yes.

44,095. Are you able to tell us what it was 10 years ago?—No, I do not recollect what it was then.

44,096. Are there many five-fingers in the bay?—There are a few, but not many.

44,097. Do you take any means for killing them?—We stamp upon all we can catch.

44,098. During the close season, do you collect them at all?—No, unless we get then on the borders of the beds.

44,099. Do you recollect the oyster fishery before the byelaw was made as to the size of the oyster in 1860?—Yes, I do.

44,100. Was there a considerable number of small oysters taken then?—There was.

44,101. There was no care taken to cull them then?—Not much. They were then in the habit of taking them and carrying them away anyhow.

44,102. Does the culling of the oysters take any time?—It does take a great deal of time.

44,103. Does it give the fishermen a good deal of trouble?—Yes.

44,104. Does it prevent them doing a certain quantity of work in the course of a day?—Yes, it does.

44,105. Have you heard any complaints from the men about that regulation?—I have. They have been complaining very much in regard to Captain Leveridge coming after them with his boat, and seeing that they had the oysters culled in a proper way.

44,106. What have been the complaints they have made?—They complain that their time is lost, in consequence of his running after them and chasing them.

44,107. Is much of the ground round Clew Bay fitted for oyster-beds?—According to my opinion, a great deal of it is very good.

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44,108. Among the islands?—Yes.

44,109. They are very sheltered?—Yes.

44,110. And mostly in shallow water?—There are some deep places which they dredged last year, but in deep water the samples are very rough.

44,111. Why does not Captain Austin extend the beds out into deeper water than beyond the tide marks?—I do not know.

44,112. Has he any right of property beyond tide marks?—I do not know.

The witness withdrew.

T. Murray.

THOMAS MURRAY called and examined.

44,113. (*Professor Huxley.*) Are you an oyster dredger?—Yes.

44,114. How many years have you been employed in oyster dredging?—I have spent between 13 and 14 years of my life in oyster dredging.

44,115. When was the last time you were dredging?—Last spring.

44,116. Have you noticed any falling off in the supply of oysters, comparing those you get now with those which you were in the habit of getting in former years?—Yes, I have.

44,117. When did you first notice that the oysters were beginning to fall off?—About four, or five, or eight years ago.

44,118. Can you tell us what was the reason of that?—It was said the reason was, that at that time the men did not come down to take oysters. They took them every month in the year. They took them down to County Clare and elsewhere; but since then there has been a byelaw passed, which says that they are not allowed to take any oysters from the bay at a particular time of the year. There was a great meeting held here upon that subject once.

44,119. Has that byelaw been observed, do you think?—The Coastguard have exerted themselves, as far as I could see, to keep the byelaw as well as they possibly could.

44,120. You have been dredging since then yourself?—Yes.

44,121. One part of that law says, that oysters less than two and a half inches across, if brought up in the dredge, shall be thrown back?—Yes. There was a penalty of so much against taking them under that size.

44,122. Did you ever know of anybody being fined for doing it?—I know that the Coastguard at Pigeon Point took up two boats, and summoned the men in them; but through the intercession of some of the gentlemen here they were allowed to go. I do not think they were made to pay the fine, although they were fined, and their dredges, which, in the first instance, were taken, were given back.

44,123. Was that for taking oysters too small?—Yes, for taking oysters under the size, and for trespassing upon a private bed. At the time we are engaged in dredging, we are not supposed to take in any oysters under two and a half inches across.

44,124. You are supposed to throw back again all that you take which are under two and a half inches?—Yes, we leave them on the bed.

44,125. Do you bring up much dead shells, culsh, and so on?—Yes, a good deal.

44,126. What do you do with that?—We have a platform in the boat, and we pitch the shells and the oysters which we do not think fit and right to take overboard. We throw them out upon the ground from which we lift them.

44,127. It would be no object to you to bring them ashore?—No.

44,128. Would you not rather be without them?—It would be an object to us if we were allowed to bring them ashore.

44,129. Why would it be an object to you?—They would make very good manure for the land, but we are not allowed to take them.

44,130. Then you do not take them?—No.

44,131. Do you think that the fishing has been getting worse during the last three or four years?—It has not been as good for several years past as it was last year and the year before.

44,132. What is the reason of that?—Because they have been prevented from taking the small ones. That is my opinion.

44,133. Is there a good market for the small ones? Would people buy them?—There were men who were accustomed to buy them in order to carry them away to the county Clare.

44,134. If you were allowed to take small oysters could you sell them?—I do not know that I could. All the oysters I have taken for a length of time have been taken in my day's wages for Captain Austin.

44,135. Why do you think it is a disadvantage not to be able to take the small oysters?—On account of the caution we have got from the Coastguard. That is the reason the oyster fishermen do not take the small ones.

44,136. But why do you wish to take the small ones?—It is not a wish on my part to take the small ones. I have no wish to disturb them.

44,137. You said the fishing was not as good because you were not allowed to take the oysters?—No. I think it does not exhaust the beds as much as when the small ones were taken.

44,138. Then the beds have been getting better?—Yes, they have.

44,139. Do you think that the fishing has been getting better for the last five or six years?—Yes, I think so.

44,140. You do not think that the fishermen now bring many small oysters ashore?—I do not think they do, but they would do so if they were allowed.

44,141. (*Mr. Lefevre.*) Do you cull the oysters on the ground?—Yes.

44,142. Immediately you pull up the dredge?—Yes. When the dredge is pulled up it is emptied on a board like the leaf of a door. There is a picker there who takes out of that anything not fit to bring to the market and throws it overboard.

44,143. How often do you haul up your dredge?—Every quarter of an hour.

44,144. But what do you empty your dredge upon?—Upon the leaf of a door between two beams in a row-boat, and as soon as it is emptied we put it in again.

44,145. Have you one man always engaged in culling the oysters?—Yes, we have one man always engaged, and if I can spare time along with him I do it myself also.

44,146. Do you recollect the oyster-fishing before this regulation was made?—Yes, for the last 30 years. I have been preserving that oyster-bed of Mr. Jervie's for the last 30 years.

44,147. In former days did you not cull the oysters at all, but take them as you got them?—We did not cull them before the regulation was made, but that was not the way with regard to Mr. Jervie. He always reserved his own part.

44,148. But generally throughout the bay?—They generally took them as fast as they could get them. At one time I could lift 15 buttekins in one tide, but they became so thin that I could not lift half a bushel at last.

44,149. Do you require more men on board your boats now than you employed formerly?—At one time we only had three men in the boat.

44,150. And now you want four men?—Yes.

44,151. Has there been a good spat during the last three or four years?—Very good.

44,152. You have found no falling off?—There has been no falling off on certain portions of the bed.

44,153. Do your boats make more money now by a day's dredging than they did some years ago?—I recollect a time when a boat with three men would go out in the morning and bring in from 25 to 30 buttekins of oysters as the result of the day's fishing.

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44,154. What money did that bring in?—About 31*s.*

44,155. How much do they make a day now?—Captain Austin gives six shillings.

44,156. Do you mean to say that Captain Austin buys the produce of a day's fishing for six shillings?—He hires the boats for lifting his own oysters when he is shooting them for himself, and he gives those boats the highest price that is going in any part. He gives them from 2*s.* 6*d.* to 2*s.* 9*d.* a buttekin for the whole length of the season they may be dredging.

44,157. Taking last season what did the men make on an average?—I cannot say. I never dredged except by the day's wages.

44,158. What wages do you get?—Six shillings.

44,159. Is that for the boat and four men?—Yes.

The witness withdrew.

JAMES MCNAMARA called and examined.

J. McNamara.

44,160. (*Mr. Lefevre.*) How long have you been dredging oysters?—About ten years.

44,161. Do you find that the supply has been increasing during the last few years?—Yes. We have had a better harvest this year than ever we had.

44,162. Were there more boats fishing than there were in previous years?—Yes.

44,163. What has been the increase within the last ten years?—The reason why there was a decrease before was, that there were some persons here who were striving to get the public beds registered for themselves. There has been a better harvest for the fishermen this year, because they would not allow them to dredge upon particular beds the year before.

44,164. Was that upon Lord John Browne's ground?—Yes.

44,165. I believe he claimed a private right of fishing and prevented the public from fishing?—Yes.

44,166. That right has been abandoned this year, and the public have been allowed to fish upon the beds which were claimed?—Yes.

44,167. That has given you an increased ground to fish upon?—Yes.

44,168. And, consequently, more boats have come to fish?—Yes, a good many more boats have gone upon those grounds.

44,169. In the course of last season what would you make by dredging for oysters?—About 15*l.*

44,170. Was that your own share?—Yes.

44,171. Are you the owner of a boat?—No, I am not, but my father is.

44,172. Does the owner of the boat get any share?—Yes, he does.

44,173. Do you agree with the last witness that the culling of the oysters when they are taken from the beds occupies the time of one man?—No, it does not.

44,174. Then how long does it take?—The owner of the boat must have one man to assist him in picking, because, if that were not so, he would be obliged to pick himself.

44,175. Then do you think that the addition of a boy would be sufficient for that purpose?—Yes.

44,176. Comparing last year with what the oyster-fishing was ten years ago, did you make more money?—Yes.

44,177. Was that in consequence of an increased take of oysters, or in consequence of the increased price you got for them?—It was owing to the increased price.

44,178. Is there any demand for small oysters to lay down on beds?—Captain Austin is, I believe, more anxious for small oysters now than Mr. Jervie was.

44,179. Would he give a better price for small oysters?—Yes.

44,180. Do you recollect, before the byelaw, if the small oysters sold for a larger price than the big ones?—No, the big ones were sold for a larger price.

44,181. The oysters then were only sold for eating and not for laying down?—They were sold for laying down to the County Clare people.

44,182. Then would they not give a better price for small than for large oysters?—They used to pick the big ones for the car men, and to sell the small ones to the County Clare people for laying down upon their own beds.

44,183. I suppose that the greatest quantity of those which are taken now are sold in Dublin?—Yes.

44,184. Is the quantity which Captain Austin takes for laying down a small portion only of the whole?—No. I think that Mr. Baxter had a large proportion of them. He took as much as would load three vessels.

44,185. Were they also sent away by rail?—Yes, they were.

44,186. (*Professor Huxley.*) Do you think that the oysters are properly culled when they are taken now?—Yes, I think they are.

44,187. Then the byelaw is really carried out?—Yes.

44,188. Have you ever known any one fined for infringing the byelaw?—I have never seen a man fined for it here, but I believe there were some fined at one time by Mr. Stretch.

44,189. Do you think that there are many small oysters or much culsh brought ashore?—No, not much.

44,190. Will there be a little brought ashore now and then?—There may be a little.

44,191. But only a little?—No, only a little.

44,192. Whatever regulation might be established, do you think there would still be some brought ashore?—Yes, I think there would.

44,193. But not any considerable quantity?—No.

44,194. Not enough to do you any harm?—No, not enough to do any harm.

44,195. You do not think there is as much culsh or young oysters brought ashore as is sufficient to damage the beds, and injure the fishing?—No, I think not.

44,196. (*Mr. Lefevre.*) Do you recollect the time when oysters were taken here in the months of April and September?—Yes, I do.

44,197. How long ago is that?—It will be about four or five years ago.

44,198. Then was there a regulation made prohibiting the fishermen from taking oysters during those two months?—There was.

44,199. Was that regulation approved of by the fishermen here?—It was.

44,200. Upon the ground that the supply was falling off?—Yes.

44,201. Have your earnings during the whole season fallen off or improved since that regulation was made?—On account of the price, I should say that the earnings have improved.

44,202. Notwithstanding that there have been two months less fishing?—Yes.

44,203. Is that due to the increase in the quantity of oysters or to the increase in the price?—I think it is due in part to the increase in the price, but it is also due to the increase in the oysters themselves.

The witness withdrew.

WESTPORT.

J. Leary.

6 Sept. 1864.

JEREMIAH LEARY called and examined.

44,204. (*Professor Huxley.*) Are you employed in the Coastguard?—Yes, I am.

44,205. How many years have you been in that employment?—I have now been in the Coastguard in Clew Bay for ten years.

44,206. Were you a fishermen before that?—Yes, I was a fisherman in my early days.

44,207. Are you acquainted with oyster-fishing?—Yes.

44,208. Is the oyster-fishing in the bay in a tolerably good condition, or has it been falling off?—I should say that it is falling off.

44,209. Do you mean that it has been falling off for the last four or five years?—I think it is falling off now.

44,210. From what cause?—I think the falling off is due to the great destruction which took place last year. There was a considerable destruction of the brood then, and I am convinced that the take will be quite diminutive this year.

44,211. How did the destruction of the brood take place last year?—It took place from the sale of it.

44,212. Was not the byelaw put in force?—No, they did not attend to it. It could not be put in force.

44,213. Why not?—There was not a sufficient force here to do it.

44,214. Was there a great quantity of culsh and small oysters brought ashore and sold?—Yes.

44,215. Did you yourself see that?—Yes, and I remonstrated with them for doing it.

44,216. And why did you not summon those who did it?—When they saw me they began to cull the oysters. Some of the boats dredge all day and remain till night, to take advantage of the absence of the Coastguard.

44,217. Then do you mean to say that there is not a sufficient inspection?—Yes.

44,218. How many boats were there fishing?—There would not be less than 300 boats.

44,219. How many Coastguard boats are there?—Three.

44,220. One here?—Yes.

44,221. One at Newport?—No; there is one at Inishcaul, about five miles from Newport.

44,222. And where is the third?—At Inishlyne.

44,223. Do those boats go on the dredging ground?—Yes.

44,224. And examine the boats when they are at work dredging the oysters?—Yes; but if the oyster dredgers see us coming, then they will throw the small ones overboard; but if we are not likely to detect them, then they put them in baskets and they put large ones on the top of them.

44,225. Is there no inspection?—No, because the boats discharge them into the large mackerel boats. Fifty Coastguard boats could not sufficiently protect the oysters. Captain Austin has boats, and Mr. Bernard also. You could do nothing with them unless you were to punish the purchasers.

44,226. Does the purchaser take his oysters ashore at once?—Yes, at once; and he lays them down or transhipps them at his own convenience.

44,227. Then your only chance is to inspect the oysters when they are dredging?—Yes; and they avoid that if they possibly can.

44,228. In your opinion is it impossible to exercise a thorough supervision over the oyster-fishing?—Yes, it is impossible, and will be, unless the law is made more stringent.

44,229. Is not the law stringent enough?—We made a seizure of one of Captain Austin's boats, but I believe there was some doubt as to the law.

44,230. Did she have small oysters in her?—Yes.

44,231. You are really of opinion that the oyster fishery is falling off?—I think it is, and I think it will continue to fall off. It will be impossible for the beds to keep up when the brood is being rapidly taken away. They are continually scraping over the beds, and leaving nothing for the brood to adhere to. I think that is very injurious. There were beds here which were very full of oysters some time ago, but they are not in that condition now. I have taken a deep interest in the oyster fisheries, and I have often remonstrated with the fishermen upon the subject but to no purpose.

44,232. What do you yourself think would be the best remedy for the evil you complain of?—I think the best thing would be to enforce the law with greater stringency upon the purchaser. I think he ought to be more amenable to the law than the dredger, whose distress induces him to take the oysters.

44,233. Would you oblige all the oyster dredgers to bring their oysters ashore, and not tranship them at sea?—Yes, I think that would restrain them to some extent; but the purchaser will do all he can to get small oysters. It tells better for him if he has one bushel of small oysters than if he has ten of large.

44,234. Does he pay more for the small ones?—No, he gets them for the same price.

44,235. (*Mr. Lefevre.*) Then he would rather have them small than large?—I know he would; there is no question of that.

44,236. Do the men dredge at night?—They would do so if they were allowed, but they are sometimes on their guard against the Coastguard. We warn them of the danger of dredging at night, but the Coastguard have other duties to perform at night, and they take advantage of a fine night to go out and dredge.

44,237. Is there a regulation prohibiting them from dredging at night?—The byelaw enforces a heavy penalty for dredging by night.

44,238. Notwithstanding that regulation, you say there is a considerable amount of dredging done by night?—I know they would do so if there was likely to be any quantity of oysters to take; but I do not think the take will be anything this season, as the brood has been destroyed. In fact, in the latter part of last season, they could not make more than 2*s.* a man, even when they were working upon the oyster-beds from morning until dark.

44,239. When you say the oysters are falling off, what do you compare them with?—During the last two years, in consequence of the destruction of the small oysters, it has told better for the dredgers; but the spawn adheres to the shell, and passes into the measure with the large oysters, and that has occasioned a great destruction of the brood. In my mind, there is no question that, if they are allowed to continue that practice, the beds, in the course of a very short time, will be destroyed.

44,240. But what do you think with regard to the past, leaving the future out of consideration? You say there has been a falling off in the oysters?—During the famine there was no fishing for them, and they were left alone until 1854. Up to that time there was scarcely any destruction to signify in Clew Bay. After that the beds revived, and then there was a great take of oysters from 1854 to 1860.

44,241. In 1854, how many boats were there dredging?—I should say there were from 100 to 150. Perhaps there were not as many as that in 1854, because the people were only just reviving from the effects of the famine, but a great many have been employed in dredging since.

44,242. From that time down to the present, has the number been increasing?—Yes; and the reason of the increase in the number of oysters taken was that the beds had had such a long time to enable them to revive.

44,243. From 1854 down to the present time, has the number of boats been greatly increasing?—Yes.

44,244. Have they been increasing every year?—Yes.

44,245. Are you able to say whether each boat has been doing as well as a boat did formerly?—Yes.

44,246. Did you hear the evidence of McNamara?—Yes.

44,247. Do you agree with him, that last year was a very productive year for the oyster dredgers?—Yes; and that was because the small oysters were saleable.

44,248. When you speak of the destruction of oysters, you speak rather with a view to the future than with regard to the past?—Yes.

44,249. You think the fishing, as it is now carried on, may do harm?—Yes.

44,250. And not so much that it has done harm hitherto?—I think it has done harm also.

44,251. What is the harm that it has done?—It has destroyed the prospects of future dredging.

44,252. You are of opinion, then, that the regulations which have been established here are to a great extent a dead letter?—Yes, that is my opinion.

44,253. Then any increase there may have been within the last two years in the take of oysters is not due to those regulations at all?—No; but it is due to the violation of those regulations. I should like, with your permission, to say a few words in regard to the herring-fishing in Clew Bay.

44,254. (*Professor Huxley.*) What do you wish to say with regard to the herring-fishing?—I think the falling off in the herring-fishing is owing very much to the use of small nets which are below the proper standard.

44,255. Where are such nets used?—In the whole of the bay.

44,256–7. What is the size of the mesh?—It is scarcely above a shilling.

44,258. Are the meshes an inch from knot to knot?—No, they are not.

44,259. But the shilling mesh is looked upon as the right size?—No; it is below an inch.

44,260. It is very commonly used as a measure of the right size?—I would condemn it.

44,261. You think it is too small?—Yes; no large herring would mesh in it.

44,262. We were told by previous witnesses that the falling off in the herring-fishing is due to the fact that the people have no herring-nets?—I entirely disagree with that.

44,263. Have they as many herring-nets as they had formerly?—They say that they have plenty of nets, but they are not of the proper gauge. In Scotland and on the west coast of England they would not be allowed to fish with the nets they use in Clew Bay.

44,264. We have been told here that there is nothing like the number of nets that used to exist?—Scarcely one-tenth of the boats in number have nets, no doubt.

44,265. Why do you think the small mesh does harm?—The large herrings will not come in to spawn when they strike the small nets. They go off in some other direction. I think it does a great injury to the fishing when the herrings come against the net and are unable to mesh.

44,266. Is there anything else you wish to remark upon?—I have often remonstrated with the fishermen when they have been going out to take a shot amongst the herrings. It is impossible to fall in with the herrings when there is a glut of them among the islands, because, if there is a shoal of them, the fishermen raise such a clamour and noise that you may hear them for miles. I think the noise of their oars is very much against the interest of the fishermen.

44,267. (*Mr. Lefevre.*) What do you think is the number of boats that dredge for oysters in the bay?—I think there have been very little short of 300 this season.

44,268. Are those boats laid up for the rest of the year?—Yes, except when they are employed in getting sea-weed for manure.

44,269. With that exception they are not employed?—No; they do not apply themselves to any other fishing.

44,270. What number of men are there in each boat?—There are three or four men in the boats that go dredging.

44,271. Do you think that in consequence of the regulation made by the Fishery Board there has been an increase in the number of men in each boat?—That is according to the strength of the fishermen and their activity. If they have three good men employed in dredging they will do well enough, but if not, then they have a fourth.

44,272. We were told by one of the witnesses that the effect of being required to cull the oysters upon the ground was to necessitate the employment of an additional man. Is that your opinion?—No; I do not think that it is the case.

The witness withdrew.

Commander GEORGE HENRY LEVERIDGE R.N. called and examined.

44,273. (*Professor Huxley.*) You are Commander of the Coastguard on this station?—Yes.

44,274. It is your duty to see that the regulations of the Fishery Board are carried out?—Yes.

44,275. Were you acquainted with the condition of the fisheries before the byelaw of 1860 was passed?—No, I was not.

44,276. How long have you been here as Commander of the Coastguard?—From the year 1860.

44,277. From 1860 onwards?—Yes.

44,278. Has it been your duty during the whole period of your command here to carry out that byelaw?—Yes, it has.

44,279. How many boats have you for that service?—I have only three stations, and the boats go from those stations.

44,280. Have you only three boats' crews?—Yes.

44,281. Are the people here who take the oysters permitted, if dredging them, to put them at once on board vessels?—Yes.

44,282. Consequently you have no power of exercising a supervision over the cargoes when they are once loaded?—Not after they are once on board the vessel.

44,283. Can you board the vessels if you think fit?—Yes, we can board them.

44,284. Suppose that you do board them, and that you find on board of one of those vessels a number of under-sized oysters, could you seize the cargo?—No.

44,285. On what ground is that?—In the first instance we supposed we could do so, but a mistake occurred last year in the seizure of one of Captain Austin's vessels.

44,286. Will you be good enough to detail the circumstances?—The case was referred to the Board of Works.

44,287. Will you state the circumstances of the case?—The circumstances were these. Captain Austin's hooker had a cargo of oysters on board coming from the fishing ground.

44,288. From his private ground or from the public fishing ground?—From the public fishing ground. She was boarded when she was coming in by a boat belonging to the "Seamew," which was then engaged in the same duty as myself, and Captain Broad, after desiring him to cull the oysters, which he refused to do, threw the whole cargo overboard. The case was referred to the Board of Fisheries, and the reply which was received from the Board I will read to you. It is as follows:—

Office of Public Works,

SIR, 9th November 1863.

ADVERTING to my letter of the 6th instant, I am directed to state that, as the Board are advised with reference to the statement of Commander Broad, in his letter of the 1st instant to you, they are of opinion that the byelaw of the 19th November 1860 only reaches persons engaged in fishing for or taking oysters, and cannot be made available against persons in the hookers which receive those oysters on board for shipment and transport.

Yours, &c.

WESTPORT.

Commander G.H.Leveridge, R.N.

6 Sept. 1864.

44,289. But in any case would the authority of the officer, upon seeing small oysters on board a vessel, extend to the throwing of those oysters overboard? Would it not be the duty of the officer to seize them, and to lay an information before the magistrate?—It would in the case of a boat which had been fishing or was engaged in fishing, but, according to this law, it would not apply to the case of a hooker engaged in shipping them for transport.

44,290. In the case of a hooker conveying them away you have no jurisdiction at all?—No.

44,291. But the officer would hardly have been justified in throwing them overboard if they were on board a fishing vessel?—Yes, he would, if they were in a fishing boat.

44,292. He would be justified in seizing a boat?—We cannot seize a boat under the Fishery Act. We can only summon the people.

44,293. He would have been justified in summoning the people?—Yes.

44,294. But there was no power given to him to seize the cargo and throw it overboard?—No, he would have no such power as that. He would only be justified in summoning, if they refused to throw the cargo overboard.

44,295. So that the officer would have been stepping beyond his jurisdiction if it had been a fishing vessel?—It was a thing I should not have done myself.

44,296. Then, from the correspondence which took place, there was what appears to be an illegality in throwing the cargo overboard?—Yes.

44,297. Had that anything to do with the indisposition of the Board of Works to proceed further?—No; I think their idea was that the byelaw did not touch the vessel conveying them.

44,298. Then that particular mode of procedure had nothing to do with their decision?—No.

44,299. Under those circumstances, what course do you instruct your boats to pursue in order to see the byelaws enforced?—I instruct them to row about among the boats, and to see that they do cull the oysters.

44,300. But there are as many as 300 boats sometimes?—I cannot tell exactly what number of boats there is, but last year there was a great number in all parts of the bay.

44,301. In practice, is it a difficult matter to see that the oysters are not under size? If they were thrown down at the bottom of the boat, would it not be difficult to inspect them properly?—It would be difficult to cull them properly, unless they are culled at the time they are drawn up in the dredge. Sometimes the Coastguard will see a boat coming in, perhaps three miles away, and the moment they see our boat going out, they pull away round the islands, and we cannot catch them. On the north coast, all the way from Newport downwards, they have a large extent of ground.

44,302. You cannot compel the men to haul up their dredges?—There would be no object in doing that.

44,303. If a dredger saw fit to keep his dredge down when he saw the Coastguard boat near him, and only drew it up when the boat was out of the way, you could not help that?—No.

44,304. Then, with the greatest zeal on your part, our supervision does not amount to much?—We should require three times the number of boats we have to do it properly.

44,305. And even then it would be difficult?—Yes. It would take the whole time of the Coastguard to do that, without having anything else to do.

44,306. Then we may take it, that in truth this byelaw is really not enforced?—It cannot be enforced with the force we have at our disposal now.

44,307. I do not suggest that the Coastguard has not done its duty, but it is a duty which, from the nature of the case, it is impossible to perform satisfactorily?—Yes, where the oyster beds are distant, but where they are near the Coastguard station the trouble would not be so great. In such a case, we might frequently go on board the boats, and not find a small oyster in them.

44,308. They will not run the risk?—No.

44,309. Do you ever take occasion to select a dredging boat for examination which you see making its way from the boats, in order to take its cargo on board another vessel?—Yes, whenever we see a boat hauling away, we always chase it.

44,310. Does not that operate as a check?—Yes.

44,311. How far in practice has the byelaw really been observed? I ask the question with a view of ascertaining whether one may ascribe any effect upon the fishery to it.—I think that wherever they could avoid it, they would do so.

44,312. And, therefore, in all probability, they have avoided it?—No doubt they have.

44,313. Can you suggest any other means by which a better supervision could be exercised?—I think one great point would be to make the law reach the vessels that convey the oysters. By that means they could be very easily examined.

44,314. (*Mr. Lefevre.*) Is it the custom here not to land the oysters at all?—They seldom land them. They generally put them in the hooker, which is to convey them, on the oyster ground. Then the purchaser has a place where they are put down for a time.

44,315. You think you ought to have the power of inspecting the hookers?—Yes.

44,316. It would be less trouble to you?—Yes, it would be far less trouble.

44,317. And you think it would be more effectual?—Yes, much more effectual than now.

44,318. How many hookers are there in the bay loading?—There are not many generally. Captain Austin has one of his own, and there are two or three others employed.

44,319. Are there not more than seven or eight vessels altogether?—There are not more than eight or ten, at all events.

44,320. Then it would be an easy matter to keep them under supervision?—It would, as far as the hookers are concerned.

44,321. Are you acquainted with the other fishings in the bay? Have you paid any attention to them?—No.

44,322. How many men are there at the Coastguard stations?—Six at each of two of them, and seven at the other.

44,323. Is their time occupied very much in looking after the oyster-fishing?—A greater part of their time has been taken up in that way.

44,324. And the last two years you have had the assistance of the "Seamew"?—Yes.

44,325. Have her boats been employed in the same way?—Yes.

44,326. And even with that assistance the force has not been sufficient to carry out the work?—Not near sufficient.

44,327. You say the purchasers all have ground upon which they lay down the oysters?—Yes.

44,328. Are they laid down for some little time before they are sent off for consumption?—Yes; they lay them down on certain spots, and when they get a sufficient number they take them up and send them away.

44,329. Is there any other ground in addition to that which Captain Austin has?—They are laid down on his private registered beds.

44,330. Do the purchasers lay them down on their own beds, or on those of Captain Austin?—They are put out on the beds they select, where they can get them easily again for consumption.

44,331. How long do they lay them there?—Until they get a sufficient number for a cargo.

44,332. Are there a considerable number landed on shore and sent by cart to the railway?—They are laid on the beds and afterwards picked out and sent by train.

44,333. Are the smaller oysters left on the beds?—Yes.

44,334. Is there any considerable amount of dredging carried on by night?—No. I do not think they would run the risk of dredging by night.

44,335. Do you think the byelaw is observed?—Yes. There may be a few cases in which it is not, but there are not many.

44,336. Was there much dredging by night before that byelaw was enacted?—That I cannot say.

44,337. (*Professor Huxley.*) Is there any further statement you wish to make to us?—I do not think that there is. If the byelaw were made so as to reach these vessels I think it would be of the greatest benefit. That would operate as a great check.

44,338. It would make the byelaw, in fact, really operative?—Yes, and would benefit the fishery ultimately by keeping the small oysters upon the ground.

44,339. Has any harm been done to the fishery already in consequence of the byelaw not being observed?—I do not think that there has been any material injury done. I think it has acted to some extent as a check.

44,340. Do you attribute the increase there has been within the last two years to the enforcement of that byelaw, as far as it can be enforced?—Yes, as far as I can judge.

The witness withdrew.

HUGH WILBRAHAM called and examined.

44,341. (*Professor Huxley.*) You are interested in the fishing here, Mr. Wilbraham?—I am interested in the oyster fishery.

44,342. Not in other kinds of fishing?—No.

44,343. Will you explain in what way you are interested in the oyster fishery?—I, together with Lord John and Lord Richard Browne, took a lease of some oyster fisheries.

44,344. Where were those oyster fisheries situated?—Inside the lighthouse.

44,345. Inside the Inishgort lighthouse?—Yes.

44,346. Among the islands on the south and the east of it?—Yes.

44,347. You leased those oyster fisheries from the Marquis of Sligo?—Yes, we took a lease of them, but we had some difficulty about the title, and we were not able satisfactorily to prove the title last year.

44,348. When was the lease taken?—Two years ago.

44,349. Having taken that lease under the impression that you had a good title, did you proceed to plant the oyster-bed there?—No, we applied for a title for some of the beds to the Commissioners of Fisheries, and we got a small piece granted to us.

44,350. Was it a natural oyster-bed you began with?—Yes, some parts of it. After we took possession of the beds the public came in upon them, and we took legal proceedings to establish our rights, and failed.

44,351. In the first place, thinking that the Marquis of Sligo had a legal right over this area, you leased the beds from him?—Yes.

44,352. Under what title did he claim that right?—It was a prescriptive right.

44,353. Then, having obtained a lease, you meant to have fished it as a private bed?—Yes.

44,354. What made you think it expedient to apply to the Board of Fisheries?—We found that the ground was trespassed upon, and when we took legal proceedings we failed.

44,355. In point of fact, you failed to establish that Lord Sligo had a title at law?—He had not a sufficient title for us to obtain a conviction.

44,356. That being the case, you applied to the Fishery Board for such powers as they could give you under the Act of Parliament?—Yes.

44,357. Do these powers extend only to the ground between high and low water mark?—They have power up to low-water mark by a later Act—the 13th and 14th I think.

44,358. That would be under the 13th and 14th Victoria?—Yes.

44,359. And the 41st section?—Yes.

44,360. And that gives power to persons, with the consent of the owner or occupier of the land, to form or plant an oyster-bed adjacent to such land, either above or below low-water mark?—Yes.

44,361. That is the section you refer to?—Yes; and the Commissioners gave us a title to some portion of the bed under the Act, but it was only a small portion of what we applied for.

44,362. It would appear from a subsequent paragraph of the same section that they could not give you a title to the whole. The section of the Act is as follows. It is the 13th and 14th Vict. cap. 88, sec. 41:—"Be it enacted, that it shall and may be "lawful for the owner and occupier of any land border-"ing on the sea or any estuary, with the permission "in writing of the said Commissioners, or of any person "or persons with the consent of such owner or occu-"pier, and with the permission in writing of the said "Commissioners, to form or plant any oyster-bed or "laying on the shore adjacent to such lands, and "either above or below the level of the lowest water "marks of spring tides, as the said Commissioners shall "think fit; and it shall be lawful for the several "persons forming or planting any such bed or laying, "to hold the same as private property, and to exercise "an exclusive control over the same; and such oyster-"beds shall be entitled to the like protection as in the "said recited Acts is provided, in case of any other "oyster-beds or layings being the exclusive property "of any person. Provided always, that the forming "and planting of such oyster-beds as aforesaid shall "not give any exclusive right or title to the occu-"pancy of the said shore, except for the purposes "aforesaid, or to the appropriation of any public "parks or beds at present reserved for fishing oysters, "but that the rights herein-before granted and con-"ferred are to be considered as exclusively applying "to places where no such public oyster-beds at present "exist?"—We did not apply for the whole that Lord Sligo claimed as his property. I can show you from the chart what it was that our application referred to.

44,363. (*Mr. Lefevre.*) When did you make that application?—In January last.

44,364. (*Professor Huxley,*) Then was the smaller area for which you applied the property of yourself and co-lessees?—The Commissioners have offered us a part of what we applied for, but we have not accepted or declined it.

44,365. Is it a natural oyster-bed, or have you taken it for planting?—We intended to plant it, if we took it.

44,366. (*Mr. Lefevre.*) Is there any portion of it below low-water mark?—Yes, all of it.

44,367. (*Professor Huxley.*) Are you going to plant it, if you take it, on the French method?—We have not settled what we shall do, if we take it. In fact, we have offered to lease it to a gentleman, or rather the right to it.

44,368. (*Mr. Lefevre.*) We have heard to-day that there is only one private oyster-bed, namely, that worked by Captain Austin?—Yes.

44,369. But in the list of licences granted by the Commissioners there is mention made of three or four beds within reach of this place. Do you know anything of them?—There is one granted to Captain Windham.

44,370. Are there not three granted to Mr. Pike at Achill?—Yes.

44,371. One to Mr. McCormick?—Yes.

44,372. And one to Captain Houston at Killary Bay?—Yes.

44,373. Where are the beds you claim situated?—We applied for the beds at Inishleague, and the Commissioners gave us this (*pointing to the map*).

WESTPORT.

H. Wilbraham.

6 Sept. 1864.

44,374. You applied for all the space from Inishleague to Dorinish eastward of Abbefilon ?—Yes, nearly to Pigeon Point.

44,375. And they gave you the space to Inishlochen ?—Yes, nearly to Finborn.

44,376. What will the total area of that be ?—Not above half a square mile at the outside, but I forget exactly.

44,377. That is a space that is covered at all times by the tide ?—Yes.

44,378. And at many places there appears to be 10 or 12 fathoms of water upon it ?—Yes, fully that.

44,379. Is that ground now fished over by the public ?—Yes.

44,380. (*Professor Huxley.*) Was it fished last year ?—Yes.

44,381. Was it fished in previous years ?—I cannot say.

44,382. Your claim would be based on the fact that it is not public property ?—Yes.

44,383. Is there any other statement you would like to make to us ?—I think the increase in the quantity of oysters last year was partly owing to the dredgers coming on those beds of Lord Sligo's which they had not been in the habit of coming on before.

44,384. Had they been virtually prohibited by the measures Lord Sligo, or you as lessees, had taken from fishing on those beds ?—Yes, certainly, the year before, and although we heard that people had formerly fished over them, still a great many never did.

44,385. Practically the ground had a sort of close time ?—Lord Sligo's tenants were allowed to fish there, and I believe they kept off, or attempted to keep off, all others.

44,386. (*Mr. Lefevre.*) Last year was there a considerable inroad of fishermen from other parts on that ground ?—Yes, people from the north of the bay came and fished. I counted as many as sixty odd boats dredging between Inishlyne and the main land. As to small oysters, we lessees summoned several parties for having small oysters under the size mentioned in the byelaws, and we obtained convictions in two cases, which convictions were affirmed, after an appeal, by the quarter sessions.

44,387. (*Professor Huxley.*) Was that for taking oysters under two and a half inches in diameter ?—Yes.

44,388. Is there any other matter you would like to mention ?—No, I think not.

The witness withdrew.

P. O'Malley.

PETER O'MALLEY called and examined.

44,389. (*Professor Huxley.*) You wish to give some information to us ?—Yes.

44,390. What is it you wish to say ?—I hope you have come here to show justice to the poor, and that you will give them leave to live. I should like to say something about the oyster fisheries.

44,391. You may say what you like ?—I have been dredging for many years. I am 69 years of age, and I never saw or heard of a registered bed until lately, when Mr. Jervie got upwards of 40 acres. We live by oyster dredging and by taking winkles and sending them to England.

44,392. Do you mean to say that the fact of this fishery having been registered does a great damage and injury to you ?—We have been dredging every morning over it until of late, and then they took all my buoys and brought them over here. About four years ago it is ; they had a faction in point of fact.

44,393. What is the nature of your complaint ?—My complaint is, that I have been dredging in Clew Bay, without any hindrance, for many years, and now I am prevented from going where I always went formerly. There were 60 boats dredging there until the people got scarce and went to England. All that we want, is to earn a little money to-day to enable us to keep our little cabins over us and to provide for the morrow, but they are wanting to banish us like rats from the place.

44,394. Who wants to banish you ?—Everybody who wants to keep us off those oysters.

44,395. Who prevents you from dredging there ?—Lord John Browne, and Captain Austin, and various other persons.

44,396. How many persons were summoned last year for fishing on the ground leased by Lord John Browne ?—18 or 19 men.

44,397. Do you wish us to understand that you were formerly in the habit of dredging over the ground which has been subsequently leased by Lord John Browne and his friends ?—I have always been dredging in that place, without any hindrance.

44,398. After that ground was leased were you stopped from dredging upon it ?—Yes, I was last year.

44,399. You were stopped last year ?—They tried to stop me, but I did not stop for them, and I was brought to the assizes at Castlebar.

44,400. Of your own knowledge are you able to say that fishermen were formerly in the habit of dredging over that ground ?—Yes.

44,401. Those very persons who were summoned had been in the habit of dredging over that ground before ?—Yes.

44,402. We have just been told that the summonses had no effect ?—We were brought up here and tried here, and then they sent us to Castlebar assizes, but we defeated them at Castlebar.

44,403. You defeated them ? — Yes, before the barristers.

44,404. You tried the question at law and gained the day ?—Yes.

44,405. Then you will not be troubled with their interference again ?—Yes, they want to do the same thing now, and to take the beds from us.

44,406. You are perfectly at liberty to dredge over that ground now, are you not ?—Yes, we dredge in that very place, and we will dredge if they do not stop us, but they are wanting to stop us.

44,407. At the present moment there is nobody to stop you from dredging anywhere, because you tell us you gained the day at Castlebar ?—Yes, and what we hope is, that you will not stop us.

44,408. We are not going to meddle with you. You must clearly understand that. It is well that everybody should understand it. We are not here for the purpose of making laws or taking them away, but our business is simply to report to Her Majesty, as to what the state of affairs is here.—If they get this space registered, they will put buoys out and protect them, and our nets are broken if they pass over them. We have also the chance of losing our life by them. They are trying to keep all the ground for themselves, and as our crops are bad and we have no corn, no oats, and no potatoes, why we must starve.

44,409. Do you fish in any other way than for oysters ?—I have fished for herrings.

44,410. How is the herring-fishing going on now ?—I should say that it is the oyster dredgers that stop them. In Clare Island and in other places we do not see many herrings coming into the bay at all. Occasionally, in the beginning of the year, there is a small trifle of small herrings.

44,411. You do not see them now ?—No, we do not indeed, although we keep nets for them.

44,412. Have you got a stock of nets ?—Yes.

44,413. How many ?—I have four of them.

44,414. How long are they ?—We have had them much worn, but we could make a new set if we had anything for them to do.

44,415. You do not find the fish ?—No.

44,416. That is because they do not come into the bay ?—We try for them very often, but we do not meet them.

44,417. Do you not see as many as you did formerly ?—We formerly took them in very large quan-

ties. We have sent away all sorts of cargoes of them.

44,418. Where was it that you were in the habit of catching those herrings?—In every place from Inishturk.

44,418*a*. Outside the lighthouse?—No, inside the lighthouse, between the lighthouse and Inishturk.

44,419. Do you now go outside the light and not find them?—Yes, and I take a rod with me to fish.

44,420. Have you been line-fishing?—No.

44,421. Do you use spilliards?—No.

44,422. Have you ever used hand-lines?—Yes.

44,423-4. What fish do you catch with them?—Mackerel, and every sort of fish.

44,425. Do you get much cod now?—No, I get no cod at all.

44,426. Is there no cod at all inside the bay?—No, none until the winter comes.

44,427. I do not mean at this particular time of the year, but do you get any in the proper season?—Yes, a little.

44,428. And do you get haddock?—Yes.

44,429. Is there as much haddock and cod in the proper season now as there was formerly?—No, not half as much.

44,430. How is that?—It is God's will, I suppose.

44,431. What has become of it?—I do not know. I suppose it is decided by the will of God.

44,432-3. As you have gained your cause now, you have nothing much to complain of?—No.

44,434. And you can dredge where you like?—Yes.

44,435. (*Mr. Lefevre.*) How long is it since you had a good herring season?—I cannot remember; about 28 years ago, I think. It is about 40 years ago since we had a good pilchard season here.

44,436. But I want to know with regard to herrings?—I have no book in which I have kept an account, but I should say that for 40 years we have not got any weighty haul.

44,437. Have you had any good take within the last ten years?—No.

44,438. None at all?—We have had a trifle, but not a great haul, such as we used to get in former times.

The witness withdrew.

MICHAEL KELLY called and examined.

44,439. (*Professor Huxley.*) Are you a fisherman here?—Yes.

44,440. What is it you wish to tell us?—What I wish to say is, that I should like to dredge as we have done before all over the bay.

44,441. You do not wish to be stopped from dredging?—No.

44,442. You would consider it a great hardship if you were?—Yes, and a great loss too.

44,443. Then you agree with the previous witnesses?—Yes.

44,444. Does what you say apply to the tract of ground that is leased to Lord John Browne?—Yes.

44,445. You think if you were kept from it it would be a great loss to you?—Yes; they took about 30 of us last year; they got us indicted for dredging there, and they had the case brought to the assizes at Castlebar, and then, when it came to within two or three days of the time, they gave up the law of the case; but we went over for fear it was a scheme of theirs, and now we fear they are coming to try it on again. But we are ready to go to Castlebar again. They want to get rights where they never had them before, and where the public have been dredging ever since it was our fate to dredge. I think it is the greatest wrong that was ever suffered.

44,446. (*Mr. Lefevre.*) You have heard that it has been proposed by the Commissioners to give a licence to these gentlemen?—Yes, it has been reported that that is the case.

44,447. Did not Mr. Barry hold an inquiry here?—Yes.

44,448. Were you here at that inquiry?—Yes.

44,449. Did you not give evidence before him?—Yes, but not at the late examination.

44,450. There was an examination a short time ago?—I was not at that, but I was at the one before it.

44,451. (*Professor Huxley.*) You object to having any ground cut off from you at all?—Yes, we object to have any ground taken from us that we have been dredging on for evermore. We consider it our public lawful right, and we do not want to lose it.

44,452. Is there anything else you wish to mention?—I have nothing more to say, except that I do not wish to see any stopping of our fishing where we have dredged for evermore and our parents before us.

44,453-5. The law as it stands provides that if any part of the sea has been dredged on publicly, and if it has been a public fishing ground, it shall not be made private property. That is the state of the law. At present you have only to prove that it has been a public fishing ground.—You will get plenty of proof of that, if you want it.

The witness withdrew.

WILLIAM CASEY called and examined.

44,456. (*Professor Huxley.*) Are you an oyster dredger?—Yes.

44,457. What is it that you are anxious to say to us?—I wish to say, that we did not care whether we took small oysters or not after we had been prevented from fishing on the public beds and summoned for doing so.

44,458. Having been prevented from going on what you considered to be public beds, you did not care about saving the small oysters. You thought you might get all you could for yourselves?—Yes, because we thought they should not have them all for themselves.

44,459. You thought that those who leased the beds were getting all they could?—Yes.

44,460. And, therefore, you got all you could?—Yes, but we did not want to take small oysters, if we were not prevented from dredging regularly on the public beds.

44,461. You thought you were being deprived of a right, and, therefore, you would do a little wrong yourself?—Yes, just so.

44,462. Is there anything else you would like to mention?—Nothing but what you have heard before with regard to the herring-fishing.

44,463. What have you to say with regard to the herring fishery?—We should be glad to fish for herrings if we were assisted in getting nets and boats. We should be glad to try and fish for them, but we have no nets or boats fit for the herring-fishing, or to fish for those coarse fish, cod and ling.

44,464. The last witness told us there were no herrings worth speaking of?—There are not the men to go and look after them, and they have not got boats.

44,465. Do you think the herrings are there, if anybody went to catch them?—I do not mean to say they are. There is always a little got when the men go out to look after them, but as to the coarse fish they are not looking after them at all. We have not the means of getting spilliards, boats, or nets.

44,466. Is there anything else you wish to say?—No.

The witness withdrew, and the inquiry was adjourned until the 7th of September, at Galway.

Galway, County Galway, Wednesday, 7th September 1864.

PRESENT:

GALWAY. Professor Huxley, F.R.S. (Chairman.) | G. Shaw Lefevre, Esq., M.P.

M. King. *Mr. Macnamara* and *Mr. Regan* appeared for the Claddagh fishermen. *Mr. Concanon* appeared for the trawl fishermen.

7 Sept. 1864.

Martin King called and examined.

44,467. (*Mr. Macnamara.*) Are you a Claddagh man?—I am.

44,468. How old are you?—35 or 36 years.

44,469. How long have you been fishing in the bay of Galway?—I have been fishing in Galway Bay ever since I was 25 years of age.

44,470. Have you ever been trawling in the bay of Galway?—I have been trawling for the last seven years, going and coming.

44,471. In whose boats have you been engaged in trawling?—I have been most of the time trawling in Mr. Sweeney's boats, and in Mr. Stopford's boats part of the time.

44,472. Do you know the points in the bay called Gleninagh Castle and Barna Pier?—I do.

44,473. Is it between these two places that the line within which you are allowed to fish is drawn?—Yes.

44,474. Have you ever trawled between Barna Pier and the islands of Arran and that line?—I have done so often.

44,475. Did you ever trawl inside the line nearer to Galway?—Very seldom.

44,476. But you have done so?—I have trawled inside the limits.

44,477. Did you see any other trawl-boats trawling inside the limits?—I did.

44,478. Have you ever taken small fry with the trawl?—Yes, I have; I have taken a power of it.

44,479. What did you do with the fry,—was it of any value?—We just shovelled it overboard.

44,480. Then I suppose that it was of no value?—Some of it we might keep for our own use on board the vessel, and we should throw the rest overboard.

44,481. Why used you to throw it overboard?—Because it was of no use to us.

44,482. Did you ever examine the fry to see what description of fish it was?—Yes; it was small fish of from half an inch to three inches in length.

44,483. But what description of fish was it,—was it plaice, or cod, or what? what description of fry did you take?—There were doreys, gurnards, plaice, and several other sorts of fish.

44,484. Did you do that often?—Yes, oftener than I can give you an account of.

44,485. In what months of the year did you usually take the fry?—We used to take the most of it from June until August and September.

44,486. Did you ever take up any fish that after it was thrown on the deck spawned in fact upon the deck?—Yes I have seen plaice spawning on the deck, and soles too.

44,487. Where did you take those fish,—will you describe to the Commissioners in what part of the bay it was where you took them?—We have taken them in most places in the bay. It was not confined to one spot but we have got it in different places. At that time of the season the fish I caught would frequently spawn after it was caught.

44,488. From your own experience as a trawler, do you think that the trawl in passing over the ground destroys any fish?—I have no doubt that it does destroy the fish, and it also bares the soil so that it has no food upon it for the fish.

44,489. Would it destroy the spawn of the fish, if such spawn was on the bottom at the time the trawl was passing over it?—Yes, it would indeed.

44,490. Do you consider that trawling does an injury to the fishing in the bay of Galway?—Yes, I consider that it does.

44,491. Will you explain why you consider that it does?—I think that it does, because it banishes the fish and drives them away and scatters them.

44,492. Do you know it to be a fact that it does drive the fish away?—Yes, it does indeed; I know that it does; I am pretty sure of it.

44,493. Have you ever seen shoals of herrings coming into the bay?—I have often seen shoals of herrings coming into the bay, but if I was towing a trawl at the time through a lump of herrings, the result would be that I should frighten them and drive them away.

44,494. You would drive away the herrings?—Yes; towing a trawl through a lump of herrings would frighten the fish, and it would go away at once, and upon several occasions I might be towing a trawl through a lump of herrings, and yet not know it.

44,495. Did you ever meet a lump of herrings or a shoal of herrings while you were trawling?—Yes, I have done so when I have been working down the bay. If I were coming forward I should see a shoal of herrings.

44,496. How many boats are there generally trawling in the bay at one time?—Sometimes as many as 16, sometimes only nine, and from that down as low as six or seven.

44,497. Are they all trawling at the same time?—Yes.

44,498. When you first commenced trawling in the bay of Galway, were the fish any better or in increased qunatity compared with what they have been lately?—Yes, the fish were much better at first when the trawling commenced than they were at the time trawling was stopped.

44,499. When you first commenced trawling can you tell us how many soles you were in the habit of taking after a day's fishing?—When I first commenced trawling we used to take in one trawl from 60 to 70 pairs of soles.

44,500, Was that often and generally the case?—Yes, it was often enough.

44,501. When did you cease trawling?—Last April.

44,502. Was it not shortly before last April?—I believe that I stopped in Galway Bay in March.

44,503. At that time about how many pairs of soles or other descriptions of fish did you take in the trawl?—We were getting scarcely any fish at all in Galway Bay by trawling the last time I was there.

44,504. Did you get none at all?—We got very little.

44,505. Then you did not keep on trawling?—No, we had to go to some other place and trawl, out of Galway Bay.

44,506. Have you ever trawled outside the islands of Arran?—Yes, I have trawled there.

44,507. When you were trawling there, did you ever take much small fry?—We have taken small fry there, but we did not take as much as we took when fishing inside the islands.

44,508. You did not take as much fish outside the islands as inside?—No, we did not.

44,509. If you could get employment again in a trawl-boat, would you accept it?—I would accept it, if the hooking failed me.

44,510. Were you discharged from that employment?—No, I was not.

44,511. (*Mr. Concanon.*) You were at work for seven years?—Yes.

44,512. I believe that Mr. Sweeney had no fault to find with you which induced him to discharge you?—No.

44,513. You have not trawled latterly ?—No.

44,514. Was that because Mr. Sweeney could not bring his trawl-boats out ?—It might be.

44,515. Now was it not because he was afraid to bring out the boats that you did not go with them ?—It might be so.

44,516. Is that the reason you did not trawl with them latterly ?—I believe it was.

44,517. When you began trawling seven years ago, what wages were you in the habit of making by the work ? When you were in the trawl-boat, were you earning 12 shillings a week here ?—Yes.

44,518. You were put on shares then ?—We were, when the fish was going away.

44,519. In the last month you were trawling, did you earn 18 shillings a week each of you on your shares ?—On my oath I did not on the last week we were trawling in Galway Bay.

44,520. Did you in any week in the last month you were trawling ?—No.

44,521. Did you earn 16 shillings each, or how much did you earn ?—For the last fortnight I know I did not get 16 shillings.

44,522. Did you get 15 shillings ?—I am not sure what it was I got.

44,523. Did you get 14 shillings ?—I am not sure. All I know is, that I was obliged to part with trawling, and if I could have got 14 shillings or 15 shillings a week from it, I should not have been so ready to give up trawling in Galway Bay.

44,524. Is it not true that at some seasons of the year the fishing is better in Galway, and then better in some other bay, in Dingle Bay, for instance, so that you are here part of your time, and then in Dingle Bay or elsewhere, according as the fish come in; is that not the way with the trawlers ?—Sometimes they were in the habit of going to other places.

44,525. Is it not the case that the fish will be plentiful here for three or four months in the year, and that then you are obliged to go to some other place ?—There used to be plenty of fish always in Galway Bay.

44,526. Six months ago did you earn 1*l.* 5*s.* a week on shares ?—I did.

44,527. That was twice as much as the weekly wages you used to have when you first began, and one shilling over ?—Yes.

44,528. Do you recollect the inquiry that was held here last Christmas ?—Yes, I do.

44,529. Do you not recollect that, for a short time before that inquiry, the trawlers were afraid to go out,—it would perhaps be for a fortnight before then? —I suppose they were.

44,530. For that fortnight, did not the fish come in great shoals into the bay ?—The fish did come in, I believe.

44,531. Do you recollect the memorial that went up to the Lord Lieutenant ?—I do not recollect the memorial.

44,532. Were the men out fishing last week ?—Not the trawlers.

44,533. I do not mean the trawlers, but your boats. Were they out herring-fishing ?—They were.

44,534. Did they not get a fine take ?—They did not get half as much as they were able to get in former years.

44,535. Did they not get more than they have got for five years back ? Have not the takes latterly been very good ?—They are getting herrings now.

44,536. In plenty ?—Yes.

44,537. Were the herrings sold within the last month at six a penny by the thousand, I mean those herrings you have been getting in Greatman's Bay?—They were sold for 1*l.* a thousand.

44,538. That is at the rate of two shillings a hundred ?—Yes.

44,539. Is that not very cheap ?—Yes.

44,540. There was a great take of them, I believe, was there not ?—Yes, there was.

44,541. Well, now, when do you take most of the small fish you have been speaking of,—do you take most of them in the months of August and September ? —Aye, and in June and July.

44,542. Now, if you were on your oath, would you swear to what a little fish, a fish an inch in size, was,—would you be able to tell what it would be when it was large,—could you swear on your oath what it was ?—What it was ?

44,543. Yes, what kind ? Could you tell what it was if you were on your oath ?—I cannot tell precisely what fish it is, but I know I have taken the fry of small fish from a quarter of an inch to three inches in size.

44,544. You said that the trawl would frighten the herrings ?—Yes.

44,545. Would the Claddagh boats frighten the herrings if they met them ?—They kill the herrings and bring them home.

44,546. But would they frighten them ?—If they did, the herrings would come in again the next day.

44,547. Then you would catch them in the Claddagh boats, but the trawlers would not ?—I never saw any herrings caught in the trawl.

44,548. When you went to Dingle Bay to trawl, were the fish very plentiful then ?—I never trawled in Dingle Bay, but I have trawled in Bantry Bay.

44,549. Were the fish plentiful there when you were trawling ?—Yes.

44,550. Who did you fish for when you were trawling in Bantry Bay ?—For Mr. Sweeney.

44,551. Would the fish run out there and get scarce, and then would you go to another place ?—We were generally about a month there.

44,552. At the end of that time, did you find that the fish were getting scarcer ?—Yes.

44,553. Tell us where you went then. Did you go from Bantry to some other place ?—No; we generally came home then.

44,554. Is there a law of the Claddagh men, that the Spiddle, Renville, and County Clare men shall not go out to fish until the Claddagh men wish to go themselves ?—From Spiddle they might.

44,555. Dare any of the boats round the shore come into Galway Bay here to fish for herrings, except when the Claddagh men wish it, and choose to go out themselves ?—The outside boats fish without the Claddagh men being there.

44,556. And were they hunted by the Claddagh men for doing so ?—Sometimes they would be, and sometimes not.

44,557. Why would they be hunted?—Because it was considered right to give the fish time to come into the bay. It was done by a proper law.

44,558. Whose law was it ?—I cannot tell.

44,559. Was it not Claddagh law ?—It was done in order that the fish might have an opportunity to remain in the bay.

44,560. But whose is the law that would not let the other fishermen come in to fish ?—I believe there is no exact law.

44,561. Are the fish in the bay in plenty now ?—Yes.

44,562. Dare the Renville men or the County Clare men go out to see after herrings, unless the Galway men go out too; would you not sink their boats if they went out ?—I do not know.

44,563. (*Professor Huxley.*) If the Clare men went out, would the Claddagh men attempt to prevent them from fishing; is that so or not ?—Sometimes it would be so, and sometimes not.

44,564. But take the case of this particular time; if the Clare men went out, would the Claddagh men prevent them from fishing ?—I have no doubt they would.

44,565. Why so ?—In order to give the bay time for the fish to come in.

44,566. (*Mr. Concanon.*) Will you tell us if you were out last night yourself ?—I was not. I have been out very seldom in the bay at night-time.

44,567. Do you know Mr. Oliver, who has a trawl-boat ?—I have never seen him with a trawl. He has a fishing-boat.

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44,568. Do you know whether he was hunted last night?—I do not know it.

44,569. Did you hear that he was?—I am not sure of that.

44,570. Did you know Henry Morris?—I did.

44,571. Was he an Englishman?—So he says himself.

44,572. Are there any men bound over to stand their trial for breaking his arm, and wounding him a few days ago?—I believe there were some people engaged in that.

44,573. Why did they attack him?—I do not know.

44,574. Was he one of the trawl men or not?—He was the skipper of a trawl-boat.

44,575. Has he not since gone away to England and left this place?—I am not sure whether he has gone to England or not.

44,576. What depth of water is there outside the islands of Arran?—There are from 40 to 60 fathoms of water outside the islands.

44,577. Could you in rough weather trawl out there?—Not much.

44,578. You could only trawl there when you had very nice smooth fine weather?—We might trawl with a reef or two.

44,579. I believe that the Claddagh men were obliged, in the years of the famine, to pawn all their tackle,—their nets, and boats, and everything?—The food being so dear, they could not afford to live.

44,580. Was it at that time, namely, in the years 1847 and 1848, that they became so poor,—I mean, at the time of the potatoe failure and the great rot?—There was plenty of fish at that time.

44,581. Were they at that time obliged to pawn their boats?—I never saw a boat pawned.

44,582. (*Professor Huxley.*) You stated, I think, in your examination, that the small fish that were taken in the trawl were doreys, gurnards, and plaice?—Yes; soles, doreys, and several sorts of fish.

44,583. Were there soles besides doreys, gurnards, and plaice?—Yes, there were soles besides.

44,584. Were there any other kinds of small fish?—There were small fish of various sorts.

44,585. Were there small cod or small haddock?—I have often seen small haddock.

44,586. And small cod?—They were not very plentiful. The cod we got were never very small, but we very often took large cod.

44,587. But I am speaking now of the very small fish which you took in your trawl-net,—were they from half an inch to a couple of inches long?—From half an inch to about three inches.

44,588. And they consisted principally of doreys, plaice, soles, gurnards, and haddocks?—Yes.

44,589. Do you think that it did much harm to the fishing?—Yes, I think it did; it destroyed the fish, and did not allow them to become large.

44,590. What proportion of the fish out of the whole haul would consist of these small fish; suppose, for instance, that you hauled up half a ton of fish how much of that quantity would be small fish, unfit for market,—would there be a basketful or a handful?—Perhaps there would be a basketful that would not be fit for sale, and at other times there would be a great deal more. Sometimes one quarter of the fish would not be fit for sale.

44,591. What do you think was the average quantity of small unsaleable fish taken in one haul,—was there as much as one-fourth small and unsaleable fish on the average?—The fish were so weighty that I cannot give you an account of it. The small fish would be very little, and yet there would be a power of fish in it.

44,592. Tell us what in your judgment would be the average quantity of small fish taken in a haul; if, for instance, there were five baskets of fish taken in one haul, would one basket out of that quantity consist of small and unsizeable fish?—We used to get half a basket, as compared with five hampers or ten hampers of large fish; but, at the same time, there might be quite as many small fish taken altogether as large fish, although, of course, they would not fill as many baskets, because they were not as large.

44,593. Then I understand you to say that, supposing there were five baskets of fish taken in one haul by the trawl net, there would be among them from half a basket to a basket of fish not fit for food?—There would be.

44,594. That is what you mean?—Yes.

44,595. Do you think that the quantity of small fish taken in that way was so great as seriously to damage the fishery?—There was not so much small fish taken the last time I was trawling as there was when I first began.

44,596. Do you think that the taking of those small fish did harm to the fishing generally?—Yes, I know that it did.

44,597. Well, then you went on to speak about the spawn being taken up in the trawl; do you mean by that the pea of the fish?—I have seen a fish spawning on the deck of the vessel.

44,598. Doubtless, if you bring fish up from the deep water, at a time when they are full of spawn, some of the spawn will be left upon the deck?—I mean from shallow water.

44,599. It would be the same whether in shallow or deep water; but did you bring up spawn in your trawl?—Fry or spawn?

44,600. I mean the pea of the fish, the eggs and the spawn itself?—No, I did not see any of that.

44,601. You have never seen any spawn in that sense?—Not unless it was the pea of the fish when they have been spawning on the deck.

44,602. Then do you conceive that trawling is a very injurious mode of fishing?—Yes, I do. I know that it is very injurious to the fish.

44,603. You stated, however, just now, in your evidence, that if you were hired to go on board a trawler, you would readily go trawling again?—Yes, I would, if I was not interfered with.

44,604. Then you do not think that it is as bad as you say it is?—I might go trawling to some other place, if this bay failed with regard to trawling.

44,605. Do you think that you would make more money by trawling than you would by hook-fishing?—If it were not injurious to the fishing, I think I might make money by it.

44,606. You tell us, in the first place, that you think trawling is very injurious to the fishing, and then you say you would have no objection to go trawling if you were hired to do so. Those two statements do not agree very well?—I have no doubt that trawling is injurious to the fishing, and I should not go trawling because I could not get any fish.

44,607. We understand you to say that six months ago you were earning as much as 1*l.* 5*s.* a week by trawling; was that when you were working upon a share?—Yes.

44,608. Then, I suppose, at that time you must have been getting a good supply of fish?—Sometimes we were.

44,609. Was that your average earning?—No.

44,610. Did you earn as much as that for five or six weeks together?—No, I did not get 25 shillings a week for five or six weeks together. Sometimes I only got 15 shillings, and sometimes 13 shillings, and from that to 20 and 25 shillings.

44,611. Were your average earnings, taking one week with another, as much as 1*l.* a week?—No, they were not.

44,612. Were they as good as 18 shillings a week?—No.

44,613. How much would be the average?—About 15 shillings, I think, and sometimes it would not be as good as that.

44,614. How long have you been a fisherman here?—I have been a fisherman ever since I have been able to fish.

44,615. Is that for about 20 years?—It is 25 years ago since I commenced fishing.

44,616. You have always belonged to the Claddagh?—Yes.

44,617. Do you recollect how many boats there were 25 years ago?—I recollect when there three times as many as there are now of the large hookers, and they were splendid boats.

44,618. Tell me how many there were at that time?—I could not give a correct statement of how many boats there were.

44,619. If you have been fishing for 25 years, you can recollect 15 years ago?—I was fishing at the time I was 12 or 13 years of age.

44,620. Can you recollect since you were 25 or 26 years old?—Yes.

44,621. Supposing we take 15 years ago, how many boats were there then?—There were many hookers sold when the trawling commenced, and the people went off.

44,622. What people went off?—The owners of the hookers; they gave the hookers up.

44,623. Was that when trawling commenced?—Yes.

44,624. But, if you can say there were three times as many boats as there are now 25 years ago, can you give us no notion of what number there was?—There were ten times as many of the large hookers.

44,625. Ten times as many?—Yes, indeed.

44,626. How many are there now?—There are only very few. There are five or six large hookers, I think.

44,627. Then there were 60 large hookers at the time you speak of?—There are only six now.

44,628. Were there 60 twenty-five years ago?—Yes.

44,629. Were there 60 of the large hookers?—Yes, they were large hookers, and they were splendid boats.

44,630. Were there more people fishing than there are now?—Yes, there were. There were a great many people fishing in our village.

44,631. If there were ten times the number of boats, there must have been a good many more men fishing?—Since then they have not been able to afford the large hookers, and they are obliged to go in the small boats now.

44,632. Do you mean to say that, when they ceased to have the large boats, the same number of people went fishing in the small ones?—Yes.

44,633. How many fishermen are there now in the Claddagh?—I think there are about 400.

44,634. And how many do you suppose there were 20 years ago?—There were a great many more any how.

44,635. Have you any notion of how many men there were?—The population of Claddagh was 700 or 800 men.

44,636. Is that 20 years ago?—Yes.

44,637. (*Mr. Lefevre.*) You say that you began trawling seven years ago?—No, 10 years ago.

34,638. How many vessels were there trawling then?—There were 10 or 11.

44,639. What sized boats were they?—They were boats that came from all parts; from Dublin and other places.

44,640. About what size were they?—The boats would run from about 40 to 70 tons.

44,641. Were they all of that large class of trawlers, or were there any smaller ones among them?—They were large boats.

44,642-3. Did you trawl every month in the year?—Yes, I did; I trawled constantly for four or five years.

44,644. How long were you paid by wages?—I was paid by wages for eight years.

44,645. Then it is only quite recently that you were paid by shares?—Yes, it has been for the last two years.

44,646. You told us that you fished sometimes within the line of prohibition?—I have trawled inside the limits.

44,647. Was that in the day-time or in the night-time?—I used to trawl in the night-time inside the limits.

44,648. How often were you in the habit of trawling in the course of a year within the limits?—I would sometimes get fish inside, but very seldom. Outside was the place in which I have generally been trawling.

44,649. Did you get a larger proportion of small fish when you were trawling within the limits or not?—I have been so seldom inside the bay trawling that I could not get so much fish inside as outside.

44,650. But when you fished inside the limits was the proportion of small fish you caught in your trawl larger than it was when you fished outside?—The small fish we caught then were about the same size as those which we caught outside.

44,651. About the same proportion?—Yes.

44,652. Is there more ground fit for trawling inside the limits than outside?—There is more ground fit for trawling outside.

44,653. When the herring season commenced did you go on trawling all the same?—Yes, I did. It was according as I had the means of going after the herrings that I went or not.

44,654. Were the trawlers at work when the herring men were in the bay?—Yes, they were.

44,655. Used they to trawl at night?—I have been trawling in the night-time.

44,656. Have you been trawling in the night-time while the herrings were in the bay?—Well I did not trawl where the herrings were in the harvest time.

44,657-8. Did you take care to keep away from the herrings during the herring season?—I did not come near them. We generally fished further out in the bay when the herring-fishing was going on.

44,659. Did you try to keep three miles off the drift nets?—No, I have sometimes been close to the drift nets when I have been trawling.

44,660. Did you ever see the herrings dispersed by the trawl?—No, I never saw any herrings in the trawl net.

44,661. Did you ever see them driven away by the trawlers coming among them?—I could not see them in that way, because when the herrings were frightened they would not show themselves. They would not appear to us so that they could be seen.

44,662. Then what makes you think that the trawlers frighten away the herrings?—I am quite sure that they do.

44,663. What makes you sure that they do?—The trawl is so heavy, and we show such a light, especially in fiery water, it would frighten a man as much as the fish.

44,664. You think that the fish must be frightened by so heavy a machine passing through the water?—Yes.

44,665. But you have not seen anything which particularly leads you to believe that?—Yes, I have.

44,666. What have you seen which leads you to suppose that the herrings are frightened by the operation of trawling?—I have seen the trawl appear quite large and like fire in the sea.

44,667. What were you in the habit of doing with the small fish you caught in the trawl?—We threw them all overboard.

44,668. Did you bring any of them home to the market?—We might take a little one from among them.

44,669. But the greater part of the small fish you throw overboard?—Yes.

44,670. Were they alive when you threw them overboard?—Sometimes they were, and sometimes they were not. I should say that the mos of them would be dead.

The witness withdrew.

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THOMAS FLAHERTY called and examined.

44,671. (*Mr. Regan.*) Are you a fisherman ?—Yes.

44,672. How many years have you been fishing in the Bay of Galway ?—Twenty years.

44,673. Am I to understand that you have been eight years trawling ?—Yes.

44,674. In whose employment were you when you were trawling ?—I was in the employment of Mr. Smith, also of Mr. Sweeney, and also of Mr. Stopford.

44,675. Have you ever seen fish taken up by the trawl that have spawned on the deck ?—Yes, I have seen plaice spawning on the deck, and codfish and soles.

44,676. Have you ever taken any quantity of small fry in the trawl ?—Yes, I have.

44,677. Will you tell us what quantity you have taken at a time ?—I cannot tell you what number of small fry we have taken at a haul.

44,678. Can you tell us how many baskets you may have had ?—No, I cannot tell you the number of baskets.

44,679. Did you take a stone weight of them ?—I believe I took about a stone weight of them; that would be the refuse and the fry.

44,680. What did you do with them after you took them up ?—We picked them out from the good fish and threw them overboard again.

44,681. Can you say whether they would be dead or alive when they were thrown overboard ?—Some of them would be dead, and some of them alive.

44,682. In what part of the bay did you take the small fry ?—In all parts of the bay.

44,683. Inside the islands of Arran ?—Yes, inside the islands of Arran, and outside of them too.

44,684. Did you take the largest quantity inside the islands or outside ?—I have been oftener inside the islands than out, and I have taken most inside.

44,685. I believe you have been fishing altogether for 20 years ?—Yes, about that.

44,686. Are you able to say whether the fishing in the Bay of Galway has improved or fallen off for the last 20 years,—is it better now than it was 20 years ago, or is it as good ?—It is as good now as it was the first year I fished. I do not know how it was before then, because I was not reared in Galway. I was reared in the country.

44,687. Is it as good now as it was eight years ago, for the poor fishermen ?—I think it is as good now as it was eight years ago.

44,688. Do you consider that the quantities of small fry and small fish taken in the trawl have been the cause of the failure of the fisheries ?—That is more than I can say.

44,689. You cannot say that ?—No.

44,690. For what description of fish is the fishing as good now as it was eight years ago ?—I do not know how it is for coarse fish, but for herrings it is better now than it was eight years ago.

44,691. That is to say, it has been better during the last few days than it has been for eight years previously ?—Yes.

44,692. For the last few days there has been a better fishing for herrings than eight years ago ?—Yes.

44,693. How long is it since the trawling was stopped here ?—It has been stopped since May last.

44,694. To the best of your belief is it not in consequence of the stoppage of the trawling last May that the fishing has been better ?—Yes.

44,695. Do you consider that the stopping of the trawlers from fishing last May has been the cause of the increase of fish now in the Bay of Galway ?—I think it has been.

44,696. What description of spawn and small fish did you take up in the trawl ?—I cannot tell you the amount of it I took up.

44,697. But I want to know what description of fish you took up; can you say if you took up the fry of codfish ?—No, I never saw any cod among them.

44,698. Did you see any doreys ?—Yes.

44,699. And plaice ?—Yes, and whiting.

44,700. Gurnards also ?—Yes, gurnards, and soles, and haddocks.

44,701. Were there any lobsters ?—Yes, there were lobsters also.

44,702. Inside the islands of Arran is it all a spawning bed until you come to the lighthouse ?—As far as I have been trawling in the Bay of Galway it is all a spawning bed.

44,703. Inside the islands ?—Yes; I have seen fish spawning in every place inside the islands.

44,704. Now, with regard to trawling over a spawning bed, do you consider that it would be injurious to the fishing in general ?—I believe that the trawl would take anything in the world that it came across. I do not know what it would take particularly, but I believe it would take anything.

44,705. Then if the fish are spawning on the beds and a trawl runs over the ground at the time the spawn is there, do you consider that that would be injurious to the fishing in Galway Bay ?—I suppose that it would be.

44,706. Do you think that it would destroy the spawn and injure the fishing ?—Yes, it would be sure to do that.

44,707. From the experience which you have had as a fisherman in the Bay of Galway, do you consider that if the trawling was put an end to within the islands of Arran it would improve the fishing in the bay ?—I have no doubt that it would.

44,708. (*Mr. Concanon.*) How long were you engaged in trawling for Mr. Sweeney ?—I think I have been with Mr. Sweeney for seven or eight years.

44,709. You heard this question put and you answered it, namely, whether you thought the stopping of the trawlers had made the fishing better ?—Yes, it did.

44,710. Then will you explain to the Commissioners what it was that stopped the trawlers ?—The poor people stopped the trawlers in order to do themselves good, because they were so poor that they could not stand it.

44,711. Where do those people live, and who are they ?—They live in the Claddagh, but there were people who were opposed to the trawling in all parts of Galway as well as the fishermen.

44,712. Did the people of the town try and put them down, or did they encourage the Claddagh men to try and stop the trawling ?—They did.

44,713. They did what ? — They stopped the trawlers.

44,714. How do you mean—that the people of Galway did it? The gentlemen and shopkeepers; did they encourage the Claddagh men to stop the trawlers ?—I do not know anything about the shopkeepers, but all the people about Galway did.

44,715. They were all assisting in putting a stop to the trawling ?—Yes.

44,716. The people of Galway ?—Yes.

44,717. Did you a short time ago lay an information before the magistrates, that you had been assaulted because you were working in a trawler ?—Yes, I did.

44,718. Before whom did you lay that information ?—Before Mr. Sweeney, Mr. Smith, and Mr. Burbidge.

44,719. But did you lay any information before a magistrate ?—They brought me before a magistrate.

44,720. What magistrate ?—I do not know.

44,721. Were you afraid afterwards to go out ?—I should not have been afraid if I could have got any one to go out with me.

44,722. Were the others afraid from a dread of what the consequences would be to themselves ?—I do not know. Some of them were; but at the same time they did not like to do their neighbours an injury, because they were so poor.

44,723. Did you swear that you were in danger of your life, and that all the men in the trawlers were in a similar position ?—No, I never did.

44,724. What did you swear then?—I said I was afraid.

44,725. Afraid of what?—I was afraid of such a number of people; it was the whole county entirely.

44,726. What were you afraid they would do to you?—I was afraid they would hurt me sure, but I was not afraid they would kill me.

44,727. Were you afraid that they would beat you?—Yes, but there were more people than the Claddagh men to do it.

44,728. Were you afraid that you would be run at by the boats?—No.

44,729. Were you afraid that the Clare men and the other men would run at you and drive you in; did they frighten you on the sea?—No, I was never frightened on the sea.

44,730. Then how was it done?—They said they would do it at night time if they caught us.

44,731. And it was from a dread of that that you abstained from trawling?—Yes.

44,732. Then were there such a peaceable lot of people among the Claddagh fishermen that you were afraid at night that they would attack you on the sea?—I was not afraid of it.

44,733. Why would they attack you?—They might attack me, but I can give you as an answer that I was not afraid of it.

44,734. In consequence of the threats that were used, was it not a fact that Mr. Sweeney and Mr. Burbidge could not send out their boats?—They would have sent them out,if they could have got anybody to go with them.

44,735. Supposing the Commissioners were able to do it, would you hesitate, if they gave you a couple of trawlers to-morrow, in going out? Would you be able to get men without dread, if you had the boats supplied to you to-morrow, to go trawling?—No, I think not.

44,736. Not even for one day?—There would be plenty to try it for one day, but not for doing it constantly. You would not get men to go in the boats for that purpose.

44,737. Do you recollect when the memorial was sent up before the trial in December last year?—I was never here about any memorial.

44,738. About last Christmas were you stopped from trawling?—Yes.

44,739. Was there not a great take of fish one week after the trawling was stopped?—I cannot remember.

44,740. Cannot you recollect last Christmas?—Only very badly.

44,741. About November, which was the month in which the trawlers were stopped last winter, did the fish get plentiful in the course of a week afterwards—I mean every kind of fish?—I know this much very well, that when the trawling was stopped last year there were more fish to be got, of all kinds of fish and hake, than before.

44,742. Were they not got in a week after the trawlers stopped?—Yes, exactly.

44,743. Do you think that the fish grew up in the course of one week?—They might have come in from the rough ground, and when the trawlers were working they may have kept them out on the rough ground.

44,744. After the trawlers stopped, you think they came in?—Yes.

44,745. (*Professor Huxley.*) You said just now that when you were trawling you took about a stone of small fish, some of which were dead, and some alive?—Yes.

44,746. When you took as much as that, how many stone of fish would you get altogether?—Big and small?

44,747. Yes, take the whole haul; I want to get at the proportion?—I have seen upwards of a ton of fish taken in one haul, with no small fish in it at all.

44,748. Supposing that you got 20 stone of fish in a haul, how many out of the whole catch would be small and unfit for food; I only want your opinion or judgment in the matter?—So far as the fish are concerned which we should condemn altogether as of no use, there would not be more than a stone.

44,749. Then about one-twentieth of the whole catch would be unfit for sale?—None of the fish we should condemn would be fit for anything, and there are others that would not be sent to the Dublin market, but which would be packed up and put in baskets and sold in Galway.

44,750. Then, in reality, did you sell all the little fish as well as the large? Did you sell all the small plaice and gurnards, and so forth?—We did not sell the fish, we threw them overboard.

44,751. There was a certain proportion you threw overboard, namely, one stone out of 20 stone?—Yes.

44,752. You quite understand my question. If you took 20 stone of fish, I ask you how much of that quantity would be unfit for food, and you say one stone. Would that have to be thrown overboard?—There was sometimes as much as half a ton of sand among the fish.

44,753. I am not speaking of sand, but of small fish?—We could not tell what would be the weight of small fish there would be in it. We should throw the sand away directly we took up the trawl, and in that case we should throw the sand and the fish overboard.

44,754. I do not want to know anything about the fish you cannot tell about, but what you can tell about.—We did not have much fish, big or small, but we might have a stone of small fish.

44,755. One stone out of 20?—Yes.

44,756. About what time would that be?—In May and June.

44,757. Would you find the same proportion of small fish all the year through?—No.

44,758. Were there some times in the year when you would get less?—We should not get half as much small fish at any other time of the year as we should get in June.

44,759. Does the statement you now make refer to June in particular,—do you get one stone of small fish out of 20 in June?—Yes, and more too.

44,760. And at other times of the year you would get less?—Yes.

44,761. I understand you to say that the fishing now is as good as it was eight years ago?—It is as good as it was eight years ago with regard to the herring-fishing.

44,762. But apart from the herring-fishing, are the other kinds of fishing as good as they were?—We are taken up with herring-fishing now. We cannot go and look for coarse fish. The last time we looked for coarse fish, we got more than we got for eight years previously.

44,763. What time of the year was that?—In the harvest time.

44,764. Last harvest?—From July up.

44,765. Do you mean this particular year just past, within the last two or three months?—Yes.

44,766. From July to September?—Yes.

44,767. In the last July and August, now past, you were getting as much coarse fish as usual?—Yes.

44,768. As much as has been taken any time for the last eight years?—Yes, and more. I did not hear of a boat killing a hundred of whiting for eight years before, and that is the fish we catch in most plenty from July up to Christmas. It is the most plentiful fish then that we supply; but I never saw a hundred caught with any boat since I began to trawl.

44,769. Did you get whiting this last July?—Yes.

44,770. Was there a considerable quantity of whiting?—There was plenty of it. There was as much as you would like to take of them.

44,771. Were they good sized fish?—Yes, they were.

44,772. Did you get anything like the same amount of whiting last year?—No, we only got very little of it.

44,773. Are you able to say what has made the difference between the two years?—I suppose the

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whiting which were existing at that time have grown up and come in.

44,774. Do you think that the leaving off of the trawling has given you more whiting this year?—Yes, I believe it has.

44,775. Have the whiting had time to grow up within the last twelve months?—I suppose they have. They must have got time, because they are in now, and there have been none in for eight years before.

44,776. Are there plenty of haddocks in the bay this year?—No.

44,777. Are there no haddocks?—No.

44,778. There have not been any haddocks for a good many years?—I have not seen any haddocks; only an odd one or so since I began to trawl. The year I trawled there were plenty of haddocks, but of late years I have got none at all, with the exception of an odd one now and then.

44,779. Does trawling destroy the fish, or does it drive them away?—I believe that it is destroying the fish.

44,780. Do you think that while the trawling lasted it destroyed all the whiting?—I know that it did. It destroyed whiting, hake, haddocks, and codfish more than any other fish, because they are ground-fish.

44,781. Trawling went on last winter, did it not?—Yes.

44,782. Up to the end of last year?—Yes.

44,783. Until May in this year?—Yes.

44,784. If the trawling, while it went on, destroyed all the whiting, those whiting you are getting now must have grown up to be big fish since last May?—Yes.

44,785. But is that possible?—I think that if the trawling was going on now the fish would be frightened away from the bay still.

44,786. It is rather difficult to imagine that large full-sized whitings, such as you tell us you are taking plenty of now, could have grown to that full size within the last four or five months, and yet that must be the case if the trawlers destroyed them all before, must it not?—Yes.

44,787. Do you think it possible for whiting to grow to their full size in the course of four or five months?—The small fry we have been destroying, of from three to five inches in length, for the last five years, if they had got time to grow up, would have been as plentiful in the bay as they are now, but we were taking them by trawling and destroying them.

44,788-9. Do they take five years to grow up?—Yes. They have been all taken away for eight years. The first time trawling began here, a trawler would take from 1,000 to 1,500 whiting, and from that time to this year, I have not seen more than 100 or 150, and they only take that quantity near the islands of Arran. There are none in the bay where we used to kill them before trawling began.

44,790. How long do you think it takes for a whiting to grow up to its full size?—I do not know.

44,791. Did you mean to say that you thought it took five or six years to grow up to its full size?—No. What we were taking of small whiting all the spring would be growing up throughout the summer time, until the harvest. What we kill now with our lines in the first of the summer were only that length (*measuring*) in the spring, and now they are that length (*measuring,*) and the bay is chock full of them.

44,792. How long do you think it takes a whiting to grow to its full size?—I do not know.

44,793. You did not mean to tell us that it took five or six years?—I did not.

44,794. Suppose that a whiting is three inches long, do you think that such a whiting, in the course of four or six months, would grow to be a foot long?—I do not know that. I do not know how long a whiting will grow.

44,795. Have you no opinion upon it?—No, I cannot give you any opinion upon that. But the fact of the matter is, that if you do not stop trawling in Galway Bay you will destroy all the people and the fishermen living here. You might as well set about building a workhouse for them at once. I cannot go further than that with you.

44,796. You think that Galway Bay is a spawning place for the fish?—I know it is, because I have been trawling over every inch of it.

44,797. What makes you think so?—Because I have taken fish when they have been spawning in every part of the bay.

44,798. Did you ever get up the spawn or the pea of the fish itself?—No. If I have taken it up, I have so much sand with it that it would destroy the spawn.

44,799. But you never did see any?—No, never.

44,800. Did you sign the memorial that was presented a few months ago to the Lord Lieutenant?—Mr. Sweeney and Mr. Burbidge brought me to some lawyers. I did not know where they were bringing me, but they coaxed me up so much that I did go with them.

44,801. Mr. Sweeney and Mr. Burbidge have nothing to do with this, because it is a memorial against trawling?—Against trawling?

44,802. Yes.—No, I never saw the likes of that at all. I have nothing to say further, than that I was trawling myself, and that if I wanted to keep at it because I was gaining more money by it, I should be compelling the other people to beg.

44,803. (*Mr. Lefevre.*) You were trawling up to May last?—Yes.

44,804. When did you first come to the opinion that it was damaging to the other fishermen?—I know it is.

44,805. When did you become of that opinion?—I have been of that opinion at all times. If I had been fishing in other ways since I began to trawl, I believe I should have been in the workhouse.

44,806. Although you thought trawling was doing harm all the while you were fishing, you went on doing it?—Yes, I did, because I wanted to keep myself alive as long as I could, and no one would blame me for that.

44,807. Was it because you made a good deal more money by trawling than by any other kind of fishing that you continued at it?—No doubt, I was making money by it, but I was setting other people begging.

44,807*a*. Did you find that your earnings by trawling were beginning to fall off last spring? Did you make less money than you did when you began eight years ago?—I do not know what I made when I first began to trawl.

44,808. Were you making less by trawling last year than the first year in which you began trawling?—It was on wages that I was the first time that I commenced, and I do not know what the owner was making.

44,809. What were you getting by wages?—From 8*s.* in one week, until I went up to 1*l.* When I was not upon a man's share I was only getting 8*s.* a week; then I got 18*s.* and after that 1*l.*

44,810. When you got 1*l.*, were you paid by wages or by the share?—I got 1*l.* by wages, and on the share I got from 1*l.* to 2*l.*

44,811. What do you think was the average of your earnings per week the last year you were trawling, taking one week with another?—Taking one week with another since I went on shares, as long as I was trawling, I think I got 1*l.* a week or above that, but I cannot exactly tell.

44,812. Did you often trawl outside the islands of Arran?—I did.

44,813. Do you think that, if trawling was prohibited in the bay, inside the Arran islands, it could be carried out profitably from this port?—That would be according to the weather. We were often kept trawling in the bay in consequence of the weather. We trawled outside as well as inside when we could.

44,814. Are you often prevented by rough weather from trawling outside?—We never tried it outside, only one month in the year.

44,815. What was the reason of that?—Because the fish would leave Galway Bay. We would not be able to get fish in Galway Bay. We had taken all of it, and then we were bound to look for it outside.

44,816. Was it in the month of May you could not find any fish in the bay?—Yes, we would not find any then.

44,817. Then, when did you begin to fish again in the bay?—Coming on to June and July; perhaps a week or a fortnight before July. We would be trawling until we destroyed one place, and then we went round all the islands, until we came to the North Sound and further up to Barna Pier.

44,818. When you could not find fish in the bay, you fished outside?—Yes; but it was not worth while to go outside when we had fish inside. It would take us a day and a night to go out and fish and get into the market, if we fished outside.

44,819. You never fished outside the islands of Arran in the winter time?—I never did, but I have heard that other people have done so.

44,820. Did you find any great quantity of small fish when you were trawling towards the end of August and September?—I do not think I did, except fresh-water flukes that would be coming in.

44,821. Did you find any small fish when you were fishing outside the islands of Arran?—Very little.

44,822. But when you came into the bay, after fishing outside in the beginning of June, you found small fish?—Yes, there is plenty of it then.

44,823. How long did you go on finding small fish?—We would be taking it for about a month.

44,824. And, with the exception of that month in the year, was there any time in the year that you took small fish?—No; on the north shore we only took it during that month, but if we went to the south shore in the spring, then we should take the fresh-water flukes I mentioned upon it.

44,825. If you had kept outside the Arran islands during the month of June, you would not have taken any small fish at all?—No.

The witness withdrew.

JOHN GRIFFIN called and examined.

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44,826. (*Mr. Macnamara.*) You are a Claddagh man, I believe?—Yes.

44,827. Have you long been fishing in the bay of Galway?—I have been fishing ever since I was eleven years of age. I have been fishing ever since that time with a hook.

44,828. Did you ever use the trawl?—I did at one time.

44,829. How long have you been trawling in the Bay of Galway?—I have been seven or eight years, coming and going.

44,830. For whom were you trawling?—I was in one of Mr. Smith's boats.

44,831. Were you ever with anybody else?—No; at that time there was nobody else.

44,832. Have you been trawling with anybody else since then?—Yes, with Mr. Sweeney.

44,833. Up to what time were you employed as a trawler?—Up to last May.

44,834. That is when you ceased to trawl?—Yes.

44,835. When all of the trawlers stopped?—Yes.

44,836. Were you discharged by Mr. Sweeney; did he turn you away?—No, he did not.

44,837. While you were fishing or trawling, did you ever take small fish?—I did.

44,838. Did you ever take fish so small that they were unfit for use?—Yes; I have taken small fish only an inch broad.

44,839. What sort of fish were they?—They were ray, doreys, whiting, haddock, gurnards, and small flukes and plaice.

44,840. What did you do with those fish when you took them?—We used to throw them overboard.

44,841. How much at a time did you take?—More than a basketful, sometimes.

44,842. You sometimes took more than a basketful at a time?—Yes, at one time.

44,843. Was that a thing that often happened?—Yes.

44,844. Very often?—Yes.

44,845. Do you mean to say that that used to happen every time you drew up the net?—There would be very few times that it would not happen.

44,846. Did you ever trawl outside the islands of Arran?—I did.

44,847. What kind of fish did you take there?—I did not take half the quantity of small fish out there that I took inside, nor one-fourth of it.

44,848. Were the large kind of fish which you used to take out there of a better kind than the large kind of fish you used to take inside the islands?—The soles were every bit as large inside as they were outside.

44,849. But how was it with regard to the other kind of fish?—We did not take as much fish outside as we did inside, nor one half.

44,850. Did you ever fish inside the line within which trawling was prohibited? Do you know where the line is?—Yes, from Gleninagh Castle to Barna Pier.

44,851. Did you ever fish nearer to Galway than that line?—Yes, I have fished very near to Galway.

44,852. How near?—Within four miles of the lighthouse.

44,853. How long ago is it since you trawled inside that line?—I was trawling inside the line before Christmas, and even after it last year.

44,854. Are you aware whether your employers knew that you were trawling inside the line?—We were trawling there unknown to the Claddagh people.

44,855. But did Mr. Sweeny know that you were in the habit of trawling inside that line?—Yes, he did, because we could not get any fish in any other part of the bay at that time of the year.

44,856. Did you ever see fish taken up inside the line, and about that direction, that would spawn on the deck after they had been taken up in the trawl?—Yes, I did.

44,857. What were they—soles and plaice?—Yes.

44,858. Do you think that trawling has done any harm to the fisheries of Galway?—Certainly, I do.

44,859. Why do you think that?—If I were trawling there, and were going over the ground with my trawl, I should take up everything that there was upon it.

44,860. Do you think that there is a spawning bed for the fish inside the islands of Arran?—I do think so.

44,861. And do you think that a trawl passing over a spawning bed would do an injury to the fisheries?—I do.

44,862. Would a trawl passing and repassing backwards and forwards in the bay frighten the herrings and prevent them from coming into the bay?—Certainly it would. I am sure of that.

44,863. Do you know how long it is since trawling was stopped in the Bay of Galway?—I cannot say.

44,864. How many months?—Since last May, I believe.

44,865. Is the fishing as good now in the bay as it was before that time?—I could take my oath that there have been mackerel caught at Black Head, where none had ever been seen for 12 years before.

44,866. None have been seen there ever since trawling began?—No, and there is another fish which we have also caught latterly, namely, the whiting.

44,867. Where have you got that?—From Greatman's Bay up to Black Head.

44,868. Is there a good fishing for mackerel and whiting in the Bay of Galway now?—There is.

44,869. When the trawling was going on, was there a good fishing for mackerel and whiting?—We did not see any coming in from the time trawling commenced until it stopped, I can take my oath of that.

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44,870. You say that you commenced fishing about 20 years ago?—Yes, about that time.

44,871. Are there more fishing boats in the Claddagh now than there were at that time?—No, nor one half, nor one quarter as many. I counted once, when I was a boy, 120 large boats in Claddagh.

44,872. What sort of boats were they?—They were the big hookers.

44,873. And how many are there now?—There are not more than five or six large hookers now.

44,874. Were there more men employed in the Bay of Galway at that time in fishing?—There were 120 boats, without counting other small boats, and there would be six men in each boat in the winter time.

44,875. How many boats were employed when you commenced first?—I counted 120.

44,876. About how many years ago is that?—I cannot recollect.

44,877. Would it be 18 years ago?—Yes, I think so.

44,878. There were 120 large boats employed in the fishing 18 years ago?—Yes.

44,879. And how many of that description of boats are there employed now in the Claddagh?—Not more than five or six.

44,880. Can you tell us how many men there used to be employed in fishing from Galway in those large boats?—There used to be six hands in every boat every winter.

44,881. That would be about 700 men?—Yes.

44,882. What age are you now?—I am about 31 years of age.

44,883. And you say there are only about six large boats now?—Yes.

44,884. How many men are there now employed in the Claddagh fishing?—There are small hookers engaged in the fishing now of from four to five tons.

44,885. But how many tons were the hookers that were employed at the time you speak of in your early years?—Some of them would be 10 tons, and from that up to 11 and 12 tons.

44,886. And the boats now employed are only of from five to six tons?—Yes.

44,887. About how many are there? Are there a hundred?—I believe there are not 100.

44,888. Are there 60?—There are over 60, I believe.

44,889. And six large ones?—Yes.

44,890. There are about 66 big and little in the Claddagh now?—Yes, about that.

44,891. About 18 or 20 years ago were there any small boats in addition to the large hookers you have told us of?—No, there were not.

44,892. Are the people of the Claddagh as well off as they were at that time?—No, nor are they half as well off.

44,893. Are they very poor now?—Yes.

44,894. And were they in a more comfortable position in the time you speak of?—Yes, they were, but they have been obliged to sell their boats, and some of them to go to America. They have been doing that since the time the trawling commenced.

44,895. In your opinion, has the trawling anything to do with that?—It was on account of the trawlers that they went to America. They sold their boats and houses to enable them to do that.

44,896. Do you think that they would have gone to America if the fishing had continued as good as it was 20 years ago?—I am sure that if it had not been for trawling one half of those who have gone to America would not have gone.

44,897. (*Mr. Concanon.*) You could tell, I suppose, how many boats there were ten years ago?—No.

44,898. Nor 15 years ago?—No, because I did not count them.

44,899. All you know is what you did when you were 11 years of age? That is the time you counted them?—I have not counted them since.

44,900. Did you count them then?—Yes.

44,901. Why did you count them?—Because I had nothing else to do.

44,902. Then I may take it that since then you have had plenty to do, and have not had time to count them?—I do not understand you.

44,903. How are you paid now? Is it by the week?—Do you mean in Mr. Sweeney's employment?

44,904. Yes.—No, by shares.

44,905. I suppose you were very comfortable and your poor neighbours were very badly off. The men in the trawlers were very comfortable, were they not?—Yes, they had their living out of it.

44,906. You were getting 1*l.* 5*s.* a week?—No, I was not.

44,907. Did you hear the statements of the other witnesses who have been examined here?—Yes.

44,908. What was the average you were getting?—1*l.* a week sometimes, and sometimes only 5*s.*, and then we were weeks without anything.

44,909. That would be according to the manner in which the fish came in?—Yes.

44,910. That was when you were lately fishing?—Yes.

44,911. When you found that the fish all ran off out of the bay here, did you go off to some other place after them?—Yes. When we were fishing and lost them in that way we used to follow them.

44,912. Then they were in the habit of going away from you?—Yes.

44,913. You would know the times, I suppose, when they would be in the bay?—Yes.

44,914. And then two or three months after that they would go off to some other place?—Yes.

44,915. And you would follow them?—Yes.

44,916. (*Professor Huxley.*) I should like to ask a question about the number of boats 20 years ago. I think you said that at that time there were 120 boats?—Yes.

44,917. And they were boats of a larger description than those which are employed now?—Yes.

44,918. They were then boats of 10 or 11 tons?—Yes.

44,919. Were they decked at all?—There was no deck in them.

44,920. They were open boats?—Yes.

44,921. Can you give us any idea of what a boat of that kind would cost?—As far as my opinion goes, and as far as I have heard my father and other people say, they would cost about 120*l.*

44,922—3. Each boat, with all its fittings and gear, would cost 120*l.*?—Yes.

44,924. What kind of gear was there in those boats?—Cables, that is all.

44,925. Did you use long-lines when you were fishing?—Yes, and spilliards.

44,926. How many long-lines and spilliards would there be?—Every man had two long-lines and spilliards of his own, and also pieces of net.

44,927. How many pieces of net?—Six pieces of net.

44,928. Were they for herring-fishing?—Yes.

44,929. How much do you think, from what you heard then, each man's extent of nets, and spilliards, and hooks, and long-lines, would cost him?—I am sure a man would not be able to get a spilliard for less than a pound.

44,930. And each man had two of them?—Yes.

44,931. That would be 2*l.* for spilliards each man?—Yes.

44,932. What would each piece of net cost?—A piece of net with back-rope, corks, and everything else, would cost over 50*s.*

44,933. That would be 2*l.* 10*s.* more?—Yes.

44,934. What other lines had they?—Two hand-lines.

44,935. What would they cost?—Two shillings or half-a-crown a line.

44,936. Was there anything else required for their outfit?—Only the hooks and leads belonging to them.

44,937–8. Would it cost from 30*l.* to 40*l.* for the outfit of the six men?—Yes, somewhere about that.

44,939. Then should I be right in assuming that 150*l.* would be invested in the boat, including the outfit and everything, in one way and another?—Yes.

44,940. Then, besides that, I understand you to say that each of the fishermen had a small boat?—Yes, and some of them had two.

44,941. What was the size of those boats?—They were only small then, but they have got larger since. They were from three tons to three and a half and four tons.

44,942. What size were they then?—About four tons.

44,943. They were simply rowing-boats?—We call them pookauns.

44,944. What were they used for?—Only for herring-fishing.

44,945. They were used for nothing else?—No.

44,946. Were they sailing-boats?—They were not sailing-boats at that time, but they have got sails in them now.

44,947. I want to confine you to what took place then. You say that each man had one or two of those boats?—Yes.

44,948. One of the larger boats would have six men in it?—Yes.

44,949. Then there would be six times as many small boats as there were large?—Yes, there were.

44,950. Do you mean to say that each of the men who worked in one of the large boats had one small one of his own?—No.

44,951. Then is what you mean to say this, that for every large boat there was a small boat?—Yes.

44,952. So that there were as many small boats as there were large?—Yes, and more.

44,953. Then I suppose that, altogether, there would be about 300 boats?—Yes.

44,954. What has become of those large boats, if there are only five or six left now?—They have been sold, and some of them have fallen away from decay.

44,955. Do you recollect when they were sold?—I recollect when some of them were sold.

44,956. When did the fishermen begin to part with them?—It is not more than four weeks since two large boats were sold.

44,957. Have the fishermen been gradually parting with them ever since the time of which you speak?—Yes.

44,958. For how many years has that been going on?—As far as I can understand it, it has been going on pretty nearly every day since the trawling commenced in the Bay of Galway.

44,959. That is since what year?—I believe that the trawling commenced more than 12 years ago.

44,960. Did they have 120 large boats till within 12 years of the present time?—They have not had them within that time, but they had before.

44,961. How many boats were there 15 or 16 years ago; did they begin to fall off then?—I cannot recollect; I did not count them.

44,962. You cannot tell us when the number of large boats began to fall off?—No, I cannot.

44,963. Did they begin to falk off before the trawling began?—That is a question I cannot answer.

44,964. Will you tell us what is the size of the small boats they have now?—Some of them are boats of four tons, and from that to five and six tons.

44,965. So that they are largish boats?—Yes, they are.

44,966. They are larger than the small boats they had at the time you have been speaking of?—Yes.

44,967. But there are not as many of those boats now as there were of the small boats before?—No.

44,968. What will each of those boats have cost?—If I were to build a new boat now, it would not cost me less than from 20*l.* to 25*l.*

44,969. Are there more than 60 of them?—I cannot tell that.

44,970. Why do they not use the large hookers now?—I donot know. They do not use them.

44,971. Would they not pay if they had them?—I cannot tell.

44,972. Cannot they catch fish enough to make them pay?—No, they are not able to do so.

44,973. What kind of fish has fallen off most?—Every sort has fallen off.

44,974. Have codfish fallen off?—Yes; cod, ling, haddock, and hake.

44,975. Has the haddock fallen off more than any other kind of fish?—I cannot say that.

44,976. You stated just now that there was more than a basketful of small fish taken up at a time in the trawl?—Yes.

44,977. How many baskets of large fish would you get at the same time?—From four to five and six hampers.

44,978. And out of that would there be one hamper which would be of no good?—There would be a small hamper which would be of no good.

44,979. Only a small hamper?—Yes.

44,980. Would one-tenth part of the fish be unfit for sale? For example, if there were 10 baskets altogether, would one basket contain fish of so small a character as to to be unfit for sale?—Do you mean unfit for eating?

44,981. Yes.—No, there would not be as much as one basket out of ten unfit for eating. There would be a portion of it that would be fit to eat.

44,982. Then there would not be one basket in ten that would have to be thrown overboard?—Yes, there would be, and more than that taking the sand and dirt as well.

44,983. But of small fish would there be as much as one basket out of ten thrown overboard?—Yes.

44,984. Then one basket out of ten would be unfit for sale?—Yes, there would be one basket that would not be fit.

44,985. (*Mr. Lefevre.*) At what time of the year do you catch most small fish?—It might be taken at different times; but about St. John's Day, or about the first month of the harvest, most would be taken.

44,986. When is St. John's Day?—On the 24th of June.

44,987. Which month do you call the harvest month?—The month that we are in now; the month that we are killing the herrings.

44,988. If you were to trawl in the bay now, would you expect to take a large quantity of small fish?—I know that I would take a large quantity of small fish.

44,989. Would you find more small fish within or without the limits?—I know that I should get a great deal inside, and that I should get a great deal outside also.

44,990–1. Are you able to say whether you took fewer fish in the trawl the last year you were trawling than when you first began to trawl?—We took seven times as much fish, and even twelve times as much fish the first year I began to trawl as we did the last year I was trawling.

The witness withdrew.

PATRICK RUSH called and examined.

44,992. (*Mr. Regan*) Are you a fisherman?—Yes.

44,993. Where do you live?—In the Claddagh.

44,994. How many years have you been fishing in the Bay of Galway?—I have been fishing there for 30 years.

44,995. How many years of that did you spend in trawling?—About three years.

44,996. In whose employ were you during those three years?—I was in my own hooker.

44,997. When did you give up trawling?—About eight years ago—seven or eight years ago.

44,998. Why did you give it up?—I had to give it up.

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44,999. What was the reason that induced you to give it up?—I gave it up because I got no fish; it would not pay me, and I had to give it up.

45,000. While you were trawling, did you get large quantities of small fry in your trawl?—The first time that I began to trawl I was able to take about a hundred weight that I could bring to the market of every kind of fish—turbots, soles, and gurnard, and every kind of fish, except salmon, herrings, or trout.

45,001. Was there any large quantity of fry?—Yes, there was a considerable quantity of small fish. That, however, was the fish I brought to the market; the rest of the fish I threw away. I threw out a great deal of small fish, of which I kept no account at all.

45,002. At every haul did you bring up large quantities of small fry?—My trawl was only a small trawl; it was not as large as those which the ordinary trawlers use.

45,003. What was the tonnage of your boat?—About 12 tons.

45,004. What was the tonnage of the other boats; those belonging to Mr. Burbidge and Mr. Sweeney?—They would be about 50 tons, I think, but I do not know exactly.

45,005. How many feet in length was the beam of your trawl?—The trawl I had the first time was 28 feet long, but one that I had subsequently was 29 feet long.

45,006. Are you aware whether Galway Bay, from the islands of Arran to Mutton Island, is a spawning ground?—Yes, it is a spawning ground in every place from the islands of Arran to the lighthouse.

45,007. To the best of your recollection, 20 years ago, how many large hookers were there belonging to the Claddagh?—I believe that 20 years ago there were about 60 hookers of about 10 tons, and from that to 11 and 12 tons. There was another class of boats, of which I think there were about 40, which ranged from seven down to six tons; and then there was another class of boats from four to three tons.

45,008. Then there were three classes of boats?—Yes.

45,009. The large hooker, and second-class hooker, and a small boat?—Yes. In the winter we fished with the large class of boats, and were in the habit of taking from five to six nets in every boat belonging to that large class. In the second class of boats we had from four to five nets. They also went out in the winter time.

45,010. From your experience as a fisherman, and having been yourself trawling, are you able to say whether the use of the trawl in the Bay of Galway has had the effect of banishing the fish?—I am sure that it has, and I can prove it. The first time we went trawling in our boats we went from Black Head to Barna Quay; that is the best place for trawling. We worked at it for a short time, and we got from 60 pair of soles up to 120 pair. We went on working, and we worked the ground until we got down to three pair of soles. Well, when we had succeeded in banishing that place, we went off to the southward from Spiddle, and we worked there until we found there were no fish to get. The first time we trawled there we used to get 60 and 40 pair of soles after fishing night and day. We banished the fish, however, and then we worked the bay all round again. We worked it until we got nothing, and then we broke the limits as we could get no fish outside, and worked from Barna Quay to Black Rock. We worked there for three or four days. The first day we got from 40 to 50 pair of soles, but after we had trawled over the ground three or four times we had to leave that place. The next week we only got from two to three pair. Then we worked the southward part of the bay, and there were not as many soles to be had as we had had in the northward, but it was better far for plaice. When we first worked it we used to catch from 10 to 11 hundredweight of plaice, and some very fine fish they were. We worked that ground for three or four weeks—about three weeks, I think. We worked it down to nothing, and then we had to take the boats out and go for round fish. We worked for round fish for some time, and the next year we began trawling, and we could not get half as many fish as we got in the first year. The following year we had to give it up entirely, and some of us had to sell our boats and go to America, because the place had been worked down so much.

45,011. (*Mr. Lefevre.*) Do you mean us to understand that you had to give it up because you could not make it pay?—It would not pay our expenses, and we gave it up.

45,012. (*Mr. Regan.*) During the period you were out trawling what were the other Claddagh men doing? Were they engaged in line-fishing?—Some of them were. Those who could not get a place in the large hookers had to fish by the line. The place we trawled over was where they had to get their living, and when we were trawling they had to go to another place, and very often we used to follow them.

45,013. Do you know whether the trawling has been stopped here?—Yes.

45,014. How long have the trawlers not been fishing?—I am not sure; it is not very long.

45,015. Is it only a few months?—Yes.

45,016. Is it about nine months?—I do not know.

45,017. Since they gave up has the fishing improved in the Bay of Galway?—Yes, the fishing for whiting and herring has improved very much.

45,018. Since the trawling first commenced, have you had a good herring fishery in Galway?—No, we have not had a good fishing at all, but we had a little, I believe, four years ago. At that time I think the trawlers were also stopped. We saw the herrings out from Black Head to Spiddle. They were two or three weeks standing there, and we said that it was because the trawlers went that way that they were not allowed to come in. We started then and stopped the trawlers, and they were only stopped for one week when the herrings came in. They did not stop in the bay long, however, as they all went away again in the course of two weeks.

45,019. Before the trawling commenced, what sort of herring-fishing did you have in Galway Bay?—It was very bad.

45,020. But I want to know how it was before the trawling commenced?—I do not know.

45,021. Had you not a good fishery of every description before the trawling commenced?—Yes, pretty fair.

45,022. Before the trawlers came here to fish, can you say what sort of fishing there was here?—I used to kill, before the trawlers came here, in my own boat, 60,000 herrings.

45,023. You did that before the trawling commenced here?—Yes.

45,024. Have you ever taken that quantity of herrings since?—No, nor the half of it.

45,025. Did you ever take even the fourth?—No; I might, perhaps, once a year or so, kill 3,000 or 4,000.

45,026. I want to understand whether you have had a good fishing or a middling fishing since the practice of trawling was introduced here?—I have never seen a good season since the trawling commenced here. It has been better, however, lately.

45,027. Is that since the trawlers gave up?—Yes.

45,028. Is it your opinion, from your own experience as a fisherman, that if trawling was given up altogether inside the islands of Arran the fishing would revive and get better?—I am sure that it would, because I know very well that the trawling destroys all the small fish.

45,029. Is it your opinion that you could have as good a fishery here as you ever had, if the trawlers were kept outside the islands of Arran?—I am sure that the fishing in the bay has been ten times better since the trawling was stopped than it was when the trawling was going on. It was quite time that the trawling was stopped, because the bay could not stand it, the trawlers were taking so much of the small fish.

45,030. Is it because Galway Bay is a spawning bay that you think that trawling is so injurious to the fishery; is that your reason?—I am sure that it is.

45,031. What is the reason?—I know that it is a spawning bay. The Bay of Galway, if it is not destroyed by trawling, is able, I believe, to supply all the other bays in Ireland from the fish which spawn there.

45,032. Do you think that the trawling would not be half as injurious if it were carried on in Roundstone Bay?—There is no trawling there, but I do not think that it would be as bad upon that coast. There is, however, very rough weather there, and it would be very difficult to fish in Roundstone Bay in bad weather.

45,033. Is it your opinion that every inch of Galway Bay, from the islands of Arran to the lighthouse at Galway, is spawning ground?—I am fully sure of it, because we find banks where the turbot spawn inside the islands of Arran, and I believe that every other kind of fish spawn there as well. It is from the islands of Arran, down the bay, that the fish come when it is their time for spawning.

45,034. Did you ever take the fish up in your trawl, and have them spawning on the deck?—Yes, I have done so with regard to sole and plaice.

45,035. Sole and plaice?—Yes.

45,036. They spawned on the deck?—Yes; we had no deck, but they spawned on the platform.

45,037. (*Mr. Concanon.*) Was there not a great take of herrings lately in Greatman's Bay?—There was about 15 years ago.

45,038. I am not speaking of 15 years ago, but of a month or two ago. Where was the great take of herrings that you had then?—In Greatman's Bay, but I count that the Bay of Galway, because it is only a creek from the Bay of Galway.

45,039. Was there lately as great a take of herrings in Greatman's Bay as there has been for 20 years back?—That was not in Greatman's Bay, but outside of it, in the Bay of Galway.

45,040. The ground there is not too rough for trawling?—I believe there are too many stones there.

45,041. Do you say that they could not trawl there?—No, but they could trawl outside.

45,042. But not where the herrings were taken?—No, but they could trawl within half a mile of it.

45,043. Have not the trawlers worked where the herrings were taken for the last 20 years, and where you say no trawl could work?—No, there are too many stones there.

45,044. Is that not immediately close to Arran?—No, it is about six miles from Arran.

45,045. What brought the herrings in there?—The bad weather may have driven them in there, but I cannot tell.

45,046. Why have you not had great takes in that place and in Greatman's Bay, where no trawlers could work for 15 years?—They were trawling outside of Galway Bay, at the mouth of it.

45,047. Is it because they were trawling in the mouth of the bay that the herrings could not go in where no trawl could work at all?—They could if they liked, but if they were frightened they would not do so. You would not go through a door into a house if you were frightened, and that is the way with the herrings. The herrings started off when they were frightened.

45,048. (*Professor Huxley.*) You admit that there was no trawling inside Greatman's Bay?—No, there was not.

45,049. But was there trawling outside of it, between Greatman's Bay and the islands of Arran?—Yes, between Greatman's Bay and the islands of Arran.

45,050. It is your opinion that trawling outside has kept the herrings off the coast, in the same as if a person stood outside a door he might keep any one from going through it?—Yes.

45,051. (*Mr. Concanon.*) What is the extent of Greatman's Bay?—I do not know.

45,052. How many miles is it across?—It is about a quarter of a mile across.

45,053. Is it only a quarter of a mile across at the widest part?—About three-quarters of a mile.

45,054. Did you take any plaice or sole inside where it is rocky, for the last 15 years?—There is no one fishing for round fish in Greatman's Bay at all.

45,055. Why not?—They never come there; it is only a creek.

45,056. Are there flat-fish there?—Yes.

45,057. Turbot?—Yes.

45,058. Did you ever take any turbot with the spilliards there?—We took it at the outside of the bay and in the mouth of it.

45,059. On the trawling ground?—Yes.

45,060. But inside, where the trawl could not go?—We never fish inside for any fish. There is no place for fishing there. We could not get fish there.

45,061. Why is it that you could not find fish where the trawlers could not go at all?—I would not be fishing it. Any place where the fish go the trawlers follow. Wherever we find fish they follow the boats and fish and trawl there.

45,062. They do not follow the boats where it is rocky ground?—No.

45,063. Then why did you not get the flat-fish there?—We never find flat-fish on sharp rocky ground.

45,064. How many years is it since you gave up trawling?—Seven or eight years ago.

45,065. Did you wear out the ground then and have no fish to get?—I did, and I gave it up.

45,066. Did you hear John Griffin state, that seven years ago, the first year he fished, which would be a year after you gave it up, he used to take twelve and fifteen times as much fish as he did lately?—I believe they had a bank outside there where they were in the habit of trawling. Ailladie Point is the name of the place.

45,067. Will you explain how it was that John Griffin, in Mr. Sweeney's boat, could get twelve and fifteen times as much as you could 15 years ago?—They caught it on Ailladie Point. They found a bank two miles further. Our boats did not go there fishing. I was fishing there once.

45,068. Surely, if you had a boat of 12 or 20 tons, you could catch fish as well as Mr. Sweeney's boats?—I was fishing there; I got 20 brace of soles there.

45,069. How many fathoms of water were you able to fish in with your small boat?—In my small boat I was able to fish in from 27 to 28 fathoms of water.

45,070. Do not Mr. Sweeney's boats fish in from 40 to 50 fathoms of water?—Yes, and deeper than that.

45,071. How deep?—I think he can trawl in 60 fathoms of water.

45,072. Did you ever hear this: that the Government were to be asked to give 5,000*l.* for setting up 60 ton vessels? If that were done, and you had them, could you trawl as well as Mr. Sweeney?—We should not be able to keep them a week.

45,073. Then how is it that Mr. Sweeney and the other owners of trawlers manage to keep them up?—They have kept them up because they have had the bay to themselves. If I had been trawling, and 20 other men had been trawling too, they would have had to give it up many years ago. They have, however, been allowed to have it all to themselves.

45,074. When you were fishing, did you fish a portion of your time in one place, and a portion in another, following the fish?—We took all the fish and banished them away, and then we went to another place.

45,075. Were you one of the men who signed the memorial which was sent up to the Government in December last?—I was.

45,076. Did you hear that memorial read?—Yes, I did.

45,077. Do you recollect that the trawlers at that time were only eight days stopped?—I do recollect that they were stopped; they were two weeks stopped. I think.

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45,078. How long were they stopped?—A fortnight. They were more than eight days stopped.

45,079. Were they stopped for three weeks?—No, I think they were not stopped for three weeks.

45,080. Do you remember that paragraph in the memorial which says that "the trawlers having given "up, the bay abounds in all kinds of fish, and the "Claddagh men are rich again?" Was that true?—Yes.

45,081. (*Professor Huxley.*) We have the memorial before us. The memorial is one that was forwarded to the Lord Lieutenant, and is the one upon which an inquiry was subsequently held in September?—That is the memorial.

45,082. The passage to which Mr. Concanon refers is this:—"A striking proof of the evil effects "of that system has lately been furnished to us by a "temporary suspension of its practice. During the "20 years it has been in existence, the supply of fish "has been gradually diminishing, until of late it may "have been said to be exhausted, or more properly "speaking, scared away, so as to render all our "efforts fruitless. Owing, however, to some local "difficulties, the trawling boats have been unable, "during the last two months, to pursue their usual "avocations, the consequence of which is that the "bay is again filled with fish and all our people are "briskly employed in every direction; hunger has "fled awhile from our doors, and the country is now "more than usually supplied with the judiciously "collected wealth of the ocean." Is that the passage?—Yes.

45,083. The statement there made is, that trawling had been for two months suspended?—Yes.

45,084. (*Mr. Concanon.*) Do you recollect that the great shopkeepers of Galway signed that memorial?—No, I do not.

45,085. Did the merchants sign it?—I believe they did on the Galway side.

45,086. Did the magistrates sign it?—I believe they did.

45,087. Do you believe that they would sign a document going to the Lord Lieutenant without first ascertaining whether what was contained in that document was correct?—All I know is, that before the trawlers gave up we went out with our boats after the herrings, and we stopped there for two or three days fishing, and we had to come back with only six hake.

45,088. When was that?—Before the trawlers were stopped.

45,089. How many days was it that you went out afterwards when you got the bay full of them?—We thought that we should die of hunger, and then we went to the trawlers and told them that they would ruin us altogether if they went on fishing. We asked them for the sake of God to stop until we could see if the bay would come better.

45,090. Did they stop for the sake of God?—They were stopped by fright, because we were powerful and we were prepared to fight for it. We could not stand it, in point of fact. There was a boat of mine at Barna. I should say, however, that a week after we had seen the herrings we fished for them, and then two of the trawlers went out. The week before they went out, there was a boat of mine at Barna which killed 18 dozen of hake, and most of the other boats did the same. They also killed from 200 to 300 whiting. The boats went out for hake. The last week they got plenty and then these two trawlers went out. The next week we went out again to fish, and we could get none. I do not know what was the reason of it, unless it was the trawlers.

45,091. (*Professor Huxley.*) Was it before the trawling was stopped at all that you got a considerable quantity of hake?—Yes, but before they were stopped we had to go out for herrings and got no fish. The biggest of the boats only caught three or four hake, and plenty of them got none.

45,092. (*Mr. Concanon.*) How soon was it after you could get none, and after the trawling was stopped that you got so many?—Three or four weeks after.

45,093. Do you mean to tell the Commissioners that the great ocean was then filled, and that they grew in a month?—They came in.

45,094. Did they come in from the deep?—Yes. When the trawlers are working on the ground the fish are disturbed by the working of the trawl and they go away. That is my opinion.

45,095. Then you think that the great take of fish you had afterwards came in from the deep ocean?—Yes, from the islands of Arran, or from some other place.

45,096. Had you a great take of herrings then?—We had one week.

45,097. Had you a great take of hake?—I did not go fishing at all, but my boat was fishing.

45,098. What kind of fish was it that was caught?—Whiting and hake.

45,099. Did you ever see the bay as full of fish?—They had time then to come in.

45,100. They had time to come from the deep sea?—Yes.

45,101. All I will ask you is, whether when you sent that memorial it was true that the bay was full of fish?—It was true at that time, but the fish fell off when the trawlers went out.

45,102. Would there be danger in one of the trawlers attempting to go out now?—If we were to take away your bread and your dinner from you and keep you for ten days without anything, I would engage that you would watch us very hard, and not let us take it away again. It is the same thing with us.

45,103. Would you not allow the trawlers to work?—We would not, if they do injury to us.

45,104. Would their working hurt you?—Yes.

45,105. Would you allow them to work until the law has settled with you?—Certainly not.

45,106. In the beginning of the season, or at any other time, dare the Barna, the Renville, or the county Clare men go to fish for herrings unless the Claddagh men allow them?—There are about 1,000 boats fishing in the bay. Upon the appearance of a bad night, if we were to go out, we might lose our craft, and if we were in danger of anything of that sort we stop them and allow them to fish the next night. Then, again, if we saw a shoal of herrings outside, in a place we considered that they ought not to be fished, and other boats were going out to fish them, we should ask them to stop until the next night, and so all the fish would have an opportunity of coming in, and then when we went all out together we could take more of them.

45,107. For the last 25 years has it not been Claddagh law to run at any boats that go out before the time fixed by the Claddagh fishermen,—has that not been Claddagh law for the last 25 years?—Yes, it has been in the way I have mentioned, namely, when other boats wanted to go out upon a bad night, and when there was a shoal of herrings outside, and they wished to fish in a place which we considered it not fit to fish in. We say that we gain more by allowing the fish to come inside than by going after them outside. That is the reason we have interfered. We have nothing at all to live by but the bay, and we want to make as much as we can out of it. We wish to live by it, and guard it as well as we can.

45,108. Can you say, of your own knowledge, whether it has been known to the gentry and magistrates, and generally to the people of Galway, that the Claddagh law, for the last 20 or 25 years has been to run down any boats attempting to fish without your approval? Have you run at boats which have been fishing out there, without first having obtained liberty from the Claddagh men to do so?—If we want anybody to speak to our character, we can find plenty here in Galway who will do it, and everywhere else.

45,109. (*Professor Huxley.*) Is it the law of the Claddagh fishermen, that fishermen from other places shall not go out before a certain time, when the other fishermen have all agreed to go out?—That is the

law. As I said before, if we see a shoal of herrings outside, we don't want these countrymen to go out after them until we can get them inside, and all of us take advantage of the fish.

45,110. Have you a law among yourselves, that one man shall not go out to fish before the others are ready to go out?—No, indeed.

45,111. Is there a general agreement among you?—No, but if some of them were not ready to-night then we would wait for one or two nights, until we would all be ready to go out fishing together.

45,112. Then it is an agreement or custom among you that all of you shall wait until everybody is ready before you commence fishing?—That was the way long before this, but it is not so now.

45,113. Was it the pratice 20 or 25 years ago?—Yes, it was.

45,114. How long has it ceased to be the practice?—Since trawling commenced.

45,115. (*Mr. Concanon.*) Is it a law in Claddagh that the fishermen there are not to allow the Renville, Barna, or County Clare, or any other men to go out unless the Claddagh men are ready to go out themselves?—There is no law upon the subject, but if there happens to be a bad night for fishing, we do not allow them to go out after the fish. That would destroy our fishing.

45,116. How would you stop them?—We should go to them.

45,117. But if they said they would go on fishing in spite of you, what would you do to them?—I don't know. I never was there when a case of that kind occurred.

45,118. Did they ever go out to fish without the Claddagh men being prepared to go out too?—Yes, they went last night, and we were not there.

45,119. Was it unknown to you that they were out fishing at the time?—I don't know whether it was or not.

45,120. You did not go out last night?—No.

45,121. Were you advised not to go out because the bay was full of herrings, or were you kept to be examined here to-day; did anything of that kind occur?—No, we did not go out because we did not know that there were any herrings in the bay.

45,122. (*Professor Huxley.*) You have been a fisherman for the last 30 years you say?—Yes.

45,123. You heard what the previous witness stated with regard to the number of boats here?—Yes.

45,124. Do you recollect the time of the famine?—Yes.

45,125. Was there that number of boats the year before the famine?—I believe there were as many boats then.

45,126. Then the number had not fallen off before that time?—The year of the famine was a very good year for us.

45,127. In what way?—Because we had a great time for the fishing.

45,128. Had you a good fishing?—Yes.

45,129. Could you get as good a price for your fish during the famine year as you could previously?—I remember that we could get from 9*s.* to 11*s.* for a dozen pollack.

45,130. Is that a good price?—It is a fine price, indeed; the highest I ever saw.

45,131. Could you sell your herrings as well in the famine year as you could in other years?—No, we sold them for 6*s.* a thousand.

45,132. Do you remember whether there were plenty of herrings then?—Yes, there was.

44,133. That was in the year 1846; there were plenty of herrings at that time?—Yes, and for two years.

45,134. But there was not as good a market for them as usual?—No, there was not.

45,135. Were you, the Claddagh men, as well off as you had been before,—during the famine year and the year afterwards, were you as well off as you usually were?—Some of us were. The men who had large property were as well off, but the pooa men had nothing, and many of them had great families to keep. The markets were very dear, and it was a very hard struggle for living. The famine let some of them down very much.

45,136. How many people were there among the Claddagh men who had property?—There were hundreds of them who had a good property at one time.

45,137. Were there hundreds of them who had property of their own?—Yes, many of them owned from one to three boats.

45,138–41. Do you remember Claddagh as long as 30 years ago?—Yes. I was young then, but I know it was better then than it has been since.

45,142. How were the people off then in Claddagh?—Every man in Claddagh at that time could put a good suit of clothes on his back, or a shilling or half a crown or a pound in his pocket, where now they are not able to get hold of a halfpenny.

45,143. At that time were the Claddagh fishermen in debt? Did they owe money?—Some of them did, and others did not, because they used to sell their boats and get to their credit 20*l.* or 40*l.* Most of them would not be able to raise a halfpenny in the same way to-day.

45,144. Do you recollect an inquiry which was made in the year 1836, not quite 30 years ago?—No, I do not.

45,145. You must have been more than 20 years of age?—Yes, but I did not pay much attention to what took place in the town at that time.

45,146. But you were earning your living when you were 20 years of age?—Yes, I was.

45,147. You were a fishermen then?—Yes, but when I came home then I used to have a shilling to go with to the public-house and drink some spirits, and then I cared for nothing. There were many besides me who did the same thing.

45,148. But have you any recollection of the condition of the fishermen at that time? You have told us that they were well off?—Yes, they were.

45,149. At the time we are speaking of there was an inquiry held at this place, and the minutes of that inquiry are all published. I turn to one particular part of the report, and I find this statement—"The "Claddagh fishermen are for the most part very poor. "Before the late winter fishery commenced the "majority of them had their nets in pawn, and many "were obliged not only to pawn their gear but the "cabin furniture, and even the iron vessels in which "they prepared their food." That is a passage from the evidence of the Rev. Mr. O'Donnell, and is contained in the official report of the inquiry which took place in the year 1836. I find it very difficult to reconcile that statement with what you are now telling us with regard to the fishermen being so well off.—At that time they used to go fishing in the winter time, and they would often go to the shopkeepers of Galway for assistance. They were not in the habit of keeping much money in their possession, but they had boats and property, although they had no money. Then whatever they asked from the shopkeepers of Galway they could easily get.

45,150. Here is a statement from another witness, Mr. Macdonnell,—"Although the Claddagh fishermen "are industrious, they are poor most of them, and the "greater part of their gear is in pawn until required "for the fishery. Then, if money cannot otherwise "be obtained, they pawn the whole of the gear an "realize what they require." Another witness, Mr. Halloran, states that—"Before the winter fishery "commenced this year the large majority of them "had their nets in pawn, and they were in debt to "me 1,200*l.* for rope and material." These are extracts from the printed evidence before us, and it is difficult to understand how it is that your recollection of what the state of the circumstances of the fishermen was at the very same time enables you say that they were exceedingly well off and prosperous.—

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We had much larger boats then, and we had six hands in each boat, and whenever we got short of gear then we use to go to the pawn office and take it out of that.

45,151. Was that the custom then?—Yes, but ever since trawling has been carried on here we have not been able to support ourselves.

45,152. Then, in point of fact, the boats were not altogether your own property then?—Yes, they were our own property.

45,153. But I understand you to say that you had no gear to work them?—We had gear, but about harvest time the fishermen were in the habit of leaving their spilliards and gear in the pawn office, and taking them out again when they required them to fish.

45,154. The statement here is, that when you went fishing your gear was in pawn?—Yes, part of it was.

45,155. Was that the case with the majority of the fishermen?—Some of them would, no doubt, put their gear in the pawn office.

45,156. I suppose you pawned it because you wanted money?—Some of them had very little money, but still they could get enough to eat.

45,157. People who are very flourishing and well off do not generally pawn their goods?—They were not well off, but some of them had property of their own.

45,158. But the people who had good property surely did not pawn the iron vessels which they used in cooking their food?—They did not.

45,159. The statement in this evidence is that the majority did?—They did not.

45,160. Then you do not agree with that statement?—No. There were at that time from 700 to 800 people engaged in the fishing, and they could not all be rich together. Perhaps there may have been 100 of them rich and well off.

45,161. The statement here applies to the majority of the fishermen?—I do not doubt that some of them were poor. They could not all be rich together. Now, at the present time, there are no rich at all; they are all in one line now.

45,162. (*Mr. Lefevre.*) Do you think that at that time fish were more plentiful than they are now?—Yes.

45,163. Were all kinds of fish more plentiful?—Yes, every kind of fish.

45,164. Were turbot more plentiful than they are now?—Yes; we used to be able to catch with our spilliards from 30 to 40 turbot.

45,165. How many haddock and sole?—From 500 to 600 haddock.

45,166. How many soles?—We never caught many soles at all. Some of the small boats used to fish for soles, but I did not.

45,167. I will read to you what was stated in that year about turbot, haddock, and soles—"Turbot are "not abundant in any part of the bay, except the "sound."—That would be since trawling began.

45,168. No, it was in the year 1836—"Haddock "and sole are scarce in the bay, and cod and ling are "not in sufficient quantities for the curers." Do you agree with that statement?—That might be the case in one year or so, but not regularly It might be the case that some part of the year there was no fish, but throughout all the year it would not be so. We were sure to have the fish in some part of the year, but now they appear to have been beaten out altogether.

45,169. Then you think this statement might be true with regard to one year, but not with regard to any number of years?—There are a great deal of fish sometimes, and very little at others. I think there were 100 fishermen who might be considered rich, while the rest of them were poor.

45,170. At what time of the year does your herring season begin?—About this time of the year.

45,171. Have you any particular day on which you go out after the herrings?—We used to begin to fish on a particular night, and when that night came, if there were no herrings in the bay, we used to wait for them. We did not go out to try for the herrings until we saw them.

45,172. Is there any custom or law among the Claddagh men that you are not to go out fishing before a certain day of the year?—No.

45,173. Do you recollect there ever being such a law in existence?—Not in my time; but I have been told that there was before then. The fishermen were better off then than they are now.

45,174. Can you tell me when that rule was done away with?—As soon as the trawling came on, because then every man was obliged to do the best he could for himself.

45,175. Have you ever known fishermen from other parts of the bay begin the herring season before you did?—Yes, many a time.

45,176. And take a large quantity of herrings?—Yes, they began at Greatman's Bay before we did.

45,177. Was that because some of the Claddagh men were not ready to go out?—Some years ago we used to do that, but now every man does the best he can for himself.

45,178. How long was it that you worked you trawl?—For about three years.

45,179. Do you recollect what it cost you to set up a trawl net?—It cost me about 30*l.*

45,180. Were you helped by anybody to do that?—I was, but I could have done it myself.

45,181. You got some assistance?—Yes, from Mr. Ford.

45,182. How many trawls were there set up then by the Claddagh men?—Five.

45,183. Were the owners of those five trawls all assisted by gentlemen in the town?—They gave them the trawls.

45,184. When you gave up trawling, was it because the trawl net was worn out?—No, I have it yet, but I have no cable. I had to sell my boat. It was worth 40*l.* I sold it for 27*l.*

45,185. When you began trawling, did you trawl within the limits?—I very often trawled inside the limits.

45,186. Did anybody try to prevent you fishing within the limits?—No, they did not, but I did not care for them. I worked day and night.

45,187. Did you fish in the day-time within the limits?—Yes.

45,188. Nobody tried to prevent you?—No, we were a good deal stronger than they were, and we did not mind them. They had only small boats for fishing, the larger boats were trawling. The small boats were not able to go out in the winter time, and they did not wish to go against us because we had large boats.

45,189. All the time you were trawling, you were allowed to fish within the limits?—Yes, we were; there was no one to speak to us.

45,190. Was that the case with all the trawlers belonging to the Claddagh men?—I believe so.

45,191. Was the large class of trawlers prevented from coming within the limits?—I did see them coming in, but I think I only saw two of them coming within.

45,192. How many of the larger class of boats were fishing when you began trawling?—There were only four of them at first, but they began to increase till they came up to forty.

45,193. Were there as many as 40 trawlers?—Yes, as far as my opinion goes. I think there were 40 big boats and large hookers.

45,194. All engaged in trawling?—Yes, but they were only trawling for one season.

45,194*a*. Then they were obliged to give it up?—Yes.

45,195. With regard to the larger class of trawling boats, like those of Mr. Sweeney, how many were there of them at that time?—There were about 16 of them at that time.

45,196. They have gradually fallen off in number until there are now only about eight?—They were

Dublin trawlers; they worked in the bay, and they used to go home. When the boats of Mr. Sweency were trawling here, they got a great deal of hake, because the trawl was so big.

45,197. Do I understand you to say that there were only eight of the larger class of trawlers belonging to the bay, and that the others came from Dublin and a distance? Was that so?—I believe there were only four or five boats belonging to Galway, and that the others came from other places to this part,—from Dingle, from Dublin, and other places.

45,198. Since you gave up trawling, do you make as much money as you did when you were trawling?—I do not, because the fishing has been going down since then. I had to sell my boat for 27*l*. I then got a bit of old oak to build a boat, but that oak is now rotting on the quay.

45,199. When did you sell your boat?—Five years ago.

45,200. Did you give up trawling because you had to sell your boat?—No, I would not have sold it at all, only I had nothing to do with it here. She would not keep herself up at all, neither boat, rigging, nor cables.

45,201. Since you left off trawling, have you made as much money by fishing as you did when you were trawling?—I was only trawling for three years. I could not make much, because I was only trawling for so limited a period.

45,202. You have given it up for eight years?—Yes. I have made as much in one night by my hooker as I did in three years by trawling.

45,203. When was that?—It was when we got the herrings, before the trawling came in.

45,204. Before the trawling?—Yes.

45,205. Not since?—No.

45,206. With regard to the taking of small fish, do you agree with O'Flaherty, that you only take a great quantity of small fish in the month of June?—I don't know anything about him, but my own hooker used to take as much as two hundredweight of small fish. They were of no use to me, only fit for little boys. I used to bring them to market, but I could only get from 6*d*. to 9*d*. for them in the market.

45,207. What time of the year did you catch small fish in the greatest quantities?—At this time of the year.

45,208. In the latter part of August and September?—Yes; but we generally get them from the first day we commence fishing. I take them every night, from St. John's Day up to Christmas.

45,209. Is there any part of the bay where you think you would catch more small fish than another?—There was at the northward side. That was where we got most small fish. We have often taken a great deal of lobsters there in the winter time.

45,210. Were you fishing close in-shore?—We were fishing about half a mile from land.

45,211. In what depth of water?—In from 15 to 19 fathoms, and from that up to 24 fathoms.

45,212. Did you ever take any small herrings in your trawl?—No, I did not.

45,213. Or any small cod?—I may have taken small cod, but not much of it. I was not fishing outside then, but inside, and we only got a little cod. My gear was not heavy enough for fishing outside.

45,214. How long does the herring season generally last in this bay?—From this time to Christmas.

45,215. If trawling was stopped altogether for a certain number of months in the year, would that suit you?—I don't know. If the trawlers stopped for some time, when they began again they would destroy the small fish, so that that would be of no use at all. If they do not go outside the islands of Arran, it would be of no use stopping trawling for a time, because at soon as they began again they would destroy the beds of the fish inside.

45,216. Do you think the trawlers do you any injury by trawling in the months of January, February, March, and April?—We say they do.

45,217. What injury do they do?—When we are fishing with the long-lines, these trawlers come over our spilliards, and break them and drag them away.

45,218. (*Professor Huxley.*) Do you recollect the time when the Claddagh men had lines from the Fishery Board?—No, I do not. I was for something like four years surveying in the bay, with Captain Bedford.

45,219. Are you aware that the Claddagh men borrowed money from the Fishery Board, for the purpose of buying boats and getting gear?—I don't recollect it.

45,220. You never heard of it?—No.

45,221. Did I understand you to say, a short time ago, that the people of the Claddagh were not much worse for the famine?—Yes.

45,222. Then it did not do them much harm?—It did not do them as much harm as it did to the country people.

45,223. Without comparing them with the country people, did it do them much harm themselves?—To those who had families it did harm, because the markets were so high, and unless they had money they would not be able to support themselves and their families. But other men, who had property and not large families to support, did not suffer much.

45,224. The year of the famine and the year after that, were there a great many people suffering from poverty in the Claddagh?—Yes, there were many hundreds.

45,225. Was the greater portion of them suffering in that way?—I am sure that a great number of them suffered. There were 700 or 800 people there, and some of them must have been poor. They could not be rich all together.

45,226. Had that anything to do with their parting with their boats?—No. Perhaps there would be three, four, or five who would have shares in a small boat, and some one would buy up the shares.

45,227. When did the number of boats begin to diminish in the Claddagh? When did the people first begin to part with their boats?—From eight years downwards, perhaps from nine years downwards.

45,228. How many years is it since trawling began to be practised here largely?—I cannot recollect that.

45,229. There was a byelaw passed by the Fishery Board in the year 1843, altogether prohibiting trawling within a line drawn from Barna Pier to Gleninagh Castle; do you recollect that?—Yes.

45,230. That was before the famine?—Yes.

45,231. What made the Fishery Board pass that regulation?—Mr. Pierce was trawling here then, and those limits were laid down.

45,232. How many vessels had he here?—Only one.

45,233. Did that one vessel alarm the fishermen?—It did not do them much harm, because he was only trawling for a month or two.

45,234. Did that one boat frighten the Claddagh fishermen, and make them think that the fish were going to be taken away from them?—It did.

45,235. In consequence of that, did they apply for the interference of the Fishery Board?—I believe they did.

45,236. Then was the regulation of those limits established in consequence of an application they made?—I don't know; I am not sure.

45,237. Did you take any part in the petition yourself,—were you one of those who joined in applying to the Fishery Board?—No, I was not.

45,238. Do you know anybody who did?—No.

45,239. Did trawling cease after that regulation was made,—did they leave off trawling?—Yes, some of them did; Mr. Pierce left it off.

45,240. Were there no vessels trawling in the bay for some years after that?—I don't know how many years after that. It was when Mr. Smith came, and Mr. D'Arcy was also trawling here for a short time; he only trawled here once.

45,241. It was not until 12 years ago that there was any considerable trawling?—It is about 12 years ago that they began to destroy the bay with trawling.

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45,242. Were you working a trawl at the time the trawl-boats were prohibited from trawling inside the limits?—Yes.

45,243. You were not allowed to fish inside the line laid down by the Fishery Board when you were trawling?—Yes, I was; I fished inside the line.

45,244. Did you fish inside the line before it was fixed?—Yes, and afterwards as well. I don't think I was trawling at all before.

45,245. You did not trouble yourself much about the line?—No.

45,246. Do you think that other people did?—I believe that some of them did.

45,247. But a good many boats fished inside?—Yes, a whole lot of them fished inside.

45,248. So that that law was not observed?—No.

45,249. What year was it when there was the greatest number of trawlers,—the 40 you spoke of?—I cannot tell.

45,250. Was it during the time you were trawling?—No, it was after that. There were only four trawling when I was trawling.

45,251. Before the famine were there no trawlers on the coast at all?—No.

The witness withdrew.

A. O'Flaherty.

ANTHONY O'FLAHERTY called and examined.

45,252. (*Mr. Regan.*) I believe that you are in the Coastguard service?—Yes.

45,253. You are chief boatman?—I am chief boatman in charge.

45,254. Am I right in saying that you are a native of Arran?—Yes.

45,255. How long have you been in the Coastguard service?—33 years; or between 33 and 34.

45,256. Where are you stationed now?—At Barna.

45,257. How many years have you been stationed there?—Eight years.

45,258. Do you recollect when trawling was first commenced in the Bay of Galway?—I do recollect when it was commenced on a large scale.

45,259. How many years ago is that?—About 12 years or thereabouts, between 11 and 12. There had been some trawling previous to that, but it was not on an extensive scale.

45,260. Do you recollect Mr. Stopford being here?—Yes, Mr. Stopford, of the Irish Fisheries Company, commenced the trawling here.

45,261. What had you to do then?—I was appointed by the Irish Commission of Fisheries to take an account of the quantity of fish caught off and on for about three months.

45,262. You did go out with them?—Yes, with one of the Irish Fisheries Company's trawlers.

45,263. What was the condition of the fishery in the Bay of Galway previous to the commencement of trawling, and what did you do yourself?—All I did was to take an account of the marketable fish that were caught, and also a rough estimate of the coarse and small fish. I saw all the marketable fish counted into the fish hampers before they were sent away by rail to Dublin, but the small fish being thrown overboard I calculated only by guess work.

45,264. While you were on board those boats, did you see any small fish taken?—I saw large quantities of small young fish taken, that were unmarketable and unsaleable.

45,265. What did you see done with it?—It was thrown overboard again.

45,266. Was it dead or alive when it was thrown overboard?—Principally dead. I think I may say that it was the same as dead.

45,267. Now previous to the trawlers coming here, 13 or 14 years ago, what was the condition of the fishery here, was it good or bad?—It was generally good.

45,268. What description of fish did they catch here?—It was according to the season of the year. They used to catch grey gurnards in the summer time, mackerel in the summer time, bream in the fall of the year, in the harvest, and herrings, and in the winter the codfish and ling would come in. Every fish that comes in, they would catch in its own season.

45,269. What was the condition of the fisheries; was it good or bad?—Sometimes there was a partial decrease, but at other seasons there was a good fishing.

45,270. Twenty-four years ago was the fishing good?—Yes.

45,271. Can you recollect 28 years ago?—Yes, and longer than that.

45,272. Can you recollect the large quantities of fish there used to be in Galway then?—I can.

45,273. Have you ever seen one-fourth of that quantity since the trawling commenced?—I have not.

45,274. Have you ever heard of a good fishery since the trawling commenced?—Not as good as it was previous to its commencement.

45,275. Was it ever one-fourth as good?—I cannot say whether it was one-fourth as good or not.

45,276. Do you recollect when the trawlers gave up here, eight or nine months ago?—I do.

45,277. Has the fishery improved since?—The fishery has improved recently, certainly.

45,278. Is that since the trawlers gave up?—Yes.

45,279. And from your experience do you consider that trawling in the Bay of Galway has been injurious to the fisheries?—I do consider that it has been injurious.

45,280. From the islands of Arran to the light-house here, do you consider that the bay is a spawning bay?—I cannot say exactly, but I believe it is. I cannot say from experience that it is, but that is my opinion.

45,281. If trawling were prohibited inside the islands of Arran, would the fisheries, to the best of your belief, revive and be better, or as good as ever they were?—It is my belief, that the fisheries would prove more profitable if trawling were prohibited inside the islands of Arran.

45,282. Could not trawling be safely carried on outside the islands of Arran?—It could be in fine weather.

45,283. Do you know the boats Mr. Sweeney has?—Yes, I have seen them.

45,284. In how many fathoms of water could they fish?—I cannot say exactly, but I dare say they could fish in from 40 up to 50 fathoms of water.

45,285. How many fathoms of water are there outside the islands?—40 fathoms in some places, and in others perhaps 50 fathoms.

45,286. Are there any places where there are only 30 fathoms of water?—I do not know.

45,287. But they could safely fish there?—I think they could in fine summer weather.

45,288. That is from May to October?—Not always; sometimes they could and sometimes they could not.

45,289. But generally speaking they could?—Yes.

45,290. You have known the Claddagh people a long time?—Yes.

45,291. What is the general character of those men, are they peaceable and quiet?—I believe them to be a very quiet and peaceable people.

45,292. And honest?—And honest.

45,293. Are they very industrious?—Indeed they are.

45,294. In what state was the village of Claddagh twenty years ago?—The people generally were well clothed, and their houses were nice and clean, and comfortable to look at. Twenty-two years ago I was stationed at Fairhill, and I remained there from 1842 till 1856. I became intimately acquainted with them at that time, as I went through the village of Claddagh every day. I was also frequently down about the quays, as my duty called me there very often, and I, consequently, became very well acquainted with them.

45,295. And you are able to say that they were most comfortable?—They were, indeed.

45,296. Do you recollect the class of boats they used in fishing at that time?—Of course I do.

45,297. Were they large lighters or small?—They were not large lighters, but they were hookers of from 10 to 12 and 13 tons. They had small boats also. There were a great many large hookers, which have nearly all disappeared now.

45,298. Were there a great number of the small boats?—There were a great number of small boats even then.

45,299. In what state are the Claddagh people now?—They appear to be wretchedly poor.

45,300. Can you form any idea whether there are half the number in the Claddagh now or not?—I declare there are not more than half, as compared with what there were in it when I was first acquainted with the Claddagh.

45,301. When did you go through the village last?—I have not been there regularly for four or five years, but I have been to the village.

45,302. Their houses are not in the same state as they were in those days?—No, they are quite different altogether.

45,303. They are in a wretched state now?—Apparently so.

45,304. Now do you think that their condition would improve if the system of trawling in the Bay of Galway was done away with?—I daresay it would.

45,305. Do you consider that trawling is injurious to the fishing?—I do. I consider that the hand-line fishermen and the trawling men cannot live in the same locality; that the hand-line fishermen will be done away with altogether if trawling is allowed to be carried on extensively in the Bay of Galway.

45,306. Since they first commenced, about 12 or 13 years ago, has the trawling improved or gone worse?—I do not know; I am no judge of it, because I do not see what fish they catch now.

45,307. Are you now stationed at Barna?—Yes.

45,308. What distance is that from Galway?—Four miles.

45,309. Were there a great number of fishermen at Barna when you first went there?—There were.

45,310. How many were there?—I dare say there might have been 100 fishermen—from 80 to 100.

45,311. How many boats had they?—I think there were somewhere about 20 boats, but I cannot state distinctly.

45,312. How many are there now?—Four.

45,313. How many fishermen are there now?—I suppose in the hookers there are not more than a dozen now.

45,314. What has been, to the best of your belief, the cause of this falling off in the boats and fishermen at Barna?—I believe that part of the decline of the Barna fishermen was owing to evictions and to their being turned out of their little cottages there. They were obliged to shift for themselves somewhere else.

45,315. What is the other part of it owing to?—To the decline of the fishing in the bay.

45,316. Occasioned by the trawlers?—Certainly.

45,317. Did you know any persons in Barna who were trawlers,—did you know Mr. Hickey?—Yes but he has been trawling there since I went away.

45,318. Did he give it up?—Yes. There were a great number of the Claddagh fishermen who trawled for a few months, but they found that it was unprofitable, and they had to give it up.

45,319. I believe that Mr. Hickey is a wealthy man, and could carry it on?—He could, if he found it profitable.

45,320. But not finding it profitable he gave it up?—He did.

45,321. (*Mr. Concanon.*) You were appointed in 1852 by the Government to go on board the "Druid"?—I was.

45,322. Did you give a true report in the journal you furnished on that occasion?—I did, to the best of my knowledge.

45,323. Was this passage contained in your report, or something very near it, at page 19: "The 8th of "July 1852 was the first day I went out. The wind "was light and west. The steam sloop-of-war 'Geyser,' "Captain Hinde, was in the roadstead." Do you remember that?—Yes.

45,324. "Forty-eight pair of soles, two turbot, one "brill, and some rough fish, as hake, gurnards, and "plaice and crabs were taken in the trawl." Was that correct?—It was correct.

45,325. "The 'Druid' was threatened by Claddagh "men in hooker No. 32"?—I never made that report.

45,326. That is not your report?—No.

45,327. "And the Coastguard men and crew were "frightened." That was not reported by you?—No, because I was neither frightened nor threatened.

45,328. "The week ending the 17th of July, a "midshipman and three men went out in the vessel"?—That is correct.

45,329. "The 'Druid' trawled four days that week; "the take of fish was great; also for the week ending "the 24th of July; we were out five days that week "and trawled four. At 5 p.m. on the 31st July we "came to an anchor inside Black Head, and landed for "water." Do you recollect that?—Yes.

45,330. "It was refused by the natives; there was "plenty of water, but none for the vessel." Was that in your report?—No.

45,331. "For the week ending the 31st of July, we "were three days out, and had a large take of fish." Were you more than three days, and was it Mr. Tukes that gave you the information?—No; I stood by and saw the fish counted into the hampers.

43,332. Where?—On board the vessel.

45,333. Were you out with them?—Yes.

45,334. Each day?—Yes.

45,335. According to that report?—According to my own report.

45,336. Why did you not represent to the Government that all the small fish were being destroyed? or rather, did you make such a representation to the Government?—No, I did not.

45,337. Will you say why you kept back that portion which was most material, after you had been selected for the purpose of ascertaining what the damage was that was done?—I was under the impression that I was sent there to see if there was any spawn lifted by the trawl; I saw no spawn, and, therefore, I did not report any destruction of spawn.

45,338. Did you report, "no spawn found in the trawl"?—I did.

45,339. You recollect that?—Of course I do. I always said I never saw any spawn taken up.

45,340. You do not in your report?—Yes, I do.

45,341. Did you think it your duty to say, "no spawn, but thousands of small fish." You did not report that?—I do not recollect the terms in which I reported, but I recollect reporting no spawn.

45,342. You state that the Claddagh fishermen are a very peaceable, quiet people?—I do.

45,343. Dare the Barna or the Renville fishermen go out to fish for herrings until the Claddagh men go out?—I knew very well that it was the habit of the Claddagh men to prevent the countrymen from going out to fish until they went themselves.

45,344. Have you ever heard that that law of theirs has ceased?—Ceased?

45,345. Yes; that they have given it up. Could the Barna men venture to go out without the Claddagh men to fish for herrings to-morrow night?—They do not try, at all events, whether they could or not.

45,346. Do you think that the Renville men dare go out?—Well, indeed, my opinion is, that it would not be safe for them to go out unless the Claddagh men went out.

45,347. Why?—Because it is the habit of the Claddagh men to go out and prevent others from going until a certain season, when they consider that the fish are fairly in the bay.

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45,348. (*Professor Huxley.*) Is that their habit still?—I am not aware whether it has been for the last five or six years, but I know that it was their habit.

45,349. (*Mr. Concanon.*) Do you know whether that habit has changed?—I do not know.

45,350. How long is it since you came to Barna station?—Eight years.

45,351. And the great character which the Claddagh men enjoyed, did they enjoy before or since that time?—Before then.

45,352. Where were you stationed before Barna?—At Fairhill, near Galway.

45,353. How long were you there?—Fourteen years.

45,354. For the last eight years, you say, you have often landed in your boat, coming from Galway?—I am not aware that I said that at all.

45,355. Were you ever assaulted?—Yes, I was.

45,356. By the Claddagh men?—No, I never was assaulted by them.

45,357. Is that the reason you think them peaceable? I want you, as you are in Her Majesty's employment, to tell the truth?—To the best of my knowledge, I will.

45,358. Are you aware that some of them the other day attacked and nearly killed a man?—I heard so.

45,359. Do you account that peaceable?—I know that there are outbreaks occasionally in different parts of the country as well as there.

45,360. Then you still say they are peaceable?—From their general habits I consider them peaceable.

45,361. Are you aware of a vessel nine months ago being obliged to shut up before the inquiry in December last?—I have heard of it.

45,362. Did a gunboat come round here?—Yes.

45,363. Was that in consequence of the very peaceable habits of the Claddagh men at Galway?—There is no doubt that the inhabitants of the Claddagh may be roused as well as other people, when they consider that their interests are at stake.

45,364. Do you think it was a proper mode in which to show that they were roused to fix upon this one unfortunate trawler? Was that a case in which they might be considered to be fairly roused?—I am not accountable for their proceedings.

45,365. You have given them a character, and I want to know why it is you have given it to them?—I have given it to them from their general character and habits.

45,366. (*Professor Huxley.*) Do I apprehend you rightly when I say, that your intention is to convey the impression, that the Claddagh men in general and among themselves, and in relation to their neighbours are orderly and peaceable, but when they think their means of livelihood are likely to be interfered with, they break out?—That is exactly what I mean.

45,367. (*Mr. Concanon.*) How long is it since you have been in a trawl-boat?—Not since 1852.

45,368. Did you report that trawling was injurious to the Bay of Galway?—Yes, and I believe it is.

45,369. Then was your belief formed on the foundation that you knew nothing at all about it?—No, it was not. My reason for believing so was the large quantities of small fish that were destroyed by trawling. I think it must be naturally injurious. There were great quantities of small fish destroyed by trawling, and that would naturally tend to lessen the supply of large fish.

45,370. Did the trawl-fishing continue from 1852 down till 1856?—I believe it did.

45,371. Was it ever as well worked as from 1852 to to 1856?—I believe that was the best time it was worked.

45,372. And there were the greatest number of trawlers then?—Yes, I think so.

45,373. Were you here when the witness Griffin said that seven years ago he commenced trawling and there was never such an abundance of fish as there was then?—I did not hear his evidence.

45,374. (*Professor Huxley.*) The statement was, that he got seven times or twelve times as much fish then as he did in the last year he was trawling, but he did not state that the quantity of fish was more than had ever been got before?—I did not hear his evidence.

45,375. (*Mr. Concanon.*) You did not hear that?—No.

45,376. If you had would you have believed it, considering the great number of trawlers there were then at work?—No, I would not believe that the fishing had improved during that time at all.

45,376*a*. Do you recollect the herring-fishing in 1862?—Yes.

45,377. Was there a good take of herrings then?—It was not to be compared with the takes I recollect about 20 or 30 years ago.

45,378. Was it the best for the last 12 years?—I do not know whether it was or not.

45,379. Was there a good take?—I dare say there was a reasonable take.

45,380. Do you know Greatman's Bay?—I do.

45,381. Do they trawl there?—No.

45,382. Do you recollect the great take in Greatman's Bay, 21 years ago?—There might be a great take, or not, but I have no distinct recollection of it.

45,383. Was there trawling in Greatman's Bay then?—No.

45,384. Could the herrings go in there?—To be sure they could.

45,385. Then if they could go in, is it the trawling that keeps them out?—I do consider that, when a shoal of herrings is coming in and trawling is going on, the trawlers will frighten the shoal away.

45,386. You say that there have been about four or six boats out latterly?—I could not say how many, because I do not know.

45,387. What is the greatest number you have seen herring-fishing?—I cannot estimate the number, because they have been out by hundreds.

45,388. Have they caught and frightened a great number of fish?—They have caught a great number.

45,389. Do you think they did not frighten others?—I do not know whether they did or not; I dare say they did.

45,390. Would you think it right towards the fishermen of this country to stop them because they frightened them?—No, I would not.

45,391. Why not?—It is their only means of living.

45,392. Then would you not think it as fair to allow the trawlers to have a means of living?—I dare say it is as fair for them, but, if the matter were left to my decision, when I saw from 700 to 800 families living by one mode of fishing, and two or three by another, I would give a preference to the 700 or 800, and take steps to keep them comfortable rather than the others.

45,393. Have there been 20 trawl-boats here?—Yes, there have been 17 or 18 sometimes.

45,394. If they had no other means of living than by trawl-boats, what would you do with them?—I would let them take to hand-line fishing.

45,395. But if they had no means beyond their trawl, would you tell them to sell their trawl, and take to hand-lines?—I would.

45,396. Are you aware that, when they have fished for two or three months in one place, they go to another, and that they find the fish very plentiful?—I have observed that they fished this ground occasionally, according to the season.

45,397. Do you think that, if money was raised, and a large number of boats were fitted out, it would improve the condition of the Galway men if they were able to go to Dingle, and Cork, and Bantry, and other places,—would that benefit them?—I do not know whether it would or not.

45,398. (*Professor Huxley.*) When you were trawling, and took so much of the small fish, what was the proportion of the small fish to the full sized fish taken?—There was a greater quantity in bulk of large fish, but in number the small fish would exceed the large.

45,399. But how would it be with regard to weight or measure?—In weight or measure the large fish would immeasurably exceed the small fish.

45,400. Was there one-fifth or one-tenth part of the whole take composed of small unmarketable fish; was there one basket out of every five or ten?—There might be one in five, or perhaps more.

45,401. Under what circumstances were you sent by Government to inquire into the trawling?—One of the Commissioners of Irish Fisheries came down to Galway, and the trawling question was rather vexed at the time; the Claddagh men were very much opposed to it.

45,402. In what year was that?—In 1852. There were many of the inhabitants who thought at that time that trawling would be beneficial, and that perhaps the Claddagh men would take to it. It was under that impression that they appointed me to prepare an account of the quantities of fish taken; and if there was spawn taken, I was to take a specimen of it, and to report to the Commissioners. The whole question was then to be brought before a public Court like this, at some future period.

45,403. Was it no part of that inquiry, how much small and unsaleable fish was taken?—No.

45,404. You did not consider yourself bound to report upon that?—I did not, from the tenor of my instructions. Perhaps it may have been intended, but it was not specified.

45,405. It was not in your instructions?—No; I was instructed to report upon the quantities of large marketable fish, and to take a rough guess of the small fish, which I did also.

45,406. Then you did report the quantity of small fish also?—I gave a rough estimate of it.

45,407. I understood you to say just now that you did not do so?—You did not misunderstand me, because I did not specify that, but I did at the examination which occurred here afterwards.

45,408. (*Mr. Lefevre.*) Do you mean the examination of last year?—I mean the examination which occurred here a short time after the trial of trawling took place.

45,409. (*Professor Huxley.*) The statement with regard to the proportion of small unmarketable fish was not given in the official report?—No, it was not.

45,410. Did it not occur to you at that time that that would form a most important element in the question?—No, it did not.

45,411. Have you any means of forming a judgment as to the total quantity of fish taken by the trawl and line together when the trawling was going on?—No.

45,412. Do you think that the quantity of fish taken altogether by trawling and line-fishing during the time trawling was going on was as great as the quantity that was taken before by line-fishing alone?—I think it was greater for the first couple of years, but I think there was a falling off after the first couple of years.

45,413. Did the whole produce fall off?—Yes.

45,414. Where did the trawled fish principally go; did it come to Galway?—Yes, and from this place was sent to Dublin.

45,415. Was it sent straight on?—Yes.

45,416. It did not supply the Galway market?—Not the prime fish; the principal part of that was sent away.

45,417. So that if the quantity caught remained the same, there would have been a falling off in the Galway market?—There would.

45,418. I understand that you were intimately acquainted with the condition of the Claddagh fishermen 28 years ago?—I was, but not as intimately as 22 years ago, and from that up to eight years ago.

45,419. Still, you had a knowledge of them?—Yes, for the last 30 or 33 years.

45,420. Do you recollect the memorial being sent up?—I have heard of it, but I never read it.

45,421. There is this statement in the memorial, "It is not 20 years since ours was a large, thriving, "and happy community." As this memorial was sent up in 1863, this assertion would refer to about 1843?—Yes.

45,422. That is well within the time you say you were intimately acquainted with the people?—Yes.

45,423. The memorial says: "It is not 20 years "since ours was a large, thriving and happy com- "munity of over 4,000 souls, and the owners of 300 "stout craft, in which we fished the sea with great "profit to the country, and with advantage to ourselves. "At the present time we do not sum up 1,500 persons "nor 90 boats, and no employment is to be found even "for such diminished numbers. The want of em- "ployment, and consequent ruin, which has overtaken "us is due to the reckless system of trawling pursued "in our bay, by which the fish are not only scared "away from their usual haunts and feeding and "spawning grounds, but the spawn itself, to the extent "of many hundreds of tons weight, is annually de- "stroyed, A striking proof of the evil effects of the "system has lately been furnished to us by a temporary "suspension of its practice. During the 20 years it "has been in existence the supply of fish has been "gradually diminishing, until of late it may be said to "to have been exhausted, or, more properly speaking, "scared away so as to render all our efforts fruitless. "Owing, however, to some local difficulties the trawling "boats have been unable during the last two months "to pursue their usual avocations, the consequence of "which is that the bay has been filled with fish, and "all our people are busily employed in every direction; "hunger has fled away from our doors, and the "country is now more than usually supplied with the "judiciously collected wealth of the ocean." Do you think that that is a correct statement? Do you think that the number of people in the Claddagh has fallen off?—I know there was a falling off in the village previous to trawling. In the famine year there was a great falling off in the Claddagh.

45,424. Do you recollect the famine time?—I was in the place at that time.

45,425. You were intimately acquainted with the condition of the Claddagh during the famine?—Yes.

45,426. Had the famine much effect upon the people?—It had indeed.

45,427. Were they much impoverished?—Yes, they were.

45,428. As the result of that impoverishment, were they unable to keep up their gear and boats?—Yes, for a period.

45,429. For how many years did it affect them?—For two or three years.

45,430. Was it because the market for the fish fell off?—Probably, and because the price of other provisions was so high.

45,431. So they were cut in two ways; in the first place, they had no market for their commodities, and, in the second place, the price of provisions rose much higher?—Yes.

45,432. And the result of that was that they were greatly impoverished?—Yes.

45,433. Did a considerable portion of the population emigrate in consequence of that?—I do not think there was much emigration, but the men resorted to the workhouse for a time.

45,434. How long did that state of impoverishment last?—About two years. They gradually improved for a year or a year and a half or so, and they became pretty prosperous again.

45,435. Then from 1846 to 1850 they were in a bad condition here?—They were improving up to 1850.

45,436. But in 1846, 1847, and 1848 they would be badly off?—Yes.

45,437. Did many of them part with their boats or their gear?—Many parted with their gear, but not many with their boats, not a large proportion of them.

45,438. Do you think that the population of the Claddagh has diminished permanently in consequence of the famine?—I know that it has diminished very much. I have reason to believe that there are not

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more than half the inhabitants now that there were when I originally came to the station of Fairhill about 22 years ago.

45,439. Do you think that, supposing the famine alone had occurred, that it was sufficient to cause the falling off in the population, and the increase of the misery among the people here, or if only the famine had occurred, that they would have recovered?—They did recover after the famine.

45,440. Did they recover completely?—They did recover, and were prosperous up to 1852.

45,441. Do you think it is a correct statement to say that there were, at the time of the famine, over 4,000 souls in the Claddagh?—I cannot be a judge of the population.

45,442. You cannot say if it is correct or not?—I daresay that it is pretty nearly so.

45,443. I ask you the question because the official report of the Commission of 1836, which was only six years before, estimates the population then at 2,000?—It could not have increased so much in that short time.

45,444. That is what we want to get at. I will read the passage. It is contained in the minutes of evidence taken in 1836, and it states, "that the district of "Claddagh within the town parish of Galway, con- "tains about 2,000 persons, nearly all the families of "fishermen." That is in the official report?—I see.

45,445. It is difficult to imagine that, within six years, the population could have doubled?—It is not at all likely; but I was under the impression that there were a great many more people than that in 1836.

45,446. We give no opinion on the subject, but such is the statement of the Report?—My own impression was that the population was larger than that.

45,447. Do you recollect the condition of the people in 1836?—I do.

45,448. Did you hear some statements I read a little while ago?—I did not.

45,449. Then I will read them again.—Can you tell me at what season of the year the report of 1836 was taken?

45,450. The report does not refer to any season, but it gives the evidence of a great number of persons. —I recollect that the season of 1836 was a good season for herring-fishing in the fall of the year, in October and November. I believe there was a good fishing for herrings then.

45,451. The evidence I desire to bring before you is, in the first place, that of a clergyman of the district, the Rev. Mr. O'Donnell. Do you recollect him?—Yes.

45,452. May be taken to be a trustworthy witness?—Yes.

45,453. He says, "By the public census of the "district in 1834, the average number of persons in "each family was found to be only five, including the "parents." Do you think that was the case?—Yes.

45,454. He goes on to state, that "The Claddagh "fishermen are for the most part very poor. Before "the late fishery commenced, the majority of them "had their nets in pawn. Many were obliged, not "only to pawn their gear, but cabin furniture, and "even the iron vessels in which they prepared food." Is that in accordance with your experience of the condition of the people?—I was not acquainted as well with them in 1836 as I have been since.

45,455. But taking that to be their condition in 1836, was their prosperity so great between 1836 and 1842, that they could have acquired considerable property and been perfectly independent?—I do not think that at any time they were perfectly independent, but they had their boats well fitted and themselves well clothed.

45,456. Is it within your knowledge, that in 1842, or at a subsequent period, it was the habit of the Claddagh men to have their gear in pawn when they were not fishing?—No doubt, they always had a habit of pawning when rough weather or adverse circumstances came across them.

45,457. Have you ever known the furniture of their cabins, and the iron vessels they use for food, to be pawned?—They might have been pawned, and I not be aware of it.

45,458. Could you know as much about them as this gentleman, the priest?—No, I could not, because he went into their houses, and I did not.

45,459. Did you know Mr. Macdonnell?—No, I do not recollect him.

45,460. Mr. Macdonnell also states, "Although "the Claddagh fishers are industrious, they are poor. "The greater part of their gear is in pawn until re- "quired for a fishery, and then if it cannot otherwise "be obtained they pawn another kind of gear to release "that required." You see that this is not the statement of one witness, but of two?—Yes.

45,461. At the same time Mr. Halloran gave evidence at the inquiry. Do you know Mr. Halloran?—Yes, Mr. Thomas Halloran.

45,462. He is a rope maker?—Yes.

45,463. He stated, that before the winter fishery of each year commenced, a large majority of them had their nets in pawn, and they were in debt to him 1,200*l.* for rope and materials. From what you know of the circumstances of the Claddagh men, do you think that in six years they could have paid that 1,200*l.* of debt off?—Perhaps they never did pay it off.

45,464. Have you the means of knowing, whether in 1842 they were in debt to the same extent?—From their appearance, I should say not.

45,465. Your evidence is given from the general aspect of the place, and not from any special knowledge of the people?—No, not from any special knowledge of my own.

45,466. (*Mr. Lefevre.*) Your experience in the "Druid" occurred in 1852?—Yes.

45,467. What time of the year?—I think it was in the summer time, in July.

45,468. How many trawlers were there in 1852?—I do not recollect precisely; there might be seven or eight.

45,469. Were you aware of the report which was sent up by the Commanders of the Coastguard, with regard to the fishery?—No, except as far as concerned my own immediate station. They send up a general account.

45,470. Did you ever see the report sent up by the Commander of your own station?—No.

45,471. Is the Commander of the Coastguard here to-day?—He is not.

45,472. When did the fishery begin to decline?—It has been declining, I think, since 1855 and 1856, or even from 1854. It has been declining ever since trawling commenced largely.

45,473. From the year 1854 did the number of trawlers begin to increase?—It did.

45,474. What was the largest number of trawlers you recollect in the bay?—I never recollect more than 15 or 16 at one time. There may have been more, but I do not recollect seeing more fishing at one time.

45,475. What year was that?—I cannot precisely call to mind now.

45,476. I want particularly to be correct, because I want to refer to the reports of the Commander of the Coastguard. I will read the report made in 1854. I want to know if you agree with it. It is the report made by the Commander of the Coastguard.—"The take of fish improving very greatly since the "Claddagh men began to trawl; the take of fish more "productive; the conflicts much less frequent; the "habits of the fishermen more orderly and peaceable "since the Claddagh men have been induced to "trawl." Do you agree with that or not,—that was in 1854?—I know there have been occasional takes of fish, even since trawling commenced, which were very good, but generally it has been much falling off, although there has been a partial increase now and again.

45,477. I will go on now to the year 1855. The next report is, "Owing to the high price of hemp, the

"trawling vessels are not so well supplied with gear "this year, but in nets and lines and vessels there is "no deficiency. Last year harvest fishing was good, "and paid most of the boats pretty well, and the "fishermen are sanguine as to the hopes of the autumn "of this year, and intend going out much earlier than "usual. Those whose gear is ready do not seem in- "clined to wait as formerly for those behindhand. "The general condition may be said to be improving; "although far fewer men and boats exist, they are "better found than before. The winter fishing (round "fish) was much better than it has been for years in "this bay. The spring fishing with nets and lines "was also excellent, but no late or winter herrings in "this district. The summer fishing with long-lines "has never been, I understand, surpassed, and might "be carried out with larger vessels to an important "extent, as the canoes and yawls are in a good take "soon laden, and, of course, return home to discharge, "losing valuable time and opportunity of weather. "The incidents of conflict much less; in fact, dis- "order and fighting seem to have ceased. The habits "of the fishermen orderly and peaceable." That is up to the 1st of January 1855. Do you agree with that or not?—I cannot say exactly, but it may be the fact.

45,478. You do not think that up to that time the decrease had commenced?—Not to any large extent.

45,479. I will take now the next year, up to the 1st of January 1856. This is the report of the Commander of the Coastguard,— "The condition of the "fishermen improved. Boats and gear are generally "speaking in good order. There is a sign of im- "provement. The take of fish is more regular and "steady. The quantity of all kinds has been larger "than for years past (with the exception of herrings), "and continues so. No conflicts have taken place "this year; the trawlers have taken more turbot, "soles, &c. than formerly, and those who can trawl "wish to continue it, being convinced it is not, when "lawfully followed, injurious to the netters and line "fishers." That is the report up to the 1st of January 1856. I suppose we may take it that the decrease of fish had not then commenced?—I suppose not at that time.

45,480. Now in the year 1857, or up to the 1st of January 1858, the following report was made by the Commander of the Galway Coastguard:—"At a good "standard. This year has equalled the last, which "was very productive, save in herrings, which seem "nearly to have deserted the coast. No conflicts; "the fishermen orderly and peaceable." In the year 1858 there does not appear to have been any report at all. In 1859 there was a report, and I will read you what the Commander of the Coastguard said up to the 1st of January 1860. "The general condition of "the fishing establishment is superior to 1844 and "keeps a fair average. The take of fish somewhat "less last year. No conflicts. Fishermen orderly "and peaceable." The report of January 1861, in reference to the year 1860, says,—"A general falling "off, owing to the scarcity of fish. No sign of im- "provement. The take of fish less productive." Do you agree with those reports? I have read you those reports, and I ask you whether you can now state, from what time the commencement of the decline of the fishing took place?—I fancy the supply of fish has been greatly decreasing since 1854 and 1855.

45,481. You do not think then that it was not till 1860 that there was a decline of fish?—No.

45,482. You do not agree with that?—I do not. I think it was declining previous to that.

45,483. When did the number of trawlers begin to decline?—I think they have been declining for the last two or three years.

45,484. Take the year 1860. Can you give us the number of trawlers then at work?—I have no distinct recollection. I never thought I should be asked the question, and I have not seen them except in passing in and out of the bay. I took no particular notice.

45,485. Do you know when the small trawlers employed by the Claddagh men were given up?—I recollect well, but I do not know the time; perhaps it would be ten years ago.

45,486. One of the witnesses said he trawled for three or four years?—They did not all keep it up as long as that.

45,487. Then we may take it that in 1856 or 1857 the number of trawlers was beginning to diminish?—I think so. In 1858 they were beginning to diminish anyhow.

45,488. How are the reports of the Coastguard made up?—The Inspecting Commander makes them up.

45,489. Is it after communicating with the boatmen?—He sends a written category of questions to be answered, asking whether the fish have decreased or increased, and he makes up his report from the answers he receives.

45,490. After looking through the reports of the men below him, he makes up at the end of the year a report for the Commissioners?—Yes, he does.

45,491. Are there many other fishing villages besides Barna in the bay?—There was a fishing village at Arran. I have not been there for a good while, but I believe the fishing has declined there a good deal. I know the hookers have.

45,492. Is that inside or outside of the island?—They fish on the inside. At Killaney, in the large island, there were a good many hookers at one time, but they fish now in canoes.

45,493. Are there any outside the bay?—There are at Gleninagh, inside the bay. There are a great deal of fish there in the spring of the year.

45,494. Inside or outside the bay?—They fish both inside and outside of Black Head.

45,495. Have they found the fish falling off outside the bay?—I have heard them say they did. They complain of their lines being carried away by the trawlers.

45,496. Is there any herring fishery outside the islands of Arran?—There has been no winter herring fishery for the last 20 years.

45,497. Is there any harvest herring fishery outside?—No.

45,498. Do the fishermen all wait until the herrings come into the bay?—Sometimes they get them out in Bushin Bay, and sometimes in Greatman's Bay, and occasionally in Cashla Bay.

45,499. There is no fishery of any importance outside the bay?—No, not for harvest herrings. There used to be large takes of winter herrings outside.

45,500. Do you think that the herring fishery is the principal source of profit to the fishermen here?—Yes, I do.

45,501. Can you say in what proportion?—No.

45,502. You do not know, out of the whole earnings of the fishermen, how much the herring season reckons for?—No, I do not.

45,503. (*Professor Huxley.*) We have before us the report of the Fishery Commissioners, who sat here in 1863, before whom you attended as a witness, and the notes of the evidence given by the different witnesses. In your evidence I find this passage:—"In 1856 and 1857 there were 26 boats in "Barna. There is not more than one-fourth of that "number there now, and the decrease has been both "in size and number." I understood you to say, in the course of your examination, that that decrease was due, in some extent, to evictions. Was that the case?—I think it was, in a certain proportion.

45,504. To how great an extent, do you suppose? Were there five or ten boats that were given up in consequence of evictions?—I think both causes operated together, but I could not say how many are due to evictions, or how many to the falling off in the fishing. I think both causes operated in lessening the number of fishermen.

45,505. Was it for the nonpayment of rent that they were evicted?—No.

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45,506. What reason was it then?—For the purpose of changing and improving the aspect of the place.

45,507. At any rate, you entertain no doubt whatever that eviction had to do with the diminution?—I think it tended partly towards the diminution.

45,508. Do you not think it would have been well if you had stated that to the Commissioners here? There is not the smallest mention of evictions in this evidence.—Nobody asked me anything about it.

45,509. Your previous answer is this: "I attribute "the decrease in the supply of fish to the decay of "everything connected with the fishing,—to trawling, "which must deteriorate the fishing, by destroying "such vast numbers of small fish."—That was my opinion in general,

45,510. Then you go on to say, "In 1856 and "1857 there were 26 boats in Barna. There is "not more than one-fourth of that number there "now, and the decrease has been both in size and "number." The clear implication to anybody hearing that evidence would be that that number had fallen off in consequence of trawling, whereas you tell us now a large share of that decrease was due to evictions?—I should not say a large share.

45,511. But a portion of it?—Yes.

45,512. As an intelligent man, you must have been aware that it was as proper to explain to the Commissioners then as it is to us now, that something else beside trawling had been concerned in producing the decrease?—My general impression was that I was giving evidence as to the general effect of trawling in Barna, Claddagh, and other places.

45,513. (*Mr. Lefevre.*) When you speak of the decline of fish, do you allude principally to the decrease of herrings or of other fish?—Of all kinds of fish.

45,514. Do you refer also to trawl-caught fish,—plaice and soles?—I have had no opportunity of judging of that; but I speak more particularly with regard to the fish generally caught by the hand-line fishermen, when I say there has been a decrease.

45,515. What is the general rate of wages for labourers in this part?—I cannot say what the rate of labour is; I never employed anybody myself, and there are very few people employed in the locality.

45,516. Is there much employment for the fishermen here in collecting sea-weed?—Yes; they generally spend all the spring of the year in collecting sea-weed. There are very few fish in March, April, and May, and then they employ their time in cutting sea-weed and selling it.

45,517. The herring season occupies them about three months in the year?—About three months.

45,518. And the collecting of sea-weed another three months in the year?—Yes.

45,519. And line-fishing the remainder?—Yes.

45,520. Has there been any falling off in the sea-weed lately?—I am told there is a falling off in the price of it, but not in the supply.

45,521. Do you think the fishermen make as much by it now as they did?—I think they make more of it than they would by fishing.

45,522. Do they make as much profit from it as they used to do?—I do not think they have made as much for the last season as they used to do, because the price was higher in previous seasons; the sea-weed was dear.

The witness withdrew.

Rev. P. Daly.

The Rev. Peter Daly called and examined.

45,523. (*Professor Huxley.*) Have you been long a resident in Galway?—Yes, upwards of 50 years.

45,524. You have been, I believe, officially connected with the place as a minister of religion?—Yes, in this town, but not in the Claddagh.

45,525. Have you taken an interest in the condition of the Claddagh people?—I naturally take an interest in the poor, and especially an interest in them, because they were a peculiar colony, and were of great and vast advantage to the general public.

45,526. Then during the last half century you have paid a good deal of attention to their interests and prospects?—As far as a general interest in their prosperity or adversity as it arose is concerned.

45,527. Do you recollect pretty clearly what was the condition of the people 28 years ago,—about the year 1836?—I have a general recollection of their whole condition for the last 50 years at least, and probably more.

45,528. Were you present when I read extracts from the report of a Commission which sat here in 1836?—I was in Court for a few minutes before you read some extracts, but I did not pay special attention to them.

45,529. Then I will read those reports to you, in order that we may have your opinion as to their accuracy or otherwise in regard to the time to which they refer. But, perhaps, it may be better if you will tell us, in the first instance, what, in your recollection, was the condition of the people about the year 1836, say from 1834 to 1836?—Not being in any manner connected with the locality, I have had only a general knowledge of their condition since I was a boy. I could not turn to particular dates, because I was not connected with them personally, but, as I have already told you, I have a general idea of what their condition has been during the last 50 years.

45,530. Then, in that case, I will read this evidence to you, and ask you if you think it is correct, and if it coincides with your impression?—The inquiry was held in 1836?

45,531. Yes. At that time the Rev. Mr. O'Donnell gave evidence to the Commission. You, doubtless, recollect him?—Yes, he was their parish priest.

45,532. Then he was likely to know all the circumstances?—I think he would know them.

45,533. He states, speaking of the Claddagh fishermen, "The Claddagh fishermen are, for the most part, "very poor. Before the late winter fishery commenced "the majority of them had their nets in pawn; many "were obliged not only to pawn their gear, but cabin "furniture, and even the iron vessels in which they "prepared food." From your recollection of the condition of the people, is it your impression that that is a correct statement?—I have no doubt they did so. I often heard they were obliged, under certain circumstances, to pawn; but I recollect a good deal further back than that myself, when they were not obliged to do any such thing. I remember 50 years back, when I was a boy growing up, and the Claddagh fishermen then were a very rich colony.

45,534. A very rich colony?—Yes.

45,535. When you were a boy?—Yes, and for many years after, even since I became a priest. I knew them in the way of business to have plenty of gold, and they had such peculiar notions that they did not like to lose the gold when once they got it in their possession. They would go and pawn a guinea, and pay interest upon it sooner than change it, so that pawning, in fact, in that way was not a direct proof of their poverty; on the contrary, it arose from a wish to keep the gold.

45,536. Are you of opinion that the pawning of household utensils is not a proof of poverty?—In some cases it is not. I have known of some cases in which it would be no such thing. For instance, I have known people of a reckless nature who would pawn things unknown to other persons of their own family, and that would be no proof of poverty.

45,537. But the evidence we have here is to the effect that the pawning took place by the possessor of the gear. For example, Mr. Macdonnell says,—"Although the Claddagh fishers are industrious, they are

"poor. The greater part of their gear is in pawn "until required for a fishery, and then, if money can- "not otherwise be obtained, they pawn another kind "of gear to release that required." The greater part of the gear could not be pawned without the knowledge of the possessor of it?—The wife might do it unknown to her husband, and a husband unknown to his wife. I do not think that that is a general proof of the poverty of the inhabitants. It does not, in my opinion, affect the general statement a bit.

45,538. Further, in page 113, I find a statement made by the Claddagh fishermen themselves, which may be taken to be authoritative. "Cutting and "carrying sea-weed for manure is the only employ- "ment which the Claddagh have in addition to "their occupation as fishermen. This additional em- "ployment continues for six or eight weeks, com- "mencing in April, and each boat earns by it about "30*s.* a week; it occurs during the worst fishing "season of the year." Then follows this passage,— "The fishermen not selected for cutting and carrying "sea-weed are unemployed at home, by which much "distress is occasioned among them. Not more than "two or three men in each boat are employed by the "sea-weed; the crew for fishing usually consists of "six men." That is a statement made by the men themselves to the effect that there was distress among them at that time?—I am prepared to say that, at different seasons there has been great distress among them, but that is not a feature which is to be taken as a proof in connexion with the case that is before you just now.

45,539. The case before us now is the question of the condition of the fishermen at the present moment, and it is necessary to ascertain what their condition was 30 years ago, when the present asserted cause of distress did not exist?—That is what I expected to be examined upon, namely, to speak to their condition 30, 40, and 50 years ago, and to speak to it down to the present time.

45,540. We are speaking of the condition of the fishermen in 1836, which is nearly 30 years ago, and we desire to ascertain if your impressions of that time are in accordance with the statements contained in the report before us. It is a matter of great importance for us to ascertain what the condition of these people was 30 years ago, when there was no trawling and the assumed causes of the distress which now prevails were non-existent.—From my general knowledge of the city of Galway and the Claddagh I can aver that the Claddagh district 30, 40, or 50 years ago was a rich, comfortable village. The people in those days were probably not as provident as they ought to have been. They were not at all as careful of what they earned as they ought to have been, but they had plenty of money, and they lived most luxuriously, even beyond their proper condition. I can state that as a matter within my own knowledge, and I can state further, that their condition has been declining latterly very considerably, even to a terrible extent. I can tell you more. I remember that for 20 or 30 years of my experience, from the earliest period I recollect the Claddagh, I never knew such a thing as a Claddagh man or woman begging, and now there is a universal necessity for them to do that. At one time there was no such thing as begging in the Claddagh. No fisherman or woman would beg in my early days; that never occurred; indeed they did not require it.

45,541. Then you disagree with the statement made by the Rev. Mr. O'Donnell in 1836?—I do not do any such thing. Such things might occur then, and Mr. O'Donnell might be cognizant of them, but they do not apply in any argument as to the general condition of the people 30 and 40 years ago.

45,542. His statement is absolute. He says, "For the most part they are very poor."—That may be. I cannot aver as a fact, not being professionally connected with them, that it was so. In the early part of my mission in Galway, I became principally acquainted with the general character of the village and of the people, but I know that they were then a rich people. I cannot determine the exact period at which they began to decline, but I should say, from my own experience of 20 and 30 years, from 1806, and I can speak from that early period, that they were a rich people. They may not have been as provident as they ought to have been, but they had plenty of gold in those days. I was employed by my parents in matters of business which sometimes brought me in contact with them, and I know them to have had plenty of gold in those days.

45,543. The same gentleman, Mr. O'Donnell, gives, a few pages on, a more definite statement. He says, "A few of the fishermen have comfortable habitations, "but the greater part of them are in miserable dwell- "ings." That does not relate to a temporary state of things?—No, but it is no proof whatever of an entirely impoverished state. It is a notorious fact, that it was merely small cabins they lived in, but notwithstanding the miserable nature of those cabins outside, you could have eaten your dinner in as much cleanliness, order, and comfort as you could in any drawing-room in Galway. It was a kind of observation made by every person, that although their cabins looked small, the interior of them was comfortable. There might be another reason for their being miserable or poor looking, namely, that they were crowded into a small space. They never went outside that space; there they crowded and were exceedingly numerous. They intermarried amongst themselves generally, and as they became numerous, they often divided their cabins among the children as they married, but inside the interior of their cabins generally speaking was as neat and comfortable as a drawing-room.

45,544. If that had been the case, would not Mr. O'Donnell, their parish priest, have known their condition intimately? He does not say they look miserable, but he says, "the greater part of them are in miserable dwellings"?—I can only state what I believe to be a fact, in whatever way it operates.

45,545. But you see that the two views are different?—I think they can be reconciled. The Claddagh was a numerous colony in those days. The space in which they dwelt was too limited for such a vast number; it contained from 4,000 to 5,000 inhabitants at one time, and if you look at the space occupied you will see at once that it was impossible they could have a very fine description of house.

45,546. The evidence before us controverts that statement. Mr. O'Donnell states again, "The dis- "trict of Claddagh, with the town parish of Galway, "contains about 2,000 persons, nearly all the families "of fishermen." We have it in evidence that there are somewhere about that number now?—There is a great difference in the population now and what it was since I can recollect. I only state what is a notorious fact, and I do not believe there is a single old person in Galway who would not swear to the truth of the declaration I am now making here.

45,547. Again, it is evident that Mr. O'Donnell did not make this statement very hastily, because he goes on to say, "They marry early in life; many of "them too early, but by the public census of the dis- "trict, in 1834,"—therefore, you see he had official means of knowing what the case was,—"by the public "census of the district in 1834, the average number "of persons in each family was found to be only five, "including the parents." That is not a hasty statement, but it is evidently based upon official documents?—I do not undertake to reconcile any man's evidence, or to make any comment upon it.

45,548. From what time do you date the decline of the prosperity of the Claddagh people?—I have been hearing of their great necessities and wants for the last eight or ten years, and it has struck me generally as a fact, that they have been gradually declining for that period, and even longer back.

45,549. Are you acquainted with the effect which the famine had upon them?—From the general state of things connected with public committees and means for giving relief to the poor, I have always

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looked upon them latterly as being in a very distressed state.

45,550. Did they suffer very much in the period of of the famine?—I understand that they did. For the last nine or ten years I have been hearing of their distress. As I have told you already, one feature in their condition must have struck every man as a proof of their terrible decline, namely, that they have been begging latterly, when, for ages before, such a thing as a begging Claddagh man was not known.

45,551. How long?—I came to Galway as a child, and when Galway was prosperous and a great town, and a town of great business, the Claddagh men were a distinct colony and a distinct race, and were considered as an important feature in the population of Galway.

45,552. Has there been any house building of late years?—I think there has rather been plenty of house falling.

45,553. Are the houses as old as you can recollect, or have they all been built since you can remember?—I cannot give any evidence upon that matter; I never took any observation in the matter. I never was connected with the Claddagh officially; I was only connected with a portion of the fishermen in Barna.

45,554. Was there the same kind of house there 50 years ago as there is now?—Much the same I should think, from my general observation. They were thatched cabins when they were at the richest; their houses used to look, externally, in a very bad condition.

45,555. (*Mr. Lefevre.*) Do you think their condition, in the times you speak of, was much better than that of the people of the same class in other occupations?—Vastly better, inasmuch as they had constant employment in their fishing, and were in constant earnings. They had a vast deal of money to spend, and I am sorry say, on many occasions they misspent it. I have often seen the evidence of their misspending it in the streets, and in drunkenness in those early times.

45,556. Do you recollect the condition of the fisherman in other parts of the bay at that time,—say, for instance, Barna?—I knew the condition of the fishermen there; I was connected officially with them.

45,557. What was their condition as compared with that of the Claddagh men?—The people of Barna were vastly more numerous and a great deal more comfortable than they are now.

45,558. Were they as well off as the Claddagh people?—I do not remember them ever to have been as well off as the Claddagh people, in my early time. I think it was a good deal the effect of the decline of the Claddagh people, that a vast number of them in the Claddagh were forced, in a manner, to leave it and spread themselves elsewhere.

45,559. Have a considerable number of the Claddagh men emigrated?—I cannot tell you particularly.

45,560. You cannot say whether a great proportion of the younger men of the Claddagh have gone away?—I heard of some of them going, but I cannot vouch for anything of that sort. I have not been connected with the district officially, and have, therefore, not taken much notice of such matters. I can only speak of their general condition, of the general and gradual decline of the population, and of the general causes to which I would attribute it.

45,561. What would you say is the average rate of wages for a labouring man in Galway at the present time?—I should think about a shilling a day. I can get plenty of labourers for a shilling a day. They get 1*s.* 2*d.* occasionally, and under some circumstances 1*s.* 6*d.*, but that is only under peculiar circumstances, such as carrying ladders, and helping in building, if a demand for building existed.

45,562. Thirty or forty years ago, what were the wages paid to labourers?—It is very singular that the wages in those days were smaller than they would be disposed to take now.

45,563. What would you be inclined to put it down at?—One shilling a day was commonly the price of a labouring man in the town, but I do not know what it was in the country.

45,564. In the town, it was 1*s.* a day?—Yes, that was about the general average of wages.

45,565. Have the wages of labouring men improved within the last few years?—I cannot exactly lay down a rule of that kind. The only thing is, that labour is now, comparatively speaking, very limited. From the desire of employers, and a general wish to give something that will enable the labourers to live a little better, they generally give 1*s.* 2*d.* a day where they formerly would only give 1*s.* a day.

45,566. Do you think that the condition of the Claddagh men is now below that of labourers of the same class?—I never knew the Claddagh men to be employed in labour such as that you are now alluding to.

45,567. Do you think their condition is inferior to that of labouring men of the same class?—From what I have generally heard of them for the last few years, they are in a most miserable condition; and I have often heard persons officially connected with them say that they are in the most miserable and wretched condition. Some of the persons connected with them attribute it to the want of catching fish, and the want of employment. In fact, every one knows that, as a general rule, the people in the Claddagh now must be poor and wretched. We all know that they principally lived on their fishing, and we also know that they do not get it now, and therefore we must naturally conclude that they must be in a wretched condition. It is the easiest thing in the world to see their condition. There is no use in metaphysically looking into causes. I cannot state the exact cause of the decline, but I can give you a general cause, and that is the only way to look at the question. I think your proper question to me would be, to what do you attribute their present condition?

45,568. (*Professor Huxley.*) You surely do not call this report metaphysical, Mr. Daly?—I think there is a little too much metaphysics in it.

45,569. Is there any other statement that you would like to make to us?—You have asked me nothing about the general condition of the Claddagh men.

45,570. What would you wish to say?—May I ask what is the object of your inquiry?

45,571. One object of the inquiry is to ascertain, as far as possible, the condition of the fishermen.—I thought it related, in regard to local interests, to the effect of trawling upon the condition of the people.

45,572. Our inquiry is by no means confined to trawling.—I grant you that that has a great deal to do with the interests of the fishermen of Galway.

45,573. We shall be happy to hear anything you have got to say.—I have only a general knowledge of the former condition of the Claddagh people, but, from their condition now, we may in a great degree consider this question as affecting the whole locality.

45,574. I think we have been asking you questions on that subject the whole time you have been under examination.—In my former times I knew the Claddagh people to be rich and independent. I know that, latterly, the condition of the Claddagh men has entirely changed. I know, also, that the condition of persons I am connected with in Barna was considerably better when I first knew them than it is at present. I would attribute that change of condition, in a great measure, to the change of the fisheries in Galway.

45,575. You have been officially connected with the people of Barna?—Yes.

45,576. We have been told by former witnesses that the number of fishermen has fallen off?—Yes.

45,577. You are aware that there has been a number of evictions there?—Yes.

45,578. When did those evictions take place?—Principally during the last four or five years.

45,579. To what cause do you attribute them,—for what reason were they effected?—The landlord or his steward would be the only persons who could give an account of that. I attribute it to the persons officially connected with them in their little holdings.

45,580. Was it because they could not pay the rent?—I should say not, in many cases, because people were evicted, in some cases, who had actually paid the rent, but had received notice to quit. They had made efforts to pay it, and had paid it in reality.

45,581. Your statement is in accordance with what we have already heard?—I do not give that as a general rule, but I know that many of the poor people borrowed, in order to keep their little holdings, and to be near the fishing place. They borrowed, and by other means endeavoured to raise what would pay their rent. I never interfere between landlord and tenant, as a priest, if I can avoid it at all, except by way of recommendation; but I must say there were a great number of evictions effected which should not have occurred.

45,582. The evictions did not take place simply because the people could not pay the rent?—Not exactly; in many cases that was not the fact.

45,583. Had that process of eviction anything to do with the diminution in the number of the boats?—Of course they were obliged to quit the place, and their boats would be useless.

45,584. Apart from that, has the condition of the Barna fishermen fallen off in consequence of trawling?—I always understood that to be the great cause of the destruction and diminution in the quantity of fish. I assume that those are facts clear and distinct. At one time fish were very abundant. I remember the time when hundreds of carts were coming into Galway, carrying away loads of fish to every part of Ireland, as far down as Sligo in the north, and into the interior as far as Kilkenny.

45,585. When the line fishermen were fishing here, did they bring all their fish into Galway market?—Generally.

45,586. Was it bought by those whom they call jolters?—We call them cadgers.

45,587. What became of the trawl-fish when it came in?—I believe it was sent off by the trawlers. I believe that was the case. We are a little popish in this country, and we like to have fish on certain days, although we eat it on other days. Such, however, is our disposition. I remember when the town was crowded with fish. I can tell you what I recollect, more than that and it is a feature which ought not to be lost sight of here. I remember when every store and cabin in Galway, and in the immediate vicinity of the town, and for a distance of four or five miles around, was crowded with fish saved and stored up. I remember to have seen herrings stored up under the beds of the poor people, so completely crowded was the rest of the house with the herrings that were saved. Every man and woman, and even children of the age of six or seven years, were employed in saving fish, and in carrying it away. I remember this, as a general rule, not one, two, or three years ago, but twenty years ago.

45,588. About what period?—From 1806 to 1820 or 1830.

45,589. (*Mr. Lefevre*) Do you speak mainly of herrings or of other fish?—I can recollect the time when you could scarcely pass through the main parts of the streets, so crowded were they with fish.

45,590. With herrings?—No; cod, hake, gurnard, and what we call black pollack. We had ling here in enormous quantities; hake, haddock, and fish of that kind were universally to be found here. There were a great many others, of which I do not recollect the immediate appellations. The whole street from the Claddagh, and the new bridge to the west, and all along up the street and down to Cross Street, and all in that direction, were crowded with fish; you could scarcely go through the streets for the crowds there were every day.

45,591. (*Professor Huxley.*) The principal light you are able to throw on the subject of our inquiry is your recollection of the former state of things. You are not a practical fisherman?—No.

45,592. So that it would be useless to ask you about the fishing itself?—Yes, except a general knowledge of what I have heard.

45,593. We have had a number of witneses before us on those points already. Have we now heard from you what you chiefly wish to say?—It would be very hard for me to say that. I naturally expected that questions would be put to me, and as my recollection was aroused I would have answered them. I considered that gentlemen of your experience would have no difficulty in putting questions to me.

45,594. It is very important for us to learn what the condition of the Claddagh men was 30 or 40 years ago, compared with what it is now. We have obtained the means of doing that to some extent already, but we should be glad to have any other information you think we ought to have. As to the practical fishery question, it is not necessary to ask you any questions. All that we desired to obtain from you was a comparison of the condition of the people now with what it was formerly, and your opinion as to the different causes which may have produced any difference which exists. Is there anything which you yourself wish to lay before us?—If you take what I have said as a general description of their condition, I don't know what more I could say. My evidence has been given from continual intercourse with these people, without any reference to this examination. In my intercourse with the poor for years past, I have always found them complain of the want of accommodation and of the want of fish. I know that the state of the market is totally changed; that, comparatively speaking, we have no fish now. I know also that we had plenty of fish in days gone by, and I never heard of any want of fish in the place until recently. I am aware, from my intercourse with the people of late years, that they all attribute the decline of the fishery in the bay to the effect of trawling.

45,595. (*Mr. Lefevre.*) Were the Barna men fishermen all the year round, or are they farmers for a part of the time?—They were generally fishermen all the year round. A few of them might have a patch of potatoes the size of this room or less, but they were generally fishermen.

45,596. Have the Claddagh men any land at all?—I am not aware; but I believe they are entirely employed in fishing. I know that in my earlier days they were entirely employed in fishing. They had more than enough to do, although they were three times more numerous than they are now, in my estimation of them. I am sure that there is not one half of the population now that there was some years ago, and there is not one-third in the village of Barna. In Barna, at one time, there were about 200 houses, occupied generally by fishermen, and at the present moment I do not think there are 20 fishermen in the place. If I had time to examine my books, I could ascertain the exact number.

45,597. We have had evidence before us that the number of fishermen there is very small indeed?—Yes.

45,598. (*Mr. Concanon.*) You have given evidence about the period from 1806 to 1820?—I have no distinct recollection of dates. With regard to the shoals of fish from 1806 down to 1820 or 1830, I do not confine myself to particular years. I know that for many years the condition of the people of Galway was as I have described. There was not a year in Galway in which the people were not employed in saving fish. So much was that the case, such quantities of fish came here, that sometimes there were not purchasers for it, and it was used as manure. Owing to the want of salt and the means of saving it, great quantities of fish were left on the shore, and turned out for anybody who chose to take them away.

45,599. Is that 40 years ago?—I think not.

45,600. How many years ago?—I cannot tell you.

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45,601. Is it 30 years ago?—It may be. I cannot recollect a fact of that kind. The general feature of the fisheries, in connexion with the Claddagh men, was that it made them rich and independent,—that they depended for their livelihood upon getting fish, and their being rich and independent is a proof that universally they got fish. There was no great decline, one year with another, which signified or was of any consequence. The fishing one year might be better than another, but every year the fish were expected. They made a regular preparation for the fishing, and they had the means of doing so. They always had plenty of money in consequence of the fishing, whereas latterly the fishing has completely declined. I am not learned enough to attribute that to any particular cause, but I can understand perfectly the force of the universal cry which we hear on every side from these poor people, who attribute it to trawling in the bay. The present destruction of the trade in Galway, and the present condition of the people is attributable, I am told, to that cause.

45,602. You have no doubt heard that this little colony of which you speak has been much wronged by the trawlers, and that they are the most peaceable in the county?—Without making any comparison between this county and others, I may say that, taking them together, they are as good a body of men as exists in the whole world. When I say that, I say it from a general knowledge of the morals of the town. It is a notorious fact, and one which I have understood ever since I was a boy, that there was never such a thing as a well founded charge against the morality of the Claddagh men. I know that they were improvident—that they spent their money badly—that they were a great deal given to drunkenness, but the immorality which prevailed in other places I knew them not to be guilty of.

45,603. They marry very early, do they not?—They are as peaceable a body as any other body of poor people, but they are liable to peculiar excitement under peculiar circumstances. Of course a row may occasionally arise among them, and there may be a boxing match among themselves and others, but as a body they are the most peaceable, the most moral, and the best behaved body of people you could meet with. That does not exclude other people from being equally so, but living in the town of Galway, I know that to be what I have stated. That has always been the general opinion and character given to them by the people who have known them best.

45,604. You have given them a good character for being peaceable, do you include in that their peaceable disposition towards the trawlers?—I know nothing personally of their disposition towards the trawlers, but my opinion is, indeed I am sure, that you would be worse than they are if you were affected in the same way. I have not the least doubt in the world, and I speak before gentlemen who know human nature, that human nature ought not to be tried too much, let it be ever so virtuous. People who knew that they had the means, by a certain trade, of obtaining their livelihood and securing the necessaries of life, would naturally become excited when they found that they were deprived of it by any peculiar mode of action to which they had never before been subjected. I say it is not in human nature not to be indignant under such circumstances, and to show it on some occasions by a little irregularity.

45,605. Then from what you have stated you approve of the course they have taken?—If you assert that, you assert what is not the fact.

45,606. Do you approve of the course they have taken?—You said I did.

45,607. Do you approve of the course they took?—I approve of nothing improper.

45,608. With regard to the great glut of fish you have spoken of, how many years is it since you have heard of that—have you heard of it within the last 30 years?—Yes, within that

45,609. Is it more than 30 years since the fish began to decrease?—Within 30 years I have seen a glut of fish.

45,610. Within how many years?—I cannot give you any particular years.

45,611. But it is within 30 years?—Yes, but it is many years since I saw it.

45,612. Is it within 20 years?—I could not tax my memory so as to give any particular date.

45,613. For the last 16 years?—I cannot state dates.

45,614. Have they been scarce for 20 years?—No, on the contrary, I have seen a vast take of fish, especially of flat-fish, within the last 10 or 12 or 14 years.

45,615. Of flat-fish?—Yes. I have bought a turbot within the last 10 or 12 years for half-a-crown that would not be sold now for five half-crowns.

45,616. Were they large fish?—Yes.

45,617. Are you aware that fish are very plentiful now?—I am not aware of it. I went on Friday to try and get a bit of fish, and I could not get a morsel.

45,618. Have they been very scarce during the last month?—They have been very scarce.

The witness withdrew.

M. Tiernay.

MARTIN TIERNAY called and examined.

45,619. (*Mr. Macnamara.*) Did you ever own a trawl-boat?—Yes, I had two.

45,620. Did you ever go out fishing in those trawl-boats yourself?—Yes, frequently.

45,621. How long were you trawling?—About two years, I think.

45,622. How long is it since you ceased to trawl?—About 10 years ago.

45,623. At the time you were fishing in those boats did you observe what particular fish the trawl had when fishing in the bay?—I did, but I did not pay great attention to the taking of fry or spawn. It never occurred to me that an inquiry of this sort would arise, and therefore I did not pay that attention to the matter which I otherwise would, but I observed a large amount of small fry among the fish taken at each haul. Strange to say, when we fished outside the headlands from Cashla Bay to Ailladie Point I found less fry than when we fished more inside the bay. I saw that we found a larger quantity of fry when we were coming in towards the shoal ground within the bay than we found when we were outside within the headlands.

45,624. But it is a fact that very large quantities of fry were taken in your presence?—Yes, so large that I used to be astonished at the smallness of the quantity of marketable fish, considering the great bulk contained in the net.

45,625. What generally became of the fry?—They were flung out; they were useless to carry home.

45,626. Were they dead?—They were either dead or dying.

45,627. They were mixed up with sand, I suppose?—Yes, sand and mud. I observed also, though I did not pay much attention to it, that there was a large destruction among the small lobsters. We used to take up large quantities of shells, which were generally empty of the young fish, and containing the fry of the lobster. Almost every shell used to contain them. They were hauled up in the net and thrown into the sea, and I think there was an immense destruction of lobsters in that way.

45,628. Did you ever trawl outside the islands of Arran?—Never.

45,629. From your experience of trawling in those days, do you consider that trawling has had an injurious effect upon the Galway fisheries?—I have no doubt on the matter. Taking the subject generally, we found that large quantities existed in Galway previous to the time trawling was practised. I was among the first

who followed the practice of trawling, and having seen the large quantities of fish—that were taken then, and having seen also the rapid decline which immediately ensued after the practice of trawling became general, I drew the conclusion that the decline, to a great extent, was owing to trawling. We used to be able to take from 80 to 100 pair of soles, which, of course, we found to be very profitable. I then paid my men so much a week, in fact, I persisted in that as a rule throughout, but the other boats did not. I did that, because it appeared to be so profitable that it would be giving too much away, and I kept the fish to myself; but towards the latter part of the time, the fish caught were reduced to such small quantities, that they did not pay me at all. I did not, however, consider it fair, as I had enjoyed the profitable part of the transaction, that I should change the mode of payment when the fishing became bad; but as a rule, the other proprietors of trawl-boats paid their men wages in the early part of the fishing, and towards the end of it paid them by share, because they could not afford to pay wages.

45,630. Do you consider that in consequence of trawling the fishing has fallen off?—I do distinctly.

45,631. Did you ever see fish spawn on the deck?—No, I never paid any attention to it, but I may have seen it without recognizing it.

45,632. Do you know whether the ground within the islands of Arran, and towards Galway, is spawning ground?—I am sure of it. The temperature of the water in Galway Bay is higher than in any other of the bays, being much exposed to the influence of the Gulf Stream. I may say, that at one time a vessel from the Mississippi came across the bottom of the sea to the lighthouse in Galway. The temperature of the water is high, and it is therefore advantageous for the breeding of fish.

45,633. Do you recollect, when trawling first commenced in Galway, what quantities of fish were generally taken?—I am as clear as I am that we sit here, that the aggregate of fish taken by the line-fishers previous to the existence of trawling in Galway was larger than the quantity of fish taken by the trawlers and line-fishers combined now.

45,634. Were you intimately acquainted with the Claddagh people 20 years ago?—I was.

45,635. What was their state then?—They derived very large profits from their fishing, but they were very improvident in their habits. With regard to some of the extracts from the report, which I have heard the Commissioners read in the course of this inquiry, if they would read them to me as they were read to the other witnesses, I think I could give reasons why the conclusions which are apparent on the surface of that evidence are not the real ones which ought to be drawn.

45,636. (*Professor Huxley.*) We will examine you on that point by-and-by.—I should be glad to be examined upon it.

45,637. (*Mr. Macnamara.*) You heard the report of Mr. O'Donnell's evidence?—Yes.

45,638. He states that the fisherman were wretchedly poor.—I know that to be a fact, but it was not owing to the want of means arising from the fishery, but to the extreme improvidence of the fishermen and the well grounded confidence they entertained that, if poor to-day, to-morrow they would be able to renew their condition by the quantity of fish they would be able to catch. As they got they spent; and if for a week or a month there was any scarcity of fish, they were in the jaws of poverty, and if there was a bad year, they were thrown out entirely, all because they were in the habit of relying upon a constant renewal of the fish from week to week. They never thought of putting by a shilling for a rainy day.

45,639. Did that apply to the owners of the boats, or those whom they were in the habit of employing?—Principally to the owners. The owners of the boats had two shares, and there were generally five or six men in each boat. The owners of the boats had something distinct from the others, although they had a share of the improvident habits of the general community. They had always something left, or they sent their nets to the pawn office, with the confidence that they could release them when necessary. There is one thing stated in the report of the evidence of Mr. Halloran. He is stated to have advanced 1,200*l.* in ropes and other materials. There could be no stronger proof of the implied and probable wealth of the community than that fact, namely, that a tradesman would give 1,200*l.* on credit, believing that he would be repaid in two or three months or so. It shows that he well knew that, if they were poor to-day, they were certain to be rich to-morrow.

45,640. What is the present condition of the Claddagh men?—I know that I have given small sums in charity to men who, a few years ago, say 10 years ago, were as independent in mind, thought, and action as any men I ever saw.

45,641. Does that apply only to individuals or to the general community there?—I mean those who were the most comfortable among them, those who formerly had means and property, but who are now I believe, in the most wretched condition.

45,642. Have you ever gone into the Claddagh?—Yes.

45,643. What is the condition of their houses?—Very poor and wretched. They have not been able to thatch their houses, and the roofs are falling. They are in a most miserable condition.

45,644. From your experience, do you consider that if trawling were put a stop to in the Bay of Galway the fisheries would improve?—Except as a general conclusion, I could not state.

45,645. Is it your opinion?—My opinion decidedly is that it would. It is my opinion, that trawling has destroyed the fish, and, of course, the converse of the proposition, namely, stopping the trawling, would naturally lead to a restoration of the fishing.

45,645*a*. A good deal has been said of the character of these men, and their morals. Do you know anything upon those points?—They are a very peaceable people at all times. There is no doubt that there used to be occasionally an outbreak, and of course they would resist the trawlers sometimes. Latterly, I believe, they grew rather impatient, in consequence of the neglect manifested by the Government in not attending to their repeated claims for assistance.

45,646. Did you ever know or hear of them being brought into court for theft?—You can tell that better than I can.

45,647. I am not giving evidence.—I have seen very few of them convicted of theft.

45,548. (*Mr. Concanon.*) You seem to know a good deal about the fishing?—I do.

45,649. Do you think it takes a long time for the fish to grow?—I have not studied that question, but I should say from three to four or five years, if we are to judge from the salmon.

45,650. We will take cod,—do you think it would take a long time for cod to become a full-grown fish from the time it was spawned?—Perhaps it would take four, five, or six years.

45,651. How would it be with regard to hake?—About the same time. I should say that fish would reach their full size within five or six years.

45,652. Do you believe that fish have become scarce by reason of the young having been destroyed by the trawlers?—I do.

45,653. Were you the writer of the memorial that was drawn up in 1863?—I was the writer of the memorial I heard read some time ago, but I forget the date.

45,654. You subscribed to that document, I suppose?—Yes.

45,655. Was it true, as stated in that document, that the bay abounded in fish?—If you will read the document, I will consider any portion of it to which you wish to call my attention specially.

45,656. The memorial states, "It is not 20 years "since ours was a most thriving and happy community "of over 4,000 souls, and the owners of 300 craft, in

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"which we fished with great benefit to the country "and advantage to ourselves. At the present time "we do not sum up 1,500 persons nor 80 boats, and no "employment is to be found even for such diminished "numbers. That want of employment and the con- "sequent ruin which has overtaken us, is due to the "reckless system of trawling pursued in the bay, by "which the fish are not only scared away from their "usual haunts and feeding and spawning grounds, but "the spawn itself, to the extent of many hundreds of "tons weight, is annually destroyed." You see it was not the scaring away of the fish alone, but the destruction of the spawn?—Yes.

45,657. Do you believe that to be true?—Yes.

45,658. The memorial goes on to say, "A striking "proof of the evils of the system has lately been "furnished to us by the temporary suspension of its "practice. During the 20 years it has been in ex- "istence, the supply of fish has been greatly diminished, "until of late it may have said to have been exhausted, "or, more properly speaking, so scared away as "to render all our efforts fruitless. Owing, however, "to some local difficulties, the trawling boats have "been unable, during the last two months, to pursue "their usual avocations, the consequence of which is, "that the bay is filled with fish, and all our people are "busily employed in every direction. Hunger has "fled away from our doors, and the country is now "more than usually supplied with the judiciously "collected wealth of the ocean."—That was literally true at the time it was written.

45,659. Was that within your own knowledge when you wrote it,—was the bay swarming with fish?—I agree with the statement contained in the document. It was comparatively plentifully supplied with fish.

45,660. The people came in with their carts to purchase it and send it away?—Yes, and happiness came again to the Claddagh men.

45,661. You say that the trawlers had scared away the fish, and that it would take five years for them to grow to their full strength. Have you formed any opinion as to what it is that caused this abundant supply within two months?—Of course they might have come in again after being scared away by trawling; there are several reasons given.

45,662. You say in that document, that it was not that they were scared away, but that the spawn was destroyed?—I think I say there that they were scared away.

45,663. (*Professor Huxley.*) There is also the assertion, "and spawn itself to the extent of many hundreds of tons weight is annually destroyed."—At that time there was a confusion of terms in my mind. When I said spawn, I should have said small fry.

45,664. (*Mr. Concanon.*) Was the same impression on the minds of the gentlemen who affixed their signatures to the same document?—I cannot say.

45,665. Are fish plentiful now?—I can buy a dozen herrings for half the money I could a short time ago. I consider that to be evidence that they are more plentiful than they were.

45,666. Did you hear the evidence given this morning as to the whiting, namely, that you have only to go out for them in order to obtain them?—I did not.

45,667. Of your own knowledge, are whiting plentiful in the bay?—I do not know.

45,668. Do you not hear whether fish are plentiful or not?—I know nothing more than this, that there is a plentiful supply of herrings coming into the town. In regard to this memorial, I may say that my assistance was sought in the affair. I was asked to prepare that memorial, and if Mr. Sweeney had asked me to do the same thing, I should have done it with the greatest pleasure.

45,669. You have been asked questions as to the peaceable habits of the Claddagh men. Now I ask you fairly, is there not a determination among them that the trawlers are not to work?—I believe there is.

45,670. Do you believe it would be safe for the trawlers to work unless they were protected?—I do not think it would.

45,671. (*Professor Huxley.*) You were speaking just now of lobsters coming up in the trawl?—Yes.

45,672. Lobsters in shells?—Yes.

45,673. Will you explain what it is you mean?—My attention was attracted by the appearance of young lobsters inhabiting otherwise empty shells, as mussel and other shells.

45,674. Whelk shells?—Yes, especially whelk shells.

45,675. You are labouring under a misapprehension. They are not lobsters at all.—They appeared to me to resemble lobsters.

45,676. They are totally different animals. They are what are called the "hermit crabs."—No, I can distinguish between a crab and a lobster.

45,677. Had they not curved soft tails?—I think so; something like the appearance of a prawn.

45,678. Were they not shaped like this [*describing*], with a long soft tail?—The foremost part appeared like that, but I cannot say anything about the last.

45,679. There can be no doubt they were hermit crabs; and had nothing to do with lobsters in any way. With regard to the temperature of the water in Galway Bay, have you ever examined it with a thermometer?—No, I have not; but from observations which have been made by persons who have been in different waters, and from my own judgment generally of the temperature by feeling the water with my hands, it is manifestly higher than in other places. I believe it will be able to stand the test of trial by the thermometer.

45,680. But that has never been done?—Not that I am aware of.

45,681. You wish me to read passages from the evidence contained in this report?—Yes.

45,682. It is important to be corrected in any wrong conclusions we may have formed, or to have any erroneous statements which are given here put right. The statements to which you refer are these. The Rev. Mr. O'Donnell says,—"The Claddagh fisher- "men are, for the most part, very poor. Before the "late winter fishing commenced, the majority of them "had their nets in pawn; and many of them were "obliged to pawn not only their gear and cabin "furniture, but even the iron vessels in which they "prepared food." Do you propose to make any statement in order to modify the effect of that passage?—I mean to say that that is no evidence of poverty arising from the decay of the fisheries.

45,683. Do you think that if the fishing had been prosperous at that time, that would still have been said of the people?—That is precisely what I mean to say, because they were so improvident in their habits. Although they might have plenty of money to-day, in the course of two days, if they had not gone in the mean time to fish, or the fisheries had declined, they would be just as poor as ever they were, and would then pawn their nets and furniture, confident that at any moment they could raise plenty of money to release them.

45,684. There is a statement at page 113 of the Report to this effect,—"None of the Claddagh boats "earned more than 60*l.* during the late fishery; the "average earnings were less." That statement is to the effect that the yield of the fishery itself was absolutely small?—That might be correct, but yet apply to a single season only.

45,685. The Claddagh fishermen themselves also state, at page 104 of the report, that, "in 1833 the "herrings were not abundant in the bay, not more "than from 1,000 to 6,000 were taken by the boats "in any night during the fishery. The winter herrings "have not been abundant in the bay in any season "during the last 10 years." That is their own statement as to the abundance of the fish.—Does it refer to 1836?

45,686. No, to 1833, and from 1833 on to 1836.—Of course, people like the Claddagh people, in putting forward a memorial to the Government, would naturally colour their statement, in order to attract attention, and can be scarcely held responsible for their statements, because they are very illiterate.

45,687. Is there any of the statements which I read upon which you would like to remark?—I do not recollect any other, but I would wish to combat the conclusion that might be supposed to be arrived at from the evidence, that the apparent poverty and the real poverty perhaps, which seem to have beset the people, arose from the failure of the fish in the bay; in my opinion, it arose from their own improvidence in neglecting to set aside the profits they made to provide for a rainy day.

45,688. With respect to the advances made by Mr. Halloran, the reply you make to that is, that it was evident he expected to be repaid, or he would not have made the advance. Now, at page 117 of this report, we have a statement from the Claddagh fishermen to this effect,—"The boat owners can all "get credit for materials in Galway, but the fishermen "cannot, as they have not any security to give; and "if they cannot obtain a guarantee, they are unable "to prepare for the fishery and the boats to which they "belong are unemployed. Credit is given for twelve "months, and the prices are moderate. Mr. Halloran "gives large credit, and but for him many fishermen "would be without employment." He seems to have advanced his credit very liberally, and without any hope of repayment?—He was a very prudent man, and he derived large profits from the trade.

45,689. But there is this statement from the Claddagh men themselves,—"In the summer the "greater number of fishermen are obliged to pawn "their nets, there being not much employment and "provisions being dear. They are in this distressed "condition when the time for the harvest fishery is "approaching"?—That is correct, and it is a proof of my argument that when the fisheries are over, having spent the profits, then in the absence of a fishery in the poor season of the year, between the harvest and the winter fishing, they had no money, and all their things went into the pawn office until the season for fishing came round again, when they would be at once released.

45,690. What direction did this improvidence take,—they are said to be a very moral people and temperate?—They were fond of social meetings and of spending their earnings in drinking.

45,691. The report contains a statement that the fishermen only do that sometimes after a great fishery, and that they never take drink of any kind to sea?—I never knew them to do so.

45,692. The Rev. Mr. Hughes says,—"The Clad-"dagh people, as a portion of a large town population, "must be considered comparatively a sober and moral "people in general; the fishermen are sometimes ine-"briated after a great fishery, but, as they never take "intoxicating liquors of any kind to sea, and are not "provided with any comforts for subsistence while out "fishing, a small quantity of spirits intoxicates them "when they return. They are often inebriated from "taking only that quantity which town labourers or "tradesmen take as an ordinary allowance." There is also this further statement,—"There is but one "public-house, a very poor one, in the district com-"monly called Claddagh. There was another opened, "which failed in a short time, about two years ago. "However, when the Claddagh men indulge in liquor, "they frequent houses in another part of the town." You will observe the difficulty of all this; if the fisheries really were very profitable, and the men were reasonably temperate, it is difficult to understand how they could spend their money?—I have known, over and over again, a party of them sit down and spend 35*l.* in a night, but that is 25 or 30 years ago.

45,693. At the present time you attribute their distress,—which, according to these reports, seems to be no greater than it was then,—to real want, whereas formerly it arose from their improvidence?—I attribute it now to real absolute want, arising from the absolute failure of the fisheries.

45,694. (*Mr. Lefevre.*) Can you date the decline from any particular year?—Yes, from the very year in which I commenced to trawl myself.

45,695. How long is that ago?—Ten or eleven years ago.

45,696. That would be 1853 or 1854?—Yes.

45,697. How long did you trawl yourself?—About two years. I continued it until I found the fish had so decreased in the bay that it was not remunerative to go on with the fishing.

45,698. What was the size of your boats?—One was of 18 tons and the other of 12 tons.

45,699. Did they trawl continuously?—Yes, more so than most of them. I was in the habit of going out frequently myself, and I recollect that when every other boat would put back I insisted upon mine going out and fishing in the bay.

45,700. Do you agree with the other witnesses that the time at which small fry was mostly found was from June until the latter part of the harvest month?—I observed small fish at all seasons of the year, but there may have been a difference as to the size—in the summer time they would perhaps be smaller than towards Christmas and December.

45,701. In August and September did you find small fish in any great numbers?—In very great numbers, indeed.

45,702. Did you hear me read the reports from the Coastguard Inspector?—Yes.

45,703. I gather from those reports that the decrease of the fisheries had hardly begun until 1860?—I regret to say that I do not attach much importance to those reports. They do not seem to me to be the result of any personal knowledge on the part of the gentlemen who furnished them,—they are rather gathered indiscriminately from other sources.

45,704. You heard a witness say that they were gathered from the men employed under the Coastguard?—Yes; but few of them have the advantage of the experience of Mr. O'Flaherty, because they very seldom go out amongst the trawlers or amongst the fishermen. They would see occasionally on the shore the result of the night's fishing, but as a rule they never went out to take notice of the fishing.

45,705. Did the Coastguard exercise any real supervision in preventing trawling within the limits?—I never observed it, although I have fished within the limits. I went to Kilmurry Bay, where a boat had never fished at all with a trawl.

45,706. Do you think the byelaw as to the limits within which trawling was to be practised was not observed?—As a rule it was neglected.

45,707. If it had been observed would any real good have been done?—I think it was immaterial whether it was observed or neglected, because where the line of demarcation ran was precisely about the central part of the best fishing in the bay. We consider the spawning beds to be to the east and west of the line.

45,708. Do you recollect the inquiry which took place previous to the laying down of that law?—No.

45,709. You did not give evidence upon it?—No.

45,710. But you think that the line was laid down after careful inquiry among the fishermen?—I rather think it was laid down after a protest from the fishermen.

45,711. Do you think that the Claddagh men were not satisfied with it?—They always had an objection to it.

45,712. If trawling were prohibited altogether in the bay could it be carried on successfully outside the Arran Islands?—I cannot say positively, but I believe not. I believe also that if you took the aggregate of good and evil arising from trawling in the bay, and made it a close fishery, considering that the aggregate of the fish taken by the line fishers alone previous to the commencement of trawling was more than the aggregate obtained from both descriptions of fishing

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since, and also taking into account the fact that where some 15 individuals would be benefitted from the profits arising from trawl-fishing, 500 families would be benefitted by the other mode of fisbing; and taking also into account that even the fish would not suffer much dimunition by a change in the mode of fishery, I think that on the whole trawling ought to be excluded in the Bay of Galway, and indeed in all bays in Ireland, if necessary.

45,713. If trawling were altogether excluded, would not soles be excluded from the market,—soles and plaice would not be caught in any numbers by the line fishermen, would they?—I have heard it stated by the fishermen, and also by the fish dealers as well as by the fishermen, that the boats of the line fishermen used to kill from 30 to 40 and 50 pair a day before trawling was introduced into the bay.

45,714. Fifty pair of soles?—Yes, and 12 and 15 turbot.

45,715. Was that amount killed by each boat?—Yes.

45,716 Since trawling stopped has there been any supply of those fish?—Not by the line fishermen; they do not pursue it now.

45,717. Have you at all considered what would be the effect of stopping trawling during a portion of the year?—I have. I naturally attach great weight to the fact of having certain fish lost to the public, but I can only repeat my answer that a large proportion of the fine fish would still be taken by the line fishermen, and the aggregate of the advantages is in favour of the line fishermen.

45,718. Then you do not think it would be sufficient to stop trawling during a portion of the year, but you would advocate its being stopped throughout the whole of the year?—Yes; if it has the effect I mention of producing a relative quantity of fine fish and of increasing the supply of other fish to such an extent.

45,719. Do you think the trawlers have interfered much with the herring fishermen—I mean in the way of cutting their nets, apart from frightening away the fish?—With regard to that I was reading yesterday an account of some of the herring fishermen in England.

45,720. I mean here; have you had any complaints here?—I hear that they have frightened shoals away by throwing stones at them.

45,721. Apart from the question of frightening them, have they been injurious to the herring fishery?—I can give you no evidence upon that.

45,722. Have no complaints come to your knowledge?—I have heard complaints, but I would not repeat them, as I think they are not well substantiated.

45,723. Was there much trawling during the night time?—Not much; there used to be some, but it was not very general. They generally endeavoured to get in so as to be able to send the fish off by the night train.

45,724. (*Professor Huxley.*) I understand you to say that in speaking of the destruction of spawn in the memorial, and of the many hundred tons weight annually destroyed, you meant fry?—Yes.

45,725. Do you think there is any foundation for the statement that spawn is brought up by the trawl?—I rather think that a confusion of terms existed in my mind, and that the same confusion of terms existed in the minds of most other people here.

45,726. Do you think that spawn is brought up in the trawl, using the term in the sense of eggs of fish?—I can give you no evidence upon that.

45,727. (*Mr. Lefevre.*) Were all the men employed on board the trawlers Claddagh men?—Not all of them, but the principal proportion were.

45,728. We have heard already that they got as wages from 12*s.* to 1*l.* a week?—I do not know any of them who got 1*l.*, except they fished on shares. If they had a fortunate week their profit might rise to 1*l.*, but from 8*s.* to 10*s.* was the average wages. Those who worked by shares had to take their chance of what arose.

45,729. You left off trawling on account of the decrease of fish?—Entirely so.

45,730. But after that the number of trawlers increased?—Yes.

45,731. Particularly of the larger class of trawlers?—Yes, and after fishing for a short time a great many left, finding it unprofitable.

45,732. Did any of the trawlers here fish at any portion of the year in other bays?—There is a well arranged system carried out by the proprietors of trawl-boats, and they have information from every quarter. The moment, they hear by letters, which are constantly reaching them, of the arrival of shoals of fish in any neighbourhood, and they happen to have a bad fishing where their boats are stationed, they send them off at once.

45,733. Is that course adopted by the owners of the large trawlers in Galway?—It is in Dublin Bay by some that I am acquainted with.

45,734. Did the smaller class of trawlers in the bay observe the same course?—No, they belong to the bay.

45,735. And they never fished outside?—No.

45,736. Did they not find it profitable to adopt trawling throughout the year in the bay?—I believe not. The general conclusion I arrive at, in the whole of the matter is, that I knew the fish to be abundant before trawling commenced, and I know it to have fallen off now, until it is almost a nullity.

The witness withdrew.

P. M'Laughlin.

PETER M'LAUGHLIN called and examined.

45,737. (*Mr. Regan.*) Are you a fish dealer?—I am.

45,738. For how many years have you been a fish dealer?—For the last 38 years.

45,739. In the town of Galway?—Yes.

45,740. I believe at one time you were a rich man?—Well, I had enough for myself.

45,741. Do you recollect when the trawling first commenced?—I recollect before the trawlers came in, and when they came in.

45,742. Before the trawlers commenced, what was the state of the fish market of Galway?—I have seen it full of trade and traffic, full of wealth and good earnings.

45,743. What counties, to your knowledge, used to be supplied from the fish market at Galway?—I have seen them coming for fish from Kildare, Roscommon, Mayo, and many other counties.

45,744. Who supplied the market at that time with fish?—The Claddagh fishermen and the people around.

45,745. What kind of fish were they,—enumerate them?—Some part of the fish buyers used to take turbot, soles, lobsters, and salmon; others would take codfish, haddock, and coarse fish, others would take fresh herrings, and some would have salt herrings; it was according as the market was.

45,746. What was the state of the herring fishery 20 years ago?—It was very good.

45,747. Previous to that, what was it, say 30 years ago?—It was very good then.

45,748. What has been the state of the herring fishery since the trawling commenced?—It has been very bad.

45,749. Do you attribute the destruction of the fishery in the Bay of Galway to the trawlers?—I do, because, before the trawlers began, I used to buy from the Claddagh people from 60 to 70 turbot in one day's fishing; I used to buy 20 or 30 from other boats. During the week I generally got about 100 turbot from the Claddagh men, which I believe they took at Arran and upon another bank leading out of Cashla Bay and Greatman's Bay.

45,750. Since the trawlers commenced, have you had large quantities of fry brought into the market of

Galway and small fish ?—I have seen small useless fish come into the market and the people used to laugh at them. They were taken down for guano.

45,751. For manure ?—Yes.

45,752. That was the fry and the small fish ?—Yes, different kinds of fry.

45,753. Did you see large heaps of it brought for that purpose ?—They did not take large heaps in, but if they were in a hurry they threw a great number of them in with the large fish. The fish were so small that they used to stick to the large fish.

45,754. Did the trawlers bring them in ?—Yes, it was the trawlers who did it.

45,755. What other fish did they bring in,—did they bring in soles in large quantities ?—Yes, at one time of the year they devoted their time to fishing for soles. Sometimes I have bought from them 40 pairs in a day, and then down to 10 pairs.

45,756. Were they caught by hand-lines or by trawling ?—By the spilliards. We have had none since the trawling commenced.

45,757. In what state has your fish market been since the trawling commenced ?—It has been very bad.

45,758. Have the fish increased in your market since the trawlers gave up trawling, for the last seven or eight months ?—For the last eight months. I have not seen so many mackerel taken as have been taken this year since the trawling was stopped.

45,759. Since last May ?—Yes, and also so large a quantity of whiting. They have caught them in thousands, and previous to this year I have seen none of them at all for a long while.

45,760. Now, while the trawlers were at work, did you see mackerel and whiting brought into the market in any quantity ?—No, there were only very few caught. Some odd times there would be three or four.

45,761. Before the trawling commenced, did you have plenty of mackerel and whiting in the market ?—Thousands of them. We were in the habit of salting them.

45,762. Have you any recollection of seeing large quantities of herrings here, 30 years ago, converted into manure ?—I recollect the time when they were lying down about the wall, and could get no buyers. They would not pay for ballast, but preferred to take some of the herrings back with them before they would take stones for ballast. I have seen them carried away and thrown out as manure.

45,763. You have not seen that since trawling commenced ?—No, nor for a long time before that.

45,764. Did you know the late James O'Doherty of Galway ?—Yes.

45,765. Do you recollect him turning out thousands of pounds of them for manure, and paying the men for carrying them away ?— Yes.

45,766. Do you know Nicholas Smith, of this town ?—Yes.

45,767. Have you known him do the same ?—Yes; he also had a large quantity, and threw them out.

45,768. How many years is that ago ?—I believe it is about 26 years ago.

45,769. Are the quantities of sole and fine fish coming now into the Galway market more than before the trawlers commenced, or less ?—Since the trawlers commenced, or rather within the first three months after trawling commenced, we could get none, because, where they used to set the spilliards these trawlers trawled, and the spilliard men could not get upon the ground. There was a large place at Gleninagh from which they were in the habit of supplying the town with soles, but since the trawling commenced they have got none.

45,770. Did the Clare fishermen trawl?—No; they were fishermen with the hand-line.

45,771. (*Mr. Concanon.*) What is your occupation ?—I live by my traffic.

45,772. In what do you traffic ?—In anything I think will benefit me in regard to the fish.

45,773. Will you tell me whether, for the last eight years, the line men,—the Clare men,—have sent their fish to Dublin by rail ?—They have not had any to send to Dublin by rail; they only catch a small trifle of haddock when the weather happens to be fine. They have caught, and sent it to Dublin, when there has not been trawling.

45,774. Haddock ?—Yes.

45,775. How long is it since they sent up haddock to the Dublin market ?—Seven or eight years.

45,776. Have they sent up fish to the Dublin market within the last three or four years ?—I have no knowledge of it.

45,777. Have you been purchasing and sending up fish to the Dublin market ?—No.

45,778. Could you get a consumption for it in Galway ?—No; because the cadgers and other people who used to take the fish do not come here now. When the fish declined and fell off, they did did not come, because they could not get half as much as would pay expenses.

45,779. Has that forced you to drive it away to the Dublin market ?—Yes.

45,780. (*Professor Huxley.*) You say you were in the habit of getting a large quantity of soles from the men who used the spilliards ?—Yes.

45,781. Did they bring as many as you wanted ?—Sometimes more than we wanted, and at other times not as many.

45,782. Have they brought in plenty since May ?—No, none, because they could not get them.

45,783–4. Do you think the trawlers have cleared out all the soles from the bay ?—I know the soles have declined.

45,785. Have they cleared all the soles out of the bay ?—They have cleared out the greater portion of them; there may be a few left. I was in the employment of Mr. Brown at the time that trawling commenced, and since then I have not been able to get them from the Claddagh people, because they have all been done up.

45,786. (*Mr. Lefevre.*) What did you give for a pair of soles before the trawling began ?—I got them for sixpence a pair.

45,787. As low as that ?—Yes, I did, and for fourpence a pair before trawling began.

45,788. What would you give for a turbot ?—I bought a turbot for one shilling and sixpence, and two shillings, and down to one shilling, before they began trawling. Sometimes I have paid as much as four shillings.

45,789. That was not the usual price, was it ?—They were not confined to any particular price; it was according to the demand for them. When the cadgers came in, we paid more.

45,790. What was about the usual price ?—Two shillings and sixpence was the price most generally paid That was the highest I used to go.

45,791. Did the fishermen from Inishbofin bring in their fish for sale here ?—They did.

45,792. Do they do so now ?—They do bring in all they catch of it.

45,793. Has the take fallen off there ?—They have got very little since the trawling commenced, except some codfish and hake.

45,794. They do not bring in any haddock now ?—Not much.

45,795. Or soles ?—No soles or haddock.

45,796. And they did bring in soles formerly ?—Yes.

45,797. And turbot ?—Yes.

45,798. Now they do not ?—No.

45,799. Is there any trawling outside the bay off Inishbofin ?—They have not been trawling beyond the Arran Islands. I never knew them to be trawling beyond there.

45,800. (*Professor Huxley.*) Was the reason why the Inishbofin men could not catch haddock because the trawlers trawled over their lines ?—No, but the Claddagh men told me that in the places where they used to get them they cannot obtain any now.

The witness withdrew.

GALWAY.

D. Kelly.

7 Sept. 1864.

DENIS KELLY called and examined.

45,801. (*Mr. Macnamara.*) Have you ever been a trawler?—I was trawling for some time.

45,802. You have trawled both inside and outside of the islands?—Yes.

45,803. How long is it since you did that?—The first time I had to do with trawlers was in 1841. At that time it was a mere experiment. Mr. Martin brought in one from London and he tried it.

45,804. When you first commenced trawling was the fishery good?—It was very good.

45,805. Did it become worse or better afterwards?—Much worse, but at that time, namely in 1841, there were very few trawlers in the country. Mr. D'Arcy had one and Mr. Thompson had one. We worked about three years off and on, not for the purpose of sale but merely for amusement. We trawled along from Slyne Head and caught a great deal of large sole and turbot.

45,806. Was that outside the islands?—Yes, at Slyne Head.

45,807. Have you trawled inside the islands of Arran?—Yes. In 1854 I came to live in Galway. The question of trawling was a very vexed one at that time, and the fishermen were annoyed at Mr. Brown for using trawlers in the bay. A few men in the town collected some money for the purpose of buying trawls for the fishermen, in order to quiet them. About 700*l.* or 800*l.* were collected and distributed. Twenty-four or twenty-five trawls were distributed among the fishermen. They went to fish then, and after a few years they found it would not pay and they gave it up. During those two or three years I had a boat myself, and I fished constantly in the bay.

45,808. Is it your opinion that inside the islands of Arran it is a spawning ground?—I am satisfied that it is every inch of it.

45,809. And the trawl in passing over the spawning bed is injurious to the fishery?—Yes, both in the destruction of fry and by disturbing the ova.

45,810. Did you ever see the fry destroyed yourself?—Yes, thousands of them in a day. I have thrown out half a ton of sea-weed, dirt, and small fish of every description.

45,811. You have thrown it overboard?—Yes.

45,112. Is there anything peculiar, according to your opinion, in the formation of this bay?—I consider that there is. I consider that the Bay of Galway is different from any other bay I know, inasmuch as it is sheltered by the Arran Islands, and I consider that the fish from the deep come into the bay under the shelter of the islands to spawn. Frequently when they have been taken up in the trawl I have seen the soles actually paying off their spawn on the deck. I have seen that in every part of the bay.

45,813. (*Mr. Lefevre.*) What time of the year was that?—In the month of April, and we used to find more soles in the month of April than in any other season of the year. I consider that the time they are coming upon the natural beds to spawn.

45,814. (*Mr. Macnamara.*) Do you consider that the fisheries would be improved by prohibiting the use altogether of trawlers inside the bay?—I consider that it would.

45,815. Were the fish taken outside the islands of Arran of a better description than those which were taken inside?—They are a larger sized fish. In fishing at the back of Slyne Head, in 1841, we scarcely took any small fish at all. In the course of three years I do not think we took a basketful of small fish. That was in the deep sea in 45 and 50 fathoms of water.

45,816. Was it in the summer time?—Yes.

45,817. Is it possible to fish outside the islands of Arran with the trawl for any considerable period of the year?—It all depends on the weather. We can trawl better outside the islands of Arran than inside if it is fine weather, but not in bad weather.

45,818. Do you know what is now the state of the fishermen in the Claddagh?—I know they are in a very poor state.

45,819. You keep an establishment in Galway?—Yes.

45,820. Not far from where they live?—Quite convenient to them.

45,821. Then you know their position?—Yes; they are in a very poor state.

45,822. Since the trawling ceased have you observed any change in their condition?—Since the herring fishery commenced there has been an improvement.

45,823. When did it commence?—It did not commence exactly until yesterday,—that is to say, the herring fishery; there were a few boats which used to get 1,000 or 1,500 fish, but it was not general until yesterday.

45,824. Have you gone every day into the Claddagh?—Yes.

45,825. What is the condition of the fishermen there?—They are wretchedly poor.

45,826. Was it so 20 years ago?—I have known them since 1846, and they were better off then.

45,827. (*Mr. Concanon.*) There was a very good take of fish yesterday?—Yes, a very fine take of fish.

45,828. There has not been a better for many years?—I have not seen a better take of fish since 1840.

45,829. Are you aware that latterly there has been a good take of other fish?—I understand there is a good deal of whiting in the bay, but I have not seen it.

45,830. How long from 1854 were you trawling?—I trawled up to 1856.

45,831. Two years?—Yes.

45,832. You then gave it up?—Yes.

45,833. Are you aware of fish being taken lately in Oranmore?—I consider the harvest fishing is not good at all until they go to Oranmore.

45,834. Have they gone there this year?—Yes.

45,835. How far is that from this place?—Not far,—it is in shallow water to the east of the bay. I never have any confidence in the herring fishery until I see them come from the deep water into the shallow water.

45,836. (*Professor Huxley.*) Were you acquainted with the Galway fishermen in 1847 and 1848?—Yes.

45,837. That was before there was any considerable trawling here?—Yes.

45,838. On what fishing did they depend principally?—On long-line fishing principally.

45,839. Did that support them more than the herring-fishing?—Each fish has its own season. In the months of January and February we have the winter herring-fishing.

45,840. Take the year round, what did they look upon as their principal harvest? Did the herrings yield them most, or the other kinds of fish?—The herrings did, in good seasons.

45,841. Did they depend upon the herrings more than upon any other fish?—They did not exactly depend upon it, as a general rule.

45,842. Would the falling off of the herrings have affected them more than the falling off of any other kind of fish?—I think it would.

45,843. Were you intimately acquainted with the condition of the people in 1847 and 1848?—I was.

45,484. Were they in a different condition from that which they are in now?—They were in a more prosperous state than they are in now, that is, the owners of the boats; of course those employed by the owners of the boats were in a wretched state.

45,845. They were then?—Yes, I have known the owners of the boats to be actually supporting them.

45,846. How many owners of boats would there be in 1847 and 1848 among the Claddagh people?—Of the large 12 ton boats there would be about 60.

45,847. How was it that these people came to be in a better condition than the rest?—Because they had more shares. They had the boat themselves, and they had a share for the tackle in the boat. They had three shares against one held by the men; and besides

that they had their boat, and were in a comfortable position. I have known some of them to have as much as 250*l.* to their credit in the bank.

45,848. Then they could not have been people of such improvident habits as we have heard?—They have not been so lately, but when they had good means they were.

45,849. Before 1847 or 1848 were they?—I had not much knowledge of it then, but I have heard that they were.

45,850. What was it made the change in their habits before that time?—The falling off of the herring-fishing principally, because, after the winter fishery, a boat and crew might have between 160*l.* and 200*l.*, all obtained in the months of January and February.

45,851. And having the money to spend, they spent it?—Yes, very freely.

45,852. Were they in the habit of pawning their boats and nets?—Yes; and, as Mr. Daly said, I have known them pawn a sovereign for a shilling and half-a-crown, until they could release it.

45,853. Did they put the sovereign itself in pledge?—Yes, that is a fact.

45,854. Would those people who had a good deal of money in the bank pawn their nets?—No, I do not mean to convey that; I mean to say that the people who fished in their boats pawned their nets, and the owners released them for them.

45,855. Were the people who would pawn a sovereign for a shilling the owners of the boats, or the persons who worked in them?—They were not the owners.

45,856. They were the persons who worked in them?—Yes.

45,857. I suppose that was done in order to prevent them from spending the whole sovereign?—Perhaps it was.

45,858. It was done to put it out of their possession?—I cannot say what their reason was, but they seemed afraid to part with the gold.

45,859. (*Mr. Lefevre.*) Was there any inquiry by the Commissioners in 1854?—I am not aware of there having been an inquiry then.

45,860. The byelaw which has been referred to has two dates, 1843 and 1854; from that it would appear that it was re-enacted in 1854?—I know that the fishermen have always been displeased with the limits.

45,861. I want to know why it was that this byelaw was re-enacted in 1854?—I cannot tell you, but I know that the men were not satisfied with the limits laid down, and I believe they were perfectly right.

45,862. Would they be satisfied with anything short of keeping the trawlers outside the Arran Islands?—I do not believe it would be of the slightest use to have any other regulation; and I declare, on my oath, that I believe every inch of the ground inside of the bay to be spawning ground.

45,863. You do not yourself speak of having taken up spawn?—You must be aware that the spawn of the sole is so very small that it would be hardly perceptible among the sand.

45,864. Do you think it so small that it would not be taken up?—It might be taken up with the sand, but disturbing it after it had been deposited by the fish would be quite as bad as if it were taken up. If it is once disturbed, it will have the same effect as being taken up and destroyed. I consider also that taking the sole when they are in the act of depositing the spawn is very injurious.

45,865. In what portion of the bay did you take up fish with spawn dropping from them?—There is not half a mile of the bay that I did not trawl in, and there is not a part of it in which I trawled from April to the beginning of May and even from the latter end of March, that I did not find them in that state. That is the reason why I drew a conclusion that there is no part of the Bay of Galway which is not a spawning ground.

45,866. You yourself trawled throughout the whole summer?—Yes, and occasionally, if I might, I trawled through the whole summer and the whole winter.

45,867. Have you considered the possibility of making any regulations to prohibit trawling during certain months of the year?—I have been considering that, and it struck me it would have little effect, for this reason, that if they are stopped at all, you must commence from the 1st of March. The small fish make their appearance about the latter end of May, and they are in a delicate state until the latter end of the month of October.

45,863. And then the herring season sets in?—Yes.

45,869. Then, in fact, you think it would be idle to mention any particular months?—That is my opinion, and, without a boast, I can tell you I have had some experience of fishing. I have been connected with the salmon fishery and the other fisheries ever since I was a boy, and I have taken great interest in the present question.

45,870. Can you give any particular date from which you would say the decline of the fish commenced here?—In 1854, when I first commenced trawling, the fish were plentiful, but in 1856, when I parted with my boat, it was not so. I used to take 120 pair of soles in 1854, and in 1856 they had fallen as low as 20 pair, and even down to 10 pair.

45,871. Do you refer particularly to sole, or to all fish in general?—I am speaking now particularly of sole.

45,872. Do you include the herrings in your remark?—The herrings are taken in a different season,—the trawl does not take a herring.

45,873. But when you talk of the decline of the fisheries, do you include in that the decline of the herrings?—The decline of the herring-fishing has taken place since 1840.

45,874. That is the last year that there was a really profitable herring-fishing?—There was a little harvest fishing since, but not to any great extent.

45,875. Then from 1840 till 1852, when the trawling began, there was no particular take of herrings?—No, not of any consequence. The only take of herrings I have seen since 1840, that I would be satisfied with as a take, was taken yesterday.

45,876. Then the decline of the fishing you speak of, since the trawling has been mainly confined to other fish?—Yes.

45,877. Such as soles, plaice, and haddock?—Yes.

45,878. And cod?—Yes, and ling and hake.

45,879. (*Professor Huxley.*) Do you think that trawling has had anything to do with the decline of the herring-fishing?—I consider, when the herrings first make their appearance in the bay, about the middle of June, that the trawling has the greatest effect in scaring them away.

45,880. On what ground do you base that opinion?—On the dragging of the trawl through the water.

45,881. You conclude that that must frighten the fish?—Yes. I have taken a bit of stick, and have stood beating the side of the boat with it; when the herrings have heard the noise, they have run off. I have frequently done that myself.

45,882. Do you compare the dragging of a trawl through the water to a noise made in that way?—I consider it much worse, particularly at night. If you draw a trawl through the water at night, the sea seems as if it were actually on fire.

45,883. Did any trawling go on here at night?—Yes.

45,884. Is there any oyster fishery here?—Not immediately in Galway.

45,885. Not in Galway Bay?—No. There are some oysters on the Clare side, but they are not breeding beds.

45,886. Are they simply laid down there?—They are simply brought there to feed.

45,887. Is there any part of the bay in which you will find the spawn of fish now?—I think there is.

ALWAY.

D. Kelly.

Sept. 1864.

45,888. In what part?—Every part of the Bay of Galway, but it is so very much diminished that you will find very little of it.

45,889. On the other side of Galway Bay there are some oysters?—Yes.

45,890. Can you give any reason for the failing of herrings from 1840 till 1852?—No, I cannot assign any reason at all.

44,891. Was there no trawling in the bay during that time?—No.

The witness withdrew.

Mr. Macnamara stated that he had no further evidence to offer on behalf of the Claddagh fishermen.

Mr. . Concanon.

Mr. Edmund Concanon called and examined.

45,892. (*Professor Huxley.*) We wish to ask you if you intend to produce any witnesses on your side of the question in open Court?—No.

45,893. We desire to hear your witnesses, if you are prepared with them; and if not, will you tell us why they are not here? We shall then know what to do. I should like to make a statement to you. I will not produce a witness, and the reason why I will not do so is, that my clients believe that it will not be safe for them to give evidence here or elsewhere.

45,894. If you tell us that you are instructed by your clients that they dare not venture to appear here, we will take other measures to ensure a hearing from them?—I am instructed by my clients that they are afraid to come either here or elsewhere.

The witness withdrew, and the inquiry was adjourned.

Galway, County Galway, Wednesday, 7th September 1864.

Present:

Professor Huxley, F.R.S. (Chairman). | G. Shaw Lefevre, Esq., M.P.

P. Sweeney.

Peter Sweeney called and examined.

45,897. (*Professor Huxley.*) Are you a native of Galway, Mr. Sweeney?—No, I was not born here, but I have been here ever since I was a child.

45,898. You know Galway very well?—Yes, very well.

45,899. When did you begin to trawl here?—In the year 1856.

45,900. What led you to commence trawling here?—I was doing business here for a company in connexion with Messrs. Rush and Palmer, and I had an opportunity of seeing what their trawl-boats were doing. I saw the returns come to Mr. Rush, and I was induced to get into the business.

45,901. Were the returns very good?—They were.

45,902. How many boats did you set up?—I only set up one at first.

45,903. What was the size of it?—Thirty-five tons I think.

45,904. It was a decked boat I presume?—Yes, it was a decked boat.

45,905. How many men did you carry on board?—When we first commenced trawling we had a man more than at present. We had four men and a boy.

45,906. Were there many other vessels trawling in the bay at the time you were working there?—Yes, a good many.

45,907. How many?—I suppose there were about 20 vessels.

45,908. Have you any reason to think that at that time they were all doing well?—Yes, they were.

45,909. What did that vessel cost?—It stood me in about 700*l.* with its gear and everything else.

45,910. On what plan did you begin working it; did you give the men whom you employed wages?—Yes, all were paid by wages at that time.

45,911. Were all the boats that were fishing at that time paid in that manner?—Yes.

45,912. By wages?—Yes.

45,913. What wages did you give?—We had a Dublin skipper, as the men did not understand trawling. We paid him 26*s.* a week, the men 10*s.*, and the boys about 5*s.* or 6*s.*

45,914. Did you get men readily at that rate of wages?—Yes; and there were many who would have been glad to get into my employment if I had had employment to give them.

45,915. The skipper was a Dublin man?—Yes.

45,916. The men were Claddagh men?—Yes.

45,917. That was the time the line of demarcation was drawn?—Yes.

45,918. At that time you were not allowed to trawl within a certain line?—No.

45,919. At that time was it profitable to work outside that line?—Yes.

45,920. Did you work outside the Islands of Arran?—Once or twice, but the day must be very fine for that.

45,921. It was not your habit to do so?—No.

45,922. At what time in 1856 did you begin trawling?—I think it was in April 1856.

45,923. How many months did you continue it that year?—All through the year.

45,924. Did you get a good supply that year, all through?—I got what paid me.

45,925. Have you gone on working with the trawl up to within a few months of the present time?—I have not worked here for the last 12 months with the exception of two months.

45,926. How is that?—On account of the interference of the Claddagh men.

45,927. If they had not interfered with you would you still have worked there?—I should.

45,928. Has the yield of fish always been such as to pay you?—Yes. Sometimes we might have had a bad year, but next year would make up for it.

45,929. How many years did you continue the system of paying wages?—Up to within a year and a half.

45,930. What made you change that system?—The fellows were getting lazy and indifferent. They had the wages to get whatever they did, and seeing the way in which the Dublin boats were worked, I considered it better to put them on shares, and give them a sort of interest in the fishing.

45,931. Then it was not because the fishing was falling off that you altered the mode of paying the men and paid them by shares?—No, not by any means.

45,932. In 1856 you had one boat?—Yes.

45,933. Have you increased the number of your boats?—I have.

45,934. When did you add to the number?—In the same year I added another one.

45,935. In the summer of 1856?—Yes.

45,936. When did you add another?—I put one on from time to time.

45,937. How many have you now?—Six at present, but I have had seven. I lost a fine boat in the Roads; it was run down by another boat of my own.

45,938. When was it you added the last one—how many years ago?—I suppose it will be about three years ago.

45,939. You have not added to the number since that time?—No.

45,940. Did each of these boats cost the same sum as the first?—No, there were none as expensive as the first.

45,941. What might be the average cost of those which succeeded the first; were they small vessels?—There was a larger one. I have one of 51 tons.

45,942. What was the size of the first?—The first was 34 tons, and the next was 33 tons.

45,943. What was the size of the smallest?—The smallest is 19 tons.

45,944–5. Were these vessels built for the purpose, or were they vessels that you bought?—I bought them.

45,946. Were any of them hookers such as those used by the Claddagh men?—No.

45,947. Would they not answer your purpose?—No, they would be too small.

45,948. What would be the amount of capital you put into them altogether?—I may say about 3,000*l.* altogether.

45,949. Did you man all those vessels and work them all the year round?—Yes.

45,950. If there were no interference with you, would you be disposed to add to them still; did you find enough for them to do?—I would have continued to fish with them but for the persecution and misery which I have gone through. My life has been threatened, and I have been hooted and hunted. Sooner than go through all that I have suffered again, I would rather go into the poorhouse.

45,951. But, so far as the yield of fish is concerned, were you satisfied with trawling as a commercial speculation?—Yes, I have been quite satisfied with it.

45,952. Have you been yourself trawling?—I have been on a few occasions, but I do not know anything about it practically.

45,953. Is it one of your men who was attacked lately by the Claddagh people?—Yes.

45,954. Have there been more threats besides the actual attacks?—Yes, the threats have been innumerable.

45,955. Do you know much of the conduct of the Claddagh people?—No, I never venture within their limits.

45,956. The statement is that their fishing has fallen off a good deal; have you any knowledge of it?—No, I have no knowledge of it.

45,957. Where does your fish go; where is your market?—Dublin.

45,958. You do not send any into the Galway market?—We do send some coarse fish into the Galway market at times.

45,959. But not the general yield of your trawlers?—No, we should not be able to get any price for it here.

45,960. What is the kind of fish you get principally; what is the staple fish you get in the trawl?—Soles and turbot.

45,961. Do you get any plaice?—Yes, we get plaice.

45,962. Anything else?—Yes, brill.

45,963. Do you have a particular season of the year for each fish?—Yes.

45,964. What are the different seasons?—The best season for soles is from the month of February until the latter end of April.

45,965. What is the best season for turbot?—The summer months, July and August.

45,966. Do you get any codfish in the trawl?—Yes, we get it in the winter.

45,967. Do you get plenty of it?—Yes, we get a deal of cod.

45,968. Do you get any haddock?—No, we only get very few haddock.

45,969. Did you ever get many haddock here?—Yes, we did at one time.

45,970. How many years will that be ago?—When I first commenced trawling here we were able to get a good many haddock.

45,971. Have the haddock fallen off since then?—Yes, they have fallen off very much.

45,972. Have any other kinds of fish fallen off?—I do not think they have. Perhaps they may fall off one season, but they invariably come back again in the next season.

45,973. Taking one year with another, do you get from each of your six boats as much fish in proportion as you were in the habit of getting from your one boat when you began to trawl?—Yes.

45,974–5. Then you will get six times as much fish?—Yes, but if we have easterly winds the bay is done for that year?—We get no more fish that year if we have a continuance of easterly winds.

45,976. Does a continuance of easterly winds drive the fish out of the bay?—It does. We get no more fish that year.

45,977. What is the reason of that?—Indeed I do not know.

45,978. Do you fish at night with your trawls?—Yes.

45,979. Is that the custom here?—Yes.

45,980. Do you work all night as well as day?—Yes.

45,981. How do your people make out the headlands and see what they are about in the night time?—Unless it happens to be very clear in the night time they do not.

45,982. The bay is not lighted, is it?—There is a light in the Arran part.

45,983. Is the fishing better in the night or in the day?—On a moonlight night in the summer time we are able to kill more codfish.

45,984. In the summer time is the fishing in the night better than in the day, or is it the other way?—It is the other way.

45,985. The day fishing in the summer time is the best?—Yes.

45,986. Can you trawl outside the Arran Islands?—Very seldom.

45,987. Is that on account of the badness of the weather, or is it too deep for the trawl?—There is such a swell there that they cannot fish.

45,988. What will be the average yield of each of your trawls; taking one year with another, what will be the average yield per day?—I really cannot say what the average yield will be.

45,989. I mean either the weight or in any other mode by which you can give it to me. Have the prices remained the same?—Yes, they have.

45,990. Have the prices remained the same for some years?—It has remained much about the same.

45,991. What would be the value of a day's haul?—Taking the average it would be 2*l.* or 3*l.*

45,992. The average for the year round?—Yes.

45,993. Do you think that 2*l.* would be a fair average?—Yes, a couple of pounds.

45,994. Have you any notion of the number of cwts. caught in a day on the average?—No, I have not.

45,995. I am speaking now of the earnings of each boat?—Yes.

45,996. That will be about 2*l.* per day?—Yes.

45,997. Have any complaints been made against your boats for carrying away spilliard lines in the bay?—Yes.

45,998. Has that been of frequent occurrence?—No.

45,999. How often has it occurred?—Three or four times. At first they were in the habit of setting their lines across our trawls, and I was fool enough to make good any damage done. When they were coming across us they would say "Heave up your lines, or we will cut your gear?" If the men took up their trawls, then that day would be lost. I disputed with them at last, and the question was brought before the chairman of the quarter sessions, and the matter was decided in my favour. After that they gave over that kind of persecution.

46,000. Since you began trawling, did the Claddagh men take to it?—No, it was before. There has not been one of those trawlers since I commenced.

46,001. Then it was before you began at all that they took to it and left it off?—Yes.

46,002. Why did they leave it off?—They spent all their earnings, and they were not ready when the time came to replace their worn-out gear.

46,003. They tell us themselves that the reason they gave up trawling was that they could get no fish?—When they went trawling they invariably fished within the limits. Nobody ever said anything against them.

46,004. Could they fish outside the limits with their boats as well as you could with yours?—No.

46,005. On account of their boats being smaller?—Yes.

46,006. Can you furnish us with returns of the fish you have sent up to Dublin year after year?—I could if I had the returns here.

46,007. Can you get them?—I will make an application for them.

46,008. There is a statement contained in a report of the proceedings of the Fishery Commissioners in Galway that a subscription was raised here of 700*l.* or 800*l.*, and that it was forwarded to the Claddagh men to enable them to buy trawls, and that they refused it on the ground of the harm which was done to the fishing by trawling?—I know nothing about it.

46,009. (*Mr. Lefevre.*) I think you said that when you commenced trawling in 1856 there were 20 trawlers in the bay. Is that so?—I think there were about 20 trawlers.

46,010. What boats were they; were they boats belonging to Galway, or did they belong to a company?—There was one company—the Royal Irish Fishery Company; there was also the London and West of Ireland Company.

46,011. Were they all trawlers?—Yes.

46,012. What sized vessels had they?—They were large vessels.

46,013. Were they larger vessels than yours were or were they of a smaller size?—They were larger.

46,014. How long were they fishing?—Not more than six months.

46,015. Subsequently to that were there no vessels except your trawlers?—There was a company that lasted a short time.

46,016. How long did it last?—Not more than 12 or 18 months.

46,017. Was that up to 1858, or when did they come to an end?—It was later than that.

46,018. When did they come to an end?—It is four or five years since they were here.

46,019. How many vessels had they at work?—Altogether they had 10 or 12. They had some for the lobster fishery.

46,020. How many had they trawling?—There were 32 boats altogether trawling.

46,021. From 1856 until four years ago?—The West of Ireland Company and the Royal Irish Company were fishing before I commenced at all.

46,022. Before you commenced how many were working at different periods?—The West of Ireland and the Royal Irish Fishery Companies were working up to 1851.

46,023. And the London Company, until when were they working?—Up to four years ago.

46,024. In the year 1861 how many vessels were there at work besides your own?—I suppose there were not more than a dozen altogether.

46,025. In the last three or four years how many have been here?—About the same number.

46,026. Were all the men employed on board your vessels Claddagh men?—Yes, with the exception of the skippers and except the Englishman who was beaten.

46,027. And you began by giving them wages?—Yes.

46,028. After you had been working for some time did you increase the wages gradually?—Yes, up to 20*s.*

46,029. I understood you to say that two years ago you began to pay the men by shares?—Yes.

46,030. Did their earnings amount to more than 20*s.* when they were paid by shares?—Yes, on the average.

46,031. What on the average did they amount to?—The skipper some weeks would have 2*l.* a week.

46,032. And what would the men have?—Sometimes 1*l.* a week.

46,033. They had about that sum?—They had, and sometimes rather more. They exerted themselves better and were out earlier and later.

46,034. Was the result better for the vessel?—I think it was better for all parties.

46,035. Was it better for them and better for you?—Yes, it was.

46,036. When was it that you first met with opposition on the part of the Claddagh men?—The first real opposition was about four years ago when they set fire to a vessel of mine.

46,037. When first you commenced you found no real opposition and had no difficulty in getting men?—No.

46,038. You experienced no difficulty until four years ago?—About that time they set fire to a vessel of mine in the Roads. It was the first vessel I had.

46,039. What did you attribute that opposition to?—To a set of fellows in the town; such men as Kelly and others like him were the cause of all the row.

46,040. How do you explain the fact that four years ago you met with considerable opposition whereas when you commenced trawling and there was a considerable amount of trawling in the bay you met with no opposition?—I cannot account for it in any way except that a set of fellows here have taken the fishermen in hand for political purposes and have been the means of causing all the opposition.

46,041. Did your trawlers fish in Galway Bay, or did they go elsewhere in the season?—Two years ago they went to Dingle Bay.

46,042. Last year did they go elsewhere?—Last year I sent three boats to Bantry Bay. Representations were made that great amounts of fish were being caught. There was a company there under the management of Mr. Pike.

46,043. Was the trawling there successful?—Yes, but it was late in the season when the boats went there. The season was over in point of fact.

46,044. Do you know what proportion of small fish was taken by your boats?—I have no idea whatever.

46,045. Was there any brought home at all?—They always brought home some small fish.

46,046. What was done with it?—It was sold in the market.

46,047. Was it sold for the benefit of the vessel or was it given to the boys?—It was sold for the benefit of the crew and the vessel.

46,048. I think you said that the smaller class of trawlers belonging to the Claddagh men did not observe the limits of prohibition?—So I have been told.

46,049. Did the larger class of vessels observe that regulation?—They always did. They were fined once or twice by the magistrates for trawling within the limits but they did not do so with my wish.

46,050. Did you give instruction to your skippers not to trawl within the limits?—Yes, and the men will to this day swear that they were not within miles of the limits.

46,051. Do the other trawlers observe the limits?—Yes, I am sure they do.

46,052. What would be the effect upon the trawling in Galway Bay if it were prohibited within the Islands of Arran; would it be possible to carry on the trawling outside?—No, it would not.

46,053. Would there be a sufficient number of days in which they could trawl outside the islands to enable them to make a profit from it?—No, they would have to give it all up.

46,054. (*Professor Huxley.*) There was a very strong statement made to-day in the course of the

evidence as to the quantity of small and unsizeable fish taken; have you any knowledge of that?—No, I have not. I never saw any fish taken that was not saleable and readily sold on the quay below.

46,055. Did you not throw overboad fish too small for sale?—I never knew of it.

46,056. When your trawlers fished outside the Islands of Arran, which occasionally was the case, did they take a larger class of fish than those taken inside or were the fish about the same?—About the same.

46,057. Was the take larger?—No.

46,058. Did they catch more fish?—No, there was very little difference.

46,059. I think you said that you now work your trawls with fewer men than you did at first?—Yes.

46,060. You work them now with three men and a boy?—Yes.

The witness withdrew.

HENRY CHARLES BURBIDGE called and examined. *H. C. Burbidge.*

46,061. (*Professor Huxley.*) You are a trawl owner here Mr. Burbidge?—Yes.

46,062. When did you begin to trawl in this bay?—About the year 1854; on or about that time.

46,063. What led you to begin trawling at that time?—I began trawling because I saw that the other boats were doing so well.

46,064. Did you buy a trawl-vessel at that time?—I had a small boat and I put a trawl into her.

46,065. What size was she?—20 tons altogether.

46,066. Was she not rather small for the work?—She was a decked boat and very handy.

46,067. Have you added to the number of your trawlers since?—Yes.

46,068. How many have you now?—Only two. I lost one, unfortunately, this year with all hands.

46,069. Has the yield of those boats been such as to pay you commercially?—It has.

46,070. Would you still add to the number if you could trawl freely in the bay?—I would.

46,071. Can you give us an idea of the total amount of capital you have put in the business?—I have not more than 300*l.* in it now. I have embarked in other businesses as I could not afford to have the capital lying idle.

46,072. You have heard Mr. Sweeney's evidence?—Yes.

46,073. Do you agree with it generally?—Yes.

46,074. Is there anything you would like to add to it?—Nothing particularly.

46,075. Do you agree as to the amount of intimidation exercised by the Claddagh men?—Yes, perfectly.

46,076. Have you experienced it yourself?—Not as much as Mr. Sweeney.

46,077. Have you altered the mode of paying your men the same as Mr. Sweeney has done?—Yes.

46,078. Did you alter it because the fish were falling off?—No, it was in order to give them an interest in the fishing, and induce them to exert themselves.

46,079. After your men were paid by shares were their average receipts greater or less than when they were paid by wages?—I think they were greater.

46,080. Do you keep any book to show the sums they have received?—No.

46,081–2. Can you give us any accurate information upon that point?—No.

46,083. Your impression is that, on the whole, the amount of money you paid after the men were put on shares was equal to that which you paid when they were paid by wages?—Yes, on the average.

46,084. Have you any knowledge of the reason which induced the Claddagh fishermen to give up trawling?—No, I have not, unless it was that they did not put by any money to supply themselves with gear and the like of that.

46,085. You were trawling at the very time they say that trawling was given up by them because it paid so badly?—Yes.

46,086. And you were making enough to reward you thoroughly, and to lead you to invest money in it since?—Yes, and I would certainly have invested more if it had not been for the opposition we have received.

46,087. (*Mr. Lefevre.*) Do you know what the cause of the discontinuance of trawling by the Royal Irish Company was?—I think there was a great deal of mismanagement.

46,088. Have the Dublin trawlers come round here for the last three or four years?—They have been here occasionally. I think they were here two or three years ago.

46,089. Were they here last year?—Yes, but there was only one boat.

46,090. Are your boats now laid up?—Yes.

46,091. Have you been unable to get men to work them this year?—I should not have been if it had not been on account of the intimidation to which the men have been subjected. The men are perfectly willing and would be satisfied to go if it were not that they have been frightened by the other fishermen.

46,092. Can the fishermen make the same wages now as they did when they were trawling?—No; they have several times complained to me since that they have been very badly off. A short time ago two or three of them came to me and said they did not know what to do; they would have to go into the poorhouse.

46,093. Were you men all Claddagh men?—Yes.

46,094. And your skippers too?—Yes.

46,095. They have now returned to their usual fishing?—They have.

The witness withdrew.

PETER SWEENEY, recalled and examined. *P. Sweeney.*

46,096. (*Mr. Lefevre.*) Did you add to your fleet of trawlers from the profits made by trawling as you went on in the business?—Yes.

46,097. Were they built here or did you buy them elsewhere?—The first I bought of Mr. Good, of Dublin.

46,098. And where did you get the other boats?—The others I bought from a Dublin man named Pile. The largest boat I have was a boat belonging to the London and West of Ireland Company. I got it when they sold their boats.

46,099. Can you give any reason for the failure of the Irish Company?—Their failure arose from mismanagement I suppose.

46,100. Not from any falling off in the fish?—They got an immense amount of fish. They spent 36,000*l.* in six months here.

46,101. (*Professor Huxley.*) As much as 36,000*l.*?—Yes.

46,102. (*Mr. Lefevre.*) How many trawlers had they at work?—About a dozen, and they had lobster-boats and steamers here.

46,103. Did they employ Claddagh men also?—Yes, all the Claddagh men were about their gates looking for employment.

46,104. Then the breaking up of this company must have been a great loss to the Claddagh men?—Yes it must have been.

46,105. Were they paid by shares or by wages?—By wages; they had no shares at all.

46,106. When was the company in activity?—About four years ago. They commenced somewhere about May.

46,107. Are there any other trawl owners in Galway besides you two gentlemen?—No.

GALWAY.

P. Sweeney.

7 Sept. 1864.

46,108. Since 1861, with the exception of Mr. Good's boats, there have been no other boats from a distance trawling in this bay?—There has been a Dublin boat but only one trawling here. It left when the last row commenced here.

46,109. Do you find that the take of turbot has been at all falling off?—No, last summer we had an immense quantity of turbot; I never saw so many. We used to take 20 large turbot in a haul.

46,110. Was it not last May that you left off trawling?—We had to take the boats in and give them an overhaul.

46,111. Then it was not on account of intimidation that you left off last May?—We had a rising in the Claddagh.

46,112. And you left off last May on account of the intimidation?—Yes.

46,113. Was there any part of the year when you habitually laid your boats up?—No, we might lay them up once in three years for an overhaul.

46,114. But there was no one month in which you laid them up?—No.

46,115. What would be the effect of making a close time for three months in the year; have you considered what would be the effect of that?—No I have not.

46,116. Would it be injurious to you as a trawler?—Not a great deal.

46,417. Would you, during the summer months, trawl in any other place than in this bay; is there any other place open to you except this bay?—No, I do not know of any.

46,118. Would you trawl outside the Islands of Arran during the three summer months?—No.

46,119. Would the weather not permit you?—No, and the water is too deep. It goes down quite abrupt and becomes very deep.

The witness withdrew, and the inquiry was adjourned until the 10th of September, at Inver.

Inver, Donegal, Saturday, 10th September 1864.

PRESENT:

G. SHAW LEFEVRE, Esq., M.P.

INVER.

Mr. W. Sinclair.

10 Sept. 1864.

Mr. WILLIAM SINCLAIR called and examined.

46,120. Have you been long resident in this neighbourhood?—I have been resident here constantly for the last 15 or 16 years, but I have been familiar with the country from my boyhood.

46,121. Have you interested yourself in the fisheries here?—Yes, very much. I came here to settle in the year 1847. At that time there was great depression, generally speaking, and I took a great interest in the fisheries here. The fishermen had no boats or nets of their own, and I employed 30 men constantly at the hake-fishing and sprat-fishing.

46,122. Can you tell us what is the number of fishermen in Donegal Bay?—There are fishing here at present, this year, I think 24 boats for sprats, and eight men in each boat.

46,123. Is that from the whole of Donegal Bay?—The whole of the sprat fishermen belong to Inver, with the exception of three crews from the Donegal side.

46,124. Can you tell us the number from Inver and Donegal?—I know there were 64 boats fishing here one night for herrings and sprats and they would have, on the average, crews of eight men.

46,125. From Inver Bay and Donegal Harbour there are 24 boats?—Yes, sprat boats with crews of eight men in each. Some of them perhaps have only seven, and some of them as many as nine. There is not a sprat boat on the Donegal coast except those which belong to Inver.

46,126. What is the size of the boats used here?—The sprat boats are from 3½ tons to 4½. The general average will be from 3½ to 4 tons.

46,127. Are there any smaller boats used for the other fisheries?—Yes, there are a considerable number of yawls used for long-line and herring fishing.

46,128. Are the fishermen here fishermen throughout the year, or do they combine farming with their fishing?—The greater number of them have small patches of land, but many have not. Many fish throughout the whole year and depend entirely on fishing for support,

46,129. What are the seasons for the different fish here?—The sprat-fishing generally begins here from the 20th of July to the 10th or 12th of August, generally about the beginning of August or a few days before or after. Sometimes they run in earlier here; this year they did for a short time.

46,130. How long does it continue?—It varies very much. Last year they were taking sprats up to the middle of November. The sprat-fishing last year was principally in Donegal Bay, in the channel that runs up to Donegal on the other side from here.

46,131. What fishing succeeds the sprat-fishing?—The hake-fishing and the long-line-fishing.

46,132. Is there any herring fishery here?—Yes. This year there has been a tolerable herring-fishing, the best there has been within my memory. I do not think there has been such a fishery for the last 20 years.

46,133. Is that the summer herring-fishing?—Yes.

46,134. In what month?—They began here in July, and the season has lasted on until now.

46,135. Is there any winter fishery for herrings?—There has not been any winter fishing for herrings for a long time.

46,136. Then what fishery is there after the herrings?—There is the hand-line-fishing for hake and the long-line-fishing for cod, haddock, and that sort of fish.

46,137. Does that fishing go on through the spring until the sprat-fishing begins again?—Yes, but at times they kill a great many coal-fish. They call them here glassen, and they are I believe the black pollack.

46,138. What is the season for them?—They are principally killed in the spring. They did not kill many this year.

46,139. Is the sprat fishery improving or falling off?—The sprat fishery last year was much better than it had been for several years before. It was very good in 1847 and 1848, and it lasted so for five or six years. It was very good all that time, but rather decreasing. It then fell away very much indeed, and for the last four years until last year there have been hardly any got. Last year the sprats came in again in great quantities into Donegal Channel, but they have hardly come here at all. A few we got here, but the people were badly off for nets.

46,140. What part of the harbour do you call the Channel?—Here from Rock Point up to the town of Donegal.

46,141. Quite in the river?—No, it is not the river. The fish come in over a sandbank which is bare at low water. They come in with the tide and run up to Donegal, and then drop out with the tide very often. Sometimes they stay in all night. The gales of wind drive them in and out.

46,142. Has this season been a good one for sprats?—So far it has been very tolerable. They say there is a vast quantity, but the weather has been stormy and they cannot go after them.

46,143. What are the nets that are used for the sprat fishery?—The nets we use here are seines; they

are nets about 140 yards in length. There are two nets at each end with 20 yards of the bosom of the net or bunt.

46,144. What is the length of the net altogether?—From 100 to 120 and 140 yards.

46,145. Is it dragged on shore?—No.

46,146. Is it dragged in a circle?—Yes, it is dragged in a circle by two boats.

46,147. How many men are there employed in each of the boats?—From seven to eight men.

46,148. Are the nets generally the property of the fishermen?—Yes, they are the property of the fishermen. Each man finds his share of the net. You will find that the bunt of the net is composed of seven depths, or seven shots of 60 meshes of half-inch net. Then below that there is a reef which runs the whole length of the net, and which is from 15 meshes going deeper towards the centre down to 40 meshes.

46,149. What depth of water do they fish in?—They fish out as far as 15 or 16 fathoms of water at night or in muddy water. Generally speaking they prefer fishing where the net will take the ground, but where the water is muddy or on a dark night they can fish out in 15 or 20 fathoms of water.

46,150. Is there any trammel net fishing here?—Yes, the herring are almost all caught by trammel drift nets. They moor them here and make them into trammel nets. When the fishing is good they stay off all night, but they always moor them and do not fish them as drift nets as they do in other places. They drift them down in Donegal Bay where there are strong streams.

46,151. Do they fish for the hake with the trammel net?—Yes. The nets are then heavily weighted and sunk to the bottom.

46,152. I think there was a regulation made by the Commissioners with regard to trammel net fishing in 1860?—Yes. The hake fishers here had got into the habit of leaving their nets out all the day and night. Nobody enforces the law, and the Coastguard takes no trouble about it at all. They have other duties to perform, and they are rather averse to going out of their regular line of business.

46,153. What was the reason that that regulation was passed?—The reason was, an application on behalf of the sprat men who said the sprat-fishing had declined, they thought in consequence of those nets being fished constantly daily and nightly, and the fish left lying in them, struggling in the shallow water at the head of the bay. The Commissioners heard a great deal of evidence; they saw the sprat-fishing and hake-fishing going on, and thereupon they decided that the hake-nets should not be left in the inner part of the bay.

46,154. Within a line drawn from Bunlaghy River to Doorin Point?—Yes.

46,155. That regulation was passed in 1860?—Yes.

46,156. Has it been observed by the trammel fishermen?—No, it has not indeed. I fined some of them here once or twice, but nobody troubles their heads about it. The Inver men, although they bothered my life out to have the regulation, will do nothing to enforce it now they have got it.

46,157. Do the Coastguard trouble themselves to enforce it?—No.

46,158. Are you aware that it is one of the duties of the Coastguard to enforce those regulations?—The Coastguard station here is nine miles down along the point, and it is almost impossible for the Coastguard to do the work effectually. The few people who have the nets out keep a good watch, and if they see the Coastguard boat coming down they cut the moorings and drag for the net when the Coastguard have gone.

46,159. Then notwithstanding this regulation there is a considerable number of nets set within the limits laid down by the Board?—Yes, but there have not been many this year, because there has not been much hake-fishing.

46,160. Are they set during the sprat season?—Yes.

46,161-2. What is the length of the trammel nets?—The trammel nets average from 12 to 16 or 18 nets of 30 yards long.

46,163. In what depth of water do they set them?—In two fathoms sometimes.

46,164. Not deeper than that?—Yes, out as far as 20 fathoms.

46,165. Are they set right across the Inver Bay?—Yes.

46,166. Has there been any trawling in this bay?—Trawling has been prohibited in a line from that point to this.

46,167. Before that prohibition was made was there any trawling?—Yes, but only seldom.

46,168. Are there any trawlers belonging to Donegal Bay?—No; the only trawlers I ever saw came from the Connaught side.

46,169. What sized boats were they?—From 10 to 15 boats. One boat about 25 tons came two or three times.

46,170. Did they trawl quite inside, in shallow water?—Yes, in five fathoms of water.

46,171. Were complaints made to the Commissioners with regard to the trawling?—Yes, there were some rows here. The Inver fellows did not like to see the trawling going on at the time the sprat-fishing was going on, and they had quarrels with them.

46,172. What kind of fish do they catch here in the trawl?—Sole, plaice, and turbot.

46,173. Are the boats not calculated for fishing in deep water?—Those boats which come in here generally are of a pretty good size. The small boats fishing in Donegal Bay never come round here at all, or hardly ever; very rarely.

46,174. There is a smaller class of trawlers fishing in Donegal Bay?—Yes, they fish at the back of a sandbank called the Ridge, but generally in shallow water of about five fathoms. They are boats of about seven tons.

46,175. Was it alleged that the trawlers did harm to the fishing?—It was alleged that the herring-fishing and the turbot-fishing had entirely been destroyed. The men used to take great quantities of turbot with long-lines, and there was a tolerable herring-fishing every summer in the bay, and sprat-fishing in the same way. They said that the trawlers by continually scraping up and down the sand had destroyed the fishing.

46,176. They attributed it to the trawlers?—Yes; evidence was given by the trawling people before Mr. Ffennell, showing that they had totally routed out the turbot, and that when the men tried for turbot they could get nothing.

46,177. In consequence of that was the regulation passed in 1860 prohibiting trawling within certain limits?—Yes.

46,178. That cut off Inver Bay and part of Mullaghmore Bay?—Yes.

46,179. Has there been any trawling since that regulation was passed?—I have only heard of one attempt, which was found out.

46,180. Have there been any trawlers trawling in the bay at all since that?—Hardly at all.

46,181. The small class of boats from Donegal, trawling close in-shore, has been given up?—Yes; they could not trawl in water above five or six fathoms deep, or 10 at the outside, but they never went into 10 fathoms of water if they could help it.

46,182. Has there been any improvement in the fisheries since?—There has been a very considerable improvement. Greater quantities of herring have been caught in Donegal Bay than before, and a greater number of fish has been taken by the hand-lines.

46,183. Did the trawlers catch any considerable quantity of soles?—They got a good many, but they thinned them out with the turbot.

46,184. Do the spilliard men catch any soles?—Hardly any; they take very few soles on lines here.

46,185. Then the result is that no soles are caught now?—Hardly any.

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46,186. What is the market for the fish here?—The curers come down from all parts of the country.

46,187. Is there any fish sent off from here by rail-road?—No, the expense of carriage is so great.

46,188. Are all the fish that are caught here hawked about the country and sold to the people?—Yes; the sprats, when there is a glut of fish, are bought up by men who salt them in bulk. They take a certain quantity of oil off them and sell them in the winter. All along this coast great quantities of fish are salted by individuals and sold to curers, who take them into the country. When my own boats kill a large quantity I have them salted in that way.

46,189. Have any haddocks been caught in the bay of late years?—The haddock fishery has entirely gone.

46,190. Since when?—It has been getting worse and worse for several years. The first year I fished extensively in the bay, about 24 years ago, I had a house in Donegal Bay, and then it was not uncommon to get from 20 to 30 dozen haddocks in the bay.

46,191. And now what is it?—Last year, in the course of the whole winter, my boats only got two haddocks.

46,192. Was it alleged that trawling in the bay did harm to the haddock fishery?—No, the trawling was over before the disappearance of the haddock, and they never trawled in that part which the haddock frequented.

46,193. I think you said that there has not been for some years a good winter herring fishery here?—Not for many years.

46,194. When was the last good season for winter herrings?—There has not been any good season for 20 years.

46,195. Do you hear any complaints from the sprat fishermen and the other fishermen?—The sprat fishermen and the hake fishermen never agreed very well; I mean the hake-net men in the Donegal Channel. The sprat fishermen and the hake fishermen do not agree very well.

46,196. What are the grounds of the disagreement between them?—The water there is very narrow, and the drift nets are put out for herrings where the tide is running very strong, and of course when the sprat men are drawing their seines in the middle of the drift nets they must interfere with each other.

46,197. Is the herring fishery carried on at the same time as the sprat fishery?—Yes, they are all fishing here, mixed up. There is a very remarkable thing about the hake-fishing which I should tell you. There have been no hake here this year at all. Such a thing has never occurred before. The men have been out several times and tried if they could catch any, and the men from St. John's Point tell me they have not caught one. On the other hand, there has been a most extraordinary quantity of dogfish. They have been here in millions. Anything like them I never beheld before. There were sharks too.

46,198. Were they pursuing the herring?—They did the herring fishery an immensity of harm. The boats came in with two-thirds of the herrings entirely cut to pieces by them.

46,199. There has been a considerable quantity of herrings here this year?—Yes, there has been a very great quantity and they have been very fine,—as fine as ever were seen.

46,200. What part of the bay do they fish for herrings?—They take them partly with seines and drift-nets off St. John's Point, and they work up into the other bays.

46,201. Are you at all acquainted with the fishermen on the south side of the bay?—No; I merely know it as far as Ballyshannon, and it is I believe very insignificant.

46,202. At Mullaghmore the fishery has fallen off, I believe?—Yes.

46,203. The principal fishery in the bay is carried on on the north side of it?—Yes, the great body of the fishermen are all on the north side.

46,204. Teelin is the head-quarters of the line-fishermen?—Yes.

46,205. Are the hake observed in the bay as soon as the sprats and herrings make their appearance?—They generally come a little after the sprats.

46,206. The fisheries go on at the same time, I suppose?—The hake fishery lasts further into the season than the sprat fishery. It has been remarked here that a body of hake would come into the bay, and though they would take the hand-lines as freely as possible, yet when once the trammel nets were shot among them they would take off entirely.

46,207. Are the trammel nets shot at all outside the bays?—No, I have never known them shot further down.

46,208. They generally shoot them inside?—Yes.

46,209. They are entirely confined to the ground on which the seines are used?—No, they are generally outside the ground, and since the byelaw was passed they ought to be entirely outside.

46,210. I thought it was a matter of complaint that the trammel nets interfered with the herring-nets?—Yes, because they fished them up at the head of the bay.

46,211. Was that the ground where the seines were used?—Yes; the seines seldom go beyond 10 fathoms of water, and they used to fish far inside of that. Now the Commissioners' byelaw has removed them to about 15 fathoms of water.

46,212. Is there any lobster-fishing carried on from St. John's Point?—There used to be, but they have been fished out. They have been fished at all times and seasons.

46,213. Is there no restriction as to the size of the lobsters to be caught, or the months during which they are to be caught?—None; no law of any kind is observed in this bay in any way.

46,214. Was the lobster fishery formerly an extensive fishery here?—They used to get a great many, and a great many round the rocky part of the coast.

46,215. Was the lobster fishery carried on by the fishermen?—There generally were men who followed it all through the year. They fished for sprats as well; that is the most lucrative fishing here.

46,216. So that at that time the lobsters had some rest?—Yes, but very little.

46,217. That would be for three months, would it not?—No.

46,218. Have you anything further which you wish to say?—I think not. The only thing I wish to say is, that if any regulations are made means should be taken to enforce them. I would also recommend to Her Majesty's Government, with regard to the existing laws, that there should be some means taken to enforce them.

46,219. Is there a great complaint that the regulations which have been made are not enforced?—Yes; they are not observed at all. For instance, the herring fishery has been carried on here, and not a single man of them knew that it was perfect ruin to keep their nets shot in daylight until I went and told them to take their nets out; yet after that they continued to do the same thing. I wrote to the Coastguard and they came up after a couple of days.

46,220. What regulation do you refer to now?—The regulation which says that herring-nets must not be shot between sunrise and sunset.

46,221. There is a regulation here with regard to trammel nets, but not with regard to herring-nets?—Yes; I mean the 5th and 6th of Victoria, which is quite clear on that point. The seventh section says:—"And be it enacted that no person shall at any "time between sunrise and sunset set, either in the "sea or within the tideway in any estuary, any sea "net for the catching of herrings, or any trammel-"net, or leave any drag or other net in the water "between sunrise and sunset, except stake or fixed "nets for the catching of salmon, as is herein-after "provided, and set also seines or drift-nets for pil-"chards or fish other than herrings; provided such "stake or fixed nets and such seine or drift-nets be

" used at such times and places as may not be prohi-
" bited by the byelaws herein-after mentioned; and
" every person offending by setting or leaving set any
" such nets as aforesaid shall forfeit the same, and
" shall also for every such offence forfeit and pay any
" sum not exceeding 10*l*."

46,222. Then you think that that law is not observed at all?—Certainly not. The best of the fishermen would not do this, but the other fellows put out their nets, and they induce those who wish to observe the law to say, " Why should we be worse off than " our neighbours ?"

46,223. Is the Coastguard unable to enforce the law?—I think they are unable to do so; their other duties interfere with them so much. They are very short-handed now.

46,224. Has it ever been the practice for the larger class of trawlers to work over the outer part of the bay in the deeper water?—Not for many years. One man I knew came down here and tried it for some time, and said it was not worth anything, that he was not able to make it pay as well as it did in other places; that was Mr. Stopford.

46,225. What is the nature of the bottom here?—Mud and sand.

46,226. Is it suitable for trawling?—Yes, very good.

46,227. Have there been any complaints about interfering with the long-line men?—Yes; the long-line men complain very much that the trawlers take away their lines; that was the object of the evidence given before the Fishery Commissioners.

46,228. Was that the complaint against the small class of trawlers?—Yes; and another complaint made against the trawl nets was that they were shot over the long-lines and destroyed them.

The witness withdrew.

George Venables Wilson called and examined.

46,229. Have you been long acquainted with the fisheries in Donegal Bay?—I have been acquainted with them ever since 1845.

46,230. Can you tell us anything about the fishermen in other parts of the bay; can you say what the number is?—There are a great many boats from Glen round to Killybegs and St. John's Point; I am perfectly acquainted with them. There are also fishermen at a place they call Malinbeg at Teelin Head, which I am perfectly acquainted with.

46,231. We have heard what the number of fishermen is in Inver Bay and Donegal Harbour; what is the number from Malinbeg to St. John's Point?—From Malinbeg I should imagine there are as near as I can say at the present moment from 44 to 45 boats with nets.

46,232. Are they for sprat-fishing?—No, for herring-fishing. They have long nets or trams for catching the mackerel and crake herring.

46,233. They are seines?—Yes.

46,234. How many men are there to each boat?—Generally seven.

46,235. Are they fishermen throughout the year, or are they farmers part of the year?—The Malinbeg men and the Teelin men are fishermen throughout the year; the others are partly farmers and partly fishermen.

46,236. Are the numbers of the fishermen increasing or diminishing?—I imagine they are decreasing.

46,237. Have they at all recovered from the effects of the famine of 1846?—A great part of the decrease is the effect of emigration.

46,238. Did the potato famine have much effect upon the fishermen there?—Very much so.

46,239. Did it cause great distress?—Yes, and the Government established a store at Killybegs and bought the fish up for a curing station.

46,240. Was it in consequence of the bad price they got for their fish?—Yes.

46,241. Not from any want of fish?—No, from the want of a market.

46,242. Can you tell us the seasons for the herring; how long is it since there was a good herring season?—I have no recollection of a herring season in my time, except some years ago, when one lasted from a week to 10 days.

46,243. What month was that?—In the month of January.

46,244. With that exception, since you have been acquainted with the bay you have not known any great quantities of herrings taken?—No; there have been a few taken every winter, but only a very small quantity. There has been no fishing in the summer except for the crake herring, which is a coarse description of herring.

46,245. Is it the same as the scad?—I think it is.

46,246. The horse mackerel?—They call them crake herring here.

46,247. Do they fish for it with a different class of nets?—Generally with a net of an inch mesh.

46,248. What is the season for it?—They generally come in July and August, and stop until now, about two months.

46,249. Do you think the herrings during the time you mention have deserted the bay altogether, or are they to be found further out?—We hear occasionally when vessels are coming this way that they pass through shoals of herrings off the land.

46,250. Are the boats of the fishermen not qualified to go any great distance outside?—I imagine not.

46,251. And I suppose the weather is very bad in the winter?—Yes, I have fished in a Scotch lugger for some time with some Scotchmen; it was a large boat, but such was the sea that was running that we could do very little at times.

46,252. With regard to long-line fishing has that fallen off?—Very much so indeed.

46,253. Have they caught fewer fish?—Yes, fewer fish; in fact they have taken nothing for the last few years to signify.

46,254. To what is that falling off attributable?—A short time ago the Commissioners came down and held an inquiry; and it was attributed partly to the use of a very small-meshed net, especially at Teelin, not larger than a sprat net. They used to take small fish which went by the name of shelins. They put a barb in the centre of the net with a mesh not much larger than that of the sprat net, and they take boatfuls of the young fry; we attribute the falling off of the fishery to that.

46,255. Have you yourself seen small fish taken there?—Yes.

46,256. What were they?—Black and white pollack, glassen, and young ling among them.

46,257. Did you find any haddock among them?—No.

46,258. Do you agree with Mr. Sinclair as to the disappearance of the haddock on the coast?—I have not seen any on the coast.

46,259. Can you give us the date of their disappearance?—I have not seen any for seven or eight years.

46,260. Are there any whiting caught off the coast too?—There were very large quantities caught last year and this year.

46,261. Previous to that had there been a good fishery?—No, I do not recollect them off the coast to any extent before.

46,262. There have always been a few, I suppose?—Yes.

46,263. It is not positively a new thing?—No, but they have not been caught in any quantity.

46,264. Has there been a falling off in the take of hake?—No; hake have been taken outside of Inver Bay.

46,265. Are there any trammel nets used along that coast?—Not that I am aware of.

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46,266. Then the falling off has been in pollack, ling, and glassen ?—Yes. The Commissioners passed a byelaw at Teelin directing that no net should be used there of less than an inch mesh, but that law has not been observed in any shape.

46,267. Do they continue to use the seine-net there ?—They use nets with a mesh not half or three-quarters of an inch ; I have seen them use them myself.

46,268. Do they take the young fish ?—Yes.

46,269. Do they drag them ashore ?—Yes.

46,270. What number of those seine nets are used ?—There were about 14 boats that had them. Some of them used to fill their boats full to the gunwale, and the destruction of young fish was very great.

46,271. Is there any sprat-fishing along that line of coast ?—Not that I am aware of. Off the rocks beyond Teelin used to be a good place for taking glassen, cod, and ling, so much so that Dr. Ritchie established a curing establishment, but for the last four or five years they have done little or nothing.

46,272. Do you attribute the falling off of the fish entirely to the destruction of small fry by the use of the seine net ?—I attribute a good deal of the falling off to that.

46,273. Has the price of cod risen very much ?—Yes ; formerly we could buy a codfish for about 3*d.*, now we have to pay from 10*d.* to 1*s.*

46,274. Can you give any date to the falling off of the fishing ?—It has been greatly falling off for the last 10 years.

46,275. Were these seine nets used before that time ?—There were formerly only two nets which were used for catching the small fish, but they afterwards found it profitable, and increased them until they got to a very large number.

46,276. What use do they make of the small fish ?—They salt them and eat them.

46,277. Have those nets been in use for the last two or three years since the byelaw was made by the Commissioners ?—They were in use before ; they altered them and made them a little larger, but this year they are decidedly using the old nets as usual.

46,278. Do they continue to catch a large number of small fish ?—They have caught a good many this year.

46,279. You have not found the supply of them falling off at all ?—I do not think there has been any falling off.

46,280–1. There is no trawling, I think, between St. John's Point and Malinbeg ?—No.

46,282. Is there any mackerel fishery in the bay ?—Yes, a considerable quantity of mackerel has been caught.

46,283. At what season of the year ?—Generally in August.

46,284. What nets do they use for them ? — Generally the same description of net they use for herrings if they can get them in shore, otherwise the catch them with lines.

46,285. With the seine net ?---Yes.

46,286. How long does the season last ?—I have known it last for six weeks, and I have known it last for only three.

46,287. Used there to be any trawling between the two points you have mentioned ?—There used to be.

46,288. How long ago ?—It was carried on until the byelaw was passed.

46,289. That was in 1860 ?—Yes, about four years ago.

46,290. Do the smaller class of boats from Donegal Harbour come round the point ?—The principal trawlers used to come from Mullaghmore. The fishermen there are the men who principally drive for mackerel at the present time.

46,291. Has the supply of turbot between the points you mention increased or diminished ?—It has fallen off.

46,292. Has there been any reappearance of them since trawling was done away with ?—There have not been as many as there were formerly. This was once a celebrated place for turbot, but now they are very scarce.

46,293. You said that the herrings appeared here twice in the course of the year, are there two seasons for them ?—Yes, in the summer and in the winter.

46,294. Are they full of spawn at those times ?—The summer fish appear to be full of spawn at the time we get them.

46,295. At what particular time would the herrings be full of spawn ?—In the present month. The herrings we had this morning were full.

46,296. Is there any reason to believe that the herrings spawn in the bay. I should imagine that they do—that is, not those herrings but the winter herrings, because those we take in February are what we call spent fish.

46,297. At the end of February ?—Yes.

46,298. Are those fish of a different size and a different character from those you get at the present time ?—Yes, they are much larger ; they are very much larger than the summer herrings.

46,299. Have you anything else to add ? — With regard to the lobster-fishing, we had some men who came down from Antrim a few years ago and fished for lobsters from the one year's end to the other. They fished nearly from Killybegs round to the Glen and they fished the ground out entirely. I have generally fished with lobster pots during the summer, but the fish are exceedingly small and so scarce that it is not worth while to fish for them. The same men have now gone from this part of the coast to a place called Ardara. They are fishing there now and are taking great quantities.

46,300. What markets do they send their lobsters to ?—Generally to Dublin or Liverpool.

46,301. By smacks ?—No, by overland conveyance, packed up.

46,302. Is any regulation observed with regard to your lobster-fishing ?—No, I do not know of any law upon the subject.

46,303. Do they observe any among themselves ?—No, I believe all they take under six inches are counted two for one.

46,304. Do they send all to market they take ?—Yes, everything they take. Formerly in this county we used to fish with baskets, but these men fish with rum-nets.

46,305. What is a drum-net ?—It is a frame work of hoops and over that a net, and at each end there is an entrance made of network. The bottom is a solid piece of wood.

46,306. It is a sort of cage ?—Yes.

46,307. Was the lobster fishery a source of profit to the people of that part ?—Yes, they still fish at St. John's Point, but they don't make anything of it.

46,308. How long were the Antrim men here ?—Three or four years.

46,309. At the end of that time did they exhaust the fish and go elsewhere ?—Yes.

46,310. Have the fish not had time since that to recover ?—No.

46,311. What was the number of boats fishing here ?—About 10.

46,312. Have they given it up now ?—I don't believe they follow it for certain.

46,313. What number of boats came from Antrim ?—I know there were five.

46,314. Did they fish all the year round for them ?—Yes, all the year round.

46,315. Whereas the men on the spot only fish for a part of the year ?—Generally only during the summer months.

46,316. Have you anything more to say ?—I would recommend that a fence season should be set up for the lobsters.

46,317. Would you recommend a close season or a regulation as to the size of the lobsters ?—I would recommend a rest for a month or two.

46,318. During what months would you have a close season ?—I believe the season for lobster breeding is in the spring of the year.

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46,319. Do you think that one month would be sufficient ?—I should say two months; that would be quite little enough. We take them in the summer months with the pea in them, which shows that must be their time. We generally find them in that condition at that time.

46,320. Have you observed whether there is a great demand for lobsters with pea ?—Certainly, but it is an objectionable thing I think. I may observe that the description of lobster taken from Killybegs to Teelin is far inferior to those taken from Teelin round the coast where the shore is more rocky.

46,321. Are they inferior in point of size or quality ?—In quality.

46,322. Can you give any reason for that; is the ground better situated elsewhere ?—Yes, and the lobsters are better formed and the quality altogether better.

46,323. Is the ground rocky ?—Yes.

46,324. Do you get any crabs at all ?—Very few.

46,325. Is there any shrimping ?—They do not fish for shrimps, but there are a great many on the coast near Ardara.

46,326. Are there any oysters in the bay or along the coast ?—There are oysters in the estuary or harbour of Killybegs, but they are not protected in any shape or form.

46,327. Do they give employment to any large number of fishermen ?—No, they are not protected and anybody takes them who likes. They are only fished for at low-water spring tides. There are oysters in five or six places on this coast, I believe. With regard to Donegal Bay, there are great complaints from the long-line fishermen that when the tide is out as you come down from Donegal the men with the seine nets fish for herrings in the pools and holes that then are there, and that they catch large quantities of flat-fish, young turbot, plaice, which they throw out to die on the shore. They have seen a great many lying dead, and they think that some byelaw should be passed to prevent the seine men from fishing in these holes when the tide is out.

46,328. Is that down the harbour ?—Yes, from Doorin upwards to the island called Hoyle.

46,329. The herrings are left in the hole when the tide goes back ?—Yes, but that is the spawning ground of the turbot and plaice, and if they are taking herrings they displace all the young turbot and plaice, and the fishermen say there has been a falling off in consequence on this coast.

46,330. Do they take the plaice with a seine net ?—Yes.

46,331. Do you know of what size the mesh of the seine net is ?—Generally about three-quarters of an inch. The cod and ling we take off St. John's Point are far superior in quality to those taken down at Teelin.

46,332. Is there any reason for that ?—I cannot account for it; I suppose it is better feeding ground.

The witness withdrew.

DARBY MCGROARTY called and examined.

D. McGroarty.

46,333. How long have you been a fisherman here ?—I have been a fisherman since I was able to fish.

46,334. How long ago is that, how many years ?—I cannot tell exactly. I have been fishing something like 30 years, on or about that time.

46,335. Do you fish all the year round ?—Yes, I have no other support.

46,336. You have no other means of livelihood ?—No.

47,337. What time of the year do you generally commence sprat-fishing ?—I commence it something like a fortnight or three weeks before Lammas, on or about that time. I don't commence altogether regularly at one time.

46,338. How long does your season last ?—Some years to Hallows day.

46,339. What fishing do you then take to ?—We go with long-lines for hake.

46,340. Have you any trammel nets of your own ?—Nothing but a seine.

46,341. Are your long-lines spilliards ?—Yes, the ordinary long-lines; they are spilliards.

46,342. What is the length of your spilliard lines ?—Two hundred fathoms.

46,343. How many hooks have you on one of them ?—Two hundred.

46,344. How many of you go out in a boat ?—From seven to eight.

46,345. Each with a long-line ?—Yes.

46,346. What distance do you generally go out in the long-line fishing ?—Two parts across the bay in the direction of Ballyshannon by Mullaghmore on to St. John's Point.

46,347. Do you fish within the line drawn from St. John's Point to Mullaghmore ?—Yes.

46,348. What fish do you generally catch most of ?—Cod and haddock.

46,349. And ling ?—Ling at times.

46,350. Do you catch many turbot ?—Sometimes we catch turbot but very seldom many turbot.

46,351. Do you catch soles ?—I never saw soles in the winter time on the lines but we catch some in the summer time.

46,352. Have you observed any falling off in the fish you catch with the long-lines ?—Some years they are better with us.

46,353. But taking one season with another do you get fewer fish than you did formerly ?—We catch more of them.

46,354. Do you catch more with the long-lines than you did some years ago ?—Yes.

46,355. Did you catch many haddock last winter ?—No.

46,356. Did you catch any ?—Very few indeed.

46,357. Have you caught many haddock during the last three or four years ?—No, there have been very few indeed.

46,358. Haddock have been very scarce ?—Yes, there have been very few of them but there have been some cod.

46,359. Do you think that the cod are scarcer than they were a few years ago ?—Yes, they are scarcer. When we began to fish them first we could kill plenty of them and haddock also.

46,360. How long ago is that ?—Ten or 12 years ago.

46,361. Have they been scarcer since then ?—Yes, they have.

46,362. In regard to the sprat-fishing how has it been ?—The sprat-fishing is mending.

46,363. The last two years you have had good seasons ?—Yes.

46,364. How was it previous to that, four or five years before ?—We had no fishing.

46,365. Before that had you good seasons, seven or eight years ago ?—Ten years ago we had; we had a good season nine or ten years ago but we have had none worth anything since then till the last year. It has appeared to us that the fishery has been decreasing.

46,366. When you are out sprat-fishing do you find that the trammel nets or drift nets interfere with you ?—We blame nothing for the fish being so scarce for the last few years except the hake-nets.

46,367. You attributed the falling off of the sprats to the hake-nets ?—Yes, since a stop was put to them we think the fish have been mending and coming back again.

46,368. The regulation to put a stop to trammel-net fishing within certain limits was made in 1860 was it not ?—I don't know the exact date; it was four or five years ago.

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46,369. You have observed that the fishing has improved since a stop was put to those nets?—Yes.

46,370. What harm do you think the hake-nets did you?—I think they stopped us in our line of running. I blame nothing but them for that.

46,371. How did they do you harm?—In the first place they would shoot there day and night and when we went out we could not get our lines in clear water. If we got foul of them they smashed our gear and it was a long time before we could get them pulled up again.

46,372. Did you come across them as you were going out with the seine nets?—Yes, we came across them several times.

46,373. Did they prevent you from shooting your seine nets?—They put me out of my course.

46,374. Did they prevent the sprats from getting up the bay?—Yes, I am sure of that; since the hake-nets have been stopped the fishing has been improving.

46,375. Can you recollect how long it is since there has been a good winter herring season here?—One year there was a good herring season.

46,376. How long ago?—About 10 or 12 years ago. There was a pretty good season at Killybegs in the winter.

46,377. How long ago is that?—I don't recollect the year.

46,378. And previous to that had you good seasons?—It is about 30 years since it came and it lasted about six or seven years.

The witness withdrew.

E. Gallagher.

EDWARD GALLAGHER called and examined.

46,379. How long have you been a fisherman here?—I have been fishing sprats and herrings and everything else for 31 years.

46,380. Have you been a fisherman all that time?—Yes.

46,381. Do you do anything else besides fishing?—I am not constantly, but I am generally fishing.

46,382. Have you some land also?—Yes.

46,383. Can you recollect how long it is since there was a good winter herring season?—The first commencement of the winter herring fishery was about 31 years ago as far as I can recollect.

46,384. How long did it last?—It was on backwards and forwards for some years. The second year was the best we ever had. We had a good fishing for four or five years, and then they got lighter for six or seven years.

46,385. After that did you ever have a good season for herring?—No, we have not had a good winter herring season. They came round by Teelin Head and the countrymen there took them. There has only been one season that has been good since, and that was eight or nine years ago.

46,386. At the time you speak of, when you say there was a good herring season, did many boats come from a distance?—Yes, there were a number of Skerries men, Arklow men, and others who came here.

46,387. Did they bring their fish ashore or carry it away with them?—They salted their fish, and bought a good deal from the countrymen.

46,388. What number of boats were there from Inver at that time?—Every boat that was able to go and had trams went to the fishing.

46,389. Were there more men fishing from Inver then than there are now?—I think there were more men, a good many more.

46,390. Had they better or larger boats?—I don't know that there has been any difference in the boats; the boats were about as large then.

46,391. In regard to the summer herring fishery, how long is it since you have had a good summer fishing?—We have had no good summer fishing for a long time. This is the best summer fishing we have had in our bay and the best I recollect for 30 years.

46,392. How long did your season last this year?—It began in July and will go on till Christmas.

46,393. Then it is not over yet?—No, I hope not.

46,394. How many boats have there been after the herrings?—There would be 50 or 60 boats out altogether.

46,395. Do you own herring-nets yourself?—Yes.

46,396. What is the length of them?—There are seven or eight men in a boat, and every man has his own net of from 15 or 16 fathoms to the rope.

46,397. What depth?—From three to four deepings of 60 meshes deep.

46,398. What is the size of the mesh?—From 36 to 37 to the yard.

46,399. Do you own a boat yourself?—Yes, I do.

46,400. Then when you have a take of herrings how do you divide the proceeds; does the owner of the boat get a share?—Yes, he gets a share of everything.

46,401. And a share for himself besides?—Yes, the boat gets a share and every man gets a share for his equal share of nets.

46,402. What time are the herrings you take at this season full fish; are they full now?—They are full about August. That is the time when the summer herrings are at their best. They will be coming in condition, get full, and then they spawn.

46,403. When do you think they spawn?—The herrings we have now will come in and go round the coast and get very small again.

46,404. What time do they spawn?—At the latter part of the harvest.

46,405. About November?—Yes.

46,406. Do they spawn in this bay?—They spawn on the foul shores outside. They spawn on any place where they can get rough ground.

46,407. You do not think that they spawn in-shore in the bays?—They do not; they go outside to the foul ground to spawn.

46,408. When do the winter herrings spawn?—About the latter end of February. In February they will spawn in the boats and among the nets when we are working at them.

46,409. Are the herrings you get now much smaller than those you get in winter?—Yes, the summer herrings are always smaller.

46,410. When the sprat season is over, do you take to the long-line fishing?—Yes, but I do not follow it much in the winter time myself.

46,411. When you have been sprat-fishing have you found that the trammel nets interfere with you at all?—They come in our way, but every man must do the best he can. No doubt they are in the way, but then we get in their way as well.

46,412. You have herring-nets as well as sprat-nets?—Yes.

46,413. You think that both should have a chance?—Yes, I think both herring and sprat nets should have a chance.

46,414. When you have been sprat-fishing have you found herring-nets in the way?—They will be in the way, but we use the nets which we think will pay us best. Whatever we find to be best we get to and do the best we can at it.

46,415. Do you take both in the boat with you?—Yes.

46,416. If you find a chance for the herrings you put the drift-nets out?—Yes.

46,417. And if you have a better chance for the sprats you take the seine nets?—Just so.

46,418. You have no complaint to make with regard to either of them?—No.

46,419. Have you any hake-nets?—No, I have no hake-nets.

46,420. Have they interfered with your seine nets at all?—There were complaints of that some time

ago when we lost the sprat-fishing because they would set their nets across the bay, and would not let the fish come in.

46,421. There was a regulation made prohibiting trammel nets being set there ?—Yes.

46,422. Do you think that has been effectual ?—Since then we have found the sprat-fishing improving and the herring fishing too.

46,423. Have you any other complaint to make about the fishing ?—No, I have not.

The witness withdrew.

P. Byrne.

PATRICK BYRNE called and examined.

46,424. How long have you been a fisherman here? —I have been fishing for the last 30 years.

46,425. What fishing do you carry on ?—Sprat-fishing.

46,426. What else ?—I fish also with herring-nets.

46,427. Do you fish for hake also ?—I have fished only for hake with the line for the last eight or nine years.

46,428. Have you got any trammel nets for hake ? —No, I have not at present. I have not had for five years.

46,429. Have you a sprat-net of your own ?—Yes.

46,430. And a herring-net also ?—I have no herring-net now.

46,431. Have you any complaint to make with regard to the fishing ?—No, I have not. I have no complaint to make against any poor man for the way he takes to earn his bread.

46,432. When you are not fishing for sprats with seine nets, do you find the hake-nets in your way ?—Sometimes they will be in our way, and we get foul of them. Perchance we should not be able to see them out.

46,433. Do you think the hake fishermen now observe the regulation which has been made with regard to setting their nets; do they set their nets within the line drawn from Doorin Point to the mouth of the Bunlaghy River?—I suppose they go backwards and forwards, but I do not know. They are sometimes inside and sometimes outside.

46,434. What time of the day do they set their hake-nets ?—I do not recollect. I suppose they put them out sometimes earlier and sometimes later. They would put them out early if they thought proper.

46,435. Do they put them out before sunset ?—Yes, I suppose they do at times, but at other times they do not.

46,436. Is there anything you know of that could be done to improve the fishing in any way ?—I cannot say.

46,437–8. There are no regulations that could be adopted that would tend to improve the fishing ?—I don't know. Perhaps the shooting of their nets in the daylight would be injurious, and it would be better if they did not do so.

46,439. We have been told that the herring-net fishermen go to the pools, and drag them, taking all the small fish ?—It is the Donegal men who do that. It is not done on this side.

46,440. Do you know the difference between a young herring and a sprat ?—I can not say that, but I know that a sprat will never be a herring.

46,441. Do you know the difference between a sprat and a young herring ?—Yes, I do.

46,442. Do you take a considerable number of young herrings in the seine nets when you are fishing for sprats ?—Sometimes we do, but it is very seldom.

46,443. Is that in the early part of the season or the latter part, or is it all through the season that you get herring fry ?—In the latter part of the season, but we take up very little of it.

46,444. You take up very little ?—Yes, very little.

46,445. But what you do take up is taken up late in the season ?—Yet.

46,446. Do you find that they fetch as good a price as the sprats or not ?—No, I think not.

The witness withdrew.

J. Moran.

JAMES MORAN called and examined.

46,447. How long have you been a fisherman ?—For the last 12 years.

46,448. What kind of fishing do you practise ?—Sprat fishing, herring-fishing, and hake-fishing, according as they come in.

46,449. Have you a hake-net of your own ?—Yes.

46,450. What size is it ?—It is 15 fathoms to the rope. Every man has the same share of a net.

46,451. What depth ?—It is 60 meshes deep.

46,452. How many rows to the yard ?—We make them now 13 rows to the yard, but some make them with a mesh smaller than that.

46,453. What is your season of the year for the hake fishery ?—From this season on till Christmas.

46,454. From the beginning of September until Christmas ?—Yes.

46,455. Where do you set your nets ?—Before the line was laid down we fished them in from two fathoms of water up to 20.

46,456. Since that regulation was made where do you fish ?—Just as we can. Sometimes we take the nets inside and sometimes outside the line.

46,457. Then you do not observe the regulation ?—We know what it is.

46,458. Since that regulation has been made have you fished within the line ?—Yes, just as often as we found Mr. Sinclair's back turned.

46,459. Then you fish as often within the limits as without ?—Yes, if we thought we could get more fish inside than out, then we should fish inside.

46,460. Were you fishing with a hake-net last year ? —Yes.

46,461. Have you begun this season ?—Not yet.

46,462. Last year did you have a good take of hake ?—Not on this side.

46,463. Where did you catch them ?—The weight of what we killed was outside the line, but we killed a good many on the Donegal side.

46,464. What time of the day do you shoot your hake-nets ?—Since the regulation was established as to shooting them within certain limits we do not shoot them in the daytime.

46,465. Since that regulation was made you have only fished inside in the night-time ?—Yes, we should be afraid of setting them inside in the daytime.

46,466. When you have fished within the line of prohibition you have set your nets after sunset ?—Yes, and before if we happen to be out before.

46,467. When do you take them up again ?—If we could get the length of them, before sunrise, but if not they would lie an hour longer.

46,468. Have you ever left your nets out all day ? —Many a time we have.

46,469. Since that regulation was established ?—Yes. I only recollect to have left mine out once since that regulation was made.

46,470. In the bay ?—Yes, in the bay.

46,471. What is the size of the buoys which you have attached to your nets ?—They are a good size.

46,472. What are they like ?—Small kegs, one to each net.

46,473. Is there one at each end of the nets ?—Yes.

46,474. Since the regulation was made have you ever set your hake-nets in the bay within the line when the sprat fishermen were at work ?—No.

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46,475. I think you said that you fished for sprats yourself?—Yes.

46,476. Have you got a sprat-net yourself?—Yes.

46,477. Do you often have your sprat-nets and your hake-nets at work at the same time?—I have not for the last two or three seasons.

46,478. Why is that?—Because when we are working for sprats we interfere too much with our hake-nets.

46,479. When you had a good sprat season you have not had time to attend to the hake?—No, we leave the nets on shore.

46,480 Before, when the sprat season was not so good you put in the hake-nets in preference to the sprat-nets?—Yes, because we had not far to go for them, and part of the crew could go and haul them.

46,480*a*. Do you think that setting the hake-nets in the bay prevents the sprats from coming in?—I cannot say whether it does or not.

46,481. Do you think the hake-nets do any other harm to the fishing?—I think there are no nets which are used which in their time do not do harm. Of course if we have these nets in the water for the whole of the day it will do harm.

46,482. What harm does that do?—It scares away the fish which are coming in.

46,483. Is it the fact of the nets being there that scares away the fish?—Yes.

46,484. Or is it the fact that there are fish in the nets?—Both will scare them away.

46,485. Do the hake putrifying in the nets scare away the fish?—Yes, I think so.

46,486. Then you think it is not the mere fact of setting the nets within the line of prohibition which does harm, but that it is also the setting of them in the daytime?—It is my opinion that it was not the harm done to the fish that led some of the fishermen to want that regulation.

46,487. What was the other reason?—The reason was that the fishermen on one side followed those nets, and the fishermen on the other side did not, and they grudged us the money we were earning.

46,488. Do I understand that you do not think that the setting of hake-nets in the night-time does harm to the seine-fishing?—I don't think it does. What is the use of the fish coming in if they are not caught.

46,489. You think that if the hake are there they ought to be caught?—Yes. There would be no good in their coming in our length if we did not get them.

46,490. Do you use sprat-nets only in the daytime?—I use them both night and day.

46,491. Only on moonlight nights?—Yes, light and dark nights too.

46,492. If you find hake-nets set across the bay where you are coming with the sprat-nets what do you do?—If we come foul of them we get rid of them as we best can.

46,493. Do you often find it the case that you do get foul of them? Take the last two seasons, has it often occurred during the last two seasons?—We were kept too far out.

46,494. Do you mean that during the last two seasons the hake were so far out that the trammel nets were not set on the same ground as the sprats were?—Yes.

46,495. There was no interference then?—No.

46,496. If a number of hake come into the bay and the trammel nets are set among them, is it the case that they will not take the net the next day?—I have been fishing for months, and I have found them take the net just as readily at the end of the time as at the beginning.

46,497. Do you find that the trammels work better by night than by day for hake?—Yes, they do.

46,498. You catch more by night than by day?—Yes. I never killed as many in the day as in one night in dark and wet weather, about nine or ten years ago.

46,499. Do you think it would be disadvantageous to the fishermen here if the regulation with regard to the setting of trammel-nets for hake within the line was strictly kept?—We have never got many of them outside or inside the line since the regulation was made.

46,500. You have not had a good fishing since?—No.

46,501. If you had a good fishing coming on would it be a disadvantage to you if that regulation were strictly observed?—I cannot say because we have no had any proof of it yet. We have had no fishing of that kind since the regulation was made.

46,502. But did you not catch a good many hake this last season outside the line?—Yes.

46,503. In former years have you caught a great number of hake within the line of prohibition?—Yes

46,504. What proportion of your take in a year would be caught within the line of prohibition?—The whole weight of fish we killed then was killed inside the line. That was all the good fishing we had, namely, when we got them inside the line.

46,505. How many of the Inver men have hake-nets?—Not many here. The fishermen between this and St. John's Point have them as well as the Inver men.

46,506. How many come into the bay?—There are a good number, perhaps 30.

46,507. Have you any other remark which you wish to make about the fishing?—No.

46,508. What is the size of the boat that you use for the sprat-fishing?—Her tonnage is about four tons and the keel is 20 feet long.

The witness withdrew.

W. Sinclair.

WILLIAM SINCLAIR recalled and examined.

46,509. Can you tell us what the cost of a sprat-boat will be?—About 9*l*.

46,510. And the cost of the nets?—The cost of the nets would be seven times 2*l*. 10*s*.

46,511. Have most of the fishermen here a share in the seine nets?—Each man finds his share. He first finds one sheet for the bunt of the net, and then a sheet for the wings of the net, and then a share of the reef, which is a net that runs from one end of the entire seine to the other. He has also to find a share of the ropes and corks for the net, and the tar which barks it, and he has also a share for the swing.

46,512. Does the owner of the boat get a share?—Yes, and every man gets another share.

46,513. Has the cost of the fit out of nets increased of late years?—It has considerably, owing to the price of hemp which has risen in consequence of the American war.

46,514. Is not flax used very much?—Yes, but it has risen proportionately. It is now 40 per cent. dearer than it was.

46,515. How many of these seine-nets are there at work?—Twenty-four and more nets were at work this year.

46,516. Are any considerable quantities of young herrings taken?—I never knew any quantity, except one year, and in that year they came in in vast shoals all round the coast.

46,517. What year was that?—It is about seven or eight years ago.

46,518. Was it followed by any shoals of large herrings?—No, it was not. Everybody expected it would be, but it was not.

46,519. What time of the year did you observe those young herrings?—About this time of the year.

46,520. You did not observe any increase in the fishing season following?—No; it was said that there were vast quantities of herrings on the inaccessible parts of the coast to the north of Teelin.

46,521. What time of the year was that?—In the following winter, but the people there were only able to go out very little after them, and the herrings did not come here.

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46,522. With the exception of that year you have not observed any take of young herrings?—No, only upon that one occasion.

46,523. Was the previous year a good herring season?—No; they appear to have come in by accident, and nobody knew where from. There is another class of boats they use here for long-line fishing and hand-line fishing, which are yawls.

46,524. What is the cost of them?—A good one will cost about 9*l.*

46,525. Are they sailing boats?—They generally have one sail, but some of them have two sprit sails.

46,526. They are the Greencastle yawls?—Yes, and capital boats they are.

46,527. Can you give us any notion of the value of the sprat-fishing here in the course of the year?—The people who had the best opportunity of calculating it in Donegal last year said there were upwards of 3,000*l.* worth of sprats sold in Donegal, and as far as I can calculate there were about 200*l.* worth sold on the shore. There are no fish that come out of the sea that are reckoned as valuable for the poor people as the sprats. We call them the poor man's herring, and there is no fish as valuable for the poor here. They are sold here by the load.

46,528. What is the price of the sprats?—A load contains about three bushels, and it is sold for from 2*s.* 6*d.* to 4*s.*

46,529. From 2*s.* 6*d.* to 4*s.* for three bushels?—Yes.

46,530. When did sprat-fishing commence off this coast?—They have been at it as long as I can remember, but I dare say there are men here who can tell you when the first seines were made. I have heard the old men say that they used to catch them with nets like large landing-nets before they had seines.

The witness withdrew.

PATRICK MCBREARTY called and examined.

P. McBrearty.

46,531. What part do you come from?—From St. John's Point.

46,532. How long have you been a fisherman there?—I have been fishing backwards and forwards for the last 43 years.

46,533. What kinds of fishing do you practice there?—Long-line fishing and herring-fishing.

46,534. And sprat-fishing?—No, I do not fish for sprats, but I have been trammeling for mackerel and crake.

46,535. What is the season for herrings there?—We kill no harvest herrings; we have no nets for them, and we do not go looking after them. We remain about our own shores.

46,536. How long is it since you had a good herring season?—About nine years ago we killed for a fortnight capital herrings.

46,537. Since that have you had no good herring-fishing?—We have not had any good herring-fishing for 30 years.

46,538. Are you speaking now of summer or winter herrings?—It was winter herrings we killed at Killybegs.

46,539. How long ago is it since you had a good winter herring-fishing?—We have killed none for nine years.

46,540. When did you kill them before that?—I think it is 31 years since they commenced with us, and they remained with us for seven or eight years, during which time we got good weighty fishings.

46,541. You have had to depend mainly on the long-lines since then?—Yes; every year we are at them as hard as we can.

46,542. What fish do you catch most of with the long-lines?—Cod, ling, and some odd glassen, and an odd turbot. Sometimes we also get an odd haddock. About 20 years ago we could kill from 10 to 12 dozen haddock with the long-lines, but we have not been able to do that for a few years past.

46,543. How long is it since the haddock disappeared?—I think it will be 15 years ago.

46,544. As long as that?—Yes, since they left off coming here.

46,545. Since then you have caught nothing to speak of?—No, nothing to speak of.

46,546. Have you been catching large quantities of cod?—Yes, a fairish quantity. Sometimes, not being able to get bait, is a great "back-set" to us.

46,547. What bait do you use?—Lugs; but if we could get fresh herrings that would be best.

46,548. What is your season for cod?—From New Year's-day.

46,549. Up till when?—Up to the 1st of March.

46,550. Then I suppose the failure of the winter herrings has been a great detriment to the cod fishery on account of the bait?—Yes, it has been very bad for us in regard to the cod and ling fishing at times.

46,551. Was that because they followed the winter herrings into the bay?—Yes, they followed the food; we got them in our herring-nets at that time.

46,552. You took cod with the herrings in your nets?—Yes.

46,553. How many men are there at St. John's Point who are dependent on fishing for their livelihood?—The whole place depends upon it.

46,554. How many are there?—There are seven boats' crews at St. John's Point.

46,555. Three years ago had you a great falling off in the fishery?—This is the best year of the fishing we have had lately.

46,556. Two or three years ago you had a falling off?—Yes, no fish were taken in that winter.

46,557. What was the reason of that?—I cannot tell, but we were in a bad state for four years.

46,558. When did it improve again?—Last year it began to improve again, and I think this is a better season still.

46,559. Did the falling off affect all kinds of fishing?—Yes.

46,560. Cod and ling and glassen?—Yes.

46,561. Did you find they were all falling off at the same time?—Yes.

46,562. You can give no reason for it?—Indeed I cannot. I know no reason except that the fish left the bay.

46,563. Have you got any hake this year?—No, not one.

46,564. This last year has been an improving one?—Yes.

46,565. Have you caught enough to enable you to make a livelihood?—What with fishing and putting in a bit of a crop we have.

46,566. Have the St. John's men got a little land?—Most part of them have got none.

46,567. What do they do then?—They make kelp of the seaweed. They dry it and take it to market and sell it.

46,568. Are there many boats employed in collecting kelp every year?—They commence in the month of May and they are working at it until the present day. They take it to Mullaghmore and they sell it there. That is generally their support in summer.

46,569. How long has that been the case?—Seven or eight years. If it were not for that there would not be a creature of them left at St. John's Point at the present day.

46,570. Has there been a great decrease of the population there?—Yes, they have gone to America, Scotland, and other places.

46,571. What are the fish that go by the name of shelins?—I think they are nothing but glassen.

46,572. The young glassen?—I see nothing else that they can be.

46,573. Have you yourself got nets for the hake?—I have not, and I never had.

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46,574. Have the St. John's men any ?—No.

46,575. Do they not get hake ?—They do with the long-line, but not with the net. They only catch an odd one or so. We catch them with the hand-lines, which we throw over the side of the boat. There will be six or seven men in a boat; five of them will be fishing, and the other two will be hauling up the boat. We have often filled our boats with them in that way.

46,576. Have you any complaints to make with regard to any of the modes of fishing practised here ?—No, I have not.

46,577. You said two men will be hauling up the boat, could you not anchor the boat ?—No, we cannot anchor there; the stream is strong, and if we were to anchor the lines would be swept away.

The witness withdrew.

G. V. Wilson.

GEORGE VENABLES WILSON recalled and examined.

46,578. Are you able to state what the general condition of the fishermen at St. John's Point is ?—It is wretched in the extreme.

46,579. Are they in a worse condition than they were 10 years ago ?—Decidedly.

46,580. To what do you attribute that? — Ten years ago many of them occupied land in a great measure, now they do not; they have gone so far back that they have had to give up their land.

46,581. They depend solely on the fishing now ?—Yes.

46,582. And you think they cannot make a livelihood out of it ?—I imagine not. We have the greatest proof of that in the increase of our poor rates.

46,583. Is it because it is not a favourably situated place for fishing ?—I think they have no gear. There are subscriptions constantly being got up to raise money for buying lines and repairing the boats for them.

46,584. Has the condition of the people at Inver improved ?—Decidedly not.

46,585. Compared with what it was 10 years ago ?—Last year they had a good fishing, and this year every man seems to be provided with his own nets.

46,586. Out of last year's fishing they saved money enough to provide themselves with gear ?—Yes.

46,587. Were the effects of the famine felt on this shore ?—Yes, the poor rates were very largely increased. I got a boat and supplied all the nets to a crew.

46,588. Was that at St. John's Point or Inver ?—At Inver they fished for sprats. I got 46*l.* 17*s.* as my share.

46,589. Were you to have half of the profits ?—Yes.

46,590. That must have considerably more than paid for the gear ?—Yes.

46,591. Was that an unusually good season ?—There had not been many sprats taken for some years before until last year.

The witness withdrew, and the inquiry was adjourned to the 12th of September, at Moville.

Moville, Donegal, Monday, 12th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

MOVILLE.

C. McKinney.

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CHARLES MCKINNEY called and examined.

46,592. (*Mr. Caird.*) Have you been for some time acquainted with the fishing interest here ?—Yes.

46,593. Have you been engaged in it as a fisherman ?—I have.

46,594. For many years ?—For a good many years.

46,595. Then speaking within your experience, can you tell us whether the present state of the fishing and the fishermen here is improving or deteriorating ?—They are both falling off.

46,596. Within what period do you refer to, how many years ?—I should say for the last 20 years.

46,597. Is there a falling off in the number of the fishermen ?—Yes.

46,598. Has that resulted solely from a decrease in the quantity of fish, or is it the cause of the falling off ?—I think it has resulted from a decrease in the quantity of fish.

46,599. Has there been any emigration which may have taken away the fishermen quite irrespective of the question of fishing ?—Yes.

46,600. Is that going on at the present time ?—I believe so.

46,601. Can you tell us, speaking of 20 years ago, what was the number of the fishermen then engaged in fishing in Lough Foyle compared with the number fishing there now ?—I would say one-third more.

46,602. Were the boats then of the same class and character as they are now ?—Yes, much about the same.

46,603. Was the fishing tackle then of the same kind as is used now ?—Yes.

46,604. Has there been no change either in the size of the boats or the description of the tackle employed in the fishing ?—It is nearly about the same.

46,605. Has the condition of the fishermen themselves within that period improved or fallen off ?—I think they are a great deal worse.

46,606. Are the fishermen as a class purely fishermen, or are they also farmers ?—A great many of them are farmers and work a few potatoes for sale.

46,607. Has their condition been at all affected by the state of agricultural success or otherwise in that period ?—I do not think they lose much time in fishing for their labour on the land.

46,608. Taking the general condition of the whole of the fishermen here, is a large portion of their time spent in fishing or is the larger portion of their time spent in the cultivation of the land ?—The largest portion is spent in fishing when they can get any fish, but the fish have fallen off very much on the coast.

46,609. What particular kinds of fish are caught here ?—Codfish and turbot.

46,610. Are there any flat-fish ?—They get some flukes.

46,611. Do they get soles ?—Yes, and plaice and all that kind of fish.

46,612. Is the quantity of cod and turbot caught now not so great as it used to be in former times ?—It is not.

46,613. Is the quality as good ?—Yes.

46,614. To what do you attribute the falling off in the cod and turbot ?—They cannot find them on the old fishing grounds.

46,615. Were those old fishing grounds inside the lough ?—No, there is one about 18 miles out at sea, called the Hoyle Bank, to the eastward.

46,616. (*Mr. Lefevre.*) Is that the bank off Inishtrahull ?—Yes.

46,617. (*Mr. Caird.*) What kind of fish did it principally yield ?—Codfish and turbot principally.

46,618. Has that bank been famous for its fish for many years within your recollection ?—Yes.

46,619. Does it not continue to be so now ?—It does not.

46,620. When did it begin to fall off?—With the exception of three years they have not been plentiful for the last 20 years.

46,621. Were those three years the last three years?—No, they were not.

46,622. To what do you attribute the falling off?—I cannot say exactly, unless they have caught them in a great measure.

46,623. Have there been more boats fishing on the bank within recent years than there were formerly?—No, not nearly so many.

46,624. Has there been any mode of fishing practised on the bank which you think has been likely to injure the fishing?—I do not think there has been.

46,625. Then there is no cause to which you can attribute it at all?—No.

46,626. Is there any other good fishing ground for cod and turbot besides that bank?—They only fish that bank in the summer, and in the harvest if the weather is fine. They get codfish nearer the shore in the winter, up in the Roads here.

46,627. Is it a very exposed part of the sea where this bank is; is it in the open sea?—Yes.

46,628. What kind of boats do the fishermen go on the bank with?—Small yawls from about 16 feet to 24 feet long.

46,629. Is the character of the boats not such as to make it dangerous to go to the open part of the sea in bad weather?—The boats they have now are very good sea boats, but I think they are rather small.

46,630. Do boats from any other parts of the coast of a larger size go upon the bank?—No, there may be some boats from Malin Head that go sometimes but they are nearly about the same size.

46,631. What kinds of fish are caught in the lough?—Codfish.

46,632. Has the lough-fishing improved or fallen off within the last 20 years?—The fish are scarcer a great deal.

46,633. Do you know any cause for that?—No.

46,634. Is trawling much practised in the lough?—There are a few trawl-boats I believe.

46,635. Has that long been the case?—It has been. They have been trawling in the lough on the south side beyond the banks for the last 15 or 20 years.

46,636. Has it ever been alleged against the system of trawling that it is injurious to the fishing and to the brood of fish?—I do not know that it has.

46,637. That is not a prevalent opinion here is it?—No.

46,638. What kinds of fish do they catch with the trawl?—Flukes and skate and soles.

46,639. Are there many soles caught here?—I believe they do get some, but I am not much acquainted with the trawling; those are the kinds of fish I see them bring in.

46,640. What kind of fish yields on the whole the largest return during the year to the fishermen?—Codfish.

46,641. Is the herring a fish that is much caught here?—They have been very scarce for the last two or three years.

46,642. Was there ever a good herring-fishing here?—Yes, there have been some very good seasons of herring-fishing, but not lately.

46,643. (*Mr. Lefèvre.*) Do they come into the lough?—Yes.

46,644. (*Mr. Caird.*) Are they cured here?—No, they are mostly all sold fresh.

46,645. There is no curing establishment here?—No.

46,646. Have you any observation to make in regard to the herring fishery; is there anything you desire to bring before us as to the mode in which it is practised?—These small boats do not go much outside the lough to fish. There have been large shoals of herrings outside and there have been no boats and nets to go after them.

46,647. Then the fish have been lost for want of being properly looked after?—Yes.

46,648. Have the fishermen here never been able to get a larger sized description of boats to follow the fish further to sea?—No; the greater part of them are fishing in other men's boats; they are fishing on shares.

46,649. Are they boats of a different character?—No, they are about the same.

46,650. Are there any valuable oyster beds in Lough Foyle?—I believe there are.

46,651. Have they been improving or diminishing in yield in recent times?—I am not much acquainted with oyster-fishing, but there are men here from that part of the bay who can give you information about it.

46,652. Is there any good lobster fishery here?—Not inside the lough.

46,653. Is there any outside?—Yes.

46,654. Along the coast?—Yes.

46,655. Is it followed successfully?—Yes.

46,656. Is it a considerable fishing?—No, they do not get very many, only a small quantity.

46,657. Are there many boats engaged in it?—There are a good many.

46,658. Is it an increasing fishery?—It has not been increasing this last year I believe.

46,659. Do you know whether the lobsters have begun to diminish in quantity?—The men tell me that this has been a very successful season.

46,660. Are there any mussel beds here?—There are.

46,661. Is there plenty of bait for the fishermen and is it to be got easily?—Yes.

46,662. Then they have no difficulty as to bait?—No.

46,663. Is there any restriction at all as to the times at which you may fish for herrings?—There is no restriction.

46,664. You fish at any time you like?—Yes.

46,665. Is there any restriction of any kind imposed here upon the fishermen as to the times they may fish any description of fish or as to the places in which they may fish?—There is no restriction. They may fish when they like and catch what they can, but the fish are not plentiful.

46,666. Can you tell us if there is a close time for trawling appointed?—I do not know exactly the time. I have nothing to do with it. The trawling is generally outside.

46,667. Is there any mackerel fishery here?—No, except they catch some in the herring-nets.

46,668. In regard to the herring fishery have you got a summer and winter fishing here?—They get a few sometimes in the winter, but very few.

46,669. Have they ever looked for them much in the winter?—Yes, they have looked for them and they have found them rather scarce.

46,670. In some cases we have found on the coast of Scotland that they do not appear to have looked for them, but now they have done so recently, they have found them in the winter; is that the case here; do you know anything about it?—Yes.

46,671. Do you think if they were looked for here in the winter they would be fallen in with?—I daresay they would.

46,672. Are they in good condition when they are caught in the winter?—They are not.

46,673. Not in the month of January?—No.

46,674. Is there any sprat fishery here?—None that I know off.

46,675. Can you tell me the price of fish as compared with what it was in your younger time?—They are a great deal dearer than they have been.

46,676. Can you compare the price of cod by the dozen 20 years ago with what it is now?—Yes; I have bought them myself at 2*s.* and 2*s.* 6*d.* a dozen about the last year the bounty was given which I think was somewhere about the year 1832. I have paid as much as two guineas a dozen for them since then.

46,677. What may be the price now?—The codfish are not in exactly; it is too early in the season, but they are selling I believe for about 12*s.* and from that to 30*s.* and 36*s.* a dozen.

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46,678. If there had been anything like the same quantity of fish caught it would be a much more paying business now than it was then?—Yes.

46,679. Do you think the fishermen on the whole are getting the full advantage of the additional price?—The fishermen are most anxious to catch them if they can get them, but they have been so scarce that the price has gone very high. If there were plenty the price would be less again.

46,679*a*. In your opinion is the price affected as much by the quantity caught here as by the increased market for them?—The market has increased, of course.

46,680. Have you noticed that the quantity has so perceptibly diminished?—Yes.

46,681. (*Mr. Lefevre.*) Have you observed the same decrease both in the lough and outside?—Yes.

46,682. Do the trawlers fish on the bank you told us of—the Inishtrahull bank?—No.

46,683. They do not work that bank?—No.

46,684. They fish inside and outside the harbour along the Magilligan bank?—Yes.

46,685. Do you know what number of trawlers there are that are engaged in fishing?—I could not exactly tell the number.

46,686. Do you know what number of boats belong to Moville and Greencastle?—I cannot exactly say.

46,687. About what number?—From Moville very few go out to the bank—they fish about the lough; but the Coastguard would give you better information upon those points than I can.

46,688. Do the winter herrings come into the lough?—I do not know. It is seldom we try for them.

46,689. In summer do the herrings come into the lough?—Yes.

46,690. What month is that?—They have been in this last month.

46,691. In August?—Yes.

46,692. Are they there for more than a month?—They went away very quick. I think they stopped a month.

46,693. In what condition are the fish then?—Very good.

46,694. Have they any roe in them then?—Very little.

46,695. Are they very fat?—Yes.

46,696. What sized fish are they?—They are middling sized herrings. The first they get are rather small.

46,697. Do you know the Loch Fyne herrings?—No.

46,698. Can you say for how much of their time the fishermen are employed in fishing; is it as much as one-third or more?—It will be more than one-third or one-half.

46,699. They are employed in fishing fully one-half of their time?—Yes.

46,700. Are the same men employed in dredging for oysters?—No.

46,701. Are the oyster dredgers a different class of men?—Yes.

46,702. Do they have different boats for that?—They are about the same boats. Perhaps you will allow me to call your attention to the state of the pier at Greencastle built by the late Fishery Board, which is in good state of preservation, but useless for the purpose for which it was intended, there not being a sufficient depth of water to admit of the entrance of any large fishing boats or trawlers. I would therefore suggest that a few hundred pounds should be expended in improving the pier so as to make it useful as a harbour for boats which would be required to search for and fish in the deep-sea fisheries round the coast.

The witness withdrew.

T. McCandless.

THOMAS MCCANDLESS called and examined.

46,703. (*Mr. Caird.*) Are you a fisherman here?—I have been but I am not at present.

46,704. What kind of fishing did you follow?—I followed cod-fishing and trawling principally; sometimes herring-fishing when there were any to be got, and I have dredged a little too.

46,705. How many years back does your experience extend?—I remember the fishing for 20 years, and it is 15 or 16 years since I commenced it myself.

46,706. First, as regards cod-fishing, where have you been most successful in finding cod?—Off the land on the bank which McKinney referred to.

46,707. Did you fish there 16 years ago?—No, but I have fished there 12 years ago.

46,708. With long-lines?—Yes, it has never been fished with anything else but long-lines.

46,709. When did you fish it last?—About four years ago, but I see what the men are taking off when they go there.

46,710. Are there as many people and boats employed in fishing it now as there were when you went?—Not one-half as many, and the quantity of fish is not a quarter as much as it was then.

46,711. Is the bank very extensive?—Yes, and to the best of my opinion the further off the land the better fishing they would get if they could venture to go there. They do not go, however. One Moville man went about 16 miles further to the northward and in an hour and a half he loaded his boat with cod and grey fish which he caught with hand-lines.

46,712. (*Mr. Lefevre.*) What grey fish?—It is a grey thing as large as a cod—tussacks or grey lords we call them.

46,713. Are they coal fish?—Yes.

46,714. (*Mr. Caird.*) When was that?—Last season.

46,715. Did anybody follow his example?—No, most of them were afraid. It was a fine day when he went. He was losing sight of the land when he got there, but it was a calm day, and it took 20 hours to bring him in.

46,716. (*Mr. Lefevre.*) What season of the year was it?—About the middle of June. He went out two or three times and was always successful. He loaded his boat whenever he went out.

46,717. (*Mr. Caird.*) Then in your opinion there is plenty of fish to be had?—I do not think there is plenty, but there are more off the land than where the fishermen go, even off the bank, where they expect to get fish in the spring of the year. If they got one fine day they would venture out there. In February on a fine day they would get a few fish, but perhaps for two weeks at a time they cannot venture out again.

46,718. Are the boats so small that there would be much danger in it?—Yes. If they have a breeze from the west they cannot pull out.

46,719. Have you seen boats of a larger size out there?—No, no larger than our 6 feet-beam boats and 24 feet keel.

46,720. Are there any other fish found there except cod?—There are turbot. It is the best place for turbot.

46,721. How do you catch turbot there?—With the long-lines.

46,722. On the same lines as the cod?—Yes, a boat could scarcely trawl on those banks, because the tide sets close in.

46,723. Is it a soft bottom?—No, hard sand and shells.

46,724. What depth of water is there?—They fish in from 15 to 40 fathoms, according to where they find fish. Some seasons of the year they get fish near the bank on the sand. Early in the season they get it on the rough edges.

46,725. You have never seen any trawling on the bank?—No, they have often intended to try, but they

are afraid that they would lose their nets as the tide would carry them across.

46,726. When did the quantity of cod caught on the bank begin to show a diminution?—For 20 years they have not got many; but in 1848 or 1850 there were one or two seasons in which they got a reasonable quantity. Some of the men loaded their boats for some few days, but since then they have not been so plentiful.

46,727. If they had decked boats and could keep at sea in bad weather would they be more successful?—I have known them be for two weeks when they could not go out at all. They would get out in the spring for one day, and then would have to lie on the shore for two weeks again.

46,728. What kind of bait do they use here?—For the most part buckies and mussels.

46,729. Do they ever try herring bait?—Yes, often, but is not to be got, because there are so many dog-fish, and they would break off the bait at once; sometimes they are plentiful and sometimes not.

46,730. Have you fished for cod anywhere else?—Yes, in the river often, close at hand.

46,731. In the lough?—Yes.

46,732. Also with the long-lines?—Yes.

46,733. Have you been successful in it?—We have done very well sometimes, but we have done nothing for a number of years. As compared with what it was formerly there has been nothing done at all for the last 20 years; it has not been as good as it was before during all that time.

46,734. Have you yourself within your own experience noticed a great falling off?—Yes, particularly within the last two or three years.

46,735. What do you suppose is the cause of it?—I cannot give you any reason for it at all.

46,736. Do you agree with the previous witness that there are fewer fishermen than there were 20 years ago?—Yes, there are; but if there were fish to be had there would soon be as many fishermen as ever there were. The reason the fishermen do not fish constantly is that they cannot get a supply of fish to keep them at it. If they could get plenty of fish they would keep at it.

46,737. Then it is the want of fish that has led to the falling off in the fishermen?—Yes, I am sure that the greater part of the fishermen would keep constantly at it if they could only get fish.

46,738. And the falling off cannot arise from over-fishing because the number of fishermen has increased?—Yes.

46,739. Have you been a trawler?—Yes.

46,740. Can you tell us whether that mode of fishing is injurious to the supply of fish?—I never heard any person complain of it. I do not believe it has been so on the Back Strand.

46,741. What do you catch in the trawl?—Sole, turbot, flounders and ray.

46,742. You do not catch cod?—No, never.

46,743. Do you get any haddock?—No, we scarcely ever get haddock here. Some odd times we get a hake or a conger.

46,744. Have you not heard the fishermen attribute the falling off of the fish to the injury done by the trawl?—No; I do not believe that the codfish are ever taken by the trawlers at all and there are but few of them that spawn there.

46,745. Where do you trawl?—Well up the river and on the Back Strand.

46,746. Where is the Back Strand?—At the back of Magilligan Point. The codfish scarcely ever go into the bay, they keep more outside; in the spawning season they go to the banks outside.

46,747. On the banks upon which you do not trawl?—No; I never saw a trawl there. There is a little bank called Dunmore which is a fine place for fish in the spawning season, and there was never a trawl-net shot there.

46,748. (*Mr. Lefevre.*) Whereabouts is it?—It lies off Culdarff Bay.

46,749. How far is it?—Near the shore and it extends for four or five miles out.

46,750. (*Mr. Caird.*) At what season of the year do you trawl?—We can trawl outside the river at any time; but the fishermen among themselves have made it a general rule from the 1st of February to the 1st of July not to trawl in the river. They never shoot a net in the river then because if any fishermen were fishing at that time they could stop them and have them fined.

46,751. (*Mr. Lefevre.*) Is that only a rule among the fishermen themselves?—I know there is such a rule among the fishermen; but I never heard of one being laid down by any other person.

46,752. (*Mr. Caird.*) You do not know whether there has been a byelaw laid down by the Fishery Board?—I believe it is done in consequence of an Act made by the Commissioners.

46,753. (*Mr. Lefevre.*) How long ago?—It is within my memory; perhaps 10 or 12 years ago.

46,754. (*Mr. Caird.*) There is a regulation of that kind?—Yes.

46,755. And is it adhered to?—Yes, carefully.

46,756. And there is no trawling within the bay from the 1st of February until the 1st of July?—No, not from Magilligan Point.

46,757. From the 1st of February until the 1st of of July there is no trawling?—No.

46,758. But after July there is?—Yes.

46,759. Can you tell us for what reason the months from the 1st of February to the 1st of July have been fixed for close months?—No; I cannot give you a reason for it, but that is the time they have fixed.

46,760. Would the spawn be destroyed during that period if the lough was fished then?—I do not know exactly where the flat-fish do spawn.

46,761. Would the young brood be destroyed if it was fished at that time?—I expect it was on that account that they made a law of that kind to protect them.

46,762. There is a law prohibiting trawling during that period?—Yes, and it is strictly observed; no man tries to trawl then.

46,763. Have you fished in all the other months in the year in the lough?—No; because the fish are plentiful outside. In rough weather we fished outside in some seasons of the year. After we commence on the 1st of July for a month or six weeks the fish are very plentiful inside.

46,764. Do you not find that in warm weather the fish are plentiful in shallow water?—That does not make much change in the river; the fishing is best outside close to the land.

46,765. Have you trawled outside and in during all the months that are not close months?—Yes.

46,766. You have been fishing all that time with the trawl?—Yes.

42,767 Have you ever observed that you brought up spawn in the trawl?—I never saw spawn the size of my hand brought up by a trawl-net.

42,768. Did you, on the average, bring up in your nets, any large quantity of small immature fish unfit for the market?—We might do that sometimes, but not often. There is a kind of brown-back about the fishing-ground, which is a small fish and never grows any larger.

46,769. Is it a small flat-fish?—Yes, they are a species by themselves, they are not the same as the other kinds; we generally bring them home because they are sweeter fish.

46,770. They are not thrown back again into the sea?—No.

46,771. They are brought for sale and use?—Yes, for our own use, we like them better than the large ones.

46,772. Except those fish, is there any large quantity of immature fish brought up and thrown away as useless?—No none.

46,773. Is there any considerable destruction of the brood of fish by that mode of fishing?—I am not aware of any.

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46,774. (*Mr. Lefevre.*) Do you take any young turbot?—It is very seldom that we get any; we lift on odd one now and then, but if we lift a small one we drop it overboard; it is however very seldom that we get one, we might fish for a week and not get one. The sole is the principal fish we catch by the trawl in the river.

46,775. (*Mr. Caird.*) When did trawling commence in the river?—There has been trawling there for the last 50 years.

46,776. Then it is not at all a recent mode of fishing?—No, there were far more boats trawling 25 years ago than there are now.

46,777. What is the length of the beam of the trawl used here?—It is according to the size of the boat; it will run from 20 to 30 feet.

46,778. Are they all decked boats?—Yes, they are all decked boats, but they are only small.

46,779. They could go to sea then?—Yes, in moderate weather; perhaps some of the boats will be from 25 to 40 feet long, but they have only small beams.

46,780. Are they good sea-boats?—They are very good, but they are not fit for very bad weather.

46,781. Do they keep at sea for some time when they go out?—They generally keep at sea for a day or two, and then come in to dispose of their fish and get provisions.

46,782. Do they keep the trawl down for one tide?—That depends upon where they are drifting, sometimes it will only be down for half an hour, and at others it may be down for three or four hours.

46,783. Have you observed in trawling, that in passing over the same ground continuously you exhaust the fish?—No, I believe that where the ground is constantly trawled the fish improve because the ground rope drags up the ground and enables the fish to obtain food. We find that we get more fish if we are fishing over where another trawl has been shot than if we go away to new ground.

46,784. Then you find it advantageous to trawl in the same locality?—Yes, we believe it trawls up the sand and exposes the worms to the fish.

46,785. You do not avoid places where you have been in the habit of trawling?—No, but we generally go back to such places again, because we find that the flat-fish always gather where the ground has been trawled over; it is often the same with dredging. If you go where the boats have been dredging and along the edge of the bank, you will get three times more flat-fish than if you kept out.

46,786. With regard to dredging for oysters, have you practised that?—Yes, a little.

46,787. Are there several oyster-beds in Lough Foyle?—Yes, a good many.

46,788. Are there any other places?—I have heard the Portrush men say that there are fine oyster beds by the Skerries off Portrush, but they do not dredge any; they have lifted them often on their long-lines.

46,789. Are there many beds in Lough Foyle?—Yes, there are a good many.

46,790. Are they private property?—No.

46,791. They are open to any of the fishermen?—Yes, any man who likes to dredge upon them.

46,792. Have the oyster beds been dredged for many years?—I hear old men of 60 and 70 years of age talking about oysters having been very plentiful when they were young men 15 and 20 years of age.

46,793. Is there any regulation adopted by the oyster fishermen in regard to the time at which they should fish?—Yes, they stop on the 1st of May, and do not begin until the 1st of September.

46,794. Does anybody enforce that regulation or do they observe it themselves?—I believe it has been a regulation the same as trawling.

46,795. Is it carefully observed?—Yes, and there is a fine against breaking it.

46,796. Is there any other regulation among the fishermen here, as to the modes in which the oyster beds shall be fished?—No.

46,797. Every man follows his own way?—Yes.

46,798. Has the number of boats and men employed on the beds in Lough Foyle increased or diminished of recent years?—I think there were as many last season as there have been for the last 10 or 15 years. I believe they got more oysters last season than before. The oysters were not as large but the fishermen have been able to get large quantities during the last two years.

46,799. Then the oyster beds have not diminished in their yield at all?—For two years they have got more oysters than they did for five or six years before. About 20 years ago I believe the oysters were very plentiful.

46,800. Do any strangers come upon these oyster-beds to fish?—No fishermen go there except the fishermen belonging to Lough Foyle.

46,801. Would the men of Lough Foyle prevent other men from going there?—No, they would not.

46,802. But they do not come?—No.

46,803. Are there any artificial beds in the lough?—No, except one at Whitecastle. A man named Reed, an oyster dealer from Liverpool, has bought young oysters from the fishermen; they were what I used to throw overboard, and he gave them 6*d.* a hundred for them and planted them.

46,804. Where did he plant them?—At Whitecastle Point, about five miles from here.

46,805. Do you know how it has succeeded?—I have not heard.

46,806. Is the planting continued?—No. It is the only bed that has been planted and I believe it has been a failure.

46,807. Has Mr. Reed ceased to buy the young oysters?—Yes, he only bought them for a short time one season.

46,808. (*Mr. Lefevre.*) Did he have a licence from the Commissioners?—No, he had no licence at all.

46,809. (*Mr. Caird.*) Has the price of the oysters much increased of late years?—Last year they were 4*s.* a hundred for nice sized oysters; that is a very fine price.

46,810. What market do they send their oysters to principally?—To Liverpool and Belfast. The price is according to the size and quality. There are some that are hardly worth anything, and there others that are worth 5*s.* a hundred.

46,811. Are the men who practise oyster-fishing successful in their business?—They make wages. If they can make 2*s.* 6*d.* and 3*s.* a-day they consider it better than labouring on shore.

46,812. What kind of oysters are those which are caught here; are they large or small?—They are of different sizes according to the different places from which they are obtained; towards the mouth of the river they are large, and further up the river they are smaller.

46,813. Is there any oyster bed that has been fished out at all?—They find them very often at the end of the season when they have been working a good while getting a great deal scarcer than they were at the beginning of the season.

46,814. Have you ever fished for lobsters?—No, I have not. I believe there are oyster beds in the river which they have not found at all. They found one last year which they knew nothing about, and they got a large quantity of oysters from it; it was however only a small bed.

46,815. Are you a herring-fisher?—I have fished herrings.

46,816. Is the herring fishery an important fishery here?—It is not. The men very often do not make anything in the season from it. This season they caught a few and they made a few pounds by it. We principally look to the herring fishery to enable us to get a few for bait in the winter time; but they have been very scarce lately. I believe there have been large shoals outside, but no man has gone out to try for them.

46,817. Are the codfish sent fresh to the market or are they cured?—When they are scarce they go fresh to the market, but if they are plentiful in the summer

time they are cured. In the winter time they go fresh to the market. They keep better in the winter, and it is not necessary to put them in ice. It would not pay if they were obliged to purchase ice.

46,818. (*Mr. Lefevre.*) What is the number of boats dredging for oysters?—In Lough Foyle there may be 40 or 50 boats employed at it.

46,819. Not more than that?—No.

46,820. Has that number diminished of late years?—I believe a number of years ago there were more than there are now.

46,821. I see that in 1836 there were 80 boats dredging?—There is not that number now.

46,822. Have the boats diminished since then?—Yes.

46,823. How many men are there in each boat?—Four men.

46,824. Have they each a dredge or have they only one dredge to a boat?—Only one dredge. Some are adopting a lighter dredge, and are beginning to use two.

46,825. Do they cull the oysters in the boat?—Yes.

46,826. Of what size do they take them?—If they are too small when they bring them ashore they cull them, and they will not buy them for small ones.

46,827. Do they cull them on board?—They take the small ones out when they come on shore. Out of 1,000 or 1,200, perhaps, there may be 100 small ones which the purchaser will not take; he picks them up however, and sends them to market, and they add to the profit.

46,828. What do they do with those they bring on shore and cull?—The person who buys the large ones takes them and picks them up with them.

46,829. He takes them up with the large ones?—Yes.

46,830. Does he get a smaller price for them?—I believe he does. If there are a few left behind he generally gets them for nothing.

46,831. Are the oysters taken up here fit for eating at once?—Yes.

46,832. They are not bought in order to be laid down on other beds?—No.

46,833. Is there any demand for oysters for laying down on other beds?—There was only one man here who bought a few for laying down, but the thing did not answer well.

46,834. What is the size of the oysters?—There are some of them very small, and there are some quite as large as a saucer.

46,835. What is the size that the buyer would reject as too small?—That depends upon the bed they are caught on. The oyster that would be objected to here would be a sizeable oyster up the river.

46,836. What is the size that would be rejected down here?—A small one about two inches would be rejected here.

46,837-8. An oyster above that size would be taken?—Yes.

46,839. What size would they reject there?—Much smaller oysters would be rejected there.

46,840. An inch?—No, an oyster an inch across would be a very small oyster that would be hardly worth opening.

46,841. What is the smallest oyster up in the lough the buyer would reject?—He would not count an oyster an inch in size as an oyster at all.

46,842. Would the buyers purchase anything above that?—A penny piece is about an inch, and that would be a very small oyster.

46,843. Would they take oysters an inch and a half across?—Yes, about that.

46,844. I think you said there were some oysters that fetch a good price?—There are some small and some large.

46,845. Do they require to be laid down on other beds?—No, they never lay them down.

46,846. Does the size of the oyster depend upon the depth of water?—The depth of water does not make much change. Further up the river they are smaller but there are some beds upon which the oysters are smaller and others upon which they are larger.

46,847. In the same depth of water?—Yes.

46,848. What is the general depth of water in which you find the oysters?—We get them in from six feet of water at low-water up to six and seven fathoms. They do not appear to be confined to any particular depth of water at all.

46,849. Are they ever uncovered at all at low-water?—No, except there are banks close to the oyster beds at low spring tides where you might gather up oysters if you were walking.

46,850. Have there been good breeding seasons here for the last two or three years?—Yes, they have been plentiful here of late.

46,851. Has there been a good spat for the last two years?—Yes.

46,852. Have you observed on the whole any falling off in the take of oysters?—Yes, they are not as plentiful as they were a number of years ago.

46,853. Does not each boat get as many, or are there not as many brought in altogether?—Each boat does not get as many and there are not as many brought in altogether.

46,854. How do you account for that?—The oysters are scarcer.

46,855. Can you give any reason for the falling off?—Of course, taking the small ones is very injurious. I believe that the time Mr. Reed bought a large quantity and planted them that that was an injury to the beds, but that is not being done now.

46,856. How long ago is that?—In 1860.

46,857. Four years ago?—Yes.

46,858. It has not occurred since?—No; it was only for one season. The small ones are never taken off our beds down here and they are never brought ashore, and yet oysters are scarcer now than they have been within my memory.

46,859. Notwithstanding that there were formerly a great many more dredges at work?—Yes, but if the oyster beds are down in the mouth of the river or anywhere else and are left undredged they would die; they would be covered up with sand.

46,860. Then do you think that a certain amount of dredging does no harm?—Too much dredging will do harm, but a certain amount will not. There is one bed here at Greencastle where there was a fair supply, but there came a heavy gale of wind, and the men did not fish upon it for about two months. At the end of that time they went back to it and all they dredged up was shells; the oysters were all dead.

46,861. Do the oyster beds shift about a good deal?—I do not think they do. I think they generally keep their place.

46,862. If there is a heavy gale of wind you find they move?—No, a heavy gale of wind will not shift the oyster beds, but it lodges sand upon the beds and injures the oysters.

46,863. How many trawlers are there fishing in the lough?—There are about eight trawlers belonging to Lough Foyle altogether, perhaps there are nine, and there are four or five boats which come from Lough Swilly to fish.

46,864. There are about nine altogether belonging to Lough Foyle?—Yes.

46,865. And occasionally there are others coming from Lough Swilly?—Yes.

46,866. What season of the year do they come?—Their boats are small, and they generally come after the open season in the summer time.

46,867. What is the average tonnage of the trawlers?—The largest is only 15 tons, and from that they go down to about six tons.

46,868. How many men have they on board each of them?—There are generally three men on board.

46,869. Do they fish all the year round either inside or outside?—No. On the 1st of January they lay them up until June on account of the bad weather.

46,870. Then during the close season they do not trawl at all?—No.

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46,871. They do not go outside?—They can go outside; they go out in May if they consider the weather fine enough. Sometimes they go out in May and June.

46,872. Then when the close season is over do they come inside?—Yes, because they can work inside at any time, but it is only on a fine day that they can work outside.

46,873. Is most of the ground in the lough trawling ground?—No, there are a great many parts of the river where they do not get fish, and on the other hand there are a great many places where a trawler could not work for wreck.

46,874. Do you trawl over the same ground in the lough as that upon which the line fishermen use their lines?—No, the line fishermen generally fish in the deep of the Channel and we generally trawl nearer the shore.

46,875. In what depth of water do you trawl?—In from two fathoms to seven fathoms.

46,876. Not deeper than that?—No.

46,877. Are your trawlers not adapted for trawling in deeper water?—If we found the fish more plentiful we should trawl there, but the wreck injures us very much.

46,878. Do not the line fishers go there and set their lines on that ground?—It is very seldom that they fish for codfish here, but they do sometimes for flounders.

46,879. What is the size of the mesh of your trawl?—Four inches.

46,880. Is that the largest?—It is generally about that throughout.

46,881. Is the take of fish you get by the trawl falling off?—Yes, we have found them a great deal scarcer than they were at times.

46,882. Compared with 10 years ago, are they scarcer now?—Yes, particularly outside, and they are much scarcer inside. They were more plentiful outside 10 or 12 years ago than they are now.

46,883. Has there not been much difference inside?—No; there has been a little difference, but not so much.

46,884. What particular kind of fish has got scarcer?—All kinds of fish are getting scarce; flounders are getting scarce and sole also.

46,885. Do you find as many turbot as you did formerly?—No, not so many, but the fishermen do not depend so much on the turbot. They will fish for a week and scarcely get a turbot in the net. We depend principally upon soles and flounders.

46,886. During that time has not the number of trawlers increased considerably?—No, I think not.

46,887. Ten years ago were there as many as there are now?—Yes.

46,888. In 1836 there were only two trawlers working?—The number has been about the same for the last 10 or 12 years.

46,889. Can you speak of any time when there were fewer trawlers at work?—Our men have been trawling for 20 years and more than that.

46,890. You yourself do not know?—No.

46,891. Do you send your soles to Londonderry?—No, they are generally sent from this river to Liverpool, Glasgow, and Belfast.

46,892. By smack or by steamer?—By steamer.

46,893. Has the price increased?—Yes, we have a very fine price if we could get enough of them.

46,894. Has the price increased much within the last 10 years?—Yes, it is much better.

46,895. Then, on the whole, the fishermen who trawl are in the same condition as they were?—I do not think that the trawling men are worse; I think they are as well off as they were 10 years ago.

46,896. Do the trawl-boats belong to the fishermen themselves?—Some do and some do not.

46,897. Are the men paid by share?—Yes.

46,898. Do you think the money the fishermen make now is as much as it used to be ten years ago?—I suppose to the men it is nearly as good as it was ten years ago, but 20 years ago the fish were much more plentiful.

46,899. Do the soles reach a great size here?—The soles we get outside are of a different class from those which we get in the river. The soles got outside are larger and lighter in colour.

46,900. What size do they run?—From about half a pound to one pound inside, but outside they run from two pounds to three pounds.

46,901. Do you think the soles leave the lough in the season?—We never get such small ones outside as we catch in the lough.

46,902. You think they are always in the lough?—Yes, I think so, and those outside are scarce in bad weather.

46,903. Is there much ground outside upon which your trawlers are capable of trawling?—We only trawl close to the land.

46,904. Do any of the larger class of trawlers come off here to trawl?—Some years ago two or three boats came from Liverpool and they got large quantities.

46,905. But not of late years?—No.

46,906. Is there much ground off here fit for trawling?—Yes.

46,907. For the larger class of boats?—Yes.

46,908. Are there any of the larger class of trawlers in Lough Swilly?—No, no larger than in Lough Foyle.

46,909. What number of trawlers belong to it?—I think about the same number as in Lough Foyle, or perhaps less. Perhaps, there are only six boats.

46,910. (*Mr. Caird.*) Does Lough Swilly yield much the same description of fish as Lough Foyle?—Yes; but what brings the trawlers to Lough Foyle is that they are restricted to a particular ground in Lough Swilly. They are trying now to get leave again. They are not able at present to get a sufficient quantity of fish to enable them to subsist, and the gentleman who stopped them I heard is now trying to get the prohibition removed.

46,911. Has he found that he made a mistake?—Yes; the fish keep above that ground in rough weather and they cannot catch them.

46,912. Is there any restriction which you consider injurious to the interests of the fishermen?—I think not. I think it right to have the lough closed at a certain season of the year.

46,913. Have you ever observed the condition of the oysters at the beginning of the season and at the end of the season?—Yes, particularly at the beginning. At the beginning they are not so good.

46,914. When is the beginning of the season?—The 1st of September.

46,915. Then during that month they are not so good?—No, I do not think they are.

46,916. At the end of April and the beginning of May are they as good?—Not as good as they are at other seasons of the year, but I have often seen them caught down here. In deep water some of the boats get them better than in any other season of the year in April.

46,917. In deep water?—Yes.

46,918. Have you heard that it would be an advantage to have a later close-time and to make the open-fishing commence at the beginning of October, leaving it also an open time during the month of May?—I never heard the fishermen say anything about that.

46,919. Is there no opinion of that kind among the fishermen here?—No.

46,920. They do not complain of the present regulation in any way?—No, they are anxious and willing to get to work to make a few shillings in that season.

46,921. (*Mr. Lefevre.*) Do you recollect trawling in Lough Foyle before the regulation was made?—I recollect it for 17 or 18 years.

46,922. You were yourself trawling before that regulation was made?—No, it is only eight or ten years since I commenced trawling.

46,923. Was there much trawling during those close-months before the regulation was made?—No.

46,924. Did they trawl during the time?—Yes.

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46,925. How long is it since the regulation was made?—About 10 or 12 years ago.

46,926. You have not found that since that time the fish have increased in quantity?—No, they have not increased a bit; I think they have gone less.

46,927. Then what makes you think the regulation has done good?—I do not say it has done good in the way of improving the fish.

46,928. You were speaking then of oyster regulations in regard to close-time?—Yes.

46,929. Are you of opinion that this regulation is of any particular use to the trawl fishermen?—I do not think it is. I do not think the fish would be scarcer if they were trawling all the year round.

46,930. You think the regulation might as well be done away with?—Yes; the regulation in reference to trawling might be done away with. I do not think it improves the fish at all to have it, because even at the beginning, for the first two weeks they begin to fish, the fish are more plentiful than they are afterwards, and in the close season, when the rough weather comes on, the fish gather to the ground again.

46,931. Then has this regulation taken from you a good deal of fishing?—Sometimes it takes away from us the very best time of the fishing.

46,932. Would you recommend any alteration of the close-time, or would you do away with it altogether?—I would not say that it would be right to do away with it altogether. I do not know whether that would be an improvement to the fishermen or not; it might improve the fishermen, but not the fish.

46,933. I think you said you did not know where the soles spawn?—No, I do not; but my belief is, the soles we catch outside are not those which we would ever catch in the river.

46,934. But where do the soles in the lough spawn?—I expect they spawn in the river. They are much more plentiful from Killmore, and inside that down to Londonderry.

46,935. Do you not trawl on that ground?—No; because the bottom is rough with stones. One man tried it this year, and before he had gone 200 yards his net was torn to pieces. Nevertheless, the torn net had 40 pairs of soles in it.

46,936. Do they spawn there?—I believe they do.

46,937. Do you know what the spawning season is for the soles within the lough?—No, I do not know the spawning season.

46,938. Do you get a better price for the sole when it is a full fish?—We sell them by the pair, and soles that are small and light we put up by twos and threes to make a pair.

46,939. When the fish are full of spawn, do you get a better price for them?—No; the condition of the sole in that way does not act. The price is according to the market. We may get a shilling a pair, and next week if there is a scarcity, 1*s.* 6*d.* I never heard a buyer complain in the market of the soles sent to him. The sole is a fish which we generally get in good order. There is a system sometimes carried on in fine weather of trawling with round nets and sweeping them on shore. I think that is injurious. They shoot the nets round and round, and very often they practise it here on our strands outside, but that is only late in the season.

46,940. Is there any seining in the bay?—None in this bay, except down at the mouth of the river, where there are sometimes young glassen and codlings drawn by nets. I have known them to draw a boatful of small fish.

46,941. Have you seen it yourself?—Yes, I have seen boatloads brought to this quay and to Magilligan Point, and sold by the hundred.

46,942. They were small flat-fish?—Yes. It is generally late in the season that that is done.

46,943. What are they; are they soles?—No, the soles seldom come so close to the land.

46,944. What are they then?—Flounders generally.

46,945. Not soles or turbot?—No; generally they go out into deeper water.

46,946. Then these are not young fry, but are the small class of flounders?—Yes; but very often young fry are drawn in with them. There are some places down along the north side of this where they draw young fish.

46,947. How many of those nets are there used at the mouth of the river?—They are not used at all unless they find the fish at the mouth of the river. Sometimes they never use them in the course of a year. Sometimes they shoot them for glassen.

46,948. When they see a shoal of glassen?—Yes.

46,949. Do you think it does any harm to the fishery?—Yes, I think it does. I think it destroys a great many young fish. It has a small mesh, and I think it does more injury than anything else on the coast.

46,950. (*Mr. Caird.*) Is there any regulation that prohibits the use of that small mesh on this coast?—I believe there is.

46,951. Is it enforced by anybody?—I believe if the Coastguard caught them they would fine them; but it is seldom that they get hold of them.

46,952. Are the Coastguard instructed to prevent such a mode of fishing?—I think they are.

46,953. They would probably do so if it were carried on to any great extent?—Yes.

The witness withdrew.

JOHN LOUGHREY called and examined.

J. Loughrey.

46,954. (*Mr. Caird.*) Are you a fish dealer?—I buy fish.

46,955. Have you been here long as a fish buyer?—Twelve or 14 years.

46,956. Within your experience, in the course of those 12 or 14 years, can you tell us if the quantity of fish brought in here for sale has increased or diminished?—It has diminished very much.

46,957. Is there any particular kind of fish that has diminished more than another?—The codfish have diminished most of all, I think.

46,958. Has that arisen from the fact that the number of fishermen has diminished?—I cannot account for it. The boats that are fishing now do not get near the same quantity they did a few years ago.

46,959. Are there as many boats employed now as when you first began 14 years ago?—I think not.

46,960. Are there as many men?—No, nor as many men.

46,961. Are the fish that are now brought here as good in quality?—I do not see any difference in the quality.

46,962. In size and quality they are as good as they used to be?—Perhaps they are hardly as large.

46,963. The price has much increased, has it not?—Yes, it is five and ten times as much sometimes.

46,964. Then it cannot be from the want of price, but because the fish have diminished in proportion; is that the fact?—Yes, that is the fact.

46,965. Did you hear the evidence of a witness who said that if the fishermen went to sea further they would be successful?—Yes.

46,966. Do you think the diminution in cod-fishing may arise from the boats not being sufficiently large to run the risk of a heavy sea?—I think that is principally the cause. Because there have been so many of them lost in going to that bank they are afraid to go out except in fine weather.

46,967. (*Mr. Lefevre.*) Do you mean the Inishtrahull bank?—Yes; it is called the Hempen and Isle bank also. The principal bank for the fishing is called Isle bank or Hempen bank.

46,968. What distance is it away?—Eight or nine miles from the land.

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46,969. (*Mr. Caird.*) Have many fishermen been lost there in fishing upon that bank?—Almost every year some are lost. I think there were some lost last year.

46,970. Boats and boats' crews?—Yes. Some time ago I think there were nearly 40 or 50 people lost.

46,971. Has that deterred them from going?—They cannot go to that bank except in the finest weather.

46,972. That may be the reason partly why the fish have diminished?—When they do go of late years they have not been able to get as many as they did formerly.

46,973. Have they been using the same description of line and bait?—Yes, the very same.

46,974. What other fish do you buy when you come here to purchase?—Turbot.

46,975. Has the supply of turbot diminished?—Yes, that has also diminished.

46,976. Are the turbot caught on the same banks?—Yes, and upon other banks round the Island of Inishtrahull. There are other banks they take them on in addition to that of which I have been speaking.

46,977. Are they caught by long-lines?—Yes.

46,978. Are there no vessels from any distance which come to fish on those banks and bring their fish in here for sale?—I never saw any.

46,979. There are no strange vessels?—No.

46,980. Do you buy soles?—Not generally; we did buy them.

46,981. Do you buy trawled fish?—I have not for some time been buying trawled fish.

46,982. Where do they go to market then?—Principally to Liverpool and Glasgow. We ship also.

46,983. For Liverpool and Glasgow?—Yes.

46,984. Do you buy herrings?—No.

46,985. Do you buy lobsters?—Sometimes I do.

46,986. Have the lobsters increased or diminished?—They have diminished also.

46,987. Have you heard any cause assigned for that?—I do not know what the cause is.

46,988. Do you suppose that they are over-fished?—I do not think they are.

46,989. Are they caught all the season through?—No, only in the summer time.

46,990. In what state are the lobsters when they are caught?—We consider them in prime condition when they are caught here. They will not be catching them for more than another fortnight, but that is principally owing to the weather.

46,991. Do you buy oysters?—I never did.

46,992. (*Mr. Lefevre.*) Do you know the difference between the soles caught outside and those caught inside?—No.

46,993. Can you tell us what proportion of the fish brought in here is brought by the trawlers as compared with the long-line fishermen?—The proportion of fish?

46,994. Yes.—The trawlers do not take any except soles and flounders and occasionally a turbot.

46,995. But in point of quantity do they bring in as much fish as the long-line fishermen?—I do not think they bring in one-tenth part as much.

46,996. What number of long-line fishermen are there?—From Greencastle down to this place there are about 25 boats.

46,997. How many months of the year are they fishing?—They generally fish all the season round if the weather is not too stormy; but as scarcely any of the boatmen have not a little bit of land, in the spring they are engaged in putting in the crops, and this season of the year in saving them.

46,998. How many men are there you call long-line fishermen?—I can scarcely say, but generally there are six in each boat.

46,999. Then besides Greencastle and Moville are there not other fishing villages?—There are scarcely any of the Moville men who go outside.

47,000. Then they are mostly Greencastle men?—Yes; the Moville men fish in the river.

47,001. Have you found that the price of line fish has been increasing of late years?—The price is regulated altogether by the supply. If the weather is stormy and the fish scarce, they become very dear.

47,002. The markets in other places are regulated by the supply as well as this?—Yes; but here in stormy weather there are very few fish taken, and then the price rises at once. The price is also regulated by the demand in Glasgow and Liverpool.

47,003. Taking the last season as compared with what it was 10 years ago, has the price increased?—Yes, very much. Codfish, which have been sold as low as 2*s.* 6*d.* and 3*s.* a dozen, were sold last year as high as 2*l.* and 2*l.* 2*s.* a dozen.

47,004. Was that an exceptional price?—Yes, but I paid 2*l.* 2*s.* myself last year.

47,005. For a dozen?—Yes, there being 14 to the dozen.

47,006. What sized codfish were they?—Not so large as the fish you will get in Dublin. Ours is a shorter and a thicker fish. The fish in Dublin are a larger fish than ours.

47,007. Do you buy from the Lough Swilly people at all?—No.

47,008. (*Mr. Caird.*) Are all the fish that are brought here sent fresh to the market?—In the winter time when they get fish plentifully they may not be able to send all away, and then they generally split them up, take off the heads, clean them, bone them, and put them in hampers. They powder them with a little salt, and send them to the market in that way.

47,009. Is there a large quantity of fish in the winter sent to the market in that way?—Yes, a great quantity, especially of cod.

47,010. Do they keep in that state for several days?—Yes, and they are sold by the hundredweight in Glasgow and Liverpool.

47,011. (*Mr. Lefevre.*) Is the supply of line fish caught within the lough considerable?—Of codfish?

47,012. Yes?—Not near so large as it has been formerly. As compared with the quantity caught outside the lough it is very small.

47,013. How many men are there fishing inside the lough?—I cannot tell how many men, but I can tell the boats fishing in the lough.

47,014. How many boats are there?—Perhaps 10 or 12; I do not think there are more.

47,015. Have you ever got any haddock here?—Very few.

47,016. In former years did you buy any quantity?—Haddock have always been scarce. They were not very plentiful. In some of our boats fishing outside we may get two or three, while others will have none at all.

47,017. Ten years ago was there a considerable supply?—No; I do not recollect that haddock were ever plentiful. Sometimes there have been none at all.

47,018. You do not recollect any time when there was any large supply?—No, I do not recollect any time when the haddocks were very plentiful.

47,019. (*Mr. Caird.*) In your opinion has the supply of fish diminished here?—Yes.

47,020. And the cause of that, as far as you yourself conceive, is that there is a want of boats of sufficient power to go in the stormy season to look after them?—I believe if they were able to look after them and to go further to sea they would get more, but they are afraid to go with the boats they have.

47,021. Is there any mode of fishing practised here which in your opinion leads to a diminution of the supply of fish?—I never heard of any.

47,022. Then it is purely a want of capital to provide boats of sufficient size to go further to sea?—Yes. If they went further to sea and had better boats they would get more fish.

47,023. The greatly increased price has not as yet tempted capital to be expended in that way?—There are no boats fit for going to sea here.

47,024. The price having risen so greatly one would imagine that it would have tempted men of

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capital to go into the business and provide boats; has it done so?—No.

47,025. From your experience as a fish buyer do you think such an outlay of capital would be very remunerative?—I cannot tell that, because the coast is bad and dangerous, and the boats might be lost. There are no harbours except that at Moville.

47,026. And Lough Swilly?—Yes.

47,027. (*Mr. Lefevre.*) And Portrush?—Yes.

47,028. That is a harbour?—Yes, and Port Stewart also.

47,029. (*Mr. Caird.*) Then it is not from the want of harbours; there appear to be far more within the same distance than there are on the east coast, in many places?—I cannot account for it in any way except it is that.

47,030. Do you think the distance from market is in any way a hindrance?—There is a good opportunity of sending fish to market by steamer.

47,031. There is a good access to market?—Yes.

47,032. And a good price?—Yes.

47,033. And a regular demand for fish?—Yes, for more than we can get.

47,034. Has any particular kind of fish decreased more in quantity than another?—I think the codfish have decreased most of all.

47,035. Do you remember whether there were ever large takes of herrings here?—I do not remember, but I have heard the fishermen talk of getting more than they got lately.

47,036. This never was a place celebrated for the catch of herrings?—I believe that formerly there was a good quantity got, but latterly there has not been many. A few we got this year for a few days. I think that one of the reasons why the codfish has failed is owing to the absence of sand eels from the banks. They have gone off; and then again there has been much loss of life from the want of proper protection.

47,037. Of what kind?—The fishermen should be protected by some vessel moored in the place where they could run to. I have known 70 widows and orphans left in one day.

47,038. Seventy?—Yes, in my time.

47,039. There is no help for the sand eels having left the place?—There is no help for that. They have to go to a greater distance for them; if they find a failure in one place they have to go to another.

47,040. The sand eels having left the place, it is beyond the power of any person to remedy?—Yes; but it shows the fish have not become extinct, but that they have gone a little further off, and if there were a place the fishermen could resort to for protection and to save their lives, I would engage that they would go out.

47,041. (*Mr. Lefevre.*) They would then go further out?—Yes.

47,042. Would that protection be supplied by a vessel anchored outside the lough?—Yes, I think it would. At the beginning of the gale they are often far distant from the land.

47,043. Have you fished the river very much?—Outside the river I have had a trawler of some 40 tons sent out.

47,044. Would not a vessel stationed upon that bank be difficult for the boats to get access to?—At the beginning of a gale they would go to it.

The witness withdrew.

JAMES MCCARRON called and examined.

J. McCarron.

47,045. (*Mr. Caird.*) What description of fisherman are you?—I fish with lines and dredge for oysters, and have been at the herring-fishing also.

47,046. Have you long been a fisherman here?—I have been fishing ever since I was a little boy.

47,047. And you are still at it?—Yes, since I have been able to fish.

47,048. Have you as a line fisherman fished on the same ground as where they were trawling?—Yes.

47,049. Did you find that trawling did any injury to you as a line fisherman?—Not a bit.

47,050. Have they not come in contact with your lines?—Sometimes when they could not see them they might.

47,051. By accident?—Yes.

47,052. They have not taken away fish you yourself ought to have caught?—No.

47,053. They have not disturbed your fishing in that way at all?—No; they would not unless they came upon me by accident, and a body must give in to that.

47,054. Do you fish outside?—No.

47,055. Do you never go outside at all?—No, except when I have been fishing for herrings.

47,056. What kind of fish have you caught inside?—Cod and flounders.

47,057. Are the cod and flounders as plentiful as they were some years ago?—No, they are not as plentiful at all.

47,058. Do you find any difference in them?—Yes.

47,059. Do you get a better price for them than you did formerly?—Yes I get a deal better price.

47,060. Then if you could get the fish they would be worth while looking after?—Yes; a man is better paid when he sells them cheaper, because in that case he generally has a larger number.

47,061. Are there more fishermen engaged now in fishing inside the lough than there were when you began?—Yes, I think there are.

47,062. There are more now?—Yes, a good deal more.

47,063. How many boats are there fishing now?—A great number, but I do not exactly know the number.

47,064. When do you think they began to increase?—I cannot say what time they began to increase. Whenever the wind blows the fish come in more plentiful than they do at other times.

47,065. Into the river?—Yes.

47,066. It is not your opinion that the fish are regularly decreasing, but that they alter from year to year—that sometimes they are more plentiful and sometimes less?—Yes.

47,067. According to the weather outside?—Yes.

47,068. Have the fishermen who formerly fished outside come in to fish in greater numbers?—Yes, in the winter when there is bad weather; they cannot go outside then. A man is not able to get out to fish in bad weather.

47,069. Have you some land as well as being a fisherman?—I have no land, but I have lived by fishing ever since I was a boy.

47,070. You were constantly employed as a fisherman?—Yes. I have reared my family by fishing, and I have lived all my days by it.

47,071. Have you made a tolerable living by it?—No, I have been a poor fisherman all my life.

47,072. Have you any sons?—Yes.

47,073. Do they follow the same business?—They did, but some of them have gone to sea now.

47,074. Do the sons of the fishermen here generally become fishermen?—Yes, and if the fish fail they go off to sea and try some other plan.

47,075. (*Mr. Lefevre.*) Have you got a boat of your own?—Yes.

47,076. What did you pay for it?—I suppose it cost me about 9*l.* when I had it built.

47,077. Have you long-lines of your own?—Yes.

47,078. And have you an oyster-dredge?—Yes.

47,079. Have you any drift-nets for herring?—Yes.

47,080. What did you give for them?—They mostly cost 1*l.* a stand. There are about six or seven stand in a boat and every one costs 1*l.*

47,081. Does each man who goes on board to fish bring his own portion of net?—Yes, every man has one or one and a half. I purchased my own nets. I had boys of my own and I kept my own nets.

MOVILLE.

J. McCarron.

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47,082. How long ago is it since you had a good herring season?—Five or six years ago.

47,083. What was the year?—I cannot recollect the year.

47,084. About when was it?—Five or six years ago.

47,085. Was that a summer or a winter season?—A summer season.

47,086. Did you ever go for the winter herring outside the lough?—No.

47,087. Did you ever get the winter herring inside the lough?—Very little. Sometimes we do, but we do not follow it much in the winter; if we find them we may have a dip, but it is too cold to be out.

47,088. Do you ever fish for herring with the seine or drag net in the winter?—No, they are not plentiful enough. The nets float.

47,089. Do you only fish with the drift-net?—Yes, with a floating net.

47,090. It is not anchored?—No, and it floats away.

47,091. Do you ever sink your nets?—No.

47,092. Do you ever ground your nets or anchor them?—No, they float away.

47,093. Do you ever sink them so that they may go to the bottom and lie upon the ground?—Yes; if we come in shallow water they will go upon the bottom, but they generally float.

47,094. Where do you find the herrings mostly when they are in the Lough?—They are in all places in the Lough. We do not often go far above the point of Killmore. It is not a wide enough space up there for us.

47,095. Are there any trammel nets set for hake here?—No, we never catch the hake here. We get them ashore. Sometimes there are one or two in the herring-nets occasionally.

47,096. Do the herrings spawn in the lough here?—Yes, I think they come to spawn here.

47,097. They spawn in the lough?—Yes, I think they do.

47,098. What time of the year?—I do not know.

47,099. Do you mean the autumn herring?—They will come in the sumer time to spawn also.

47,100. Have the herrings you take in the lough in the summer time any roe in them?—Yes, they have.

47,101. Is it a full fish?—Sometimes. You may get an odd one full and others not full.

47,102. The greater proportion is not full?—No, the greatest number are not full. They are not all alike. You will get some full and some not full.

47,103. Do you ever take the spent fish in the lough?—No, we do not get any spent herrings here. They only come at a certain season, and they are not spent. They come generally in the summer time. We never fish them after Christmas.

47,104. Do you find the trawlers trawling in the bay when you are drifting for herrings?—No, it is in the night when we fish for herrings.

47,105. Do not the trawlers work at night in the lough?—Yes, they do, but we do not go so high to fish; it is too narrow.

47,106. You do not work over the same ground?—No, we do not. They trawl in the winter time through the whole of the lough.

47,107. Do you set your long-lines at night?—Yes, and we lift them in the morning.

47,108. How do you buoy them?—With corks.

47,109. Have you not lost any lines from trawlers coming across them?—No.

47,110. Did you ever trawl yourself?—Yes.

47,111. Did you make a better living by it than by line-fishing?—No.

47,112. Do you think the trawlers are more successful and that they make a better thing of it than the line fishermen?—No, I do not think they do, if a man has boats of his own.

47,113. Are you an oyster fisher?—Yes.

47,114. Do you find that the quantity of oysters on the beds is increasing or diminishing?—They are plentiful. There are more than there were years ago.

47,115. Are they a good deal more plentiful?—Yes, they are far more plentiful. I have seen them very scarce, when we could not get 300 in a day.

47,116. What could you get now?—A thousand or 1,500, but we should not get that every day.

47,117. How do you sell them now?—We sell them at different prices, about 15*s.* a thousand.

47,118. (*Mr. Lefevre.*) Is 15*s.* a thousand the price this year?—Yes, that is the price I have got for them.

47,119. (*Mr. Caird.*) Is that the highest price you have got this year?—Yes.

47,120. What was it last year?—I think 1*l.* is as much as I got last year.

47,121. They were higher last year?—Yes; oysters are higher in the winter on account of the scarcity; they get higher then.

47,122. Is the number of men employed in oyster-fishing increasing?—There are a power of men employed.

47,123. More than there were?—Yes.

47,124. Are the beds more closely fished than they formerly were?—No, about the same.

47,125. It has not had the effect of diminishing or of increasing the oysters?—The oysters are better than they were years ago.

47,126. Have any new oyster-beds been found in the lough?—Yes, in different places.

47,127. Are there particular places where you have been more successful than others?—Yes.

47,128. Are they well known?—It just depends upon how you come upon them, if you find those spots out you will work upon them, and if they fail then you go somewhere else.

47,129. In what month are the oysters in best condition?—I never saw much difference in them; we begin on the 1st or 4th of September, and we fish until May.

47,130. Do they not improve in condition as you go on?—Yes, but mostly they are in the one way; I never heard any complaints of them one time more than another.

47,131. (*Mr. Lefevre.*) Do you cull the oysters when you take them on board?—Yes we pick them out and shovel out the small ones; we throw them over on to the bed again so that they may grow up again.

47,132. What number of boats do you say there are?—I could not say, there are a great number of them.

47,133. Have they really increased in number of late years?—Yes, they are better than they were some years ago.

47,134. How long can you recollect, 20 years ago?—Yes, or 25 years ago.

47,135. Do you think they have increased since then?—Yes, they are better now than they were then. they failed, and since then they have mended again.

47,136. Do you think the number of boats has increased since then?—I think there are more boats than there were.

47,137. Do you think there are more than 40 boats engaged in the fishing?—Yes indeed, there are far more.

47,138. Are there 80?—Indeed I cannot say, but I am sure there are more than 40.

47,139. Do they come from all places about the bay?—Yes, from places all along the river; they do not dredge much about here, but they come from all parts along the river; no boats dredge higher than Tyre, they do not go to dredge at Killmore.

The witness withdrew.

MOVILLE.

JOHN MACRAE called and examined. *J. Macrae.* 12 Sept. 1864.

47,140. (*Mr. Caird.*) You are the chief boatman to the Coastguard here?—Yes.

47,141. Have you been long stationed here?—For about four months.

47,142. Where were you stationed before here?—At Garston.

47,143. Is that in this neighbourhood?—About nine miles off.

47,144. Were you long stationed there?—About three years.

47,145. Have you any knowledge of the state of the fisheries here?—A little.

47,146. Have you received any instructions from your commanding officer as to enforcing any regulations with regard to the fisheries on this coast?—Yes.

47,147. What are those instructions?—In the first place there are particular instructions with regard to the herring fishery. We are to go on board the herring-boats and see that they are carrying on the fishery in a legal manner.

47,148. Is that with regard to the mesh of the net?—Yes, the size of the mesh of the net.

47,149. What other legal manner?—That they are fishing in a peaceable manner and so on.

47,150. Is there any regulation as to a close-time with regard to the herring-fishery here?—No, we prevent them from drawing the small seine-nets on the shore.

47,151. Is it one of your orders to prevent that?—Yes.

47,152. Have you had occasion to carry that order into effect?—No, there have been no nets of that kind on the part of the coast where I have been stationed.

47,153. You have not seen that kind of fishing practised?—No, it has not come under my immediate notice.

47,154. What other regulations have you?—We are required to go on board the trawlers and examine their nets, and so forth.

47,155. To see that their meshes are of the proper size?—Yes.

47,156. Have you had occasion to find fault on that ground?—No.

47,157. Their nets have been of the proper size?—Yes, all that I have seen.

47,158. Is there a prescribed size?—Yes, about four inches is the prescribed size.

47,159. Is that from knot to knot?—No, two inches from knot to knot.

47,160. Have you any other orders and regulations with regard to the fisheries?—No, nothing else.

47,161. Have you had occasion frequently to interfere with the fishermen?—Not since I came here. I have had on other parts of the coast.

47,162. What is the reason you have had nothing to do; are the fishermen here more orderly than in other places?—The fishermen are very orderly here, and they have not fished with illegal nets since I came.

47,163. You have no orders with regard to the long-line fishing?—No, I have nothing to do with that.

47,164. Have you any orders with regard to the place where trawling may be followed; is there any law laid down?—There is.

47,165. In this lough?—No, this lough is not mentioned in our instructions.

47,166. Then you do not interfere with the trawl fishermen in regard to the place where they shall fish?—No.

47,167. Is there a close-time within the lough laid down in your instructions?—Yes, Lough Swilly is mentioned but not Lough Foyle.

47,168. Is there no mention of Lough Foyle?—No, not with regard to trawling.

47,169. (*Mr. Lefevre.*) Then you know nothing of the regulation we have been told of to day about a close-time for trawling?—No.

47,170. You have had no instructions with regard to that?—No.

47,171. Then may the men trawl for the whole year?—No; but I don't know the day on which the season for fishing commences nor the day on which it ceases.

47,172. You have no instructions from your superiors to stop trawling at certain portions of the year here?—Yes, we have.

47,173. Where does it appear?—In my instructions, (*handed in for inspection*).

47,174. (*Mr. Caird.*) Does it apply to trawling generally, or is it in reference to the trawlers in Lough Foyle?—To trawling generally, right round the coast of Ireland.

47,175. Is there any trawling allowed outside from the 1st of February until the 1st of July?—It is not legal to trawl anywhere outside in the close season.

47,176. (*Mr. Lefevre.*) Can you point out anything in these instructions relating to that?—I have not examined them particularly myself.

47,177. (*Mr. Caird.*) Are you quite positive that there is a prohibition against trawling outside at any season of the year?—No; but I considered that it was not proper in the close season to trawl for fish.

47,178. It is not what you consider, but have you any positive orders on that point?—No.

47,179. (*Mr. Lefevre.*) You have no orders except those which are contained in this book?—No.

47,180. Then if I cannot find instructions to that effect in this book you have no orders in any other way?—No.

47,181. Then I may tell you that such instructions are not to be found in this book?—I thought they were.

47,182. (*Mr. Caird.*) Have you ever been on the cod banks which have been referred to about 18 miles off?—No.

47,183. Was that book of instructions sent to you?—No, it was lying in the station before I came here.

47,184. The instructions have not been renewed to you of late?—No.

47,185. (*Mr. Lefevre.*) Do you know what number of oyster-boats there are employed in dredging for oysters?—I could ascertain by referring to the books at the station. I could see what are registered from the station but not from the whole lough.

47,186. Can you tell us in round numbers?—No.

The witness withdrew.

JOHN MCKINNEY called and examined. *J. McKinney.*

47,187. (*Mr. Caird.*) Are you a fisherman?—Yes.

47,188. Do you fish outside?—Yes.

47,189. With long-lines?—Yes.

47,190. Have you been long engaged in fishing outside here?—For 12 years.

47,191. Have you followed it very constantly?—Yes, I do nothing else.

47,192. How far do you go to fish on the outside?—About 18 or 19 miles off the land.

47,193. What bank is that?—Hempen.

47,194. Is that the place to which you always go to fish outside?—That is the furthest place I go.

47,195. Have you done that all the 12 years you have been engaged in the fishery?—Yes, when the season of the year will enable us.

47,196. What season can you most safely go?—From the 1st of February until the 10th of September.

47,197. What is the size of your boat?—About 22 tons.

47,198. Is it an open boat?—Yes.

47,199. How many men have you in it?—Five.

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J. McKinney.

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47,200. Are there many boats engaged in that fishery at present?—There are 15 or 16 now.

47,201. Have they increased or diminished since you have been fishing?—They have decreased.

47,202. What has been the cause of that?—I don't know.

47,203. Have they been lost?—No, there have not been many lost in my time, only about three, I think.

47,204. Have you found the fish on that bank increasing or diminishing?—They are diminishing.

47,205. When did that begin to show itself most?—About six years ago.

47,206. Have you any idea what is the cause of that?—No.

47,207. Have you not formed any opinion in your own mind as to what is the reason of that diminution?—No, I cannot say anything with regard to it, except that a shoal of fish at one time gathered and tore all the meat up and we have never seen the fish properly gathered since.

47,208. There was a large shoal of dog-fish?—Yes, very large.

47,209. Was it larger than usual?—More than was ever known before.

47,210. Do you think that caused a diminution in the fish?—Yes; there has never been any fish worth anything since.

47,211. You still go there though?—Yes.

47,212. Do you use the same lines you used before?—Yes, and better lines.

47,213. More hooks?—Yes, more hooks and better prepared.

47,214. Do you use the same kind of bait?—Yes.

47,215. Do you ever use herring bait?—Yes.

47,216. Do you find it very good bait for catching cod?—We have better bait than herrings, namely, buckies.

47,217. Are buckies better?—Yes, and mussels.

47,218. Do you find that buckies and mussels are as good bait as herrings in the spring months?—Yes, and better. It is only outside the rocks that the herrings are the best bait.

47,219. Do you get many turbot?—We have not got many for some years back. The turbot we get have not been of any consequence.

47,220. Have you ever attempted to go further to sea than those banks to which you refer?—No, I never did.

47,221. Have you ever seen any fishermen who have done so?—No.

47,222. Are there any other boats from any other part of the coast which fish on that bank in addition to yourselves?—Yes, the back country boats.

47,223. Are they increasing in number or diminishing?—I don't know.

47,224. (*Mr. Lefevre.*) What do you call "back "country boats"?—Those from about Glengad and Inishtrahull.

47,225. To the westward?—Yes.

47,226. (*Mr. Caird.*) Do you bring all your fish in here for sale?—Yes; in fact we never go regularly to the bank for fish. We may not be able to get out there more than twice in one week.

47,227. If you had better boats do you think you could make a better thing of it?—I think we could.

47,228. What kind of boats would suit you better—decked boats?—Yes.

47,229. Could you fish with the long-lines if you had decked boats?—Yes.

47,230. Have you seen any decked boats fishing there?—No, none but our own boats.

47,231. No strange boats?—No.

47,232. No boats from Scotland or any of the English decked boats?—No.

47,233. They do not go to that bank at all?—I have never seen any of them on it.

47,234. Have you ever seen any deep-sea trawlers upon that bank?—No.

47,235. Then it is not on account of any diminution of the quantity of fish upon the bank but because there is a difficulty in getting to it that there has been a falling off?—I think the difficulty in getting to the bank is worse than the fish.

47,236. You mean the falling off of the fish?—Yes.

47,237. When you can go there you can get fish?—We are afraid to stay too long.

47,238. Then it is not because there is any diminution of fish but because you are afraid to remain on the bank in consequence of having insufficient boats?—We could not stop longer than two or three hours at one time except we had boats that would live in all weather.

47,239. Except you had boats which would keep the sea in bad weather?—Yes; our boats could not live in more than a breeze.

47,240. (*Mr. Lefevre.*) You found the same difficulty eight or 10 years ago?—Yes.

47,241. And you got the same quantity of fish?—No.

47,242. What other kinds of fish do you catch besides cod and turbot?—I never follow any other except herrings in the summer time.

47,243. Do you catch ling?—Yes.

47,244. Coal fish?—Yes.

47,245. And haddock?—Yes.

47,246. Have you observed any falling off in the haddock?—Of late years they have vanished entirely.

47,247. Since when have they disappeared?—There have been no haddocks to be got on Hempen Bank for the last ten years.

47,248. Before that did you catch many?—Yes; in the spring of the year we could get four or five dozen at a shot.

47,249. Now you cannot catch any?—No; I have fished a season and never seen the face of one.

47,250. Do you catch whiting?—No.

47,251. Have you never caught any?—No.

47,252. Do you find that you lose much of your fish by the dog-fish; do they come and take them away off your hooks?—No, not many; they do not come and take any on the bank.

47,253. Do they come and take the other fish off your hook and eat them?—No.

47,254. When the dog-fish are in this part do you find any other fish?—We do not find the other fish on the banks at all.

The witness withdrew.

J. McLaughlin.

JOHN MCLAUGHLIN called and examined.

47,255. (*Mr. Lefevre.*) Are you a fish buyer here?—Yes.

47,256. Do you buy fish both from the long-line men and the trawlers?—Yes.

47,257. From the trawlers as well as the long-line men?—Yes, trawlers and all persons who come to me. I buy turbot and all other kinds of fish.

47,258. Do you agree with the other witnesses that the supply of fish has fallen off here?—I don't know particularly about that, but I have not got nearly as many as I used to get.

47,259. You have not got as many fish as you got in former years?—No, not half as many.

47,260. Do you find the same diminution in the trawl-fish as you do in all other fish?—I don't buy many trawl-fish.

47,261. Do you find the same diminution in the trawl-fish as in the others?—They are always lessening.

47,262. Trawl-fish as well as others?—Yes, they are.

47,263. To what do you attribute the falling off?—I cannot tell; but there are not nearly so many as there used to be. They are every year getting worse. We get less of them every year; we have done so for the last three years.

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J. McLaughlin.

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47,264. Do you have to pay more for them?—Yes.

47,265. A good deal more?—Yes, a great deal.

47,266. Do you think the number of boats employed has diminished also?—I think so.

47,267. And the number of men?—Yes; the fish have altogether left this compared with what they were two years back, and every year they are getting less and less.

47,268. (*Mr. Caird.*) Is the number of fish caught outside getting less or the number caught in the lough?—There are scarcely any in the lough now at all. Those which are caught in the lough are useless altogether; they are small codlings.

The witness withdrew.

JOHN GAMBLE called and examined.

J. Gamble.

47,269. (*Mr. Caird.*) Are you a fisherman?—Yes.

47,270. What is it you wish to add to the information we have already received?—I think if we had larger boats than we have we should be able to increase the fishing, because we are not able to go to sea to look for fish in our present boats. They are not fit to go far from land.

47,271. Are you generally an outside fisherman?—Yes; I go 20 miles off frequently.

47,272. It is the difficulty of going to sea in your small boats that you think has decreased the quantity of fish?—I think the fish have been abundant off the coast in the deep-sea fishing; but we have not boats which are able to go there at all.

47,273. If you had better boats would you follow them; do you find that the further out you go the more fish you can get?—Certainly we do; the further off land we go the more fish we get.

47,274. Have not the fishermen been making enough money to enable them to get larger boats themselves?—No.

47,275. They are not able to get enough to enable them to buy larger and better boats?—No, they cannot.

47,276. And owing to the want of boats they are unable to go further out?—Yes.

47,277. Do any of the great London companies who have property down here aid the fishermen at all?—No; they never give us anything here.

The witness withdrew, and the inquiry was adjourned until the 14th of September at Carrickfergus.

Carrickfergus, County Down, Wednesday, 14th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

CARRICK-FERGUS.

J. Stannus.

14 Sept. 1864.

JAMES STANNUS called and examined.

47,278. (*Mr. Caird.*) Have you been long acquainted with the state of the fishing interest in Carrickfergus and Belfast Lough in this neighbourhood?—Yes, I have.

47,279. Can you tell us whether, within the experience over which your observation extends, the supply of fish here has increased, has remained stationary, or has diminished?—For the two last years the supply has increased.

47,280. During the last two years the supply has increased?—Yes, there has been a greater quantity of fish caught during the last two years than for five or six years previous.

47,281. Are there more men employed now in the fishing than there were 10 or 12 years ago?—There are more men employed.

47,282. Are the number of boats increasing?—There are 10 boats now; there were only five or six following the fishing five or six years ago.

47,283. What particular boats do you refer to?—The trawlers and the dredgers I am speaking of at present.

47,284. With regard to the line-fishers, has the number of their boats increased also?—No.

47,285. Are the line-boats diminishing?—I think so.

47,286. Has the quantity of fish caught by the line increased or diminished?—I think it is diminishing.

47,287. Do the line-fishers and the trawlers fish on the same ground?—Occasionally.

47,288. Do they interfere with one another?—I don't know that they do now; they very seldom fish in the bay.

47,289. What class of fishers, then, fish in the bay?—The line-fishers do not, except in the winter time when they cannot get outside. The cod and such fish they go after they get outside.

47,290. Then, when you say the supply of fish during the last two years has increased, you refer specially to the supply of trawled fish?—Just so.

47,291. Have there been any regulations made restricting the trawlers to a certain part of the lough?—There have been.

47,292. When were they first put into operation?—Perhaps 10 or 12 years ago.

47,293. Has any change taken place in regard to those restrictions since they were first published?—No.

47,294. Are they enforced?—Partially.

47,295. Have the fishermen since those restrictions were established, within the last two years, during which you say the fishing has increased, resorted to the fishing ground within the interdicted space as fixed by the regulations?—I have seen them fishing inside the limits prescribed.

47,296. Have you seen the kinds of fish which are caught by the trawl fishermen?—Yes.

47,297. Are there many small fish among them?—A great number.

47,298. Has that been the case within your recollection; have small fish always been brought up in the trawl-nets?—No.

47,299. Did they at any time fish without catching small fish?—No, they did not; but perhaps they had one-fourth or one-third of small fish, all the rest being countable fish.

47,300. They would have three-fourths countable fish and one-fourth small fish?—That is about the proportion.

47,301. They were caught in the earlier time to which you refer?—Yes.

47,302. Has that been about the proportion during the last two years?—No, that was previously, five or six years ago.

47,303. What has been the proportion during the last two years?—There have been as many small ones got as large ones.

47,304. Are those small fish marketable?—They get them sold, but I should not like to use them.

47,305. They are sold, are they?—Yes, they sell them.

47,306. When you say that the supply of fish by the trawlers has increased during the last two years, do you refer to all kinds of fish or to marketable fish?—All kinds of fish.

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47,307. In your opinion is there any injury done by fishermen fishing within the interdicted bounds?—I think there is.

47,308. How do you reconcile that with the statement that fish are more plentiful now?—It is the immense quantity of small fish they have caught along with the other fish that has made them more plentiful.

47,309. When did they begin to get small fish?—Within the last three or four years.

47,310. Did they use nets with a small mesh; is the mesh of the net smaller than it used to be?—No, I think it is about the same size. I think it is 2½ inches from knot to knot.

47,311. How do they get a larger proportion of small fish than they did before?—By fishing on the banks.

47,312. Did they not fish on the banks before the regulation was adopted?—No, I do not remember them fishing off there.

47,313. (*Mr. Lefevre.*) What banks do you refer to?—What are called the Whitehouse Banks.

47,314. They are inside at the head of the lough?—Yes.

47,315. (*Mr. Caird.*) Are the banks to which you refer within the interdicted bounds?—Yes.

47,316. What is the depth of water upon them?—Perhaps only one fathom at low water.

47,317. Within your recollection of the trawl-fishing are you able to say that they did not fish upon those banks at all, although they were not prevented?—They were not prevented, but they did not fish there.

47,318. Did they find fish in the other parts of the lough without much trouble?—Yes.

47,319. Can they find them there now?—There is not one-half or one-third of the fish to be got now in the places where they used to get them 30 or 40 years ago.

47,320. Do you refer now to trawl-fishing?—Yes, to trawl-fishing altogether.

47,321. Has the long-line-fishing during the same period improved or decreased in value?—I believe it has decreased considerably.

47,322. Is there not some season during which fishing by the trawl is interdicted altogether?—Yes.

47,323. What season is that; is it from the 1st of September until the 1st of April?—No, it is not until the latter end of August.

47,324. The regulation says from the 1st of December until the 1st of April. Trawling is altogether prohibited within the lough between these dates?—Yes.

47,325. Do you think that is a judicious regulation?—I cannot say.

47,326. Have you ever had your attention called to it?—No, I have not.

47,327. Can you tell us what kinds of fish have increased, if any have increased?—I know of no increase in the fish in the lough.

47,328. Are there any kinds which have particularly fallen off?—Yes, cod and haddock. We used to get cod and haddock here sometimes with the long-lines, but they are very scarce now; codfish are very scarce also.

47,329. How is it with regard to turbot?—Turbot are very seldom caught indeed. Perhaps there may be a turbot or brill in the course of six weeks or so, but only occasionally one.

47,330. How is it with regard to soles?—Soles are getting scarce also.

47,331. They are caught by the trawl?—Yes.

47,332. Is there any good mackerel-fishing?—Very little, indeed.

47,333. Are there any mullet got here?—There are mullets occasionally. They come up the harbour, but only very few are got.

47,334. Is the herring fishery here a source of much profit to the fishermen?—No.

47,335. Is there not a good herring fishery here?—No, it has been a loss to the fishermen for the last two or three years. They have had to go from home and to go as far up as Dublin Bay to fish.

47,336. Then during that time do they cease the fishing in the lough?—Yes.

47,337. Do you think they have not made as much by following the herring-fishing as they would have done if they had remained fishing here?—They had to leave this place on account of the scarcity of the fish.

47,338. Have the herrings frequented this lough in any quantity within your experience?—Yes, up above Carrickfergus we have got them in large quantities.

47,339. Do the fishermen go out here to meet the herrings as they are passing southward?—They will go out for 10 or 12 miles around.

47,340. Are the shoals of herring supposed to pass round from the north to the south?—I have had no experience of that, but I believe they do.

47,341. Can you tell us anything of the oyster beds in Belfast Lough?—There is an oyster bed which has recently been worked upon and they get a considerable quantity of oysters from it. It is about two miles above this town.

47,342. Is there a large and valuable oyster fishery in this lough?—It cannot be called large.

47,343. Is it improving or diminishing in value?—The oyster-fishing as to quantity has improved within the last three years.

47,344. Are the oyster beds private property?—They are the property of anybody who chooses to fish upon them. Any fisherman can go upon them.

47,345. Does nobody claim a property in them?—No; one gentleman applied to the commissioners to get a piece of beach so that he might lay it down partially for the propagation of oysters.

47,346. Was there a licence issued in favour of a gentleman in this neighbourhood for that purpose?—Yes, to Mr. Walker.

47,347. Has he taken any steps to form a bed?—I was with him when he laid out a portion of the bed. We got several thousand oysters and put them down among hurdles, but the place was too exposed and there was not a proper barrier to keep the sea from washing away the seed of the oysters.

47,348. Was the ground enclosed for an oyster bed?—No, that was the worst of it. There was no protection to it. There was a certain portion that was 18 inches deep at low water.

47,349. Was it intended as a feeding or breeding ground?—A breeding ground.

47,350. What has been the result of it?—The sea was so heavy in an easterly gale and the brood when exuded was so weak that it was washed away. A great number of little oysters about that size (*measuring*) have been washed away, while a few others have obtained a hold.

47,351. Are the operations continued there with the view of making that a useful bed?—No, the gentleman who got the licence has gone to the Cape of Good Hope.

47,352. The whole thing has been given up?—The whole thing is at a stand at present.

47,353. Did it prove a failure, or would constant enterprise have proved the advantages of the speculation?—No doubt if there had been a regular barrier of stones it would have prevented the spat from being washed away.

47,354. Has that been the only attempt made in the lough to form an artificial bed; are all the other beds in the lough natural oyster beds?—Yes.

47,355. Have the natural beds continued to be fished regularly for many years within your knowledge?—Yes.

47,356. Have they continued to yield rather more largely than they formerly did?—The bed about two miles above the town has only been fished recently.

47,357. Is it a bed that has only been recently discovered?—No, it was known before; it was only recently fished.

47,358. Have they found a considerable quantity of oysters upon it?—Upon one portion of it in the

course of a day they were able to get 1000 countable oysters.

47,359. Are there any regulations among the fishermen or established by any other body to prevent the improper waste of those oyster beds?—Not that I know of.

47,360. But the result has been that without any regulations the take of oysters has been increasing?—It has increased for the last two years. They will get oysters until they dredge the beds out. I remember when I was a little boy the dredgers arranged among themselves to make a bed and to keep the oysters upon it. They built a barrier upon the shore close to the harbour and they had millions of oyster spat on it, but the tide washed it away every time it came on.

47,361. Is there any lobster fishery here?—There is.

47,362. Has it improved?—I do not think it has; they have to go a considerable distance out for lobsters.

47,363. Outside?—Yes, among the Copeland Islands and Garron Head.

47,364. Are there many people engaged in the lobster fishery?—Three boats, sometimes more and sometimes less.

47,365-6. Is there a scallop fishery also?—Yes.

47,367. Is there a large fishery of scallops here?—No, but we get them.

47,368. Are there good beds for mussel bait here?—They can get plenty of bait.

47,369. What is the kind of bait principally used by the line fishermen?—It is a shell-fish which they use principally and which they call buckies.

47,370. Are there plenty of those buckies to be had?—Yes, they have pots and they set them out in the lough, and they get the buckies in those pots.

47,371. Then there is no difficulty felt from the want of a plentiful supply of bait?—No, there is plenty of bait.

47,372. Has the price of fish within your knowledge very much increased?—I think not. I think it has not increased.

47,373. Is not the price of fish higher than it was 20 years ago?—No, I think not. I am speaking principally in reference to flat-fish.

47,374. Is the price of flat-fish about the same as it was 20 years ago?—About the same.

47,375. Do the fishermen follow any other occupation except that of fishing here?—No.

47,376. They are not small farmers; they have no land?—No.

47,377. They are purely fishermen?—Purely fishermen.

47,378. Do their sons become fishermen?—Their sons become fishermen perhaps for a short time, but mostly all of them go to sea.

47,379. Is their condition improving or otherwise?—Their condition is not improving by their profession but their condition is improving. We may impute that to the manufactories in the neighbourhood and to the fact that their daughters and wives are making a livelihood by embroidery and sewing.

47,380. In addition to what the men make by fishing?—Yes.

47,380*a*. Their condition is improving, but not in consequence of the take of fish being greater or the price being better?—No; the condition of the inhabitants altogether has considerably improved. Their houses are very snug compared with what they were formerly.

47,381. Are the line fishermen making a better business of it than the trawl fishermen?—Yes, on account of the mills and the sewing. The line fishermen are a much more industrious class of people than the trawlers.

47,382. Have you such a knowledge as would enable you to tell us what the take of fish will be in one shot with the lines now, compared with what it was at the earlier period to which your experience extends?—No.

47,383. (*Mr. Lefevre.*) I think you said that the number of trawlers has increased of late years?—Yes.

47,384. How do you account for that if the fishing has not been improving?—I don't know how to account for it.

47,385. Do you think the increase in the number of trawlers would show that they are making a good livelihood by it?—They are not. There are a number of labouring people who have been initiated into the trade. Perhaps they may have one good fishermen in a boat and two or three others who are not acquainted with fishing at all.

47,386. Has there been any attempt to prevent trawling within the limits laid down by the commissioners?—Yes, there have been many attempts; the boats have been seized and the nets taken from them.

47,387. Have the Coastguard in many cases interfered?—Yes.

47,388. And yet notwithstanding that, trawling continues to be carried on within the line?—They make a stolen march occasionally at night.

47,389. Is it only occasionally at night that they do it?—It cannot be done by daylight, and they can get more fish in any case by trawling at night than in the daytime.

47,390. Do you think it impossible to prevent trawling within those limits?—I don't think it impossible.

47,391. How could it be done?—Stringent laws and attention to enforcing them would do it.

47,392. Do the Coastguard take steps to stop it in the night-time?—They have done so.

47,393. By rowing boats down the lough?—Yes.

47,394. Is there any time of the year when you have observed more small fish than at another time?—Yes, in the summer time.

47,395. In what months?—From May to August.

47,396. Have you yourself seen small fish brought ashore in the boats?—Frequently.

47,397. Do you know what the small fish are mainly; what sorts of fish are they?—Plaice principally.

47,398. Is there any codfish among them?—No.

47,399. Any herrings?—No.

47,400. Or soles?—Occasionally a very few soles are got.

47,401. Are there any turbot?—No.

47,402. Then in fact we may take it that they mainly consist of small plaice?—Yes, and also a great quantity of ray.

47,403. Do the line-fishermen take any plaice within the lough?—They sometimes hook some of them, but only seldom.

47,404. That is not a class of fish they fish for?—No, it is round fish.

47,405. Do they ever get soles on the long-line in the lough outside?—They may, but it is a rare occurrence to get a sole on the long-line.

47,406. Is the regulation with regard to restricting the trawlers as to time observed?—Yes.

47,407. From the month of December till April the trawlers do not trawl inside the lough?—No, they dredge then.

47,408. Are the boats used then in dredging oysters?—Yes.

47,409. During that time does the number of line-fishermen fishing inside the lough increase?—In winter time they are necessitated by bad weather to fish inside.

47,410. But except in the case of bad weather the line-fishermen do not fish in the lough?—They do occasionally; they fish for young fish called codlings.

47,411. What size are they?—About 10 or 12 inches long, and some of them are 18 inches long.

47,412. Do they catch a considerable number of cod only about 10 inches in length?—I have seen a good many caught about that size.

47,413. Caught in the lough?—Yes.

47,414. At what time of the year do they catch them?—They get them from the early spring and through the winter in moderate weather.

47,415. Do you recollect the inquiry which took place here previous to the regulation being established

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as to the time at which trawling should be allowed in the lough?—I do, but I do not remember the time.

47,416. I mean with regard to prohibiting trawling from December until April?—Yes, I remember the inquiry; I think that Mr. Barry and somebody else came down here.

47,417. On what ground was trawling prohibited at that time?—It was upon the evidence of several gentlemen, I think the evidence was principally taken in Belfast.

47,418. What were the general grounds given for making that regulation?—I do not know what the reason of it was; my opinion is that it was considered desirable to give the fish time to increase in bulk and quantity.

47,419. Was it on the ground of their catching small fish at that time of the year; was that the ground?—I believe it was principally in order to allow the brood time to increase in the season.

47,420. Do you yourself see any reason why trawling should be prohibited during that time?—I think that is a very good reason why it should be.

47,421. You say that small fish are taken principally in the summer time; would it not be better to limit trawling in the summer?—No, but there is a particular portion of the ground upon which these small fish are got.

47,422. Is that in the summer time?—The same kind of fish would be got in any season of the year.

47,423. Early in the winter?—Yes, at any season of the year it would be got on those banks.

47,424. Then is there in your opinion any reason why the trawlers should be prohibited at one time of the year rather than another?—Well, I do not know that; I do not see the reason why.

47,425. Do you know what the number of the line-fishermen is?—I think there are about 10 boats.

47,426. And how many men in each boat?—From four to six men in each boat.

47,427. Do you know anything of the Grooms Port men?—No.

47,428. What number of boats are there employed in dredging for oysters?—There are 10 boats at present, but they are not all dredging; some of them are dredging now.

47,429. On the average are there 10 boats dredging?—There are 10 boats at present dredging.

47,430. Are they all employed as trawlers during the season?—Yes.

47,431. Do you think that the line-fishermen are making a better livelihood than the trawlers; do they make larger earnings on the whole?—I do not know that they make larger earnings, but they are more careful of their money. There are some of the line-fishers who are commissioned by the Harbour Commissioners of Belfast as pilots. They bring ships in when they are out fishing.

47,432. Is there much trawling outside the lough?—No, there is no trawling outside.

47,433. Then to what do you attribute the falling off of the line-fishing outside?—I do not know, it seems to be a general case; I was talking to several persons within the last eight or 10 days with regard to the fishing on the south-west side of the Scotch coast, and they told me that it had decreased there as well as here.

47,434. You think there has been a general falling off?—Yes.

47,435. Then you think that falling off has no relation to the trawling?—I think not.

47,436. Has there been the same falling off of line fish within the lough as outside?—The round fish are not as plentiful.

47,437. Have they fallen off in about the same proportion as the fish outside?—I should say so.

47,438. Then do you think that it is due to trawling?—I do not think it is.

47,439. Then you think the taking of small fish at the head of the lough by trawlers does not interfere with the line fishermen?—I do not think it does.

47,440. (*Mr. Caird.*) Do you know whether the herrings spawn in the lough?—I cannot say; I have seen very small herrings about two inches long in the lough; I have seen them in our harbour here.

47,441. Do they fish herrings in the lough with the seine-nets?—No.

47,442. Always with drift-nets?—Yes.

47,443. (*Mr. Lefevre.*) When do you last recollect herrings within the lough?—They got herrings last year.

47,444. Did they get them in any quantity?—No, there was only a small quantity.

47,445. When do you recollect any quantity of herrings within the lough?—Fifty years ago or nearly, I suppose.

47,446. What would you consider a fair average season?—Five or six maze.

47,447. I do not want you to take an extraordinary fishing but an average fishing?—We have had no average fishing for the last 40 years in the lough.

47,448. Then you can give no reason, I suppose, for the falling off of the herrings within the lough?—No, I cannot.

47,449. (*Mr. Caird.*) Do you think the traffic of the steamers up and down has had any effect in destroying the fish in Belfast Lough?—I think not, the fish get their food at the bottom.

47,450. Have the herrings been prevented from entering the lough by the steamers passing up and down?—That is very possible; they would go as deep as they could. I have been out catching herrings, and I have known that if a blow were struck upon the gunwale of a boat the fish would go down at once.

47,451. No observation of that kind has been made by the fishermen to your knowledge, I mean with regard to the effect of the steamers upon the fishing?—No.

The witness withdrew.

B. M. Smith.

BARRY MARTIN SMITH called and examined.

47,452. (*Mr. Caird.*) What are you, Mr. Smith?—I am master of the guild of fishermen, trawlers and dredgers.

47,453. Do you claim any exclusive right on the part of those you represent to trawling and oyster-dredging in Belfast Lough?—I do not call it Belfast Lough; I call it Carrickfergus Bay; it is so laid down in the ancient maps.

47,454. What do you consider the limits of Carrickfergus Bay?—From Farr Furlongs in the county of Antrim to Beerlooms in the county of Down; it is so laid down here in the charter.

47,455. What charter do you refer to?—The charter of King James.

47,456. What charter rights do you claim?—An exclusive right of fishing in the bay or the waters of the Bay of Carrickfergus.

47,457. Of all kinds of fishery?—Yes, exercised by the trawlers and dredgers.

47,458. Have the parties you represent exercised such rights for any long period?—I believe they have from time immemorial, quite outside the memory of man.

47,459. Has the system of trawling been a mode of fishing long in practice here?—I believe it has.

47,460. Can you speak from any knowledge of the fact?—My own knowledge would not go very far back.

47,461. (*Mr. Lefevre.*) How many members are there of this guild?—There are a good many; I cannot exactly state the number. Their names are enrolled in a book; I can supply you with it afterwards.

47,462. Is the right you claim a right exclusively belonging to the guild or to the whole town of Carrickfergus?—It belongs to one particular guild of fishermen, but I take it for granted that it was given for the benefit of the inhabitants of the town at large.

47,463. Can any of the inhabitants exercise that right?—Not unless they are members of the guild.

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47,464. Is the charter granted to a certain guild?—Yes, they are formed into a guild by a grant to the mayor and corporation of Carrickfergus.

47,465. Are all the members of the guild fishermen?—They are not.

47,466. How many are fishermen?—Nearly all of them are; there are only a few exceptions. The charter gives power to the mayor, sheriffs, burgesses, and commonalty.

47,467. Has not the question come before the courts of law already?—Yes, and it has been decided very often in our favour.

47,468. Has it not been decided against you?—The parties have sometimes not been properly represented.

47,469. Is it not the fact that it has been decided against you?—It is, and it has been decided for the fishermen also repeatedly.

47,470. (*Mr. Caird.*) That being the case we must decline to enter into a question which has been decided already in a court of law. We are not prepared or authorized to deal with such questions.—I was only anxious to lay the case before you.

The witness withdrew.

J. Ingram.

James Ingram called and examined.

47,471. (*Mr. Caird.*) Are you acquainted with the fishing interests of Carrickfergus and Belfast Lough?—I am a little.

47,472. Have you been a fisherman?—I have fished for twelve months.

47,473. Have you had good opportunities for observing the progress of the fishery here?—Yes.

47,474. Has the supply of fish taken in Belfast Lough as far as you have observed been increasing, stationary, or diminishing?—I think it is decreasing.

47,475. Is there any particular kind of fish you refer to when you say so?—I mean flat-fish.

47,476. Are those the fish taken by the trawl?—Yes.

47,477. Then do you think that the trawlers do not make as good a fishing as they used to do?—They are not making as good a fishing out of it as my father did when he had a boat.

47,478. How long is that ago?—He was for 15 or 20 years in partnership with Mr. McKie.

47,479. Were his boats of the same size as those used now?—No, they were larger.

47,480. Had he a decked boat?—Yes.

47,481. In what part of the lough did he follow trawl-fishing?—He fished in all parts of the lough, from Whitehead up to Holywood.

47,482. Is the same ground used now?—Yes, except the prohibited ground.

47,483. At that time was there no prohibited ground; did the fishermen go far up the lough?—Yes, they fished off Holywood.

47,484. Is the proportion of small fish taken now by the trawls, increased or diminished as compared with what it was then, 15 years ago?—I think it is in general about the same; they took all kinds, both large and small.

47,485. Have the men and the boats employed in trawling increased or diminished?—The boats have decreased; there is not such a number of boats as there was. I think at the time my father had a boat here there were 10 or 12 men belonging to it.

47,486. How many are there now?—Six or eight, I think.

47,487. Can you speak precisely?—I am not sure, but I think there are not more than eight.

47,488. Can you speak precisely to the fact?—Not to one or two; I think there are about eight now, and in my father's time there were 10 or 12.

47,489. Has there been a decrease in the boats?—Yes, in the number of boats.

47,490. Do you agree with the previous witness, that during the two last years the fishing has been more productive than previously?—I did not hear the previous witness. There is one thing I can state, that I have caught as good fish inside the prohibited ground as outside.

47,491. Do you think it has been an advantage to the fishery here that a restriction is made in regard to the prohibited ground?—Not the slightest, I think it is just the reverse.

47,492. Have you yourself trawled outside?—I have trawled from Whitehead up as far as Holywood.

47,493. Have you been more successful there than inside?—That would be according to the season.

47,494. What season are you more successful outside?—In the latter part of the year.

47,495. In the warm weather are you more successful inside?—Yes, the fish congregate up in the lough in warm weather.

47,496. Have you ever seen any spawn in the trawl nets when they have been taken up outside?—I have seen as much outside as inside.

47,497. Have you seen much spawn of fish brought up in the trawl net inside?—I am not sure what spawn is, but the fishermen said it was spawn.

47,498. Was there much of it?—Yes, a good deal sometimes.

47,499. (*Mr. Lefevre.*) What was it like?—It had a pulpish, jellyish look.

47,500. You cannot say that it was spawn?—No, I cannot.

47,501. (*Mr. Caird.*) Do you trawl on the same ground as that upon which they dredge oysters?—Yes.

47,502. Do you catch flat-fish on the same ground? Yes, they get oysters in all parts of the lough, and the ground must be clean both for dredging and trawling.

47,503. Are dredging and trawling followed both at the same time?—Yes, they are doing both at present. There is a close season for both, but both are open at present.

47,504. Twelve or 15 years ago was there a great proportion of small fish caught with the large fish?—There were always small fish caught with the large.

47,505. Were there many of them so small as to be useless for food?—A great number were brought ashore that were quite small and were scarcely fit for food.

47,506. What was done with them?—The fishermen got their share. The boat got one share of them, and the rest went to the fishermen.

47,507. Did the fishermen use them for their own food?—They either used them or sold them.

47,508. They were not thrown away as useless?—No, certainly not.

47,509. Have you seen any thrown away as not being fit to bring on shore?—I have seen a few thrown away.

47,510. But not any large proportion of the whole catch?—No, only a few.

47,511. Is the proportion of small fish unfit for human food increasing?—I cannot say.

47,512. You have not heard that alleged against the trawling now?—No; there was a great number of small fish caught when I was fishing, the same as there is at present.

47,513. Do you know anything about the long-line fishing?—No.

47,514. Have you any knowledge of the oyster-fishing?—I have a little; I have dredged.

47,515. Have the oyster beds been increasing in productiveness of recent years?—In some parts they have, in others they have not. From last Christmas until the close of the season the oysters were more plentiful than ever I remember.

47,516. Was that on the same beds you previously fished on?—No, this was an old bed.

47,517. An old bed re-fished?—Yes.

47,518. Are the beds in sufficient number to allow of some of them remaining unfished for a time?—I do not know anything with regard to that.

CARRICK-FERGUS.

J. Ingram.

14 Sept. 4864.

47,519. Are there any regulations established by the fishermen themselves or by other people as to the mode in which the beds shall be worked?—No, there is no regulation that I am aware of.

47,520. Anybody can fish where he pleases?—Yes.

47,521. There are no fees paid for doing so?—No.

47,522. Has the number of oyster beds increased?—I think it has rather decreased.

47,523. Has the price of oysters increased?—It has since my father's time.

47,524. Has it increased lately, within the ast two years?—No, I think it has been stationary; it has been much about the same.

47,525. Was not the price last year more than it was formerly?—No, they were cheaper last year The fishermen were paid from 8*s.* to 10*s.* a hundred for oysters.

47,526. Are they very large oysters?—Yes, the largest caught anywhere.

47,527. Has there been any change in the average size of the oyster caught on these beds within your time?—No, they are about similar now to what they were 15 and 20 years ago, with the exception of this old bed.

47,528. Have you any regulation among yourselves as to the size of the oyster you bring ashore; if you catch any of a smaller size do you throw them back?—No; there are two kinds of oysters here, one they call the scrab.

47,529. Do you select them yourself?—Yes. The small Carrickfergus oyster is the worst oyster caught. There is less fish in them than in any I know. The large oysters are the best that are caught and the small ones are the worst.

47,530. Have the oyster beds in the lough been fished for many years without any regulation and without showing any diminution in the quantity of oysters yielded by them?—Yes.

47,531. You say they are rather increasing in yield than diminishing?—Yes, they were more plentiful from last Christmas up to May than ever I remember.

47,532. Have the commissioners issued any regulations for fishing those beds?—No.

47,533. Is there any desire among the fishermen themselves that any regulations should be adopted?—No, I never heard of any.

47,534. They prefer being left as they are at present?—Yes.

47,535. Do you know anything about an artificial oyster bed that was attempted to be formed by Mr. Walker in the lough?—I heard them say he had put down some oysters opposite Green Island, but that is all I know about them.

47,536. Do you know whether any other attempt has been made with success to establish an artificial bed in the lough?—No, that was the first attempt I ever heard of.

47,537. Has any attempt been made to take the oysters and lay them down on feeding grounds so as to get them in a better condition for the market?—No, I never knew oysters laid down here.

47,538. Talking of the season, is there any opinion on the part of the fishermen themselves as to the correctness of the time fixed as the season for fishing oysters?—It has been the rule that in every month with an "r" in it they should fish them; that is from September until May.

47,539. They do not desire to see any regulations made upon the subject?—No, I think not.

47,540. Do the oysters improve as the season goes on?—Yes.

47,541. Does that improvement continue up to May?—Yes.

47,542. Are they as good in April as they are at Christmas?—They get milky in April and May.

47,543. Then it would not be considered advantageous by the fishermen that the season should be prolonged until after May?—No, they do not wish to fish them then, and there would be no sale for them. The lobster season comes on then.

47,544. Is the lobster fishery improving in yield here?—I think it was decreasing last year. They were scarcer then than they have been and smaller.

47,545. Do you think they have been over-fished?—The reason the fishermen give is that they have been fished all the winter. Our fishermen only fish them in the summer time.

47,546. (*Mr. Lefevre.*) Is the close time for oysters strictly observed?—Yes, the fishermen pay attention to it themselves. They would not fish them out of season.

47,547. Do you recollect the time here when there was no close time for oysters?—No, it was always just the same as it is now.

47,548. There always has been a close time?—Yes; the fishermen would regulate it themselves. They only fish in the months which have an "r" in them. They do not fish them either before or after; they would get no sale for them then.

47,549. Do the fishermen cull the oysters when they take them out of the dredge?—No, they take them in and put them in baskets. The fishermen get the small oysters but the boat and gear get none.

47,550. What do they do with the small oysters?—They sell them.

47,551. What is the smallest-sized oyster they take?—They take them as small as a five-shilling piece.

47,552. Is there a ready sale for oysters of that size?—There is very little sale for them, in fact there are very few small ones among them. Out of 200 they get in a day there will not be more than two dozen small oysters.

47,553. What is the reason of that, does the dredge not take them up?—I do not know what is the cause of it.

47,554. Are there many oysters bought here by vessels from a distance for the purpose of laying down on other beds?—No, I never heard tell of it. There is generally a consumption for all that are caught, and they are so very high in price that it would be a bad speculation to lay them down after giving 8*s.* or 10*s.* a hundred for them.

47,555. Are the oysters fit for eating immediately they are taken up?—Yes.

47,556. Can you speak positively as to the number of trawlers there were 12 years ago?—I think at the time my father had a boat there were 10 or 12.

47,557. You think the number has rather diminished?—Yes.

47,558. Is that, in your opinion, owing to the regulations laid down by the commissioners?—I think the regulations laid down by the commissioners were injurious to them.

47,559. Do you think it is to that rather than to a decrease in the fish that it is owing?—It is owing partly to that and partly to the decrease of fish. I think the fish have not increased in consequence of limits being laid down.

47,560. Why?—I do not know the cause, but there is not as much fish taken.

47,561. Do you mean that as many fish have not been taken on account of the limits being laid down?—Yes.

47,562. Do you think that the regulations are observed or not?—They are to a certain extent.

47,563. Do you think that the trawlers do fish during the night time within the limits?—I cannot say. I never saw them do it or knew it myself. I have fished inside before the limits were laid down, and I have got as prime fish off White Abbey and off Holywood as in any part of the lough.

47,564. Have you observed boats fishing within the limits during the daytime?—I have seen boats inside the limits.

47,565. High up in the lough?—Yes, but I could not tell if they were fishing or not; I was not on board.

47,566. Is it your opinion that the regulation fixing a limit has been injurious to the trawlers here?—Yes, it has been, and I think it does not add to the fish.

47,567. Do you think it does any good to the line fishermen here?—I cannot say that. The only good it does that I know of is that they can shoot their lines

inside without coming in contact with the trawlers. If you were to prohibit the trawlers from trawling inside altogether you would exterminate the boats and the fishermen, and send 50 men to the poorhouse.

47,568. They could not fish outside the Lough?—No, neither the boats nor the men are fit for fishing outside.

47,569. Is there ground outside fit for the larger trawlers to work upon?—There was a company set up in Belfast which tried for a season and did not succeed at all. They followed the deep-sea fishing and did not succeed at all. They had wells in their boats.

47,570. What is the principal fish the trawlers take in the lough?—Flukes, flounders, brill, sole, and turbot occasionally.

47,571. Do they take plaice in large numbers?—The plaice are the principal fish, it is only occasionally that they get sole, brill, or turbot.

47,572. Then if trawling were prohibited in the lough, the trawlers, you think, would be exterminated?—Yes.

47,573. And would the supply of fish be much diminished?—Certainly it would.

47,574. Would the line fishermen supply their place?—Certainly not.

47,575. They would not take the fish now caught by the trawlers?—They might take a few but not such a large number.

47,576. Is there any considerable amount of turbot brought in by the line-fishermen from outside?—No, only very few.

47,577. Can you give us any idea as to what portion of the year the trawlers fish outside the lough?—At the latter end of the season they fish more outside. The fish shift very much in the lough. One time they get them off Holywood, then in Bangor Bay. In 40 or 48 hours they will shift, and after a gale of wind you will not get any.

47,578. Do they fish outside the lough in the close-season?—No.

47,579. Do they fish for oysters at that time?—Yes, they dredge for oysters.

47,580. Do you know whether the supply of haddock has fallen off of late years?—I think it has. This lough was always a bad place for haddock, but occasionally they get them on the long-lines.

47,581. Did the trawlers ever take any haddock?—Very seldom. They may have got an odd codfish or haddock, but only seldom.

47,582. Do you recollect years ago a supply of haddock being brought from outside the lough?—Certainly.

47,583. But of late years, during the last six or seven years, you have not obtained any?—I do not think there have been many caught since then.

47,584. (*Mr. Caird.*) Is it a long time since the regulation was adopted restricting the trawl-fishing during the months of December, January, February, and March?—It was since the last Commission was down here.

47,585. Before then did they fish in the winter months?—Yes, up to Christmas.

47,586. Has it been a loss to the fishermen to be prevented from fishing in December?—Yes, they have got fine fish then.

47,587. Were the fish in good condition then?—Some were and some were not.

47,588. What was the reason that influenced the commissioners in taking off the winter months?—I cannot say.

47,589. Has it been followed by a diminution to that extent during those months of the fish brought to the market?—Yes, there has been a great diminution since then.

47,590. Have the fishermen who would otherwise be employed in fishing in those months any other occupation at that time?—Nothing but dredging.

47,591. Dredging for oysters?—Yes.

47,592. They do all dredge for oysters?—Yes; when the close season for fishing commences they dredge for oysters; they have no other means of living.

47,593. If they had not been prohibited from fishing would they have continued the fishing?—Yes, they would take them up to Christmas. Before the commissioners made the close season they fished for white fish up to Christmas. I have known them catch flat-fish up to Christmas. That is the time the flat-fish go outside. They got them off Causon Point very large.

47,594. After that did they not fish?—Some go to Scotland to fish rather than dredge.

47,595. To Whiting Bay?—Yes, and different parts of Scotland.

47,596. In January, February, and March did the trawl fishermen in former times refrain from fishing?—One or two boats might fish, but they would not all fish generally.

47,597. Was it because there were very few fish to be caught in the bay at that time?—Yes; but some of the men who did not have dredges would fish occasionally.

47,598. Are we to understand from your evidence that the trawl fishermen complain of being restricted from fishing during the month of December?—I think they would fish then if they were not prevented.

47,599. Do you know any reason yourself why they should be prevented from fishing in the month of December?—The only thing is that that is the season when the fish are in spawn; they are full fish.

47,600. Then would it be more likely that the brood of fish would be destroyed?—Yes, I think that is the time they deposit the spawn.

47,601. You told us about a Belfast company having tried large trawlers for trawling outside, and also well-smacks?—Yes.

47,602. When was that?—About 15 or 20 years ago.

47,603. How long did they continue at it?—A season.

47,604. One season?—Yes.

47,605. Was that sufficient to give them a good knowledge of the probabilities of success or failure?—They tried every place and there was a failure wherever they tried it.

47,606. Where did they try it?—Outside of White Head, Black Head, off the Copeland light, and in Bangor Bay.

47,607. Were they trawling?—They were only trawling, I believe.

47,608. Did they give it up because they were unsuccessful?—Yes, it was a complete failure.

47,609. Has it never been attempted since that?—No, never.

47,610. Do any of the large English trawl-vessels ever come there?—I think not.

47,611. (*Mr. Lefevre.*) Have you observed any time of the year when there have been more small fish caught than at others?—Sometimes they are smaller than at others.

47,612. At what time of the year?—At the beginning of the season, in May and June. They get larger the further the season goes on.

47,613. What would be the effect of stopping trawling here during three out of the five summer months?—In May, June, and July?

47,614. Yes.—It would ruin the fishermen. They could not make a livelihood in any other way. The oyster season closes in May, and they do not fish them after May, and they would be three months without anything to subsist upon.

47,615. You do not think it would be advantageous to the fishing or to the fishermen?—No, and the fish are prime then.

47,616. And even at the risk of catching small fish you think the fishing does no harm during those months?—I think not. You will get very good fish during that season.

47,617. It would do a great deal of harm if the fishing were stopped during those months?—Yes.

The witness withdrew.

CARRICK-FERGUS.

J. Wortley.

14 Sept. 1864.

JONATHAN WORTLEY called and examined.

47,618. (*Mr. Caird.*) Are you a trawl-fisherman here?—Yes.

47,619. Have you been many years engaged in that business?—Yes.

47,620. How many?—For the last 15 or 16 years.

47,621. Were you engaged in the trawl-fishing before the regulation which has been adopted by the Commissioners at Dublin was established?—Yes.

47,622. Were you in the habit of fishing on the same ground then as that which is now interdicted?—Yes.

47,623. Can you tell us whether the quantity of fish which you now catch on the average is increasing or diminishing?—During the last two years they have been rather scarcer than they were before.

47,624. Has there been any considerable difference in the proportion of large and small fish you catch with the trawl?—I caught as many small fish 16 years ago as I do at present.

47,625. Do you catch any large proportion of small fish in your trawl?—None but what are fit for the market.

47,626. None so small as to be thrown overboard?—There may be small fish among them, but we throw them out alive.

47,627. What is the size of the mesh of your net?—From 2 to $2\frac{1}{2}$ or 3 inches.

47,628. Is the mesh of the bag smaller?—Yes.

47,629. When it drags does it get pretty close?—If a weight of fish gets into the bag it will.

47,630. Do you not catch large and small?—Yes, if they get entangled amongst the seaweed.

47,631. Are the small fish alive when you throw them overboard?—Yes, they go to the bottom instantly.

47,632. Are those you throw overboard generally alive?—I am certain of it.

47,633. Is there any large proportion thrown overboard and utterly destroyed?—No, I do not think so Those we throw overboard are all alive.

47,634. How long have you the trawl down at a time?—Sometimes an hour, sometimes not a quarter of an hour, and sometimes an hour and a half.

47,635. Not longer?—No.

47,636. Do you put your trawl down and take it up several times during a fishing?—Yes, perhaps seven or eight times in a night.

47,637. Is it in the night that you trawl?—Yes, mostly, now.

47,638. What is the reason of that?—Because we dare not go where we could get anything in the daylight.

47,639. Has the regulation forced you to be night fishermen instead of day fishermen?—Yes, and has caused us to run a deal of risk.

47,640. If there were no regulation would you fish the same ground in the daytime that you do at night?—Yes, because we can get nothing anywhere else.

47,641. Were you in the habit of fishing the same ground in the daytime as you do now at night?—Yes, we were.

47,642. Do you catch as many fish in the daylight now?—I have caught as many in the day as in the night, but unless the water is clear we get more at night. At this time of the year when there is much fire the water gets all in a glow, and we know that that hurts the fish; in that case we get none that night.

47,643. Has it imposed any increased hardship on you as a fisherman to be obliged to fish at night?—Of course it has.

47,644. Has the number of trawl-boats increased within your experience?—When I commenced the trawling first there were as many boats as there are now. Then they fell back to four or five. Now there are 10, but they are not all trawling.

47,645. Then is there now about as many as you had when you began to fish 15 years ago?—Yes, about the same.

47,646. And the same number of men employed?—Yes.

47,647. Are they the same kind of boats?—They have a better kind of boat now.

47,648. And larger nets?—Yes.

47,649. Do you make larger catches with them?—Up to the last two years we did.

47,650. What may be an average catch in one haul by the nets?—I have got as high as 30 score large and small, which have all been brought ashore.

47,651. Thirty score of what kind of fish?—Flat-fish.

47,652. Were they all flat-fish?—Yes.

47,653. What kind of fish were they, plaice and soles?—Plaice in general.

47,654. Were there no soles?—Perhaps we may have got one or two, or the like of that.

47,655. Are plaice the chief kind of fish you catch in Belfast Lough?—Yes, but we get sole, turbot, and brill occasionally.

47,656. Do you get many turbot?—No, they are scarce.

47,657. Do you get any very small turbot?—No; for the last six months I have only caught three turbot, and 25 pounds was the lowest.

47,658. Whereabouts in the Lough was that?—Above Holywood.

47,659. A long way within the prescribed line?—Yes, a long way.

47,660. Has the price of your fish increased of recent years?—Since I commenced fishing I never knew them as dear as they have been this season.

47,661. Then at present the fishing should be remunerative to you?—That is on account of the scarcity of the fish.

47,662. Is this season not turning out well as a fishing season with you?—The fish are scarce, and the ground is so dirty that we cannot work upon it, and the reason of that is that it has not been trawled over. The trawling stirs it up and the tides wash the dirt away. If it is not trawled over the dirt lies there and the water has no effect upon it.

47,663. Was the system of trawling long practised before you yourself engaged in it?—I am sure it was; there is not a man here in court now who remembers the time.

47,664. When there was no trawl-fishing?—Yes, not in this lough.

47,665. Has it been your experience that during all the time trawl-fishing has been continuously going on the supply of fish has not diminished?—I do not think that it did until within the last two seasons, and the reason we give for that is that the ground has not been worked over regularly.

47,666. Why has it not been worked over regularly during the last two years?—Because we cannot get leave to do so.

47,667. You only do it at a risk and hazard?—Yes. The Coastguard and Revenue cutter watch us night and day, and we can only get there by stolen marches.

47,668. Did you in former times fish in the month of February?—No.

47,669. Did you find that that was much of a disadvantage?—No. We would not care about being prevented from fishing in February and March, because the season would close of itself at that time. There are no fish to be got during those months. There might be some in the latter end of March.

47,670. You would make no complaint of that regulation?—No. I do not think it does us much harm.

47,671. You only complain of the limit with regard to the bounds within which you are to fish?—If we had liberty to work through the lough the months which we have for a close-season would do us no harm.

47,672. Is there any general opinion among the trawlers that any diminution which has taken place in the fisheries has arisen from the banks not being regularly fished?—I believe they are all of one opinion.

47,673. Do you find that by going repeatedly over the same ground you can get more or fewer fish?—We do.

47,674. What do you get—more fish or fewer ?—We get more fish, because we consider that we keep the ground clean and stir up food for the fish.

47,675. What depth of water is there on the ground ?—We work in from two fathoms to seven or eight fathoms of water.

47,676. There is no part of that ground that is ever left dry at low water ?—No.

47,677. What length of beam is generally used in the trawl ?—From 31 to 35 feet.

47,678. What is the size of the boat you use ?—From about eight to 14 tons. That would be about the size, taking the boats through. The smallest will be about eight tons.

47,679. Can a boat of eight tons carry a beam 35 feet in length ?—No, but one of 14 tons can.

47,680. Is that a decked boat ?—No.

47,681. Is it half-decked ?—Yes, half-decked to the mast.

47,682. As a trawl-fisherman do you say that your business yields more fish than that of the line-fishermen with the same number of men ?—Yes, at certain seasons of the year. During the trawling season the market is better supplied by the trawlers than by the line-fishers. They do not practise line-fishing in the summer time.

47,683. Do you fish over a greater number of months in the year with the trawl than the line-fishermen ?—Yes, we do.

47,684. Do you or the line-fishermen bring the largest quantity of fish to market from Belfast Lough ?—We bring the largest quantity.

47,685. Do you think there is much difference ?—There has been a great difference for some time back.

47,686. Do the line-fishermen and you occasionally fish on the same ground ?—Very seldom.

47,687. Do you at all interfere with each other ?—We interfere more with them when we are dredging for oysters than with the trawl.

47,688. Have they their long-lines laid on the oyster banks ?—Yes, and we may get foul of them before daylight and tear them away, and put them out of two or three days' work.

47,689. Have you trawled outside ?—Yes, outside White Head.

47,690. Do you ever come in contact with the line fishermen's lines when trawling outside ?—No.

47,691. Do they not fish there ?—No, very little.

47,692. Then the long-line fishermen and the trawl fishermen do not practically come in contact with each other ?—Very seldom ; it is a great rarity.

47,693. And they do not fish for the same kind of fish ?—No.

47,694. Do the long-line fishermen catch many of the same kind of fish you catch ?—Not many. When they are fishing for cod at this time of the year they may get some plaice.

47,695. Do you get any codling ?—No.

47,696. Do you get any haddocks ?—No, very seldom.

47,697. Do you get nothing but flat-fish ?—We get very little except flat-fish. We get some hake and conger eels.

47,698. Are you an oyster fisherman ?—Yes.

47,699. Do you find that the oyster beds are yielding as well now as they did in former years ?—I never remember the oysters as plentiful as they were last season.

47,700. Do you, as an oyster fisherman, desire any regulation to restrict you as to the mode in which you should fish oysters ?—I do not think there is any occasion for a regulation of that kind.

47,701. Do you think the season prescribed for close-time for oysters is the proper season ?—I think so ; it is so, to the best of my opinion.

47,702. There is no regulation of any kind with regard to the fishing of the oyster banks ?—Nothing more than the close season.

47,703. And anybody may fish on the banks who likes ?—Yes.

47,704. Any stranger coming into the lough ?—Yes, it is open to all.

47,705. Do any strangers ever come to fish upon the beds ?—No.

47,706. Is there any limit as to the small size of the oyster you can bring ashore for the market ?—There is not.

47,707. You are entirely guided by your own opinion upon that matter and the demand in the market ?—Yes. The under net we use for catching oysters is made of iron rings. It takes 10 inches of iron to make one of those rings, and we think that those rings are wide enough to let any oyster go through which is not fit to be taken. There are a great deal smaller oysters than any we can catch which pass the market.

47,708. Where do they come from ?—I cannot say, but I have seen them.

47,709. Would they be condemned in Belfast Lough ?—No, I think not. I have seen them the size of half-a-crown here in Belfast market.

47,710. Are they not caught here ?—No.

47,711. Do you get Loch Ryan oysters here ?—No.

47,712. (*Mr. Lefevre.*) You do not think there is any necessity for a regulation limiting you as to the size of the oysters you are to take ?—I do not think there is.

47,713. You do not, in point of fact, catch small oysters here ?—There are none very small. Any very small oysters we catch we throw out ; they are of no use to us.

47,714. Do you cull them on the deck ?—Yes ; we throw them out if they are not fit for the market.

47,715. Do you use your trawl-boat for dredging oysters ?—Yes.

47,716. How many dredges do you have ?—From seven to eight. Some have eight and some have seven.

47,717. What sized dredges are they ?—The knife is $3\frac{1}{2}$ feet in length.

47,718. Do you think it better to have that number of dredges than a large one ?—We could not work a large one in this part of the lough.

47,719. How is that ?—There are too many stones and dirt on the ground.

47,720. It would be too heavy to bring up ?—Yes.

47,721. Do any of the boats work with only one dredge ?—There are some about Grooms Port and Donaghadee where there are nothing but oysters, but not here.

47,722. What is the number of boats dredging for oysters in the lough ?—There were four dredging last season.

47,723. Only four ?—Yes.

47,724. Were there only four boats dredging for oysters in the whole of the lough ?—I mean from Carrickfergus.

47,725. But how many were there in the whole of the lough ?—I cannot say how many there were from Grooms Port.

47,726. Do the trawl-boats belong to the fishermen ?—Yes.

47,727. Do you own one yourself ?—I do.

47,728. What did it cost you ?—She cost me upwards of 30*l.*

47,729. How much did the gear cost you ?—I cannot say exactly. I did not keep an account of what the gear cost.

47,730. Do you think the flat-fish are not in the bay from December to April ?—I cannot say that. I think they leave, or they go where we cannot catch them on to the foul ground where the trawls cannot get near them.

47,731. Do you find it more profitable to fish for oysters at that time ?—We do that because we cannot get fish to catch, and another thing is that the price is very low. We could make nothing out of them.

47,732. Are the fish not in good order at that time ?—They are not as good at that time as they are at other times.

CARRICKFERGUS.

J. Wortley.

14 Sept. 1864.

47,733. You tell us you do fish within the limits during the night-time ?—Yes.

47,734. Then do you not think that on the whole that part of the lough gets as much fished as it was formerly ?—No.

47,735. Do you think that the fishing has diminished there ?—Yes. If it were more fished upon it would be more productive. I think the regulation has done a great deal of harm to the public at large. Many a day we should be able to work in the daytime when we cannot work at night, upon dark nights, for instance, when there are so many steamers and vessels passing up and down the lough that we should have to work in their road, which would be very dangerous.

47,736. Do you consider that part of the bay the best part for flat-fish ?—Yes.

47,737. Before that regulation was made did you fish there during the greater part of the year ?—We only fished there up to Christmas at the furthest, even when we had liberty.

47,738. What is the greatest depth of water you can trawl in ?—Seven fathoms inside the lough, until we go outside beyond Carrickfergus and Grey Point; we can then work up to eight and 10 fathoms of water.

47,739. Your boats are not calculated to fish outside the lough ?—No, they are too small for deep-sea fishing.

47,740. Then the effect of any regulation to prohibit your trawling altogether in the lough would be to put an end to your calling as trawlers ?—Of course it would. I have worked outside with the company.

47,741. Did you work for them outside ?—I did.

47,742. What was your experience ?—We could not catch any fish until we went on the prohibited ground, and then we could catch plenty.

47,743. Do you think there are no fish on the grounds outside ?—If they had been there we should have got them as well as on the prohibited ground.

47,744. Is the bottom fit for trawling ?—It is very coarse. All we could make outside would not keep up our nets; the ground was rough and we only lost our time.

47,745. Was it due to that that the fishing was not profitable ?—The fish were scarce, too; they were very scarce.

The witness withdrew,

A. Donald.

ALEXANDER DONALD called and examined.

47,746. (*Mr. Caird.*) Have you been long a line fisherman here ?—Yes, a good while.

47,747. How many boats are engaged in the line-fishing here ?—In the winter time I think there are about five or six.

47,748. Is that all the line fishermen there are in Belfast Lough ?—There were more, but a great many of the young men have gone to sea and left it.

47,749. Are there not as many now at Carrickfergus as there used to be ?—No.

47,750. Ten or 15 years ago were there more boats engaged in line-fishing than there are now ?—Yes, there were more.

47,751. You were accustomed to catch more fish than you do now ?—For the last two years we have not got as many codfish as we were formerly in the habit of getting.

47,752. Is it only within the last two years that a decrease has taken place ?—We got more before. For the last two years we have not got as many.

47,753. Where do you fish with your long-lines ?—From Whitehouse down to Lough Larne.

47,754. How far out at sea ?—Off Lough Larne.

47,755. How many miles out at sea ?—Perhaps two or three.

47,756. In what depth of water ?—In 50 fathoms and from that down to four fathoms.

47,757. Is it rough ground or smooth ground ?—It is a kind of rough ground.

47,758. Do you get better success on the rough ground than on the smooth ?—Sometimes we get a good quantity of codfish in the lough.

47,759. Do you sometimes set your long-lines in the lough ?—Yes.

47,760. In what part of the lough do you fish ?—About Whitehouse Point we shall get good codfish up to Christmas.

47,761. Has there been any perceptible decrease in the cod caught within the lough during the last few years ?—Yes; we have not got as many for the last two years.

47,762. What has been the cause of the diminution during the last two years ?—I cannot say.

47,763. Do you and the trawl-fishermen fish on the same ground ?—Yes.

47,764. Do they ever come foul of your lines ?—They have done so sometimes.

47,765. Do you think they interfere at all with your success as a line fisherman ?—I cannot say anything concerning that at all; I have nothing to do with that.

47,766. Have you ever fished above the restricted boundary with your long-lines ?—Yes.

47,767. Have you had much success there ?—Yes, I have got a great deal of cod there.

47,768. Are you restricted in your fishing to any part of the lough or may you fish where you please ?—We may fish where we like.

47,769. There is no restriction against you ?—No.

47,770. Is the quality of the cod you get now as good as it was in former years ?—I think they have been better in quality this season.

47,771. Has the price improved ?—Yes; but before my time I believe there was a higher price than that. Some of our men have got more for them than ever I did, but that was before my time.

47,772. Have you plenty of bait here ?—Yes.

47,773. What bait do you use ?—Buckies; they are whelks.

47,774. Do you ever use herring bait ?—Yes.

47,775. Do you find it a good bait for catching fish ?—Yes, very good.

47,776. Are you a herring fisherman ?—Yes.

47,777. Have the shoals of herrings decreased or increased of recent years ?—We have got very few this season.

47,778. Do you go out to sea into the Channel to fish for herrings ?—We go a good way off here.

47,779. Do you often see shoals passing from the north to the south up the Channel ?—Yes; I have seen them here, a great many of them, many a time.

47,780. Do you remember when there were any large catches of herrings in Belfast Lough ?—Many years ago inside Green Island I got 7*l.* worth in a haul there.

47,781. Was there a great quantity caught that year in the lough ?—Yes; and we have got a few maze in other years, but we have not got so many at a haul.

47,782. What is the time when you usually get them in the largest quantities ?—We usually get them in the largest quantities up the lough about this time of year.

47,783. How long does the fishing continue ?—Sometimes longer and sometimes shorter. One year we got them well on to Christmas; then we did not get them for so long a period, for a few years.

47,784. Do you get the herrings here now ?—We have not tried them here for awhile.

47,785. Do you get any turbot on your lines ?—Yes, on the lower bank and on the east bank.

47,786. Do you get as many as you did formerly, or more ?—I have not tried there for a long time.

47,787. There are no restrictions at all against your mode of fishing in any way ?—No.

47,788. Have you any complaints to make as to anything interfering with your mode of fishing ?—No, I have no complaints to make.

47,789. (*Mr. Lefevre.*) How many boats are there from Grooms Port ?—I cannot say.

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47,790. Do you recollect the inquiry which took place here before the Commissioners with regard to trawling?—Yes.

47,791. Did you give evidence upon that occasion?—Yes.

47,792. Did you then complain about the trawlers?—I cannot say whether I did or not. Some of the fishermen did.

47,793. You gave evidence?—Yes.

47,794. You were then a line fisherman?—Yes.

47,795. The other line fishermen gave evidence against them?—Yes.

47,796. In consequence of that inquiry these regulations were made?—Yes.

47,797. Have you experienced any benefit from them?—I do not say that they have been of any benefit.

47,798. There were two inquiries here, were there not?—Yes, I believe there were.

47,799. At one of them the regulation was made as to the limits?—Yes.

47,800. And at the other as to time?—Yes.

47,801. Have you found that neither of those regulations has done you any good?—I cannot say.

47,802. Do you mean that you have not found much good from them?—I make no complaint.

47,803. Is there no complaint now from the line fishermen?—No.

47,804. Do you think it would do harm to the line fishermen if these regulations were done away with?—I cannot say.

47,805. I want to know your opinion, do not be afraid about giving it?—No; I cannot say.

47,806. Have you observed whether these regulations are strictly adhered to?—No.

47,807. What is your opinion; do you think they are observed or not?—Did not one of the men tell you that they were not kept?

47,808. Is that also the result of your own observation?—Yes.

47,809. You have now no complaint to make?—No, I have nothing to say against any man. I have no wish to say anything; we must all live.

47,810. Do you think it would be of advantage to the line fishermen if those regulations were adhered to?—As long as they keep clear of us I do not want to interfere with them.

47,811. Have you found that since the regulation was made with regard to a limit you have fished more in the lough than formerly?—No; we fished as much in the lough then as we do now. As long as they keep clear of us we do not wish to fall out with them.

47,812. When you have fished within that limit have you caught more fish than you caught formerly?—I cannot say. We got as many fish then as now.

47,813. You got about the same quantity?—Yes.

47,814. Have you observed any diminution in the cod in the lough?—There are not as many got in the lough as there were formerly.

47,815. Do you think that catching the codling does any harm?—Perhaps it may.

47,816. Do you think you catch too many of them?—It may hurt the cod.

47,817. What is the season of the year when you fish mostly in the lough?—From Halloween until Christmas.

47,818. That is within the lough?—Yes; we get codfish then. Sometimes we get as many in the lough as we can get outside.

47,819. After Christmas where do you fish?—We shift out into the deep sea.

47,820. When was the last good herring season that you can recollect?—I cannot say; we have not had a good herring season for a good many years.

47,821. Have you got herring nets?—Yes, I have.

47,822. Do you use them every year?—Yes.

47,823. But you have not had a good take for some years?—No, I have not had a good take.

47,824. Do you know what time the herrings spawn here?—They mostly spawn about this time of the year.

47,825. In the lough?—Yes.

47,826. Is there a winter season besides?—No, we do not bother after them in the winter time.

47,827. You do not look after them then?—No.

47,828. Are they on the coast?—They may be, but we do not look after them.

47,829. Have you any reason to believe that they are on the coast in the winter?—They may be there. They must be in some place not far off, because we see the spawn or the small herrings.

47,830. You see small fry in the lough?—Yes.

47,831. When do you see them?—I saw them about a month ago. I have seen lots of them away up the lough.

47,832. Inside the lough?—No, outside; but I have seen them inside too.

47,833. Do you see any signs of herrings in the winter?—No, we see no signs of them in the winter.

The witness withdrew.

J. Morrison.

John Morrison called and examined.

47,834. (*Mr Caird.*) Are you a line fisherman?—I was.

47,835. Have you had a long experience of fishing in this neighbourhood?—Yes, I have been fishing for a good while.

47,836. You have been fishing for a good many years?—Yes.

47,837. Can you tell us whether the quantity of fish caught by each boat is as great now as when you began to fish many years ago?—Not the half of it. It has diminished one half.

47,838. Has that been a gradual or has it been a sudden diminution?—It has been a gradual diminution for some years back.

47,839. When did you first observe it begin to diminish?—I think it has been diminishing for the last 20 years.

47,840. Has there been any particular kind of fish that has diminished more than another?—I think the herring and the cod have diminished most.

47,841. The herring and the cod?—Yes.

47,842. The cod are as good in quality now as they were, are they not?—I think they are. I did not fish much last winter, but I think they are. They are not as plentiful, however.

47,843. Do you remember when the prohibition as to trawling in the bay was established?—Yes, I heard tell of it.

47,844. Was it not established in 1854 for the first time?—I cannot say.

47,845. It is a long time within 20 years, since it was established?—Yes.

47,846. But you found that the diminution of the cod began to take place 20 years ago?—Yes.

47,847. Then that was before the restriction was established?—It was.

47,848. Do you know whether the restriction has had any beneficial effect upon the cod-fishing?—I cannot say that it has had.

47,849. You are not aware that it has?—No.

47,850. What is your own opinion as a fisherman as to the effect of the trawling upon the interests of the line fishermen?—I think it has no effect outside.

47,851. None at all?—None outside.

47,852. Has it any effect inside, within the restricted boundary?—I could not say that it has had, because I have seen the fishermen getting cod plentifully on the lines. I have seen 10 dozen caught off the point when we have been working with dredges.

47,853. At the same time the trawlers were trawling on the ground?—Yes, I have seen from 10 to 20 dozen caught off the point.

47,854. Have you heard the opinion often expressed by the trawlers that the more they trawl upon the ground the more they provide food for the

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fish?—I have heard them say that, but I do not know anything about it.

47,855. Have you noticed the trawlers going on the same ground with continued success?—Yes, I have.

47,856. Have you followed them with your lines with equal success?—I did not meddle with them.

47,857. But have you fished upon the same ground?—Yes.

47,858. And at the same time?—No.

47,859. Have you fished upon the same ground within a short time afterwards?—Yes.

47,860. Perhaps the next day?—The next night.

47,861. On the ground on which they had been previously trawling?—Yes, and dredging both.

47,862. Did you find plenty of fish notwithstanding that fact?—Yes, I have seen the time when they have been dredging all day that we have let our lines lie all night, and we have got plenty of fish.

47,863. On the same ground?—Yes.

47,864. What kind of fish did you get; were they cod?—Yes, codfish in November, and from that on to Christmas.

47,865. Then on the same ground where you got cod the trawlers got flat-fish?—Yes, in the month of October.

47,866. Both of you were fishing different kinds of fish?—Yes.

47,867. And both of you were successful?—Yes.

47,868. As a fisherman, is it your experience that you have most success in the lough or outside?—There have been no fish worth noticing in the lough for some years.

47,869. Do the line fishermen have the best success outside?—Yes, but the fish are very scarce there also. The cod seem to have gone off our coast altogether.

47,870. Have you any reason which in your own mind you can assign as the reason why the fish have left your coast?—No.

47,871. Is there any mode of fishing practised on the coast that could have frightened them away?—No, not that I know of. There is no natural cause that I could assign.

47,872. Is there any other cause?—No.

47,873. But the fish have decreased?—Yes, and very greatly.

47,874. What would be a fair average day's fishing with a boat with lines 20 years ago?—I do not remember what it would be 20 years ago, but I have seen the time when we have been getting 5*l.* worth in a day. That was a long time ago.

47,875. In one boat?—Yes.

47,876. Was that an exceptional day's fishing; was it a particularly good fishing?—Yes, it was. On the average we should not make more than 1*l.* a day.

47,877. That was in former times?—Yes.

47,878. What can they make now?—I cannot tell; hardly anything scarcely. They do not get 5*s.* or 6*s.* in a morning for the whole boat's crew.

47,879. For a whole night's fishing?—Yes.

47,880. Sometimes they get more than that?—I do not think they have exceeded half a guinea a day.

47,881. How many men are there in a boat?—Five.

47,882. And they have not got nearly as much as you did in former times on the average?—No.

47,883. Then they must be making a poor business of it?—They are making nothing at all scarcely.

48,884. Then the line-fishing is not an improving fishing just now?—No. It has greatly decreased, and our young men have mostly all gone to sea.

47,885. And the sons of the fishermen do not become fishermen?—No.

47,886. And the number of boats is not increasing?—No.

47,887. There is no restriction of any kind on your mode of fishing?—Not a bit.

47,888. And you have no difficulty in getting plenty of bait?—No.

47,889. You have a good market for your fish?—Yes, a good market.

47,890. Then you attribute the falling off entirely to a dearth in fish?—Yes.

47,891. Do you remember the herring-fishing in old times?—I remember it 50 years ago.

47,892. Was there a better fishing then than now?—Yes, a great deal better.

47,893. Year by year was the fishing better?—Yes, for 20 years we could get 12 maze of herrings off Black Head, and very fine herrings they were.

41,894. In what season was that?—In June and July.

47,895. Were the shoals of herring on their course at the time up the Channel from the north?—Many a time I have seen them go up and down the lough.

47,896. Was it up the lough or outside that you were most successful?—They went right up the Channel.

47,897. Where were you most successful in catching them?—Outside White Head and Black Head.

47,898. Out at sea?—Yes.

47,899. Outside the lough altogether?—Yes.

47,900. Do they not fish there now?—No.

47,901. Is there no herring-fishing there?—No.

47,902. Did you ever have a winter herring-fishing in the old times you mention?—Yes, we used to get them up the lough.

47,903. Are they the same kind of fish up the lough as those which are caught outside?—No, they are not.

47,904. Are they smaller fish?—Yes. The summer herring are the big herring.

47,905. What time did they get the fish up the lough?—I do not know how many years ago it was, but there was a good fishing at Christmas. They made a living out of it at Christmas.

47,906. Up the lough?—Yes.

47,907. Has that ceased?—Yes.

47,908. How many years is it since that was done?—About seven, I think.

47,909. Do the herrings spawn in the lough?—There have been no herrings in the lough for some seasons.

47,910. Do you ever get spent fish?—Yes, some odd ones.

47,911. When?—If we get a few hundred we may get some spent fish among them.

47,912. (*Mr. Lefevre.*) When did you observe the cod begin to fall off?—I think it has been within the last 20 years that they have fallen off.

47,913. During the last two or three years have you observed a greater falling off than usual?—Yes, they have been very scarce for the last two or three years.

47,914. Previous to the last two or three years what would you consider a good take for each set of long lines?—Four or five dozen would be a good take.

47,915. To each boat?—Yes.

47,916. How many lines are there to each?—Seven, and sometimes eight. Every line has 14 score of hooks four yards asunder.

47,917. Then you would call four or five or six cod to a set of lines a very bad take?—Yes.

47,918. What is your most profitable season for cod-fishing?—From November until the month of March.

47,919. Previous to the last two or three years what would each man make in the course of a week?—They would not make 7*s.* 6*d.*

47,920. Do you recollect pretty well as long ago as 25 years?—I do.

47,921. What did you then make per week?—From 8*s.* to 10*s.*

47,922. Do you agree with what the last witness said with regard to trawling; did you hear the last witness?—Yes, but what was it he said?

47,923. He said he had no complaints to make?—I have none to make.

The witness withdrew.

ARTHUR KERNAGHAN called and examined.

47,924. (*Mr. Caird.*) Did you hear the evidence of Wortley ?—Yes.

47,925. Do you agree generally with the evidence he gave us ?—I think he is very correct in a part of it. There are no fish to be got outside now at all.

47,926. (*Mr. Lefevre.*) Outside the limits ?—Yes, I was three weeks at it, and I did not lift a fish the whole time.

47,927. (*Mr. Caird.*) Was that outside the limits ?—Yes.

47,928. Have you since fished inside the limits ?—Yes, and outside too.

47,929. With what success have you fished inside?—With very little for the last three months. There has been very little success for three months in any part. The ground is very dirty, and we have to cut away our net very often when we get it alongside.

47,930. Has the ground become more foul since the limits were enforced ?—Yes; as a general thing all over the lough it is in a dirtier state. There is a thing we call the Marylug, which we lift up in our net by a ton at a time.

47,931. Has that increased of recent years ?—Yes, they are more numerous than they were thirty years ago.

47,932. What is the reason of that ?—I can give no account of it ; the dredges cannot get any oysters or anything of that sort for them.

47,933. Has that anything to do with the restriction preventing you from fishing the banks as regularly as you would do ?—If we could go far enough in the lough to keep it clean it would be better.

47,934. Part of the ground is clear ?—No, it is very dirty.

47,935. Wherever it is clean do the fish go ?—Yes.

47,936. Is that the ground you frequent for trawling ?—The cleaner we can get it the better.

47,937. Do you not clean it by the process of trawling ?—Yes, we do, but we would rather save ourselves that labour. If we get dirt in our nets it injures the fish.

47,938. Is the dirt you get in the nets the kind of food the fish would take ?—It is a little kind of mussel—a small shellfish.

47,939. Do the line fishermen find fish on the ground that is foul ?—There is very little fish there. There are none on the foul ground ; but on the stony ground and the rocky ground they go for codlings.

47,940. How many years is it since you began to fish with the trawl ?—Thirty-seven years.

47,941. Did you fish over any part of the lough at that time that you chose ?—Yes, in any part we liked.

47,942. What part was chiefly fished at that time; where did the fishermen find themselves most successful ?—From White Abbey across the lough. The Marquis of Donegal had a boat there to try for the fish, or we should never have thought of going there.

47,943. When you first began to fish you fished outside the limits now laid down ?—No, not outside of them, but I have fished further up the lough since.

47,944. When did you begin to fish further up the lough ?—About 24 years since.

47,945. Did you find yourself more successful by going up the lough ?—Yes, the ground was all clean; there were no stones or foul ground.

47,946. Was it an easier process fishing up the lough ?—Yes, it was easier for the nets.

47,947. Was it shallow water ?—Yes, but there are mussels in the lough that the fish feed on.

47,948. Do you get much fish on the soft ground you speak of ?—Yes, there are small mussels about the size of this (*measuring*) that the fish live on and small razor fish.

47,949. Are they found on the smooth ground ?—Yes, all on the smooth ground.

47,950. Over what breadth does that smooth ground extend ?—The breadth in one part of the lough would be about two and a half miles ; off Rochford it will extend only half-a-mile.

47,951. Is that off the Copeland light ?—Yes.

47,952. In other parts it is two and a half miles broad ?—Yes.

47,953. And what length ?—I suppose about twelve miles, that is, taking the place where they begin to trawl and going on until you end trawling.

47,954. Is the direction in which you trawl over the banks according to the wind ?—We trawl with the tide, and if the tide does not answer we trawl across with the wind.

47,955. The smooth grounds well up the lough are the grounds you find most productive of fish ?—Yes.

47,956. Have you been in the habit for a number of years of following much other fishing over the same ground ?—Yes.

47,957. Have you ever found that the fish have decreased in quantity from being over fished ?—They have been decreasing of late years. I was out all night this week for fourteen fish altogether.

47,958. Have you noticed whether the proportion of small fish is greater now than it used to be ?—We get more small ones at the present time. We had more the last time we were out than ever we had. Our nets are very large in the mesh ; it is styled a two-inch mesh but it is really a four-inch mesh. The meshes are two inches from knot to knot and four inches in length pulled out. That is sufficient to let any small fish out.

47,959. Do you not get any very small fish ?—No, we throw out a third of what we get.

47,960. Are they dead ?—They are quite alive. I have had them three days alive in taking them to Greenock.

47,961. Are they not killed by the trawl?—The trawl never hurts them.

47,962. Then the greater portion of the small fish you get is alive ?—Yes.

47,963. Very little injured ?—Yes, if they were injured we should get them dead.

47,964. You do not get them dead ?—No, I never saw a dead fish come up.

47,965. (*Mr. Lefevre.*) How often do you draw up your trawl ?—From four to six times a day, sometime oftener. If we have not sufficient wind to trawl our net we take it up sooner.

47,966. How many hours is it generally down ?—From a quarter of an hour to an hour, and from that to an hour and a half and two hours.

47,967. You do not drag a whole tide ?—No, we cannot take in our net in the lough.

47,968. Why can you not do so ?—We should gather so many star fish, wreck, and weeds.

47,969. You have to lift your net for that reason, and not on account of the quantity of fish ?—Yes.

47,970. You turn and come back again ?—Yes, and if we find fish in our net we go a little further the next time.

47,971. Do you think that the more you fish on the same ground the more fish you get ?—There have been plenty since I have gone to them. The more we trawl over the ground the more plentiful they are. If they only get three or four days stand they get as plentiful as ever. Perhaps the boats going over the ground may shift them for two or three miles.

47,972. Are there no parts of the fishing ground inside the restricted limits which have shown any sign of decreasing ?—No, the fish are plentiful in the lough, and the shallower the water you go in the more fish you get.

47,973. Does it depend on the season of the year; in warm weather do not the fish go further up the lough ?—Last year they were all over the lough.

47,974. Do you ever trawl outside the limits?—Yes.

47,975. With what success ?—With none at all.

47,976. Is there no good smooth ground outside the limits ?—There is smooth ground down each side

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of the White House; it is all foul if we go too near White Point.

47,977. Is there not so much smooth ground out side the limits as inside?—There are some parts upon which we cannot work outside. We work outside when the fish are there in June and July; we work there by night all we can.

47,978. Do you prefer in some cases to work in the night instead of the daytime?—The water is clearer then, and we get more fish at night.

47,979. I do not quite understand whether there is as much smooth ground for fishing with the trawl outside as within?—The ground is very rough except we go far out to the bank.

47,980. Is it good ground for fishing?—Yes, for two months.

47,981. Do you fish it then?—Yes.

47,982. What two months are those?—June and July.

47,983. Is the ground better than the more shallow water up the lough?—It is for soles and large plaice during those two months.

47,984. Then do the fish shift their ground?—Yes, they shift their ground and work in the lough.

47,985. You would like to be allowed to follow the fish?—I would like to follow the fish.

47,986. Do you ever come in contact with the line fishermen?—I never got foul of the line fishermen except twice in my life, and that was at night.

47,987. Did you entangle their lines?—No, if we do anything of that sort we put a buoy upon their lines to show where they are.

47,988. That does not often happen?—No, only twice in my life.

47,989. You do not often catch the same kind of fish that they do?—When they are fishing for flat-fish we do. We get ray, dabs, brill, soles and plaice.

47,990. But the great proportion of your fish is not the same as the great proportion of the fish got by the line fishermen?—No, theirs are nearly all cod-fish. We may get an odd codfish, or a haddock, or a conger eel.

47,991. Are there any boats fishing at Grooms Port?—Yes.

47,992. How many?—Five boats.

47,993. Are they better found boats than yours?—They are all alike, and they are all a little out of order.

47,994. Are your boats a little out of order?—Yes, they are.

47,995. Are the Grooms Port boats better?—I do not think they are; they do not fish all the year, but they have bits of land as well.

47,996. Do they come inside the lough too?—Yes, they do.

47,997. In what season?—When they know the fish to be there; they can know in 12 hours if there are fish up the lough.

47,998. Do they fish within the limits?—Yes, they do.

47,999. Is there any good turbot-fishing outside the lough?—There is at Grooms Port and Black Head. They go there.

48,000. Is there a good turbot ground outside?—No, they take them with the lines where we cannot trawl. Turbot is a fish that likes to be near the rough ground.

48,001. Are you yourself the owner of a trawl-boat?—Yes, I have been the owner of a trawl-boat for 37 or 38 years.

48,002. Have you made less by it of late?—I have made very little by it lately; we are hardly able to keep up the boats at present.

48,003. Do you agree with the previous witness that the last two years have been better years for trawling?—They have been worse for me.

48,004. It has not been so with you?—No, I have never done so badly as I have done for the last three years.

The witness withdrew.

Captain William Swinburne, R.N., called and examined.

Capt. W. Swinburne, R.N.

48,005. (*Mr. Caird.*) Are you Inspecting-Commander of the Coastguard?—I am.

48,006. Have you and your officers and men any instructions with regard to enforcing certain regulations which have been laid down for the fishing in Belfast Lough?—There is to be no trawling or fishing inside a line drawn from Carrickfergus Castle to Rochport on the opposite shore. Any boats or trawlers seen there are immediately chased by the boats of the Coastguard or by the cutter when we have one here, and the strictest orders to that effect have been given to the officers by me.

48,007. Do you know if the result of that watchfulness on the part of your men has been to prevent trawling altogether?—Not altogether.

48,008. Are you aware whether trawling is carried on in the night-time still?—I believe they do if they can. I have only a small force and I am not able to enforce the regulation so rigidly as I might otherwise do.

48,009. Does this constant watching of the fishermen in this way interfere with looking after the interests of the revenue?—It takes the men away from patrolling the coast.

48,010. Is patrolling the coast set aside to enable your men to attend to these directions?—Not unless we have a suspicion that the boats are out. Then, and then only, do we man a boat and send it out at night, and of course the patrols are lessened and the guards weakened by so doing. I consider that our first duty is to protect the coast and the guards would not be withdrawn if they could not be spared.

48,011. Practically, I suppose, there is no attempt to interfere with the restriction during the day?—Decidedly not. The illegal trawling is generally carried on off White House.

48,012. I suppose the trawlers do not attempt to trawl during the day?—They do attempt it, but if they see our boat putting off they throw their nets overboard and make off. I found that the cutter we have had here occasionally can put a stop to it better than the boats. The fishermen keep a look-out and as soon as they see a boat launched they throw their gear overboard and are off.

48,013. Then practically the regulation is enforced during the day?—Yes.

48,014. And it is only evaded during the night?—Yes, when we have not sufficient men to man the boats or watch the ground.

48,015. (*Mr. Lefevre.*) How many men have you here in the lough?—At this station there are seven men and one officer.

48,016. And how many are there on the other side?—I know nothing about the other side. At White House there are six men and one officer, which is too short a complement.

48,017. Is there another station on the other side of the lough?—There are four stations on the other side.

48,018. I take it that they have the same orders?—Yes, I know they have. There have been one or two cases brought into court.

48,019. Are there seven men at each of these stations?—I do not know; they vary very much. Some of them have 10 men, and some only four. I have only three men and a chief boatman in charge. The largest number, including an officer, is 10 for two stations.

48,020. What is the width of the bay of Carrickfergus at the point where the line of limit runs?—Four miles and a half I think.

48,021. What increased force of men would you require in order to keep off the trawlers in the night-

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time ?—I should require at least double the present complement of men and boats. If it was requisite to keep a boat afloat at night I should have two crews to relieve each other, but in most weathers in this port these light open boats could not live.

48,022. Would an increase of seven men at your station be sufficient for the whole bay ?—No, nor anything like it.

48,023. Would you require an increase at another station ?—Yes, at White House station, six miles from here ; they would require an increase there and also on the opposite side.

48,024. Would that not be some distance from the line of limit ?—No, that is the extreme south point where the trawlers go.

48,025. Then in your opinion you would require two additional boats' crews with a full complement of seven men in order to enforce the regulation ?—Yes, on this side of the lough.

48,026. Can you tell us the number of fishermen's boats at Grooms Port ?—Not at Grooms Port, but I can here.

48,027. What is the number here ?—There are seven large boats belonging to the trawlers and there are 22 or 23 of the smaller line boats.

48,028. Are they all used for line-fishing ?—Yes, and oyster-fishing.

48,029. Are they all used for line-fishing ?—Yes.

48,030. That would indicate that there are about 55 men employed in line-fishing ?—There are from 50 to 60 men.

48,031. Besides the trawlers ?—Yes, besides the trawlers.

48,032. How long have you been here ?—Four years.

48,033. Has the number decreased since you have been here ?—I consider it pretty much at a standstill. There are one or two boats less now from old age. They apply for fresh licences as soon as they have the means of setting up another. The boats are certainly not on the increase ; if anything they are on the decrease.

48,034. Do you think all the trawlers trawl within the limits or is it confined to a certain number of them ?—I think pretty nearly all of them do if they can get the chance.

48,035. And not one more than another ?—No ; there are two or three whom I see here whom I have cautioned very often.

48,036. (*Mr. Caird.*) I think you stated that your experience here has extended over four years ?—Yes.

48,037. Can you give the Commissioners any opinion of your own as to the advantage or disadvantage of this restriction on the supply of fish to the general market ?—I have heard complaints that the fish in the market are very small.

48,038. But you are not prepared to offer any opinion as to the policy of this restriction or otherwise ?—I think I can hardly say anything about that.

The witness withdrew.

JOHN WORTLEY called and examined.

J. Wortley.

48,039. (*Mr. Caird.*) Have you heard the evidence which has been given by the trawl fishermen to-day ?—I have heard some of it since I came into the court.

48,040. Is it long since you began to fish with the trawl ?—It is between 50 and 60 years.

48,041. Has the number of men employed in trawl-fishing increased or diminished within that time ?—There were more at one time than there are now.

48,042. Is it paying as well as it did in olden times ?—No.

48,043. Are the trawl fishermen not making as good a fishing as they did formerly ?—Yes, and the reason of that is that the fish are not fetching as good a price as they did formerly.

48,044. Are you sure of that ?—Yes.

48,045. Can you tell us in figures ?—I have sold flat-fish as high as 24*s.* a hundred, six score to the hundred, and now they are selling as low as 15*s.*

48,046. Is that a diminution of price that has been going on regularly ?—It has been a good while going on.

48,047. Are the fish got in greater quantity ; is that the cause of it ?—The fish are not got in as large quantities as they used to be in olden times.

48,048. Are there not as many caught in the lough as in olden times ?—They were more plentiful four or five years back than ever I remember them, but they have been scarce this season.

48,049. Have you noticed whether the proportion of small fish caught now is greater than it used to be ?—When they fish now on the prohibited ground there are more small fish than there are outside.

48,050. Have the trawlers been making a good livelihood by their business ?—They have not been making a better livelihood this season. Sometimes they make a middling good livelihood by it, but they have made very little this season on account of the scarcity of fish.

48,051. Do they make more money by oyster-fishing than by trawling ?—Last year they made a good season by oyster-fishing. They found a new bed last year and they made a pretty good thing of it, but where they used the trawl outside here the oysters are very scarce. One of the large boats was dredging outside the whole day for 100 oysters.

48,052. (*Mr. Lefevre.*) Are you a member of the Guild of Trawlers ?—I am.

48,053. How many of you are there ?—I cannot tell the number.

48,054. How many trawlers are members of that guild ?—I suppose I may say about 20.

48,055. Does the guild provide for you when you are old ?—No.

48,056. When you are unfit to work does the guild provide for you ?—No.

48,057. Then what benefit is it to you ?—In the guild we are sworn to assist each other in case of necessity. If the boats are going to receive harm we are sworn to assist one another and to tell each other where the greatest quantity of fish is likely to be caught.

48,058. Do you pay anything every year to the guild ?—No.

48,059. Do you receive anything from it ?—No, we receive no benefit from it and we pay nothing to it.

The witness withdrew.

BARRY MARTIN SMITH recalled and examined.

B. M. Smith

48,060. (*Mr. Caird.*) You desire to offer some information to the Commissioners on the part of the trawl fishermen at Carrickfergus ?—I have known the fishermen, the trawlers, and dredgers of Carrickfergus for a good many years. I know them to be a peaceable well disposed body of men, who were not willing to offend against the criminal law of the country until this byelaw was passed first in 1854 prohibiting them from fishing within certain bounds from Kilrood Point in the county of Antrim to Great Point in the county of Down. A second inquiry was held before the Commissioners after which a further byelaw was passed

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prohibiting them from trawling within a straight line from the Coast of Carrickfergus to Rochport in the county of Down. The inhabitants here are entitled to beach their boats in the harbour and yet this point excludes them totally both in coming into the harbour or coming out. They are actually within the prohibited limits. That byelaw has had a very injurious effect upon them; they have been prosecuted or persecuted in various ways, and if it were not that I have had the opportunity of fishing up certain points of law it would have been difficult to have kept them out of gaol.

The witness withdrew.

J. Thomson.

JOHN THOMSON called and examined.

48,061. (*Mr. Caird.*) You are a county magistrate?—Yes, for Down and Antrim.

48,062. Have you observed the operation of the restrictive regulation established in regard to trawling in the Lough of Belfast?—Yes, I have taken a very deep interest in the question, and as far as I can understand it the law has never been fairly tried. The fishermen have broken it both by day and night.

48,063. Not during the day; I think we were told that by the Inspecting Commander?—Yes, they have frequently broken it during the day. I pointed out two of them breaking the law as I was coming down to this place to-day.

48,064. Were they not dredging for oysters?—They may be just now, but I do not understand that they could be dredging for oysters; they only dredge in those months which have an "r" in it. I can positively state that the law has been violated day and night, and that it never has had a fair trial. I can further state that it is totally impossible for the Coastguard to prevent the fishing by day or night. There is no difficulty in the trawlers dropping their trawls if they see the Coastguard or any other boat coming off. They heave over their rope with a small catch attached to it, and, as the law stands, unless you see the men actually fishing you cannot prosecute them. It has often struck me that if there was a regulation to prevent fish of a certain size from being brought to the shore the Coastguard in that way could exercise a surveillance over the boats, but not otherwise.

48,065. Would it not require a large number of additional watchmen to prevent the infringement of such regulations?—Yes, I think it would.

48,066. Who would pay the expense of that?—That I cannot say.

48,067. (*Mr. Lefevre.*) Have you formed any opinion as to the number of men to be employed?—No, my opinion is that if they were prevented from bringing small fish ashore that would be the best mode of preserving the fishery.

48,068. You think that would be better than laying down limits?—Yes, I think it would.

48,069. Would you advocate doing away with the present regulation?—It has never been tried fairly, but if there was a prohibition preventing small fish being brought ashore, then I think you could come to a good conclusion. The small fish are now caught in very large quantities. I frequently visit the market to make an inspection and I have noticed large quantities of small fish.

48,070. (*Mr. Caird.*) They are saleable fish I suppose?—No, they are not.

48,071. Are they not sold?—Yes, they are sold in the market.

48,072. The fish are sold for food?—Yes.

48,073. (*Mr. Lefevre.*) What are they?—Plaice.

49,074. (*Mr. Caird.*) Is there any other observation you desire to make to us?—There is one remark I would wish to make further. As far as my experience goes, and I have fished in the lough many times so that I know it perfectly well, my impression is that our fishermen are degenerating. It is said that the fish are degenerating and going away, but I think the fishermen are degenerating as well. The young men are all leaving. They are going to sea and leaving the old men to fish as if they were afraid to pursue the fishing as they did in former times. I have noticed that the Grooms Port boats are a better class of boats, and though one witness said they come to fish up here on the preserved ground I have not noticed them. It would be very easy to distinguish them because they are a different style of boat from the Carrickfergus boats. They fish in deeper water and I have also noticed that the Grooms Port boats catch fish which are darker than those which are caught here. They are also larger and better. There is no doubt that the fishermen here have some reason to complain; whether it is from a diminution in the fish or not I am not able to say, but certainly, the poor unfortunate men get no price for their fish. I frequently come here and visit the boats as it is only a distance of seven or eight miles from where I live, and I have noticed that the fishermen here sell their fish to dealers in Belfast who only give them $1\frac{1}{2}d.$ for fish I am charged $7d.$ or $8d.$ for in Belfast. So long as that system exists it is impossible for any class of boats to find a profitable employment.

48,075. Then the great evil seems to be that the class of purchasers is not more extensive and that they do not enter more into competition with each other for the fish?—That is one great evil.

48,076. Is there a great abundance of fish?—I am not prepared to say.

48,077. The fact is that there is not a great abundance of fish here?—Some have said that there was and some not.

48,078. (*Mr. Lefevre.*) Do you think that the fact of the young men going away to other professions has affected the supply of fish?—I do. I do not think the present men work the sea as the fishermen did before.

48,079. Do you think if the boats were manned by younger men and they went out to the same places they fished upon formerly that they would catch the same supply of fish?—I think it is probable.

48,080. We heard today that the wages and earnings of the line fishermen have been $7s.\ 6d.$ a week?—Yes.

48,081. In the report of 1836 it is stated that their earnings were only $6s.$ a week?—Yes.

48,082. Is that a sufficient temptation to induce men to remain in the trade?—I think not, but I do not think the line-fishing boats are kept in the same style they were kept in in my younger days, nor do they go as far out to sea.

48,083. (*Mr. Caird.*) Does not that all show that the trade is not a prosperous one and that the young men are going out to other things which are more remunerative?—Yes; the young men are going more as sailors. As a matter of course these men do not follow their own profession, but as to the preserved ground I am strongly of opinion that the byelaw has never had a fair trial. Whether it be right or wrong I know not, but my impression is that if it does not damage the spawn it would be as well to have no preserved ground, inasmuch as the regulation cannot be kept.

48,084. Is there any evidence that the spawn is damaged?—I do not know that.

48,085. Is there any evidence that can be brought before us to show that it is damaged?—I think one of the men stated that he often got it up in the nets.

48,086. Outside and in?—Yes.

48,087. That was something the fisherman called spawn but he did not know whether it was spawn or not?—The bay is a very shallow bay, and if there is spawn there I think it would be taken up.

The witness withdrew.

JONATHAN WORTLEY recalled and examined.

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48,088. (*Mr. Caird.*) You are anxious to say something in reference to the evidence of Mr. Thomson?—Yes; he mentioned that there were two boats out fishing to-day and breaking the regulation. Those are boats that are out dredging for oysters; they have neither of them a trawl nor a trawl-beam on board.

48,089. Do you know that as a fact?—Yes.

The witness withdrew, and the inquiry was adjourned until the 15th of September, at Carlingford.

Carlingford, Louth, Thursday, 15th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

CARLING-FORD.

Lieut. M. Knox, R.N.

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Lieutenant MARCUS KNOX, R.N., called and examined.

48,090. (*Mr. Caird.*) You are Commander of the Coastguard here?—Yes.

48,091. You have been stationed here for two years?—Yes.

48,092. Then you have had an opportunity of ascertaining the state of the fisheries in Carlingford Lough, and in the neighbourhood?—Yes, I was stationed here also 20 years ago for two years, namely, in 1843 and 1844.

48,093. Then you can give us some comparison with regard to the state of the fishing now, and what it was 20 years ago?—Yes.

48,094. What is the principal kind of fish which is to be found in Carlingford Lough?—The principal thing is oysters. There are very little fish in the lough, and they are not fished regularly.

48,095. Then is the principal business of the fishermen in Carlingford Lough oyster-fishing?—Yes; occasionally they go to the sea outside after herring-fishing.

48,096. Is there no other description of fishing except the herring-fishing sought after by the Carlingford fishermen?—No they do not think it worth their while.

48,097. Was that the case 20 years ago?—No.

48,098. What was the case then?—White fish and flat-fish were caught in considerable quantities then in 1843, 1844, and 1845

48,099. In this place?—Yes.

48,100. By the long-line?—Yes.

48,101. They did not trawl?—No, but they trawled outside.

48,102. What number of boats is there now engaged in the oyster-fishing?—I will tell you shortly.

48,103. Have they increased or diminished?—They have increased within the last two or three years.

48,104. The oyster boats?—Yes. There is a great complaint about the shortness of the open season. The open season here only lasts four months, while it is eight months everywhere else.

48,105. Is it an open season from the 1st of November until the 1st of March?—Yes.

48,106. In other quarters it is from the 1st of September to the 1st of May?—Yes.

48,107. What is the reason that that curtailment of the season has been adopted here?—Because they were taking all the small oysters. The fishermen themselves gave evidence at Warrenpoint before the Commissioners that it would be better for them to have a longer close season. It was at their suggestion, I believe, that the period for the close season was extended.

48,108. Then the change was made at the suggestion of the fishermen themselves?—It was.

48,109. What year was it that that change was made?—I cannot say; I was not here at the time.

48,110. Are you aware whether the change has resulted in an increased supply of oysters?—There has been a better description of oysters, and I think an increased supply. I think the supply has been greater for the last two years than it was before.

48,111. Have you before you now papers from which you can tell us the number of boats engaged in oyster-fishing at the present time?—I cannot tell you all the boats engaged. The lough is divided and registered into two divisions.

48,112. If you could give us the number of boats for the whole of the lough it would be better?—I think I can do that. There are 220, I believe.

48,113. There are 220 boats in Carlingford Lough altogether?—Yes.

48,114. Can you compare that number with any previous date accessible to you?—There were 357 in 1842 and 1843.

48,115. Now there are only 220?—Yes.

48,116. That is a great falling off?—Yes.

48,117. Are the boats of the same class that they were then?—They are a better description of boat now, I think.

48,118. Are they manned by the same number of men?—No, there were 887 men at that time.

48,119. How many are there now?—Not more than 460. They have fallen off by nearly one half.

48,120. At that time a number of these boats were engaged in white-fishing, and not altogether in oyster-fishing?—Not altogether. The season was not altogether a close season then. They did not observe the seasons for oyster-fishing as they do now. There was no law of that nature then.

48,121. But, as showing the comparative increase and decrease of the oyster-fishing here, these figures would not give us a correct representation?—No, they were not all employed in oyster-fishing at that time.

48,122. Not in 1844?—No.

48,123. But all the boats you have now are employed in oyster-fishing?—Principally in oyster-fishing.

48,124. Are there many natural banks of oysters in Carlingford Lough?—They are all natural banks but one. There is a bank belonging to a man named Elmore.

48,125. Are there many natural banks all over the lough?—It is principally on this side and in Rosstrevor Bay that there are oyster banks.

48,126. Are these oyster banks open to every fisherman?—Yes, they are open to all.

48,127. There is no claim of royalty or right of payment?—No, except at one place I have mentioned, which is below Carlingford.

48,128. Are they fished without any other regulation among the fishermen which all must observe?—The oysters are taken subject to a certain size. I think they must be $2\frac{1}{2}$ inches across. They must not take smaller oysters than $2\frac{1}{2}$ inches in diameter.

48,129. Who looks to the enforcement of that regulation?—I and my men and the constables.

48,130. It is part of your duty to see that oysters of no smaller size than what will go through a certain ring are brought ashore?—Yes.

48,131. Then those oyster beds in Carlingford Lough have been fished continually during the period over which your experience extends?—Yes.

48,132. They continue to yield as much as they did at any former time?—I think last year the yield was as good, if not better, than it had been before.

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48,133. They have not shown any signs of being over-fished ?—No, I do not think they have, but the season is too short for that.

48,134. Do the seasons vary according to the spat being good or otherwise ?—The year before last was a good season. Last year it was not quite so good as the year before, but they were a finer description of oyster last season than they were the year before.

48,135. Is there not a system adopted here of taking the oysters up and placing them on feeding beds so as to get them into better condition ?—No, but they put them in rings, and they are not to be sold under a certain size.

48,136. Are they taken direct from the beds ?—They are put into large rings and sold by auction to the buyers.

48,137. Are they taken direct to the market for consumption ?—Yes, by men with carts.

48,138. (*Mr. Lefevre.*) What is the size of the ring ?—It is the size of this court house or larger.

48,139. I mean what is the size of the ring by which you measure the oysters ?—That ring is $2\frac{1}{2}$ inches in diameter, and the smallest oysters must be of that size.

48,140. What is the other ring you spoke of ?—It is a kind of place in which there is a little water where they throw the oysters down and cover them round with stones.

48,141. Is that in order to keep them alive until they are ready to be sent off ?—Yes.

48,142. (*Mr. Caird.*) Anything that does not pass through the small ring is allowed to go to market ?—Yes ; anything that passes through that ring is not allowed to go to market, at any rate if we can prevent it. The beds are dry at low-water spring tide, and the people then gather up the oysters. Children and women go down and gather them.

48,143. Are all the oyster beds dry at low-water spring tides ?—Most of them, but not all.

48,144. Are they injured in the winter by the severity of the weather ?—Yes, they are ; large numbers of them get into deep water.

48,145. You mentioned that there was one bed which was in some degree an artificial bed ?—Yes.

48,146. Where is that ?—Below Carlingford. It is the only place below Carlingford Harbour where they get oysters at all.

48,147. When was it established ?—By licence from the Commissioners.

48,148. Was it regularly planted as an oyster bed ?—Yes, I understand that the gentleman who has it got some oysters from Arklow.

48,149. Is that a different description of oyster ?—Yes, it is quite different from the Carlingford oyster.

48,150. Is it a larger or a smaller oyster ?—A larger one. People don't appear to like it. Carlingford is famous for its oysters. The present owner of the bed bought it from Mr. Burton.

48,151. Bought the oyster bed ?—Yes.

48,152. Has that oyster bed been found to be a profitable speculation ?—I don't think it has been very profitable. The proprietor complains to me that he cannot manage to get oysters. He never buys except in the close season. He cannot get at them in winter as it is only low-water spring tide at 6 o'clock in the evening and 6 in the morning, and it is always dark.

48,153. (*Mr. Lefevre.*) Does the regulation with regard to the close-time affect him as well as the natural beds ?—Yes.

48,154. (*Mr. Caird.*) Are his oysters laid down on the bed for feeding, or do they breed on the bed ?—They breed.

48,155. Are you sure of that ?—Yes, he tells me that the bed has improved a great deal since he got it.

48,156. You cannot tell us when the white-fishing which was practised 20 years ago began to cease to be practised in the lough ?—I have heard it was in 1846 and 1847.

48,157. During the famine ?—Yes, the fishermen got into such a state of poverty that they could not prosecute it. Then the fish became scarce, and the fishermen do not think it pays them to go now.

48,158. Was it at any time a lough in which there was a good supply of fish ?—Yes, it was very famous for fish long ago.

48,159. Are the fish not to be found now in the lough ?—I don't think they are as plentiful; certainly not.

48,160. Is there any cause which has rendered them them less plentiful ?—Not to my knowledge. There is no trawling.

48,161. There has been no over-fishing of any kind ?—No.

48,162. Is it a soft bottom in the lough ?—No, some parts of it are soft, but the other parts are principally gravel.

48,163. (*Mr. Lefevre.*) Does the ground upon which the oysters lie consist of mud ?—It is generally hardish mud.

48,164. Is it clay ?—No ; mud.

48,165. (*Mr. Caird.*) Is it easily dredged ?—Yes.

48,166. Is there any mackerel-fishing here ?—A good deal outside the bay. Some boats get 70 or 80 dozen off Derryhogue.

48,167. When the mackerel make their appearance are they always followed ?—I think they are generally, but not so much as they might be.

48,168. Is the herring-fishing followed very carefully when any herrings appear upon the coast ?—Most of the boats are well prepared.

48,169. Are many herrings caught here ?—Some years there are. About this time in September and October they come off Derryhogue Bar.

48,170. Just outside ?—Yes.

48,171. The herrings do not come inside the lough ?—Yes, there have been a few for the last few nights, but not many.

48,172. Are they caught with the drift-nets ?—Yes.

48,173. The fishermen here do not use seine-nets for catching them?—No, they do not use seine-nets at all.

48,174. Is there any winter fishing for herrings here ?—No.

48,175. Do the herrings not appear on the coast in the winter ?—Not that I am aware of ; not later than the months of September, October, and the beginning of November.

48,176. With regard to the close-time for oysters you say it was upon the representation of the fishermen themselves that the close-time was extended from September until November ?—Yes.

48,177. And also made to include the months of March and April ?—Yes.

48,178. That was making the close-time four months longer than in other parts of the coast ?—Yes, there are eight months of open fishing in other places, and only four months here.

48,179. Have you heard any opinion from the fishermen lately as to whether they think the extended close-time should be maintained ?—Some are for it, and some against it.

48,180. Have you had an opportunity of forming an opinion yourself as to the policy or impolicy of that extension of close time ?—It is supposed that it tends to increase the quantity, and to allow the fish to become better.

48,181. Are there any circumstances connected with the oyster beds in Carlingford which make it necessary to have a different close-time from that which is adopted in Belfast Lough and other loughs on the coast ?—The oysters are very easily taken.

48,182. Are they more easily taken here than elsewhere ?—They can go out in all weathers to take them. The small boats can do it, but it takes the larger boats in Belfast Lough.

48,183. Then the ground on which you think a restriction of that kind ought to be maintained is the sheltered nature of the harbour ?—Yes.

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48,184. (*Mr. Lefevre.*) What measures do you adopt to prevent the taking of small oysters?—I make the boats go out in the evening and I look into the oyster boats occasionally to see that they are getting no smaller oysters than they ought to take. We watch them when they come on shore, and measure the oysters with one of the rings, and we watch the rings upon which they are laid also.

48,185. If you found small oysters in the rings, what would you do with them?—We should take them away and put them in the deep water, which we occasionally do when we seize any. There were a great number of summonses last year, and fines were inflicted. Any oysters that are taken in that way are put into the deep water.

48,186. Do the fishermen cull the oysters immediately after they are taken up in the dredge?—Yes, in the boat they are supposed to see that nothing is taken which is not of the proper size. I believe that is what they generally do.

48,187. Do the dredges take up any considerable number of small oysters?—Yes, they may take up any quantity. There is nothing to prevent them taking up small oysters. Of course they would go through the dredge if they were very small.

48,188. Have you any reason to believe that there are any small oysters sold here?—If I knew it I would not allow it.

48,189. Have you any reason to believe that there are any sold?—Sometimes they may take some of them home and use them themselves.

48,190. But they are not sold for the purpose of being laid down elsewhere?—Not since I have been here. I believe it was done before. There was a vessel that took an immense quantity some years ago, and the fishermen say that in consequence the fish declined.

48,191. How many men are employed in the service; how many of the Coastguard are there here?—I have 32 or 33 men under me in this lough.

48,192. They undertake that duty in addition to their other duties?—Yes, it is a very onerous duty. They have many other duties to perform, but they were ordered to do this also.

48,193. Do you recollect how many of the boats you speak of 20 years ago fished with the line?—No, I cannot tell you. There were a good number that fished with the line, but I cannot say the number.

48,194. There was no trawling in the bay at that time?—No, I do not remember that there were any trawls here, but they were in the habit of trawling outside. The trawlers belonging to Carlingford used to work where the oysters are taken and the fishing-boats were all attached to Carlingford at that time. The larger ones were at any rate.

48,195. Are there no trawlers belonging to Carlingford now?—There are six belonging to Carlingford.

48,196. What sized boats are they?—They are from 15 to 20 tons, or perhaps from 12 to 20 tons.

48,197. How many men do they take in each boat?—The tonnage of the six boats is 67 tons, and they have 34 men.

48,198. Is there any other place in the lough from which they trawl?—No, there is no other place in the Lough except Carlingford. We have 34 men and six boats of 67 tons altogether.

48,199. (*Mr. Caird.*) Are there any lobsters caught in the lough?—There are outside the entrance to the light-house at a place called Bellagan.

48,200. Is it a valuable fishery?—There are a great number got.

48,201. Are there several boats employed in it?—I don't know; it is just out of my jurisdiction. It is in the Dundalk district, but there are a great number of small lobsters caught there. They are principally small lobsters.

48,202. Does it continue to yield as much as it did formerly?—I think they have done very well this year.

48,203. Is there a crab fishery?—They catch crabs, but not many.

48,204. Are there any other shell-fish in the lough?—No.

48,205. Is it a place where bait is easily found?—They can get any quantity of bait—of lug bait.

48,206. And buckies?—I don't know about buckies, but they can get any quantity of lug bait.

48,207. Are there mussel beds here?—No, but I never saw such a place as Carlingford for lug in my life; the strand is covered with them.

48,208. (*Mr. Lefevre.*) Do you think that any of the Dublin trawlers trawl in the bay now?—They never come inside the bay.

41,209. You have no reason to believe that there is any trawling here now?—No.

48,210. (*Mr. Caird.*) Are you aware whether there is any regulation which prohibits trawling in Carlingford Bay altogether?—Yes, it is not allowed.

48,211. Then would you prevent it?—Yes

48,212. You have instructions to enforce that regulation and prevent trawling?—Yes.

48,213. Do the fishermen desire to trawl if they had leave?—I don't think they do. There is a line drawn from Cranfield Point to St. John's Point and Dunany Point, and they dare not come to trawl inside that.

48,214. At the time you refer to when you were acquainted with the bay formerly, were there a certain number of trawlers that belonged to the bay?—Yes.

48,215. They did not trawl in the bay?—They did occasionally, but principally outside.

48,216. Is there any complaint among the fishermen that they are prevented from trawling in the bay?—I never heard any complaint. There are a few rocks round the entrance to the lough at Bellagan Point where lobsters and crabs are found; they put down pots for them.

The witness withdrew.

J. Murphy.

James Murphy called and examined.

48,217. (*Mr. Caird.*) You are a fisherman here?—Yes.

48,218. Have you been long acquainted with the fishing in Carlingford Lough?—Yes, I have been fishing for 28 years and I never missed a season.

48,219. You have been constantly fishing all that time?—Yes.

48,220. Do you remember when there was trawling in Carlingford Lough?—I never recollect any trawling here in my life.

48,221. What mode of fishing has generally been adopted here?—Dredging for oysters and herring-fishing, I think, in this harbour.

48,222. There has been no white-fishing?—No.

48,223. No line-fishing?—In the spring of the year there are some lines, but they get nothing but scad and a few codlings.

48,224. It is purely oyster-dredging and herring-fishing?—Yes.

48,225. Has that been all that has been practised within your recollection?—Yes, as long as I can recollect.

48,226. Has the number of boats and men increased or diminished during that time?—The boats have decreased greatly. I recollect that there were 26 smacks from this port at one time and now there is not one to be seen.

48,227. Then they have fallen off altogether?—They have.

48,228. In what way were those smacks employed?—In carrying potatoes to Dublin in the spring of the year and in fishing in July, August, September and October.

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48,229. Was that outside?—Yes, they went to Howth, to Scotland, to Ardglass and other places.

48,230. Were they employed in dredging for oysters in the winter time?—Yes.

48,231. Those large smacks?—Yes, from September to March.

48,232. How many are there now?—There is only one which I have myself.

48,233. What is the cause of that falling off?—The boat owners are generally all poor men and they were obliged to be responsible for fitting them out, and if the season went against them they were broken up entirely.

48,234. Has the opening of the railway put a stop to the traffic in carrying potatoes to Dublin?—Yes.

48,235. That had nothing to do with the yield of fish?—No.

48,236. Have the oyster beds within your recollection continued to be as productive of fish as they were in earlier times?—No, they are less productive than they were 20 or 30 years ago.

48,237. Were there more oysters caught then than now?—A great deal more.

48,238. Has the falling off been very considerable?—There has been a great decrease in the oyster-fishing.

48,239. Was the catch less last year than you recollect it in former years?—I recollect when a boat would get as much as four boats could get last year.

48,240. Were there more boats last year than in former times?—I think there were fully as many.

48,241. Were there as many boats fishing?—I think there were.

48,242. Are the oysters taken into the different ports in this lough?—Yes; wherever the small boats belong to they take them in and put the oysters in the rings.

48,243. Where are those rings situated?—Along the shore from this place down to Warren point.

48,244. Is Warrenpoint the place from which the oysters are chiefly sent to market?—Yes, they are taken from Liverpool.

48,245. You say that on the whole there has been a decrease in the quantity of oysters caught?—Yes.

48,246. When did that decrease begin to show itself?—There have been none caught here for 15 or 18 years.

48,247. None?—No, it was not worth while to catch them until a few years ago.

48,248. Then did the boats begin to be more productive?—They did.

48,249. What was the cause of that?—A boat from London came here and loaded oysters not larger than half-a-crown, and after that the oysters decreased for a long time.

48,250. There is nothing of that kind permitted now?—No, there is not.

48,251. Has that been carried on to a considerable extent?—I never recollect but that one London boat.

48,252. There is nothing of the kind now?—No.

48,253. (*Mr. Lefevre.*) You only recollect that one case?—Yes.

48,254. Do you think that that one cargo could have affected the whole catch?—It was a vessel of 60 tons and she was loaded to the decks.

48,255. From the time they began again to fish the oysters, has the yield continued to increase?—I don't think they were as good last season as they were the year before.

48,256. Do you think the beds are now fished?—I think they are. There are a great number of small boats, and if they find a new bed they scrape it clean in no time.

48,257. Has it occurred to you whether any regulation could be adopted by which that could be put a stop to?—No, they are lifting the oysters all for the market.

48,258. The small boats do the same as the large boats in that way?—Yes.

48,259. Is the regulation which prevents small oysters from being lifted sufficient to protect the oyster beds?—Yes.

48,260. Is that a sufficient regulation without any other of any kind?—Yes.

48,261. Do you recollect the time when the open fishing for oysters was diminished by four months?—We always dredge here from November till March. From that time it is stopped.

48,262. In Belfast Lough they dredge from September until May; are you aware of that?—No, I know nothing about it.

48,263. Were oysters never dredged here within your recollection except from November till March?—No.

48,264. You do not recollect the time when they were dredged from September?—No, unless they smuggled them, but November was the time appointed.

48,265. Then it is an old regulation here?—Yes. That has always been the regulation here, namely to dredge from November till March.

48,266. Can you say, speaking as a fisherman, whether it is the general opinion of the oyster-fishermen in Carlingford that that regulation from the 1st of November till the 1st of March should be maintained?—I think it is.

48,267. Is there any desire on the part of the fishermen to begin earlier or to go on later?—No, there is not.

48,268. Are you aware that oysters are marketable in the other months of the year in which there is an "r"?—Yes, I am aware of that.

48,269. Are they not in good condition in September and October?—They are in good condition in September.

48,270. But you have no wish to fish them?—No.

48,271. Do you think it of advantage to the oyster beds that that regulation should be continued?—Yes, I think so.

48,272. Because it prevents to a certain extent the over-fishing of the beds?—Yes.

48,273. Has it always been the opinion of practical fishermen here that that regulation should be maintained?—Yes.

48,274. In what other business are the fishermen engaged when the oyster-fishing is not going on?—Anything they can earn money at.

48,275. Have they mostly bits of land?—Some of them have, and some of them have not.

48,276. What other employment do they follow; do they follow that of agricultural labourers?—Yes, a good many of them do.

48,277. What do they use their boats for at other times of the year; are they laid up?—Yes, 100 boats are laid up. They are small boats, which they have for the purpose, and they are fit for no other business.

48,278. If the herrings appear on the coast are a good many of them used for them?—They are rather too small for the herring-fishing; they have boats for the herring-fishing.

48,279. They have boats in addition?—Yes.

48,280. They do not use the same boats for herring-fishing and for dredging for oysters?—They do not.

48,281. How many boats are there that are fit for herring-fishing here?—At present?

48,282. Yes?—I daresay there are 100.

48,283. Are they all out fishing this season?—They are all prepared and ready.

48,284. The herrings have not made their appearance yet?—They are just beginning to come now.

48,285. Do I understand that for 15 years there was no oyster-fishing in the bay?—No, there was not. We did not follow it for 14 or 15 years.

48,286. You gave it up altogether during that time?—We could make no wages by it.

48,287. When did it begin again?—About two or three years ago.

48,288. Has the price of oysters improved ?—Yes, very much so.

48,289. Within the last two years ?—Yes, we have a fine market for oysters here.

48,290. Were there no oysters on the ground during the time of which you have been speaking ?—Very little. Trials were often made, but they could get nothing.

48,291. Do you recollect trawling inside the bay ?—I never recollect any trawling in the bay in my life.

41,292. Where did the trawlers from Carlingford trawl then ?—All outside ; they are prohibited from trawling here.

48,293. Has the condition of the fishermen here improved ?—No, it has not.

48,294. You get a better price for oysters ?—Yes, there is a better price for oysters.

48,295. When you were young did you go out line-fishing ?—I was only one season out line-fishing.

48,296. Were they plentiful in the bay then ?—No.

48,297. How many boats were fishing ?—Eight or 10.

48,298. How many men in each ?—Nine.

48,299. What fish did they catch ?—Mostly cod. It was nearly all cod.

48,300. And haddock ?—Yes, a few haddock.

48,301. Did they catch any flat-fish ?—Very few on the long-lines.

48,302. Did they occasionally get a turbot ?—It was very seldom they got a turbot.

48,303. Have they now altogether given up fishing with the long-lines ?—Yes, they have done so for many years.

48,304. How many years should you say ?—I think it is 20 years, or even more than that.

48,305. Did they take many codlings in the bay ?—A good many.

49,306. At what time of the year ?—About October.

48,307. Do you think they do not come in the bay now ?—They may, but it is not worth while to go hand-line fishing.

48,308. At the time you speak of did the men who were fishing make a good earning by it or not ?—I believe they did.

48,309. Did they fish with long-lines ?—Yes, with long-lines outside.

48,310. (*Mr. Caird.*) There were not many caught in this bay ?—Very few.

48,311. Can you give us any information about the artificial oyster bed which has been formed in this lough ?—Yes.

48,312. How long ago is it since it was begun ?—I think about nine or 10 years ago, but I cannot exactly tell the date.

48,313. Were you engaged in the formation of that bed ?—No, I was not.

48,314. You have observed it ?—Yes, I have been on it at different times.

48,315. The proprietor took means to stock the bed ?—There was a man from Dublin who took the oysters down here and sold them to a man named Elmore.

48,316. From whence did he bring his stock of oysters to put on the bed ?—From Arklow.

48,317. What was the object of going to Arklow when he could get them here ?—There were none here then.

48,318. Has that stock continued to breed on the bed ever since ?—Yes, when it is attended to.

48,319. Are they a different description of oyster from those found on the natural beds ?—Yes, they are not of as good quality.

48,320. Would they not bring as good a price ?—They are not of as good quality.

48,321. Does the bed continue to be as productive now ?—Yes, every year.

48,322. It is not supplied with fresh stock ?—No.

48,323. The brood is produced on the bed itself ?—Yes.

48,324. (*Mr. Lefevre.*) Does he buy every year from Arklow ?—Not at all.

48,325. Does he keep the bed exclusively in his own hands, and fish it himself ?—He does.

48,326. (*Mr. Caird.*) Has it been profitable to him ?—I think it has when he has attended to it.

48,327. Is he here ?—No.

48,328. Is there anybody representing him ?—No.

48,329. (*Mr. Lefevre.*) I see the size of the bed is about 50 acres ?—Yes.

48,330. Is it all below low water ?—He cannot get at them until the 20th of March.

48,331. (*Mr. Caird.*) Cannot he dredge them ?—He would spoil the bed if he dredged them.

48,332. Then he picks up the oysters from the bed at low water ?—Yes, they gather them by the hand, and take them up.

48,333. (*Mr. Lefevre.*) Why is it that he cannot go on the bed during the months you speak of ?—The tide does not ebb on them from Michaelmas until March, and he cannot get at them.

48,334. Why ?—The tide in the winter time ebbs only after dark.

48,335. Then the close-time operates rather hardly upon that ground ?—Yes.

48,336. (*Mr. Caird.*) Has anybody else applied to get a licence to make another oyster bed in Carlingford Lough ?—No, I never heard of any.

48,337. Has it not proved so remunerative an investment as to induce other people to follow the example ?—It has not.

48,338. But it still continues ?—Yes.

48,339. Does he let it to anybody to fish ?—No.

48,340. Have you any idea of the quantity of fish he gets from it in one season ?—No, I have not. He gets a good deal some seasons, and then after that he gets careless about it, and strangers make free with it.

48,341. Is there anybody looking after it ?—No.

48,342. Does he pay anything for his licence ?—I don't know whether he does or not.

48,343. (*Mr. Lefevre.*) Do the fishermen pay anything for the rings in which they deposit the oysters ?—Not at all.

48,344. Does each boat have a ring to itself ?—Yes.

The witness withdrew.

PATRICK RICE called and examined.

48,345. (*Mr. Caird.*) Are you a fisherman here ?—Yes.

48,346. Have you long been a fisherman here ?—Yes.

48,347. How long ?—I have been for many years backward and forward dredging. I fished in this season of the year, and then I dredged from November until the 1st of March ; but we fish now for herrings in the lough and outside.

48,348. Have you ever followed line-fishing ?—Often.

48,349. Was there more line-fishing formerly than there is at present ?—No, it was much about the same. There is only line-fishing for ray and codlings and such things as that.

48,350. That fishing is continued now ?—Yes.

48,351. Do most of the fishermen who have oyster-boats occasionally use lines for fishing ?—A good many of them in the slack season go out, but others will not be bothered with it. They go for fish for their own use.

48,352. Is there not a sufficient quantity got to make it an object to the fishermen ?—No.

48,353. It has not fallen off then compared with what it used to be within your recollection ?—Not a bit.

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48,354. It is about the same?—Yes; they can get them still if they follow the fishing.

48,355. Do you remember trawling in the lough?—No, there never was trawling in the lough, I believe.

48,356. Has the oyster-fishing become more productive than it used to be?—Yes, there have been twice as many got for the last two or three years back.

48,357. Are there more oysters than there used to be before that?—Yes, there are 10 for one in comparison with what were got 20 years ago.

48,358. What has been the cause of the increase?—I do not know; I think they were banished away by the big wind we had 25 years ago.

48,359. Was that in 1837; there was a great gale in 1837?—I think it was.

48,360. Is it the opinion of the fishermen here that that gale really injured the oyster banks?—Yes.

48,361. Was the falling off after the gale really perceptible?—Yes, and it was not worth a man's while to go after them; he could not make a shilling a day for 15 or 16 years after that until within the last four or five years.

48,362. Did you then begin it again?—Yes.

48,363. Had you ever on any previous occasion noticed that a heavy gale rendered the oyster-fishing less productive; had you noticed the falling off of oysters in consequence of heavy winds before?—No.

48,364. That was the first time?—Yes.

48,365. Is that the only reason you can assign for the decline of the oysters?—We think that was the reason.

48,366. Was the price of the oysters as good then as it is now?—No, it is rather better now.

48,367. Is it much better?—Yes it is.

48,368. How did you happen to think of renewing your search after the oysters about five years ago, after so long a cessation?—There were always a few going after them, but they made nothing at it until two or three years ago.

48,369. Did the oyster beds then begin to yield better?—Yes, twice as much.

48,370. And there has been a continuance of better yields ever since?—Yes, there has.

48,371. And the number of men and boats has increased?—I think both the men and the boats have increased.

48,372. Then lately I suppose there have been no signs of the oyster beds becoming less productive?—Not a bit.

48,373. They are doing very well?—They are doing very well; but we are going now to the herring-fishing. We do not care to begin oyster dredging until the 1st of November.

48,374. Are the men very particular that they do not bring oysters in that will pass through the ring by which they are measured?—The men here earn 2*l*., 3*l*., or 4*l*. a night in the herring-fishing, and if there was anybody out after the oysters it would be very injurious to the herrings.

48,375. Has the herring fishery increased or diminished within the last few years?—It is much about the same. It looks pretty well this year.

48,376. Are there many boats employed in the herring-fishing when the herrings appear on the coast?—Yes.

48,377. How many?—There are 25 or 30 of them.

48,378. Have you to go far after them?—We get them in the lough and off the Bay of Dundalk at times.

48,379. Have you any winter herring fishery?—Yes, we get some in the lough in the winter.

48,380. In the month of January?—Yes.

48,381. Do you take them then?—Yes.

48,382. Are they in good condition then?—No, they are not.

48,383. (*Mr. Lefevre.*) What condition are the herrings in now; are they full fish?—Yes, the herrings are all full now; they come in to the shore to spawn where they can.

48,384. Do they come inside the bay?—Yes, they are inside the bay.

48,385. Do you ever take many inside the bay?—Yes.

48,386. How far up?—As far up as we might draw our nets ashore at Warrenpoint. We were last night fishing and got great lots of fish.

48,387. Do they come every year into the bay?—Yes, every year.

48,388. What time do you observe that they are spent fish?—About November.

48,389. Have you observed what the nature of the ground is upon which they spawn?—I think they spawn mostly upon the hard ground. They will spawn on the oyster beds as well as anywhere else.

48,390. What depth of water do they spawn in?—We get them in one fathom of water, and from that up to eight or nine fathoms.

48,391. Do you ever sink your nets?—Yes, down to the rocks, and we lose them on the rocks.

48,392. When you are fishing in eight or nine fathoms of water?—Yes, in eight or nine fathoms of water; we let them lie down there.

48,393. Sometimes they touch the ground?—Yes, we let them touch the ground.

48,394. Do you find that the fish when you take them up are in the act of spawning?—Yes, sometimes there is no spawn in them, and sometimes they are full. We can get as many as we can carry in a boat.

48,395. Do you recollect an inquiry taking place here in reference to trawling about 10 years ago?—No.

48, 396. Do you recollect an inquiry here in 1851?—No.

48,397. Was there an inquiry made by the Commissioners previous to prohibiting trawling in the bay?—I heard them talking about preventing them from trawling in this river. They prevented them from trawling between Carlingford Bay and Dundalk Bay.

48,398. And they extended the line to this bay I suppose?—Yes, there is no trawling here.

48,399. Was there any inquiry at Carlingford by the Commissioners?—I cannot recollect.

The witness withdrew.

P. Elmore.

PATRICK ELMORE called and examined:

48,400. (*Mr Caird.*) Are you a fisherman here?—Yes, sometimes.

48,401. Are you an oyster fisherman?—Yes.

48,402. And a herring fisherman?—Yes, sometimes.

48,403. When you say sometimes do you mean that you are not always at it?—No, only when the fish are on the coast.

48,404. What is your employment in other seasons?—Cadging, and fishing in other countries, and working on the land. We have only a limited time for fishing here.

48,405. You are here during the whole time of the oyster-fishing?—Occasionally I am.

48,406. Have you a boat?—Yes.

48,407. Do you find it a profitable business?—It has been very good for the last five or six years, and has done very well.

48,408. Is the take of oysters with your boat increasing?—Yes, and I think the oysters are increasing in the river.

48,409. You are not over-fishing the banks?—No.

48,410. You do not begin to fish for oysters until the 1st of November?—No.

48,411. Do you object to that?—I do not.

48,412. You do not desire to see that regulation altered in any way ?—No, I do not.

48,413. What do you think is the advantage of having the regulation as it is here different from what it is in other places, and giving you four months lest in the year to fish oysters ?—The first cause is thas all the poor men here have little fishing boats ; they make up a train of nets at one time of the year, and dredging would injure them. They follow herring-fishing from this time up to November, and then they go to the oyster-fishing until the first Saturday in March.

48,414. Then it is convenient for the fishermen that that regulation should be enforced ?—Yes.

48,415. Is it of advantage to the oyster banks ?—Yes ; the longer the oysters are left at rest the better they are. If they were dredging in the Bay of Rosstrevor now they would get oysters, but they would not be good for much. Two months hence there will be a great improvement in them.

48,416. They will be in better condition ?—Yes. Oysters at this time are not in good condition. The oysters are only recruiting after having spawned; they are much better from November down to Christmas.

48,417. Are the oysters not in good condition in March ?—They begin to fail then.

48,418. Then from the 1st of November until the 1st of March includes the fishing when the oysters are in the best condition ?—Yes, all throughout Ireland.

48,419. If the herring-fishing was falling off in the month of October, would it be of advantage to you to be allowed to fish oysters in the month of October ?—No, I think not ; the fishermen would have then to get in their harvest and take up their potatoes, and the oysters would remain there still.

48,420. Then it is partly from other circumstances as well as the advantage to the oysters themselves that you wish the present close-time to be continued ?—Yes ; but still it is of advantage to the oyster beds.

48,421. But the oysters have improved ?—Yes, and they have time for themselves still.

48,422. Has the number of men employed in fishing oysters increased ?—They have inceased a few, but not many.

48,423. Was there a good spat last year ?—Yes, it was very good.

48,424. Does not the yield of oysters on the beds vary much, taking one year with another, in consequence of a good or bad spat ?—Yes, according to a good season of spawning, and if they are particular in not taking small oysters.

48,425. Is that carefully looked after ?—It ought to be.

48,426. But is it ?—It is only looked after in a middling way ; I cannot say that it is well looked after at all.

48,427. Would the oyster fishermen themselves find a market for oysters below the size which it is lawful for them to take ?—Yes, they would.

48,428. Who would buy them ?—Some of the carriers who would drive them through the country. I have been in the habit for the last year or two of sending to Liverpool; I get rather a better price there, and they have a better sample of oysters. I think it is as beneficial to the dredgers not to take in the small oysters as to take them.

48,429. Are the dredgers here in the habit of taking small oysters ?—I am certain that if they were all to do so it would be very much to their disadvantage. I do not believe they would bring in any of the small oysters ; any oysters that will go through the ring they do not bring in.

48,430. Is it your habit when you take the dredges up to cull all those which are too small, and to throw them back ?—They take the dredge up and bring on board all that there is in it, but afterwards they take the shovel and throw out the small oysters and the filth.

48,431. Is that done by all the dredgers ?—Yes, unless some individuals may take a sample of small ones of no use to them or any other person.

48,432. Is there no other regulation at all in regard to your oyster-fishing ?—There was another regulation in our neighbourhood. We used to get oysters along the shore.

48,433. When the tide was out ?—Yes, at low spring tides the beds were not covered in July and August ; the water is warm then, and there were widow women and orphans in the neighbourhood who would go out and get 200 or 300 small oysters from the rocks, and they were able to get a small price for them ; that was very well for them when they were in necessity, and was of great service to the country. By the last regulation however they are not allowed to gather them or to sell them during the season. I strongly object to that, because for my own part I do not think it ever did a bit of harm or injury to the dredging part of the river to gather them on the shore.

48,434. That has been put a stop to ?—Yes, for a few years past. Before the regulation there were a good many women and children who were able to earn an odd shilling, but they have now been left destitute and cannot earn a penny.

48,435. Are the oysters in good condition then ?—The rock oysters are in good condition at all seasons of the year.

48,436. (*Mr. Lefevre.*) Why could they not be gathered in the winter ?—The spring tides do not allow them to be gathered then. They might be gathered at eight or nine o'clock in the morning, or at nine at night in the winter, but it is generally dusk and they could not get them. I myself and my father before me have often got a cargo of oysters which have been obtained in that way in the summer season ; we have bought them on the shore in July, August, and September, and have shipped them in September to Dublin.

48,437. Then you desire to have the opportunity of gathering these oysters in September ?—Yes.

48,438. (*Mr. Caird.*) That is entirely discontinued now ?—Yes, it has been for the last six years.

48,439. Is it not the case that within the last five and six years the yield of oysters has increased ?—It is.

48,440. Has the regulation had anything to do with that ?—I think not ; I do not think the gathering of those oysters ever did any harm to the oyster beds.

48,441. (*Mr. Lefevre.*) They must have been in the same condition in the summer as the other oysters ?—Those oysters I mention we used to get to the extent of about 10*l.* or 20*l.* worth and bring them into our own rings until the month of September, when they were sent up to Dublin in very good condition.

48,442. Then they would be in the same condition as the oysters you take out of the dredge ?—Yes.

48,443. They were not fit for eating at once, but you laid them down ?—Yes.

48,444. Do you think that the gathering of oysters ought to be allowed for the purpose of laying them down on other beds until the season for eating oysters arrives ?—It would do in that way, but I think it would be better if they had permission to sell their hundred or two of oysters and make the most of them.

48,445. You would allow them to sell oysters in the close months ?—Yes, I think it would do no harm to anybody ; and I will tell you another thing, there is nothing to be done with regard to the oysters except to prevent the lifting of small oysters by the dredges.

48,446. Do you recollect the oyster-fishing before the disappearance of the oysters in 1837 ?—Yes ; the fishermen think the oysters were very much injured by that gale.

48,447. Do you recollect the gale ?—I was in the south at the time.

48,448. Do you recollect the oyster-fishing before then ?—I do.

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48,449. Were they in great abundance then?—They were not more plentiful than they are now.

48,450. In those times were the people allowed to dredge all the year round?—They did not fish all the year round; they began to fish on the first Monday in November, and they went on until the first Saturday in March. We had seen our error; we saw our oyster beds reducing, and we thought it best to have a regulation made.

48,451. Do you think that in those times the taking of small oysters diminished the total quantity you could take?—I am certain that that was the cause of it. We had no rules or regulations in those days, but we dredged away and sold all we got. We could get three prices for the oysters in the one ring, but now we have only one price.

48,452. You say there has been a good appearance of herrings here this year?—Yes.

48,453. How long is it since you had a good year?—I suppose it will be 16 years ago. We have not had a better appearance for the last 16 years than we have now. I mean inside the bay.

48,454. But every year you have had them outside?—Yes.

48,455. But it is 16 years since the herrings appeared in great abundance up the bay?—We used to get a few of them, but not so many for the last 16 years as we got this morning.

48,456. How long does the herring season last here?—Generally until November.

48,457. From September?—From any time from Lammas when we can see an appearance of herrings. If they get them they continue fishing.

48,458. Have you herring nets of your own?—I have got a new train and a part of one.

48,459. What do you consider that you can earn by the oyster-fishing during the season?—Some seasons we can make 5*l.* or 6*l.* by it, clear, from November to the first Saturday in March.

48,460. Five or six pounds?—Yes, and 7*l.* Some boats will make more than others. You may have a better dredge than I, and may get more.

48,461. Do you consider that 6*l.* would be the average?—Yes, that is as near as I can go.

48,462. How many dredges do you work in your boat?—One dredge; our ground is very soft.

48,463. How many men are there in each boat?—Three, but some of the big fishing-yawls have five.

48,464. Is one more occupied in dredging?—Yes, and one is engaged in culling the oysters. The chief thing wanted here is to prevent the dredgers from taking the small oysters.

The witness withdrew.

H. Elmore.

HENRY ELMORE called and examined.

48,465. (*Mr. Caird.*) Have you heard the evidence given by the previous witnesses?—Yes, and I think that all they have stated is quite correct.

48,466. Do you desire to add anything to what has been stated by the previous witnesses?—I do not know of anything else that I could say.

48,467. You agree generally with what they have stated?—Yes.

48,468. Is there any point upon which you desire to offer an explanation?—It is our opinion,—the opinion of the whole of us,—that we should like to maintain the short season, and that we ought to cull the small oysters, and put a stop to the taking of the small oysters.

48,469. You desire regulations to restrict you upon those points?—Yes; if we are allowed to take the small oysters we shall ruin the place altogether.

48,470. You would restrict the fishing from March until November?—Yes.

48,471. That is the opinion of all the fishermen in this lough?—Yes, we think the season is long enough for the number of men employed in it. The fishery would not bear a longer season, they would work all the oysters out if they were eight months fishing them. The oysters also improve in the months which have been extended for a close-time.

48,472. You find the oysters in better condition?—Yes.

48,473. Have you seen the oysters gathered on the rocks during the summer months?—Yes.

48,474. Are they not in good condition?—Yes, in the summer.

48,475. Would they not be in good condition on the banks at the same time?—I daresay they would.

48,476. Are the rock oysters of the same size as the oysters that are dredged?—No, they never grow as large as those which are dredged.

48,477. Are the oysters which are found here of the same size as those which are found in Belfast Lough?—They are pretty large here, but there are some parts of the river where they are far larger than others. On the soft ground they grow the best.

The witness withdrew.

P. Elmore.

PATRICK ELMORE recalled and examined.

48,478. (*Mr. Caird.*) The close of your fishing for oysters is the 1st of March?—We generally stop upon the first Saturday in March.

48,479. Are you in the habit of fishing the rings in which you deposit the oysters after the close of the season?—If we catch 50,000 or 60,000 we are in the habit of laying them down in our rings, and we cannot get them until the close season is over.

48,480. Does anybody prevent you from taking them away from those rings when they are not upon the oyster beds, but in the rings?—Yes, the Coast-guard prevented us last year.

48,481. Would it be very convenient for the oyster fishermen here that they should be allowed a certain time within which they should be able to take away the oysters they have put within the rings?—Yes, without that they get no market for their oysters at the latter end of the time; nobody can buy them.

48,482. What period would be sufficient to enable you to get them all away?—We should want until the latter end of April.

48,483. You would require more than a month?—Yes, perhaps six weeks. A man cannot sell his oysters all in one day; he must wait for a market.

48,484. You desire to have the power of shipping the oysters after the close of the season; I mean those oysters which you have caught from the oyster banks during the open season?—Yes.

48,485. That would be convenient for the fishermen here?—Yes.

48,486. (*Mr. Lefevre.*) What was the price of the oysters last year?—The price during the season last year was from 23 to 25 and 26 shillings. My brother bought 500*l.* worth and could not get them away.

The witness withdrew.

Lieut. M. Knox, R.N.

Lieutenant MARCUS KNOX, R.N., recalled and examined.

48,487. (*Mr. Caird.*) It has been stated by the fishermen that it is a hardship upon them that the oysters they catch up to the close of the season, and which they allege they deposit in rings until they can be sent to the market, are not allowed to be sent away after the regular season for catching oysters has

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closed. Are you aware if there is any objection to allow them a longer time for sending their oysters away?—It is not allowed at present.

48,488. (*Mr. Lefevre.*) Do you consider that the first byelaw laid down by the Commissioners in reference to the Carlingford fishery prohibits it?—I consider that it does—it prohibits me from allowing any removal after the 1st of March.

48,489. You so interpret it?—Yes.

48,490. Do you consider it necessary that it should be so carried out?—It ought to be carried out in order to keep a close season. If the oysters in those rings were left open for another month they might as well be left open altogether. I think there would be no objection to allow a week or a fortnight for the purpose of enabling them to sell their oysters, and to prevent them from forcing them upon the market at a low price.

48,491. You think without any disadvantage to the fishery the fishermen might be allowed an extension of a week or ten days for the purpose of getting the fish they have already caught sent to the market?—Yes, I think so, but no other oysters should be caught and put there.

48,492. You think it would be objectionable if it were extended to a greater length than that?—I think it would lead to fishing clandestinely.

48,493. It would lead to fishing on the banks after the season had closed?—Yes, both to fishing and dredging clandestinely.

48,494. The byelaw to which you refer is this: "That between the 1st day of March and the 1st day "of November in any year it shall not be lawful for "any person to dredge for, take, catch, or destroy any "oysters, or oyster brood within the said lough of "Carlingford, or off or from any of the shores or rocks "of the said lough, and any person offending against "this byelaw shall for each such offence forfeit and "pay a sum of five pounds?"—Yes.

48,495. You consider it comes within the words "take off or from any of the shores?"—Yes, it comes within the meaning of that byelaw.

48,496. Have you ever taken the opinion of the Commissioners upon it?—No.

48,497. Has it come within your observation that the oysters which have been left in those rings, have remained unsold at the end of the season?—There were some left there last year. They made a representation to me and I allowed them a week upon my own responsibility.

48,498. Did they get them away?—Yes.

48,499. At the commencement of the week were there a considerable number of oysters in the rings?—No, only a few; there were about two or three bushels and the men sunk them I think.

48,500. Do you think there has been any dredging at night after the season has been over?—There was.

48,501. Was there during the week you speak of?—I cannot tell, but I think about that time there was. I had information that there had been, and I myself heard two or three boats pulling in the lough one night. I went off after them, but the boats got away. I went off myself to look after them. This year before the end of the season I will refer the matter to the Commissioners and ascertain from them how I am to interpret it.

The witness withdrew, and the inquiry was adjourned until the 16th of September, at Dundalk.

Dundalk, Louth, Friday, 16th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

DUNDALK.

T. Maginnis.

16 Sept. 1864.

THOMAS MAGINNIS called and examined.

48,502. (*Mr. Caird.*) Have you long been a fisherman here?—It is 25 or 26 years since I was first able to go to fish.

48,503. Are you well acquainted with the whole of the fisheries in Dundalk Bay?—Yes, from Clogher Head down to the Boyne with long lines.

48,504. How many boats are there engaged in fishing here?—There are eight boats belonging to our place; there are seven at Giles's Quay, and at Annagaussen there are five or six.

48,505. Can you tell us the number of boats engaged in the fishing all round the bay?—There are about 15 or 16 at Giles's Quay, eight of which are at the line-fishing, and there are six at Annagaussen, and 14 or 15 fishing off Clogher Head.

48,506. There are between 30 and 40 altogether?—Yes.

48,507. How many men are there in each boat?—Between five and six.

48,508. Are they all long-line fishermen?—Yes.

48,509. Is there no other kind of fishing adopted in the Bay of Dundalk except line-fishing?—No.

48,510. Twenty years ago were there more boats fishing in the bay than there are now?—Yes, double what there are now.

48,511. In your opinion the number of boats engaged compared with what they were 20 years ago has diminished?—Yes, it has.

48,512. Has the same kind of fishing always been adopted here?—No.

48,513. Have there ever been any trawl fishermen fishing in the bay?—No. There was one trawl-boat at Dundalk once.

48,514. Is that boat still here?—No.

48,515. Why is that; is it in consequence of the regulation which has been adopted to prevent trawling in the bay?—I suppose so.

48,516. Was the bay much trawled before tha regulation?—Yes, I have seen eight or nine boats in it at one time.

48,517. Were they boats belonging to the place?—They were boats from Clogher Head and Balbriggan.

48,518. Of what size were they?—From 10 to 15 tons or more.

48,519. How long ago is that?—Ten or 12 years or less.

48,520. When was the restriction imposed by the board in Dundalk?—In 1851.

48,521. Since that time has there been no trawling inside?—No.

48,522. Can you tell us if the supply of fish has increased or diminished since 1851 in this bay?—The fish are not as plentiful in the bay as they were at that time.

48,523. There are not as many fish to be got in the bay now as there were before the restriction was imposed?—No, nor in any place out in the deep. We cannot get them more there than in the bay.

48,524. Did the trawlers at that time catch the same description of fish as you did with the long-lines?—Yes.

48,525. Do you get turbot and soles?—Turbot, soles, plaice, and dabs.

48,526. The same kind of fish?—Yes.

48,527. Have you trawled in the bay?—No, but I have been with them. We go out to protect our lines.

48,528. Is the bottom soft and easily trawled?—It is.

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T. Maginnis.

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48,529. Do you think, as a long-line fisherman, that it has been of advantage to you to have the restriction established against trawling in the bay?—I think it would be a great improvement to the fishery if there was never a trawl-boat in the bay. The haddocks spawn in the deep, or at any rate we calculate that they do.

48,530. Do they trawl outside?—Yes, outside beyond the headlands.

48,531. Beyond the line of restriction?—Yes.

48,532. How many trawl there now?—Twenty and 30 in a stretch.

48,533. Do they ever get foul of your lines?—Yes, they have taken the lines at Clogher Head. They have taken many lines both this season and last.

48,534. Do you fish on the same ground as that upon which they trawl?—Yes.

48,535. Do you get plenty of fish there now?—We used to get a power of fish, but we do not get it now. We get an odd whiting and a few codfish.

48,536. Then doing away with trawling has not increased the supply of fish in the bay?—It is the trawl-boats that have done away with the fishing altogether.

48,537. There has been no trawling since 1851?—Not in this bay, but what signifies that?

48,538. Do you go far out to sea?—We go in 21 fathoms of water.

48,539. How many miles from the headlands?—About nine or ten from the Mourn shore.

48,540. Do you find plenty of fish when you go far out?—Indeed we do not.

48,541. Is there any particular kind of fish that has decreased more than another?—Yes, the haddocks have gone away altogether.

48,542. Do you get as many cod as you got formerly?—No, nor one-half as many.

48,543. Is the quality of the fish as good?—Yes, but we get very few of them. We used to get 50 or 60 some nights, and now we only get six, seven, or eight.

48,544. Is the price the same as it was formerly?—The price is dearer and the fish are still getting dearer. We have been getting 15*s.* and 16*s.* a score for haddocks, and we used to sell them for 10*d.* and 1*s.*

48,545. Are your boats better?—Yes.

48,546. And your lines longer?—Yes, we have better lines altogether.

48,547. The whole of your tackle has improved?—Yes.

48,548. (*Mr. Lefevre.*) What is the size of your boats now?—They are good-sized yawls.

48,549. How many men are there in them?—Five or six. They are about 23 or 24 feet long.

48,550. What sail do they carry?—About 30 yards of lug sail.

48,551. (*Mr. Caird.*) A single lug sail?—Yes.

48,552. You are a herring fisherman also?—Yes, sometimes, but only very seldom.

48,553. Has the herring-fishing within the last 20 years improved or diminished?—They are scarcer than they were 20 years ago; they are a good deal scarcer in the bay.

48,554. Is there not a good herring-fishing going on now?—Yes, at present.

48,555. At this moment?—Yes, and they are fine herrings too.

48,556. Have you been out at the herring-fishing?—I have not been out yet.

48,557. Where are the boats getting them now in the bay?—Near Giles's Quay, in three fathoms of water.

48,558. Are they large shoals of fish?—Yes, they come in great quantities. Some of the boats have got 14 and 20 maze.

48,559. Then the prospect of the present season is a good one?—Yes, it is.

48,560. Does it vary from year to year?—It does.

48,561. Has there been no regular falling off in the herring-fishing such as you have described in the white-fishing?—No.

48,562. From what direction do the shoals come?—From the Carlingford shore, and they go in a southerly direction.

48,563. How long do they remain on your shore here?—They stop here sometimes until near Christmas.

48,564. Do they come in July or August?—They always come in the latter end of August.

48,565. Then you have two or three months fishing?—Yes.

48,566. Is it a very profitable fishing for the fishermen?—Yes, it is the best they have.

48,567. The best fishing you have?—Yes.

48,568. Is it better than all your other white-fishing?—It is indeed.

48,569. Do boats come from other parts of the country?—Yes, from all parts, from Clogher Head.

48,570. Do the Scotch and Manx boats come here?—Very few.

48,571. Is it only the Irish boats?—Yes, only the Irish boats fish here.

48,572. Do you fish entirely with drift nets?—Yes.

48,573. Do you never use a seine net for catching herrings?—No.

48,574. Have you any regulations with regard to the time at which you shoot your nets?—Yes.

48,575. What are they?—We do not shoot them until after sunset.

48,576. You never shoot before sunset?—No.

48,577. Is there anybody to enforce regulations as to that?—Yes.

48,578. Who?—The men themselves do it.

48,579. The men agree among themselves not to shoot before sunset?—Yes.

48,580. They believe it would be injurious to the fishing if they did?—Yes.

48,581. And they generally observe that rule?—Yes, it is never broken.

48,582. When do they take up their nets?—Before sunrise.

48,583. Is there any officer to enforce any regulation among you?—No, there is not.

48,584. Is there anyone to inspect the size of the mesh of your nets?—Yes.

48,585. Who?—The Coastguard inspect them sometimes.

48,586. What is the size of your herring nets?—I do not know what the exact size is; it is the right size.

48,587. Is it an inch mesh?—Yes.

48,588. Do you buy all your nets from Scotland?—No, we do not, but we have been getting them lately from Scotland, and they are the best nets.

48,589. Are they made of soft twine?—Yes.

48,590. Do you use flax nets?—Yes.

48,591. Do you make them yourselves?—No, they are made in Carlingford and sold.

48,592. Have you any lobster fishery in the bay?—Yes.

48,593. Is it a good one?—Yes.

48,594. Is it increasing?—They are getting them plentifully, but there are only a few men fishing them.

48,595. Is it not a profitable fishery?—It is, but the man the land belongs to will only allow certain people to fish for them.

48,596. Are they only found on certain parts of the coast?—Yes.

48,597. On a certain person's land?—Yes, where the coarse ground is.

48,598. Does he charge anything for fishing?—No.

48,599. He only gives leave to certain people?—Yes.

48,600. Is the supply of lobsters increasing or diminishing?—They have been very plentiful this season.

48,601. It is rather a privilege, then, for a man to get leave to fish for those lobsters?—It is a very good fishery.

48,602. Do the fishermen make money by it?—Yes.

48,603. Is there plenty of bait to be had here for fishing?—Yes.

48,604. What kind of bait?—Mussels or lug.

48,605. There is no want of it?—No; mussels are rather scarce.

48,606. Is the condition of the fishermen better than it was 20 years ago?—It is not; I think it is a deal worse.

48,607. Is there any suggestion you could make to us to improve the condition of the fishermen by enabling them to make a better business of it?—I do not know.

48,608. Is there any complaint you have to make as to any restriction upon you?—No, except that we think the trawl-boats are doing away with the spawn of the haddock.

48,609. You imagine they do you harm?—Yes, we think they do away with the spawn of the haddock.

48,610. Have you ever seen them taking up spawn?—Yes, I think I have. I have been to see their trawls when they have been going away with our lines. I have seen them haul the trawl in, and I have seen a great deal of spawn upon it when it has been hauled up in the bay.

48,611. How long is it since they came off your coast to trawl?—Fourteen or 15 years ago they were very numerous here; they came from all parts to fish here.

48,612. Are they numerous here now?—Not here, but in the deep they are.

48,613. They are numerous off your shore outside?—Yes.

48,614. Was it the Dublin Bay fishermen who came here?—Yes, and the Balbriggan fishermen.

48,615. Have they been in the habit of coming here for 15 or 16 years?—Yes.

48,616. Were they in the habit of coming previous to that time?—Not as many of them as now, not half as many as now.

48,617. Are they increasing in number?—They are.

48,618. Then if they are increasing in number they have had a good business of it?—They will not long have a good business of it, they will soon get it all scraped away.

48,619. (*Mr. Lefevre.*) What is the size of the vessels they have?—From 50 and 60 to 70 tons.

48,620. Are they much larger than those vessels that came trawling in the bay?—Those large boats did not come here.

48,621. They were not in the bay?—No, they were outside.

48,622. Do you think the byelaw sufficient to prevent trawling in the bay?—Yes, it has prevented it altogether in the bay.

48,623. Do you think that the large class of trawlers do you harm by trawling outside?—Yes, I think they do; they do away with the spawn of the codfish and haddock.

48,624. What depth of water do they trawl in?—In 26 and 27 fathoms.

48,625. Do you think the cod and haddock spawn out in that depth of water?—Yes, I think so. They never spawn in shoal water. It is generally outside that they are caught.

48,626. I think you said that on one occasion you went to cut away the trawls inside the bay?—Yes.

48,627. When was that?—When they had liberty to trawl in the bay.

48,628. How long ago?—In 1850 or 1851.

48,629. Before the regulation was made?—Yes, earlier than that a good while. They were going to sink us in the bay.

48,630. When did you observe that the diminution of the haddock first began?—The haddocks were very numerous in this bay always.

48,631. When did you observe them falling off?—They have been falling off for the last two or three years very much indeed; there are none at all.

48,632. Have they not been falling off longer than that?—No.

48,633. Have they fallen off as much within the bay as outside?—No, there was a time when there was always a good pull of very large haddock in the bay, but they are all away now. We used to take haddock of 3 or 4 lbs. weight in the deep, and there are none at all there now.

48,634. Have the cod been falling off?—Yes.

48,635. When did you observe the falling off to begin?—Three, four, or five years ago.

48,636. Before that time had you plenty of them?—Yes.

48,637. And plenty of haddocks too?—Yes.

48,638. Did you give evidence in the inquiry previous to the making of the byelaw?—I gave evidence 12 months ago.

48,639. Do you recollect the inquiry taking place here in 1851?—No, I do not.

48,640. Was there an inquiry here 12 months ago?—Yes, there was.

48,641. What was it about?—About a company here who wanted to set up a trawling boat. We got notice that the commissioners intended to inquire into the state of the fisheries here. They came down from Dublin.

48,642. Was the proceeding on the part of the company opposed by the fishermen?—Yes, men from all parts belonging to the long-line fishery opposed it.

48,643. Where do you send your fish to market?—It goes to Dublin and Liverpool.

48,644. Does it come to Dundalk?—Yes.

48,645. Is it bought upon the quay?—Yes, by men who send it to all parts.

48,646. Do you fish inside the bay or outside?—In the winter season I fish outside the bay mostly, but in the summer time I fish inside.

48,647. When do you begin to fish inside?—In March.

48,648. You fish throughout the summer in the bay?—Yes; in the winter for cod, whiting, and haddock.

48,649. I think you told us that you caught flatfish?—Yes.

48,650. Where do you catch them?—Inside the bay.

48,651. With long-lines?—Yes.

48,652. What do you catch?—Fifty or 60 pair of soles sometimes.

48,653. Is that very rarely the case?—No, they are very plentiful. Four or five years ago they were very numerous.

48,654. They have been numerous for the last few years?—Yes; but there are fish that cut away our lines. The dog-fish take them away and cut away the lines altogether.

48,655. In what depth of water do you take soles with the long-lines?—In from 14 or 15 up to 16 or 17 fathoms of water.

48,656. Do you ever take soles outside the bay?—Yes, but only very few of them. We may get a few pairs.

48,657-8. What price have you been getting for soles this last season?—We sold them at 6*d.* a pair some years ago when they were plentiful, but we can get 2*s.* or 2*s.* 6*d.* for them now.

48,659. Do the fishermen own any land?—No, they have no land or anything except the houses they live in.

48,660. Are they fishermen all the year round?—Yes, they have nothing but what they get by fishing.

48,661. How long is it since you had a good herring season in the bay before this year?—Last year was a pretty good season.

48,662. Before that I think you told us the herrings had not been numerous for some time?—The season before last year was a bad season, and so also was the season before that.

48,663. It is only occasionally that the fish come into the bay in great numbers?—That is all.

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48,664. Do you often go outside the bay for them?—Not often.

48,665. You wait till they come in the bay?—Yes.

48,666. Do you go into Carlingford Bay for them?—Yes, and off Clogher Head.

48,667. And into Dundrum Bay?—Yes.

48,668. Do you fish with the long-line in Dundrum Bay?—No, all by the side of it.

48,669. Are there any long-line fishermen in Dundrum Bay?—Yes, there are a power of boats fishing there with long-lines.

48,670. Can you say how many?—I have seen 12 or 14 and even more than that at one time fishing.

48,671. There is no want of fishing in the bay?—No.

48,672. Do you find herrings here in the winter at all?—Yes, we see them. The codfish throw them up when we take them in the boat.

48,673. Do you go out with the drift-nets in the winter?—No.

48,674. Then do you only see the herrings when the codfish throw them up?—Yes.

48,675. Where do you get the codfish at that time?—In eight or nine fathoms of water, outside the bay.

48,676. (*Mr. Caird.*) You say the best time for fishing the bay with your long-lines is the winter?—Yes.

48,677. Have you been in danger of having your long-lines cut by the dogfish?—Yes, we could not fish at this season of the year; they destroy our lines.

48,678. You do not get as good a fishing of soles as you did formerly when you used your lines in the night?—No.

48,679. But that is not from any want of soles, but because you cannot fish properly for them?—We could get more soles if we could fish for them at night, but we cannot do it on account of the dogfish.

48,680. You think there are plenty of soles in the bay if you could catch them?—I don't think they are so plentiful as they were, or near it.

48,681. (*Mr. Lefevre*) Do you mean that there is the same falling off inside the bay as outside?—Yes, with regard to sole and haddock.

48,682. And also with regard to cod?—There used to be a deal of haddock, and we get a deal of haddock and cod after a gale.

48,683. Do you catch any codlings in the bay?—Yes, a great many.

48,684. Of what size are they?—Fourteen pounds weight, and from that down to 6 and 7 lbs., and from that down to 2 and 3 lbs.

48,685. As low as 2 lbs.?—Yes.

48,686. What length would a codling of that size be; would it be less than a foot long?—One of 2 lbs. would just be about a foot long.

48,687. Is that the smallest size you get?—Yes.

48,688. When do you catch them?—From about this time until April.

48,689. In the bay?—Yes.

The witness withdrew.

N. Crosby.

Nicholas Crosby called and examined.

48,690. (*Mr. Caird.*) You are a fisherman?—Yes.

48,691. Do you fish from the same village as the previous witness?—Yes, I do.

48,692. Do you agree generally with the evidence he has given?—I suppose so.

48,693. Is it the result of your experience that the fishing in the bay has diminished?—It is more plentiful.

48,694. More plentiful?—Yes, it is more plentiful than when the trawlers were in the bay.

48,695. When did the trawlers cease to come here?—Since the time of the restriction, whenever that was.

48,696. Since the time the restriction was passed?—Yes.

48,697. (*Mr. Lefevre.*) That was in 1851?—Somewhere about that time.

48,698. (*Mr. Caird.*) Has the quantity of fish caught in the bay increased since that time?—Yes, flat-fish, plaice, and turbot also.

48,699. Are the fishermen getting a good fishing now?—Yes.

48,700. Do the people of Dundalk complain that they do not get fish here?—Yes, but we send them off to Dublin and Liverpool.

48,701. Is it because you can get a better market for them elsewhere that you send them to other places?—Yes.

48,702. Has the quantity of fish caught here increased for the last 10 years?—Yes, the quantity of plaice has.

48,703. Is plaice the only kind of fish that has increased much?—Yes, but we get plenty of cod from this time of the year up to Candlemas.

48,704. Do you catch the plaice on your lines?—Yes, in the daylight; they will take no bait at night.

48,705. The previous witness said he made the best fishing at night?—There is a time of the year for that.

48,706. Do you find that you make the best fishing in the daytime?—Yes, with regard to plaice-fishing. For round fish, for cod, haddock, and whiting, it is best at night.

48,707. What description of fish is most plentiful in the bay?—Do you mean in the winter time?

48,708. I mean all the year?—In summer, mullet, salmon, trout, and plenty of eels.

48,709. Do you use seine nets in the bay?—There are not many of them here.

48,710. What is the size of the mesh of those nets?—Seven inches.

48,711. Do you get any fine cod in the bay?—Yes, we do.

48,712. Have they increased?—They are not as plentiful as they were at one time, or near it.

48,713. When did they begin to diminish?—Four or five years ago they were more plentiful than they are now.

48,714. Do you get turbot in the bay?—Yes, they have been very plentiful in the bay for two or three years.

48,715. Are they plentiful now?—Yes, when the water is muddy.

48,716. Are they of fine quality?—Yes.

48,717. Has the number of fishermen increased in the bay in consequence of the fish being plentiful?—There are twice as many as when I first went.

48,718. Then the quantity of fish caught here is increasing?—It is with regard to the plaice-fishing.

48,719. And codfish also?—Codfish are not as plentiful as they were four years ago.

48,720. Do you follow the long-line fishing all the year round?—Yes, the whole year round.

48,721. You have no other occupation?—Not a bit. I have been fishing with long-lines since I was 14 years of age.

48,722. Is the price you get for your fish now as good as it was then?—It is as good as it was 14 years ago.

48,723. It is no better?—No, not a bit. If we get haddocks in the winter time we get a good price for them.

48,724. Have you any complaint to make to us in regard to any mode of fishing practised here which you think injurious to you as a fisherman?—When the trawl-boats were coming into the bay they destroyed the fish and the lines likewise.

48,725. But there are no trawl-boats coming into the bay now?—No, not one.

48,726. There have not been since the year 1851?—No; but I have seen them taking our lines and dragging them with the tide.

48,727. You have no complaints of that kind to make now?—No.

48,728. Have you any other complaint to make?—No; I have summoned them for taking my lines and robbing the boat's crew. I caught them in the fact.

48,729. Is there any mode of fishing that destroys the brood or spawn of the fish?—No, nothing in the world. There were bow-nets used in the bay, but they have been done away with.

48,730. What were they?—They were hauled against the flood. They would take fish as small as a button. They fed the pigs with them.

48,731. You have no complaints of that kind to make now?—No.

48,732. (*Mr. Lefevre.*) You think that since trawling has been done away with, the quantity of plaice has been increased?—Yes.

48,733. But that of other fish has not?—No; two or three years ago the haddock were very plentiful, but for the last three years they have been getting scarcer and scarcer every day.

48,734. They have disappeared in the bay as well as outside of it?—Yes.

48,735. With regard to the soles, have they decreased?—They are not as scarce as they were four or five years ago, but we cannot work for them on account of the dogfish.

48,736. Do you find the dogfish close in-shore?—They come into the bay when we are fishing in the summer season.

48,737. Do they come in after some other fish?—They come in after every sort of fish; they are the most ravenous fish we ever see.

48,738. How many soles have you caught in a night?—Thirty pairs.

48,739. How many plaice?—Seven or eight score, some of them large and some small fish.

48,740. Do the trawlers bring their fish into Dundalk?—Yes.

48,741. Are there as many flat-fish brought in by the long-line fishermen as there were?—Three times as many.

48,742. What time of the year used the trawlers to fish in the bay?—Generally from the 1st of June until the latter end of November.

48,743. In the winter?—No, they did not fish in the winter time.

48,744. Do you think that trawling outside the bay does you any harm?—Sometimes it does, if they are fishing when the fish require peace. Plaice-fishing is over about the month of November. After that you would not get one if you were to offer a sovereign for it.

48,745. Do they leave the coast?—No, they lie up and live on suckers.

48,746. They will not take your bait?—No. When the haddock fishery begins, as soon as the hard weather comes we follow them into the deep.

48,747. What harm does trawling outside do you?—If we go there at two o'clock in the morning and work our lines, the trawlers come and sweep them away when we are not watching them.

48,748. Do you often fish at night in the winter time?—Yes.

48,749. Did you lose any this last winter?—No; I was never in much danger in that way.

48,750. You have not lost any yourself?—No.

48,751. Then with that exception you do not think the trawlers do you much injury?—They would not do us much injury if they would not come upon our lines. At the same time they take away and catch the fish we should get.

48,752. They take the fish you would get?—They take any kind of fish, and spawn especially, if the net is dirty. They will take it then, no matter how large the mesh is. If the net happens to be dirty it will sweep up all the spawn.

48,753. Have you seen them take the spawn?—Yes.

48,754. What kind of spawn?—Codling spawn and black sole spawn.

48,755. You mean small fish?—Yes.

48,756. In what depth of water do they take the young cod?—In about 25 fathoms; they would take it anywhere it is. They would pick up a button from the bottom.

48,757. At what time of the year?—Any time they put out their net. They would take anything from the bottom.

48,758. Have you observed any time of the year more than another when the trawlers take small fish?—They take them any time they put their net out; they take them every time they come across them.

48,759. But is there any particular time in which they take more small fish than at another time?—In the spring time of the year they take most; that is the time the fish spawn.

48,760. Have you even seen them haul up their trawls?—Yes.

48,761. Have you been trawling yourself?—No, but I have often come alongside of them when my lines were in danger of being taken.

48,762. What proportion of small fish would they take up?—A hundred in number.

48,763. A hundred small fish?—Yes.

48,764. How many big fish?—Sometimes about the same number.

48,765. A hundred big fish and a hundred small fish?—Yes, and sometimes not half of it. If they came upon ground that had not been trawled upon before they would take more than if they were working upon ground which had been trawled upon before.

48,766. What time of the year are the trawlers in the greatest number off here?—They never trawl until the nights begin to get short.

48,767. Not in the winter?—No.

48,768. What is the length of your long-line?—It has 400 hooks.

48,769. How many fathoms long?—There is a fathom and a half between every hook.

48,770. What bait do you use?—Wórm, oyster, and mussel.

48,771. What are the oysters you use for bait?—They are in the sand, a foot and a half deep; they are what they call sligs or cock oysters.

48,772. (*Mr. Caird.*) Do you find that they make very good bait?—Yes, they are very good bait.

48,773. (*Mr. Lefevre.*) What do you catch the sole with?—With worms.

48,774. (*Mr. Caird.*) You say you do not get plaice in the cold weather?—No, we do not.

48,775. Is that during the whole of the winter months?—We get them for about five weeks before St. Patrick's-day, and for about a month after November.

48,776. Do you get them up till Christmas?—Not until five weeks before St. Patrick's-day, and then they go down to the sand again.

48,777. Do you think they are lying in a dormant state all the winter?—They are.

48,778. They cannot be taken at that time with bait?—No, they would not take bait.

48,779. Can they be taken in any other way?—I believe the trawlers would take them.

48,780. When you cannot take them?—Yes.

48,781. Is there a large supply of them to be found in the winter time if they could be taken?—There is.

The witness withdrew.

JAMES M'GROWTHER called and examined.

J. M'Growther.

48,782. (*Mr. Caird.*) Are you a fisherman here?—Yes.

48,783. Have you long been acquainted with the fishing in Dundalk Bay?—I have been acquainted with it for about 20 years.

48,784. What mode of fishing do you practise?—Long-line fishing.

48,785. Has the supply of fish increased or diminished within that time?—I don't know whether it has diminished, but there are a good many more

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practising it. There are three fishing now for one that there was then.

48,786. There are three times more people fishing now than there were 20 years ago?—There are that number at Black Rock anyhow.

48,787. Does each boat make as good a fishing as it did then?—I think it does in general.

48,788. From that we are to conclude that there is a great increase in the fishing here?—Haddocks have decreased for a while past, but we got haddocks here the year before last when none were got round the coast of Ireland.

48,789. Have any been got this year?—No, not yet.

48,790. Is not the time come yet?—No.

48,791. Were there good haddocks here last year?—Yes.

48,792. Had they disappeared in other parts for some time previous to that?—The small haddock disappeared, but we have got some large haddock which have resorted to the bay for some time.

48,793. Has the cod-fishing continued as plentiful?—No.

48,794. Is the fishing for plaice better?—The plaice are fully as good.

48,795. How is it with regard to turbot?—Turbot are fully as good as they were then.

48,796. Do you remember the time when the restriction in 1851 was established against trawling in the bay?—I do.

48,797. Has it had any effect upon your fishing as a line-fisherman?—I think it did us a great deal of good. It was very right that a stop should be put to trawling.

48,798. Do you think the bay has yielded as large a quantity of fish since trawling was put a stop to?—Yes, it must have done so, because the trawlers take away a great deal of the fish from us.

48,799. But putting together trawl and line-fishing, do you think the fishing with the line alone yields more fish than both together did before that restriction was enforced?—Yes, I suppose it does, because there are more following it now than ever did.

48,800. There are more at it now?—Yes.

48,801. There are more getting a good living out of it?—They are just getting support.

48,802. Are the fishermen in better circumstances than they were 20 years ago?—I believe that 20 years ago they had a good deal more help than they have now. They had plenty of potatoes then and they have none now.

48,803. Do the fishermen here not have potatoe ground?—Yes, but the potatoes have been bad for many years.

48,804. Last year they were pretty fair?—Yes.

48,805. And this year they look well?—Yes, and I hope they will continue to do well.

48,806. Is it a matter of great importance to the fishermen that there should continue to be a good crop of potatoes?—Yes.

48,807. They derive a good deal of their assistance from that?—Yes.

48,808. Have you observed trawling vessels when they are trawling outside the bay?—I cannot say that.

48,809. Do you ever go alongside?—No, they keep far off.

48,810. Have you never been alongside and seen any of them raising the trawl?—I have been close to them.

48,811. Have you ever noticed what kind of fish they had in the trawl?—No.

48,812. Do they bring up spawn or young fish?—They must bring it up.

48,813. But you have not seen it yourself?—No, I have not, but they cannot miss it.

48,814. Do you fish with the long-lines outside the bay?—Sometimes in the winter season.

48,815. On the same ground as that upon which they trawl?—Yes.

48,816. Do they trawl outside in the winter season?—Yes.

48,817. Do you find that when you are line-fishing upon the same ground as they are trawling that their trawl-fishing injures your line-fishing?—Certainly it does.

48,818. Do they get many fish outside the bay?—I cannot tell you that indeed.

48,819. Are there any oysters here?—No, except that kind of oyster we use for bait.

48,820. Are there any oysters for sale as food?—No food is made of those oysters; the poor men use them for bait.

48,821. Do they get abundance of them?—Yes, they do.

48,822. Are they dug from the sand?—Yes, with a spade.

48,823. Have you any complaint to make with regard to any regulation at present in force in regard to the fishing in the bay?—I have nothing to complain of if the same regulations are kept up which exist at present.

48,824. You desire to see them kept?—Yes.

48,825. You think they are for your benefit as a line-fisherman?—Yes.

48,826. Is it a fact that you do not get any plaice during the cold months in the winter?—We get them from the latter end of July until November; then there are no plaice got from the latter end of November or December till the latter end of July.

48,827. That is a long time?—Yes.

48,828. Between six and seven months?—Yes.

48,829. At that time do the trawl fishermen get them?—I do not know, but the plaice are not in season then. I suppose they would get them.

48,830. If plaice were caught at that time do you not think they would be of use for food?—No, I think not.

48,831. Have you yourself ever eaten them at that time?—We get none of them at that time except a few small things which are of no use. It is the haddock and codling we get then.

48,832. Are you a fisherman only, or have you any other occupation?—I have no other occupation.

48,833. All your life you have been a fisherman?—Yes, nearly all my life.

48,834. For a number of years?—For about 20 years.

48,835. You find regular employment all the year round in fishing?—That is all the employment I have to support a family.

48,836. (*Mr. Lefevre.*) You belong to Black Rock?—Yes.

48,837. How many boats are there there now?—We had eight, but there have been two broken up in the place, so that there are only six now.

48,838. How many men are there to each boat?—There are six to two or three, and five to the rest. There are six to three, I believe.

48,839. Are there 30 men?—More.

48,840. How many?—Nearly 50, I believe. There are young men fishing who are not counted in the boats at all, but I am sure there are 50 altogether.

48,841. Are there men belonging to Dundalk who used to trawl?—Yes, but there are none of them here. I don't see any of them here to-day, although they came here in opposition to us the last time the commissioners were down here.

48,842. The proposition which was made then was opposed by the line-fishermen?—Yes.

48,843. Do you bring all your fish into market at Dundalk?—Yes, the fish are generally sent here, except in the winter time, when if the haddocks are plentiful they are sent away to Dublin and Liverpool.

48,844. The general supply is sold on the quay at Dundalk?—No, it is brought into market here.

48,845. And sold in the market-place?—Yes.

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48,846. And then sent off by rail to other places?—There is no great supply sent off to other places except Dundalk.

48,847. The fishing supplies Dundalk?—Yes, and more than Dundalk; some of them go to Carrick and Ardee. There are different markets for the fish. The St. Giles men have a market of their own, but we are nearest Dundalk.

The witness withdrew.

S. Hagan.

STEPHEN HAGAN called and examined.

48,848. (*Mr. Caird.*) You are a fish buyer here?—Yes.

48,849. What description of fish do you buy from the fishermen?—I buy salmon, turbot, sole, and haddock.

48,850. And plaice?—It is very seldom that we buy plaice.

48,851. Have you been for some years a fish buyer in Dundalk?—Yes.

48,852. Do you find that the supply of fish from the fishery in the bay has increased or diminished?—I cannot exactly say.

48,853. Do you find that more fish is offered to you now than some years ago?—I think it is much about the same.

48,854. Is there any decided difference, either last year or this year, as compared with former years?—Not that I am aware of.

48,855. Can you go back previous to 1851 in your recollection of the state of the fish market?—Yes.

48,856. Was there a larger supply of fish at that time when trawling was allowed in the bay than there is now?—I never got any fish from the trawlers here.

48,857. Did they not bring their fish here?—No, it is from the line-fishermen that I have got the best fish.

48,858. Do you know whether the number of long-line fishermen in this bay has increased?—I think there are no fishermen about this place except those who are here at present. I think they are all here.

48,859. Is the price you give the fishermen for the fish greater than it was a few years ago, or does it continue pretty stationary?—I think it is about the same.

48,860. Has no kind of fish increased in price in consequence of scarcity?—Any kind of fish would increase in price if there was a scarcity.

48,861. But is it a fact that no kind of fish has increased?—I suppose it is.

48,862. Is there any kind that has increased in price in consequence of scarcity?—Salmon, or turbot, or sole, or anything would increase in price if there was a scarcity.

48,863. Are there any fish that have increased in price in consequence of scarcity?—Yes, turbot have.

48,864. Are turbot dearer than they used to be?—Yes.

48,865. Do you pay a larger price to the fishermen for them than you formerly did?—Yes, I have done so this season.

48,866. Is there any other kind of fish for which you pay a larger price?—There is not.

48,867. Then the supply is quite equal to the demand here?—I think it is.

48,868. Do you get as many fish supplied to you as there is a demand for in the market here?—I do, and more.

48,869. Do you send some of it away to other markets?—Yes.

48,870. Do you supply the Dublin and Liverpool markets?—We send some to Dublin and some to Liverpool, and sometimes to other places.

48,871. Have you found that the haddock have increased lately?—They have not, I think.

48,872. The last witness told us that for the last year or two they had begun to get haddock again?—They were got here when they were not got anywhere round the coast of Ireland.

48,873. Did you get them?—Not this year or last.

48,874. Do you get turbot here in abundance?—No there are not many unless they are got on the top of the tide.

48,875. Are they fine in quality?—Yes, they are pretty fair.

48,876. Can you give us an opinion as to the advantage or disadvantage of having discontinued trawling in the bay?—I cannot.

48,877. Do you get any lobsters?—Yes, but not about the rocks here.

48,878. Do they not come from the bay?—They come from the Cooley side.

48,879. Are they increasing in quantity?—Yes, they have been more plentiful this year than they have been for five or six years back.

48,880. Then the lobster ground does not seem to have been over-fished?—I don't think it has been.

48,881. You do not get any oysters in the bay at all?—No, only what we get from Carlingford.

48,882. Do you get any mackerel?—Yes.

48,883. Do they come pretty regularly every season?—Yes.

48,884. Have they been got in greater or less abundance of late years?—They have been more plentiful this season.

48,885. In your experience as a fish buyer would you say that the quantity of fish caught on this coast is increasing or diminishing?—I cannot exactly say, but if the men were fitted out better than they are it would increase.

48,886. For what reason do you think so?—I think it would if they had good boats and plenty of lines.

48,887. Are they at present deficient in boats and lines?—I think they are.

48,888. Would that enable them to go further to sea?—It would.

48,889. Would it increase their chance of getting more fish?—I think it would.

48,890. Then you do not attach much importance to the fishing in the bay merely; you think it would be to their advantage to go further to sea?—I think so.

48,891. Do they go far to sea in search of fish?—They do, but that is according to how the weather answers.

48,892. (*Mr. Lefevre.*) Do the boats generally belong to the fishermen?—They do.

48,893. Are many new boats being built?—I think not.

48,894. Are the boats generally in bad condition?—Yes, some of them are.

48,895. Is the gear in bad order?—I don't know. I suppose the fishermen here can tell you better than I can.

48,896. How long have you been here as a buyer of fish?—14 or 15 years.

48,897. Do you know how many purchasers of fish there are here attending the market?—No, I do not.

48,898. Are there many besides yourself?—There are three or four more.

48,899. Is there any considerable quantity sent off by train from here?—There is sometimes.

48,900. But not as a general rule?—No.

48,901. Did you ever send for fish to Dublin to supply your customers?—Yes.

48,902. Then the fish caught by the fishermen is hardly sufficient to supply the market?—Sometimes they catch more than sufficient to supply the market, but when we do get any good fish we send them away to Dublin or Liverpool.

48,903. If your customers want turbot or soles do the fishermen here bring in enough for you?—If they have them we buy them, and if not we send to Dublin for them.

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48,904. Do you often send to Dublin ?—Yes, many a time.

48,905. Do you think that on the whole you buy more fish from the fishermen than you did 14 years ago ?—I think I do. I was buying very little 10 or 12 years ago.

48,906. Your trade has increased, I suppose ?—Yes.

48,907. From your observation of the market do he fishermen bring in more fish than they used to do ?—Well, I cannot say that they do not.

48,908. (*Mr. Caird.*) Do you buy salmon ?—I do.

48,909. Has this been a good salmon year ?—Yes, the best season that we have had since I can remember.

48,910. Were salmon formerly caught in the bay ?—There are very few of them caught in the bay; they are all caught in the river.

48,911. Are they caught with draught nets ?—I don't know with what sort of nets they are caught.

48,912. (*Mr. Lefevre.*) Did you attend the meeting of the commissioners last year ?—No, I was not at home.

48,913. Have you heard many complaints about the supply of fish here ?—No, but I know if we have good fish we have to send them away to other places.

48,914. Is there not a good market here for the best quality of fish ?—No, very seldom.

48,915. Do the fishermen ever bring in soles ?—Yes, they do.

48,916. Do they bring in as many as 30 pairs here in the daytime ?—It may happen that they may not bring in any sometimes.

48,917. Is it very seldom you get soles from the fishermen here ?—Very seldom.

48,918. Have you ever known a fisherman bring in as many as 30 pair of soles ?—No, never.

48,919. You have never seen such a thing in the market here ?—No.

48,920. What would you say is the average supply of soles to the market here ?—I cannot say; I have not seen many for some time back.

48,921. Did you all last year have anything like a supply of soles to the market ?—There was sometimes.

48,922. What do you call a good supply ?—Two or three dozen pairs.

48,923. (*Mr. Caird.*) Does the whole of the catch of the fishermen come to this market ?—Some of them sell them at home, at their own place, and others come here to make a sale of their fish.

48,924. So that all the fish caught in the bay do not come here ?—No, many go away in different directions, and some come to this place.

48,925. (*Mr. Lefevre.*) What would you call an average supply of plaice to the market here ?—We see a pretty fair supply of them sometimes, and we get a great lot of them if there is a good year.

48,926. What would you call a good supply ?—Six or seven creels.

48,927. That is a large supply ?—Yes.

48,928. What would be the average supply ?—Two or three creels would be a fair supply.

48,929. During the summer time ?—Yes.

48,930. Are there none during the winter ?—There are not a great deal during the winter I don't look much after them in the winter because I am then looking after the oyster trade.

The witness withdrew.

F. Prendergast.

FRANCIS PRENDERGAST called and examined.

48,931. (*Mr. Caird.*) Are you a fisherman here ?—Yes.

48,932. How long have you been a fisherman here ?—25 years.

48,933. Are you a line-fisherman ?—Yes.

48,934. A long-line fisherman ?—Yes.

48,935. Do you fish chiefly in the bay ?—Yes.

48,936. Do you remember the time when there was trawling in the bay ?—Yes, I do.

48,937. Did the trawlers have great success then ?—Sometimes they did and sometimes not. They often came in when they had not got a shilling's-worth of fish. I attended a trawl-boat for three years, and 55*s.* worth of fish was the most I ever saw come in with her.

48,938. For one day's work ?—Yes, night and day.

48,939. Do you often make that in your line boats ?—Sometimes I do, and more. Since 1851 I have got 18*s.* a night by haddock fishing.

48,940. Have you got anything like that lately ?—That is about six years ago, but I have caught 21 pairs of soles since 1851 to my own share on the bare sand.

48,941. With the line ?—With the long line.

48,942. Did you never catch that while trawling was going on ?—I never got that to my own share.

48,943. Can you say from your own experience respecting trawling in the bay that it was disadvantageous to you as a line-fisherman ?—I can only say this, that if they had continued trawling in the bay the fishing would not have been worth twopence to us; our bay is too small for trawling.

48,944. Has the bay increased in the yield of fish since an end was put to the trawling ?—Yes.

48,945. Have you been getting more and more every year ?—Yes, thank God for it.

48,946. You are making a good business of it now ?—Yes.

48,947. How many soles do you catch now in a night's fishing ?—We cannot work at the fishing now on account of the dogfish.

48,948. The dogfish injure your lines ?—Yes.

48,949. Could the trawlers fish at a time when you could not fish with advantage with lines ?—Yes. There are a great quantity of dogfish in the bay now, and they tear our lines up; but for the last three years past there never were as many turbot caught in the bay as there have been of late; there never were as many caught within my memory for 25 years.

48,950. Then the supply of fish in the bay is increasing ?—It is of turbot and black sole and plaice.

48,951. Are the turbot you get of fine quality ?—Yes.

48,952. Do you ever fish outside the bay ?—Yes.

48,953. At what time of the year do you fish outside the bay ?—We go from December up to the latter end of March or April.

48,954. Outside ?—Yes.

48,955. You do not find much success in the bay in the cold months ?—No.

48,956. How is that; why did you not go inside instead of out ?—When the days are getting a little lengthened they go to spawn outside and we follow them up to the month of March. The fish all come upon our shore when the nights are getting short.

48,957. They come into the bay ?—Yes, but towards the month of March again they go off the beach and we follow them off the Bay of Carlingford.

48,958. You follow them up to the month of January ?—Yes, we do.

48,959. Do you get good success outside ?—We do at times.

48,960. Do you fish in the same parts that the trawl fishermen frequent ?—Yes; they will be trawling there off the Bay of Carlingford.

48,961. Just at the same place that you are fishing with your long-lines ?—Yes.

48,962. Do you and they interfere with each other ?—Not there.

48,963. They do you no harm there ?—No.

48,964. Then you have no objection to trawling being permitted outside ?—Yes, I have.

48,965. Do you find that you are as successful outside now as ever you were ?—I cannot say we are

altogether, outside, because I remember we used to get 25 or 30 score of haddocks in from about 12 to 15 and 18 fathoms of water, of from one pound to eight pounds weight each.

48,966. (*Mr. Lefevre.*) Setting aside haddock, is the fishery good?—No, it is not.

48,967. When did the falling off begin?—About five years ago. The haddock have come in for the last two years.

48,968. But with regard to the other fish, how is it with regard to cod?—Cod have fallen off too.

48,969. When did they fall off?—We have had a good many of them for the last couple of years in our own bay.

48,970. (*Mr. Caird.*) Another witness told us that the haddock had been better for the last two years?—Yes, in our bay, but last year was much worse than the fishing we had years ago in our bay.

48,971. In the bay?—Yes, we only got very few haddocks in our bay last year.

48,972. One of the witnesses told us it was the best fishing you had?—No, it was not.

48,973. Was it the best you have had for the last two or three years?—Yes; for the last two or three years not a haddock has been got that has not been got in Dundalk Bay. We got from two score to 12 score, and they were sent to Dublin, Belfast, and England.

48,974. Do the dogfish come into the bay now more than they did?—Yes.

48,975. Is that not a sign that other fish are plentiful?—Yes.

48,976. But when they come into the bay you cannot fish for the other fish?—They do no harm to us in the winter time.

48,977. Is it the fact that you cannot fish with your lines when there is a quantity of dogfish in the bay?—We cannot fish with our lines at nights, but in the day they do not meddle with us. The plaice will not take the bait at night, but the black sole will take it. Then, with regard to the haddock, if there is not a breeze from the south and east they will not take the bait from sunrise until the sun goes down, even if we are shooting through millions of them. If there is a south wind to make the water go we can get them at daylight, but if not they will not take the bait until sunset.

48,978. Is it your habit to fish both night and day in the bay?—It is. We follow the fish according to the season they come in.

48,979. The only hindrance you have is when there is a great quantity of dogfish in the bay?—Yes, then we cannot work our lines.

48,980. On account of the quantity of dogfish?—Yes.

48,981. (*Mr. Lefevre.*) When did you observe the increase of dogfish?—A couple of years back; it follows the fish into the shoal water.

48,982. Have you taken many to speak of lately?—Yes; sometimes they do us very great injury. Some of the fishermen have lost half a score of lines, and others have lost all, while others have come away safe.

48,983. (*Mr. Caird.*) Could the trawl be fished with success when there are dogfish on the ground?—I cannot tell.

48,984. The dogfish could not hurt the trawl?—I cannot say anything about that.

48,985. (*Mr. Lefevre.*) Do you belong to Black Rock?—Yes.

48,986. Do you think the fishermen in your place have increased in number?—At the time I went to fish, about 25 years ago, there were about 20 fishermen at Black Rock, and now there are over 40.

48,987. How many are there at Giles's Quay?—I cannot tell you, but I believe there are double the number there.

48,988. You said you attended upon a trawl?—Yes.

48,989. How many trawlers were there then?—One from Dundalk and three from Clogher Head, and they came from the Bay of Carlingford, and from Dundalk, and from all parts.

48,990. How many came from Carlingford?—I have seen six in the bay.

48,991. Were they generally trawling in Dundalk Bay?—They did sometimes, according to the season.

48,992. Was that put a stop to?—Yes, our bay was swept clean, because it is only a small bay of sand. It is a rough part from Giles's Quay down to Salterstown.

48,993. What depth of water is there there?—From five fathoms down to two and a half fathoms on the rough ground.

48,994. Did the people who were trawling discontinue it after the regulation was established?—Yes, they were not allowed to trawl.

48,995. Did they give up their trawl-boats and take to other modes of fishing?—I think they took to long-line fishing. I do not know whether they followed it outside, but they were not allowed inside.

48,996. Did those boats trawl most outside the bay or mostly inside the bay?—They took the trawl in any part where it was not coarse ground, but I never saw them in Dundalk trawling outside the Point. I do not know what may have been the case with the Clogher Head or Carlingford men.

48,997. Do the line men bring in anything like the quantity of flat-fish that the trawlers used to bring in?—Yes, I think they bring in more. No matter where we shoot now we can get a day's wages.

48,998. When the trawlers were trawling in the bay did the hookers bring in any flat-fish at all?—Yes, they did.

48,999. Then, taking the whole supply together, is more brought into the market now than there used to be?—I think there is; indeed I am sure of it.

49,000. Only one of the trawlers was in the habit of bringing in fish to Dundalk?—Yes.

49,001. The others took their fish elsewhere?—Yes, unless the weather was bad.

49,002. Where did the other trawlers take their fish to?—To Dublin market; Clogher Head and Carlingford were their harbours.

49,003. (*Mr. Caird.*) What is the greatest number of trawlers you ever saw in the bay?—Four inside the point of land.

The witness withdrew.

THOMAS HANLON called and examined.

T. Hanlon.

49,004. (*Mr. Caird.*) Are you a line fisherman?—Yes.

49,005. You have heard the evidence which has already been given by the line fishermen here?—I belong to Giles's Quay.

49,006. Have you heard the evidence which has been given by the other fishermen?—Yes.

49,007. Have you anything to add to what they stated, or is there anything in their evidence with which you disagree?—There is. We fish at the herring-fishing and the Rock men never do. We fish for mackerel as well as for herrings.

49,008. And, in addition, are yo a line fisherman?—Yes.

49,009. Can you tell us whether the shoals of herrings that come off the coast here are increasing or diminishing compared with what they were some years ago?—They have been increasing since the trawlers left off. The trawlers take the spawn of the herrings and destroy it. When the herrings get liberty to settle on the sand they leave their spawn in the sand, and the haddock and codfish also come in upon the spawn of the fish.

49,010. Do they come in to feed upon it?—Yes, they feed upon the spawn of the herrings.

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49,011. Then do you think in consequence of the spawn being left undisturbed you get a larger supply of cod and haddock ?—Yes.

49,012. Are you aware whether that has really been the result of the discontinuance of trawling in the bay ?—It has.

49,013. Have you observed it ?—Yes.

49,014. Did you ever see spawn on the sand ?—I have seen it in the fish's belly, and I have seen it in the codfish.

49,015. Have you, as a line fisherman, observed that you get a better fishing in the bay now than you did before trawling was prevented ?—Yes, I do, because when the fish spawned the trawl destroyed the spawn on the ground.

49,016. Do you get the same kind of fish that the trawl fishermen were in the habit of getting ?—We get as large a supply of fish as ever I saw in the trawls. Very frequently they get as small a take of fish as ever I saw on the long-lines, but what I complain of is that the trawling destroys the spawn and the brood ; they move the sand and take the spawn up in their nets.

49,017. Then you approve of the regulation which has been established ?—I do.

49,018. You wish to see it continued ?—Yes, I wish to keep trawling off on account of the destruction it does to the spawn of the fish.

49,019. Did you ever come in contact with the trawlers outside the line within which they are prevented from coming ?—Yes, I did, and they have taken our lines away in their trawls.

49,020. Are there many of the deep-sea trawlers which now come on the fishing grounds you frequent outside Dundalk Bay ?—Yes, they fish outside since they have been prevented coming in the bay.

49,021. Are there many fishing there now ?—There are a good many.

49,022. Are they very successful now ?—Yes, they are.

49,023. Do you find that the quantity of fish you can catch on your own ground has increased or diminished in consequence of that ; are there as many as ever ?—I am sure there are more fish in the bay since trawling has been prevented.

49,024. But outside of the bay on the fishing grounds here are there more fish ?—I think if the trawlers were prevented outside there would be more fish. The haddock we used to get are not coming inside since the trawlers have been trawling outside.

49,025. Have you not got them lately ?—Not half as many as we formerly did.

49,026. Did you ever get them outside in the deep water ?—Yes.

49,027. Do you get them now ?—We do not have a boat's load now, and we have never got them for eight or nine years as we used to get them.

49,028. Do you recollect when the trawlers first came to this bay ?—I do not.

49,029. I thought you recollected the bay before trawling began ?—Yes.

49,030. Did you get large hauls of haddock before there was any trawling here ?—Within my memory we have never got haddocks as plentiful as we got them when the trawlers kept away.

49,031. With regard to the herring-fishing, you say that you regularly fish for herrings whenever they appear off the coast ?—We have as good herrings in Dundalk Bay as ever I saw, but if the trawlers come in in the night they knock them so much about that we shall not have herrings in the bay 24 hours afterwards. They disturb them by the trawls and will not allow them to settle on the ground.

49,032. Have you noticed when the herrings came in here from what direction they came ?—They came from the southward sometimes, and from the eastward at other times. I do not know where the shoals came from we have now.

49,033. But it appears that the herrings are as good as ever you saw them ?—Yes, to the best of my opinion.

49,034. Has the herring-fishing off Dundalk been improving or diminishing of recent years ?—It is better.

49,035. It is better ?—Yes.

49,036. Do you think the whole supply of fish caught in this bay has improved or diminished of recent years, taking the herrings and everything else ?—It has all improved since trawling has been put down.

49,037. (*Mr. Lefevre.*) How long is it since you had as good a shoal of herrings in the bay as you have had this year ?—We had a good shoal last year.

49,038. And before that how long ?—I think we have had a good share of herrings every year for the last five or six years, but I think there never was a better fishing than there is at present.

49,039. Then previous to doing away with trawling had there been any decrease in the quantity of herrings ?—Yes.

49,040. Had you observed the falling off ?—Yes. When the herrings spawned on the sand and the trawler came across it he moved the sand and took the spawn away with him.

49,041. What I want to ascertain from you is what the supply of herrings was before trawling was done away with and what it has been since trawling has been done away with ?—When the trawlers came into our bay they did not give the herrings an opportunity of settling in the bay.

49,042. Did you observe immediately after trawling was done away with that an improvement took place in the herrings ?—Yes.

49,043. Have they gone on improving ever since up to the present time ?—Yes, and all sorts of fish have improved.

49,044. But with regard to the herrings, have you had good takes ever since 1851 ?—Yes, ever since the trawlers were shut out.

49,045. Ever since the trawling was stopped ?—Yes.

49,046. And before the trawlers were shut out was the fishing very bad ?—I cannot say, but to be sure they destroyed the fish when they came in.

49,047. But is it the fact, that you have taken more since trawling has been done away with than before ?—Yes.

49,048. You are quite sure of that ?—Yes, any sort of fish that spawned on the sand in our bay would be injured by the trawlers. The trawlers took away the spawn by moving the sand.

49,049. Has the number of fishermen increased at Giles' Quay ?—Yes, there is a good number now.

49,050. How many are there now ?—I suppose there are between 14 and 15 boats.

49,051. How many men are there in each boat ?—Mostly five men in each boat.

49,052. How many were there there 14 or 15 years ago ?—They have been improving every year.

49,053. Are there fresh boats built every year ?—There are. There is one thing which I may tell you, namely, that when the poor men have no good lines they let the best of the fish go. When they get a good fish on their line it is not able to hold it.

49,054. Do you mean to say the fishermen have not got good lines ?—No, they have not.

49,055. Is that because they are so poor ?—Yes, that is just it.

49,056. They have not got money enough to buy good lines with ?—That is a sure thing, and when a good codfish or a good haddock gets caught upon a bad line he can obtain his liberty.

49,057. What is the reason the fishermen have bad lines ?—Because they have not money enough to buy good ones with.

49,058. Then they have not made a good thing of the fishing of late years, since they cannot pay money enough to purchase good gear ?—Since the bad times came they have been more pushed than they were before.

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49,059. Have they never recovered since the famine of 1846?—They have never been as strong since as they were at that time.

49,060. They have never been as well off as they were before?—I don't recollect the fishermen to have been as well on our shore as they are at present since the famine.

49,061. How long is it since the improvement began; is it only this last year?—Yes, this last year and the last three years, because the potatoes are getting better and stronger everywhere, and the fishing is better too.

49,062. Are the fishermen of Giles' Quay dependent on the land?—Yes.

49,063. How much land do they have?—They have no land at all. There are no fishermen at all who have any land except a very few; they have only a house and a garden.

49,064. Then is it the price of potatoes you refer to?—Yes.

49,065. How many hooks has each man?—About 600.

49,066. And are there five in each boat?—Yes, some have four and some have five.

The witness withdrew, and the inquiry was adjourned until the 17th of September at Skerries.

Skerries, Dublin, Saturday, 17th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

SKERRIES.

C. McCourt.

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CHRISTOPHER MCCOURT called and examined.

49,067. (*Mr. Caird.*) Are you connected with the fishing here?—Yes; with the herring-fishing, but not with any other.

49,068. Are you acquainted with the state of the white-fishing here for some years past?—Yes, I have been at the white-fishing here during a portion of my lifetime but not a great deal.

49,069. Can you give us any idea of the progress of that fishery here, whether it has been improving or otherwise?—The white-fishing has been on the decrease for some years back.

49,070. From what period can you date the commencement of the decrease?—I am not able to state accurately, but I should say from 10 to 12 or 15 years as near as I can recollect.

49,071. About some 15 years ago there were more boats engaged in the white-fishing here than there are now?—Far more.

49,072. Can you tell us the number then and the number engaged now?—No, I cannot.

49,073. Can you tell us the number of men engaged then and now?—There are not any engaged in the white-fishing now, and there was a first-rate fishing on the coast of Ireland.

49,074. Are there none here now?—No; none, except those engaged in the herring-fishing.

49,075. (*Mr. Lefevre.*) What do you include in the white-fishing, cod and haddock?—Yes.

49,076. And any flat-fish?—No; that is what we call the long-line fishery, the hook fish.

49,077. (*Mr. Caird.*) When you say that there are no persons engaged now in the white-fishing, you do not include the trawlers?—There is only one trawler here; at any rate I do not know of any more.

49,078. He is the only person engaged in white-fishing?—Yes; and he is three or four months idle out of the year, if not more.

49,079. Does he fish off the immediate coast?—Yes; nearly in-shore.

49,080. Nearly in-shore?—Yes.

49,081. Does he fish within the limits prescribed not to be fished upon by a trawl-boat?—I believe that he does; but I think he does less harm in-shore than he does outside, in regard to the herring-fishing and the long-line fishing too.

49,082. Does he catch many fish?—Sometimes a good deal, and sometimes very little.

49,083. Then he can do no injury to anybody here if there is no other fishing?—I do not think the like of him can do any harm to any person. It is the Dublin trawlers who do the harm.

49,084. I see there are many old boats in the harbour, were they fishing-boats?—They were fishing-boats in former times.

49,085. How long is it since they were used for fishing?—Some three or four years, some less; some were only hauled up last year.

49,086. What kind of fishing did they follow?—They followed in their turn the long-line fishing; but they were generally engaged in the coasting trade and in speculations.

49,087. They were not employed altogether in fishing?—No.

49,088. There seems to be nearly a score of them?—Indeed, there are a good many.

49,089. Are they hauled up for want of employment?—Yes, for want of employment.

49,090. What was the employment they had formerly?—They were engaged in the coasting trade, in carrying potatoes and in herring-fishing.

49,091. They were not so much fishing-boats then?—They were fishing-boats in former years until the fishing got bad, then they knocked off and took to other employment, and now from the want of that employment they are hauled up.

49,092. Do they belong to people in this place?—Yes; they all belong to people in this place.

49,093. Have the people to whom they belong fishing-boats of other descriptions?—Some of them have and some have not.

49,094. Do you know when they were built?—I do not.

49,095. Is it a long time ago?—Some will not go back for a long time at all.

49,096. They seem all to be of one class?—Some of them are not more than 15 or 16 years of age, and that is not old for a vessel.

49,097. Were any of them built at the time there was a bounty given upon the fishing?—I believe some of them were.

49,098. Had the withdrawal of the bounty anything to do with the disuse of the boats?—They drew the bounty when it was given.

49,099. Had the discontinuance of the bounty anything to do with the discontinuance of those boats?—I will not say that, because the bounty was discontinued before the boats were hauled up here.

49,100. Did those boats continue to fish after the bounty was discontinued?—Yes.

49,101. Is there any particular kind of white fish that has decreased here?—The haddocks have decreased most.

49,102. Are there no haddocks caught here now?—No, nothing to speak of; but our people can give a better statement with regard to the long-line fishing than I can.

49,103. There are no long-line fishermen here are there?—No, there are not.

49,104. Do vessels from other quarters come here to the long-line fishing?—No further than the next town to us.

49,105. From Balbriggan?—No, from Rush. At Balbriggan they do not work at the long-line fishing at all.

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49,106. Has the herring fishery improved of recent years?—Yes.

49,107. Has that improvement been very marked?—Yes, it has.

49,108. When had you your first very good herring-fishing?—It has improved very much within the last three or four years. It has been improving every day here.

49,109. Does it look well at present?—It does.

49,110. Have you any notion what has been the cause of the improvement in the herring fishery on the coast?—I do not exactly know; I cannot say that.

49,111. Has there been a large quantity of herrings taken here?—There has been sometimes.

49,112. You do not know if there have been any herrings spawning on the coast at all?—I do not know that. It is not for us to say. It is always thought that the herrings spawn on the rough ground.

49,113. You have no knowledge on the subject yourself—you have not made it a matter of observation?—No; the herrings spawn where I could not see them. It is generally thought that they spawn on the rough ground.

49,114. Is there any mode of fishing employed on this coast which you consider injurious to the interest of the fisheries?—No, I could not say that.

49,115. Are there any restrictions established on this coast which you think injurious to the interest of the fishing?—The only thing I think injurious to the fishing here is trawling; that I think is injurious to the fish altogether; it destroys both the young and the old.

49,116. But I understand that trawling is not permitted along the shore here?—It has not been permitted for some years. There was an Act passed against it, but there is no one to put it into operation.

49,117. Do any vessels belonging to the port except the small one you have mentioned, trawl along the shore within the limits in which trawling is not permitted?—I do not exactly know what the limits are here.

49,118. Is it not well known and understood here where the limits are?—I do not think it is.

49,119. "Outside of St. Patrick's Island;" do you know that?—Yes.

49,120. In a straight line drawn to the point of Clogher Head from St. Patrick's Island; inside a line drawn between those two points trawling is not permitted?—That is where it should be permitted I think if they had done right; it is outside where we get the herrings.

49,121. Do you think there is no injury done to the brood or spawn of the fish by trawling inside that line?—Not one tenth part of the injury that is done outside.

49,122. Is there much trawling inside?—There may be some boats in-shore from Balbriggan, but the Dublin boats trawl outside and there are plenty of them to be found there.

49,123. Have you ever seen the Dublin boats trawling inside that line;—Yes.

49,124. Often?—Yes.

49,125. Does anybody interfere with them?—I never saw anybody interfere with them.

49,126. At what part outside do you imagine the harm is done?—From the line outside to 18 fathoms and 20 fathoms of water, and even 40 fathoms. They trawl there day and night at all times. They are even waiting there with their nets until the herring-boats haul their nets in the morning in order to put down their trawls into the balls of fish.

49,127. But the trawling has done no injury to the herring fishery because you say the herring fishery has improved?—But it has done injury to it. The herrings would be more plentiful if it were not for the trawlers. The herrings spawn on the rough ground, but they have trawled over the rough ground and have made it all smooth.

49,128. When did trawling outside begin to be very extensive?—It has been extensive for a good many years; it is too far back for me to recollect.

49,129. Twenty years ago?—Yes, and more.

49,130. Has it been for more than 20 years within your knowledge?—Yes, and more than 30 within my own knowledge.

49,131. All along this coast?—Yes.

49,132. Has it been carried on pretty much on the same ground all that time?—Yes.

49,133. Has that ground been frequented by an increasing number of boats of late years?—Yes, by double and treble the number there formerly were. I might venture to say there have been five times the number.

49,134. Is the number increasing very much?—It is, but it has now nearly condemned itself because they cannot get a livelihood out of it; I think that is as good a proof as I know of against the trawling. There were only five boats trawling out of Dublin last summer and they were not able to support themselves. Now the herrings are striking in towards the shore; I counted 36 or 37 boats here no longer ago than yesterday.

49,135. Were they looking for the herrings?—They were discharging their fish off the coast.

49,136. (*Mr. Lefevre.*) Were there 36 trawling-boats?—Yes.

49,137. (*Mr. Caird.*) Independent of the herring-boats?—Yes, they have nothing to do with the herring-boats at all.

49,138. They do not fish for herrings?—No, they do nothing but trawl all the year round.

49,139. Do they find that the other fish follow the herrings?—Yes, exactly; the nearer they can get to the ball of fish the more fish they will get.

49,140. And have you as a herring fisherman seen that they have done any harm to the herring-fishing by trawling?—They scatter the herrings. If the trawl is put down in the midst of a great ball of herrings they scatter the herrings away.

49,141. Do they trawl in the daytime or at night?—They trawl both day and night when there are no herring-boats out, but when the herring-fishing is going on they wait until we haul our nets in.

49,142. Do they trawl day and night sometimes?—Not while the herring-fishing is going on.

49,143. They do not come foul of your drift-nets?—Yes, they do. Last year they tore a man's nets and took some of them away.

49,144. He would have been able to recover his loss if he had been able to follow them, would he not?—I think he did recover some of the damage, but I am not able to state whether he was paid in full or not.

49,145. Have you any regulations among yourselves or fixed by others as to the time at which you are to shoot your herring nets?—We have no regulations. I think we ought to have some, but the regulations should not be made among ourselves; there should be some proper authority to enforce them.

49,146. Do you observe any regulations at all?—No, not any.

49,147. Do you shoot before sunset?—Of course some of them do, and when one shoots then they all go on shooting. They begin to shoot in order to get a berth, but they should not be allowed to do so; they ought not to be allowed to shoot before sunset.

49,148. Is it common for the fishermen here to have their nets shot before sunset?—Yes.

49,149. Do you think that that alarms the fish and disturbs the shoals?—Yes.

49,150. Does it prevent them from rising?—Yes.

49,151. Have you observed that?—I have not. I have fishing boats although I have not been at the fishing, but I know that it does from the experience I had in former years.

49,152. Do the fishermen desire to have some official authority over them to restrict them to shooting their nets not earlier than a certain time?—I think it would be for their interest if they had.

49,153-4. (*Mr. Lefevre.*) How many fishing boats

have you got ?—There are somewhere about 23 or 24 here.

49,155. Herring-boats ?—Yes, I believe 23 is the number.

49,156. How many men are there in each ?—There are 165 men and boys in the 23.

49,157. How many have you got yourself ?—Two.

49,158. When did you buy them ?—Three years ago.

49,159. Did the great increase of herring-boats take place three or four years ago ?—More than two thirds of the increase in this place took place then.

49,160. Previous to that time there was not a considerable herring fishery from here ?—No.

49,161. I suppose it was about the same time that trawling was given up here ?—They have not been trawling here for many years ; they were not able to get bread at it, but when other things failed they took to the herring-fishing.

49,162. How long do you recollect this place ?—For more than 40 years.

49,163. Do you recollect the year 1836 ?—Indeed I do.

49,164. We are told that at that time there were 38 boats belonging to this place and six or eight men in each ?—Yes ; some of them are lying here at present.

49,165. They were mostly trawlers ?—They were not regular trawlers ; they might trawl at certain seasons of the year.

49,166. Can you recollect what number were trawlers ?—No.

49,167. Was it only a small proportion of them ?—There might be a good many in different seasons of the year.

49,168. What were they mostly employed upon ?—In former years they were employed at hook-fishing, a good many of them, and at certain seasons of the same year they would be employed at trawling, then in buying fish, and in running to the market, and such things as that.

49,169. The boats you use for the herring fishery are not the same boats employed in that ?—No, they are not the same at all ; they are the proper lugger-rigged boats.

49,170. What has become of the boats that existed in 1836 ; are they all laid up now ?—No, not all ; we have them in different occupations.

49,171. But they have all given up fishing ?—Yes.

49,172. Except one trawler ?—Yes.

49,173. There is no white-fishing now except by this one trawler ?—Not a bit of it.

49,174. When did the line-fishing begin to fall off ?—Fifteen or 16 years ago, or more than that.

49,175. Is it more than 20 years ago ?—Yes.

49,176. Can you say what number there was 10 years ago ?—Indeed I cannot.

49,177. Can you say what number there was four years ago ; were there then some of them employed in trawling or line-fishing ?—There might be a couple employed four years ago in trawling, but not in long-line fishing.

49,178. When did the men here gradually give up trawling and hooking to take to the herring fishing ?—I suppose about 10 years ago.

49,179. I suppose the same men who are now fishing the herrings used to fish with the hook and line ?—Yes, the very same, with a little addition to them. The young ones are growing up and the old ones are dropping off.

49,180. Did the trawlers and the hookers disappear about the same time ; did the fish fall off about the same time ?—I think they did near about the same time.

49,181. What earnings would the herring fishermen make now in the season ?—Do you mean here ?

49,182. Yes ?—It varies very much.

49,183. Take last year ?—It varies very much.

49,184. Last season did they make good earnings ?—Some did, and some only got middling good earnings.

49,185. Did your boats do pretty well ?—Yes, they did pretty fair.

49,186. What did you make last year ?—I suppose we averaged about 350*l.* from the boats for the year.

49,187. How are the earnings shared in the boat ?—There are 17 shares made of it.

49,188. How many go to the owner of a boat ?—There are seven hands in a boat and each man gets a share, and the boats and nets get all the rest.

49,189. Do you deduct the expenses first ?—No, all the expenses come out of the owner, every halfpenny-worth.

49,190. You divide it into 17 shares afterwards ?—Yes, all the expenses fall to the owner ; he pays for all.

49,191. What would each man make out of your boats last year ?—From 20*l.* to 22*l.* I should say.

49,192. How long did the herring season last ?—From the 25th of May until the middle of December.

49,193. Was there another herring-fishing after Christmas ?—No, we generally give it up here before Christmas.

49,194. At what time did you find the fish full ?—It is generally about July and August that the fish are full.

49,195. Did you take any spent fish later than that ?—They do not take spent fish here ; they come in different shoals of fish and the spent fish are here in the winter. The spent fish are a bit smaller than the others.

49,196. When do you find them here ?—About a week ago.

49,197. The second week in September ?—Yes, and they come here now.

49,198. Is there any interval between the finding of those fish and and the summer fish ?—No, the weather makes a difference ; if it gets a little severe it is too far distant for the boats to go.

49,199. In what condition are the fish now ?—In very good condition.

49,200. Are they full of spawn ?—If they were full of spawn they would run in the boats and nets, but they do not run now ; you will see the spawn running when they are full but they are not running now.

49,201. Then you think they are a different class of fish from those you caught a fortnight ago ?—Yes.

49,202. Are they not as full as those fish ?—No, they are not as large.

49,203. Are they not as full of spawn ?—No.

49,204. Do you say that you have observed an increase in the Dublin trawlers within the last few years ?—Yes, a very great increase.

49,205. And has there been an increase in the herring fishermen ?—Yes.

49,206. And have the trawlers gone on increasing ?—Yes, everywhere.

49,207. Then you have had an increase in the herring fishermen notwithstanding that the Dublin trawlers have been trawling in great numbers ?—Yes.

49,208. Do you think that has affected the supply of herrings ?—Yes, it must have done so; they kill both large and small.

49,209. They do not take the herrings in their nets ?—The herrings are too knowing for them ; the net was not made for the herrings.

49,210. Then what harm do they do you ?—They kill the spawn.

49,211. Do you mean the young fish or the spawn ?—I mean the spawn; without the spawn there would be no fish.

49,212. Do you think they trawl over the rough ground where the herrings spawn ?—Yes, but they have made the rough ground all smooth nearly; the herrings are not found on the rough ground off here at all now.

49,213. Do your fishermen fish on the ground which the Howth fishermen frequent ?—Yes.

49,214. Then there is no distinction between the

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herring fishermen here and the Howth fishermen?—No, they all go together here.

49,215. Do you know what the number of Balbriggan trawlers is now?—No.

49,216. (*Mr. Caird.*) Are there any shellfish caught here, lobsters or crabs or oysters?—There is an oyster-bed about here but no person from here dredges upon it; there used to be a boat from Dublin dredging here just outside St. Patrick's Island.

49,217. It is not dredged at all now?—No, not to my knowledge.

49,218. Is it not worth dredging; is it not a good bed?—It may be a good bed but I think they are very small.

49,219. The fishermen do not dredge it now?—Not for some years.

49,220. Has it been discontinued because it was not supposed worth while to follow it?—The people here have discontinued it at all events; they had very large oysters here.

49,221. Were they saleable?—Yes, they went to Dublin from here.

49,222. Is that bed entirely untouched now?—Yes; there was no dredging there last year, but there was one boat upon it from Dublin before.

49,223. Is that the only oyster bed on this coast?—It is the only one I know of.

49,224. Then oyster-fishing is not followed here?—No, not here in this place.

49,225. Is there any lobster-fishing?—No, there is no lobster-fishing.

49,226. Or crabs?—Yes, there are crabs; in the summer time they put out the creels for them.

49,227. Are there plenty of crabs to be found here?—I think so.

49,228. Is crab-fishing not followed here?—No, they have worn them out; they followed crabs in the summer time and I think they have worn them out, and they are not able to make bread out of them now.

49,229. Is the herring-fishing in the month of May a more remunerative business?—Yes.

49,230. It pays better?—Yes.

49,231. (*Mr. Lefevre.*) At what season of the year have you observed most of the Dublin trawlers trawling off this shore?—There have been more at this season of the year than any other time, and I can count 36 or 37 coming into the bay every night.

49,232. Do they land their fish here?—Yes.

49,233. And send it off to Dublin?—Yes.

49,234. How long do they generally fish off this shore?—Perhaps six weeks or two months; they go as long as the fish stay here.

49,235. Then during the herring fishery they do not fish in the night-time, but as soon as the principal portion of the herring-fishing is over they do fish at night?—If they land their fish in the daytime they run out to sea again.

49,236. They run out to sea in the night-time?—They will keep quite clear of the herring-fleet if they can, but of course a man in a herring-boat is afraid to see these vessels running through the herring-fleet in the night-time; on a dark night it would be very dangerous.

49,237. Have there been many cases in Skerries of the loss of nets?—No, I cannot say there have been many cases; there was one that occurred here last year.

49,238. One case out of the 23 boats?—We had not 23 boats last year; we have 23 this year but we had only 13 last year.

49,239. Has there been any case this year in which the fishermen have lost their nets?—Not that I have heard of.

49,240. (*Mr. Caird.*) During the period of the herring fishery is it common for the fishermen to shoot their nets here on the Sunday evening?—Not with our class of people, but there are fishermen who fish for herrings who do so.

49,241. But not from the Skerries?—No.

49,242. They come from a distance?—Yes, they come from Arklow.

49,243. None of your fishermen do so here?—No, they may go out during part of the season when there is bad weather if they can get a fair evening; if the fish have had rest enough they may go out on the Sunday night.

49,244. Then in that case they do go out?—Yes, for an odd time if they get a fair night.

49,245. What is the principal reason you do not go out on a Sunday evening; is it in order that the fish may have a certain rest, or because you object to fishing on Sunday?—We do not like to trespass on the Sabbath if we can avoid it, but we consider that the fish get rest enough on the Saturday and Sunday night in the summer time.

49,246. Do you think that that rest is beneficial to the fishery?—Yes.

49,247. You think you make a better thing of it by giving the fish those two nights' rest than you would by fishing all the time?—Yes, we generally remark that the two first nights of the week we make the best fishing.

49,248. Would you desire any restriction against fishing on Sunday?—Yes, I would.

49,249. Is that the general feeling of the fishermen here?—Yes.

49,250. (*Mr. Lefevre.*) You would not extend that to the winter fishery?—No.

49,251. You call the winter fishery the fishing that begins in September?—Yes, in the first week of September.

49,252. Do you ever observe a great number of boats out fishing on the Sunday night in the summer?—Yes.

49,253. How many?—I cannot state the number.

49,254. Are they Howth boats?—No, they are Arklow vessels. I cannot say that the Howth boats go out.

49,255. Then their numbers cannot be very considerable because there are not a very great number of Arklow boats that come up here?—Yes, there is a good number.

49,256. Do you think the Scotch and Manx boats fish on Sunday?—Not to my knowledge.

The witness withdrew.

P. Edwards.

PATRICK EDWARDS called and examined.

49,257. (*Mr. Caird.*) You are a fisherman here?—Yes.

49,258. And you were formerly employed in trawl-fishing?—Yes, some 16 or 18 years ago.

49,259. Have you found the herring-fishing improving very much in the last year or two?—Yes, it has improved here, and the cause of it I think is the improvement in the nets, the improvement in the fishing boats, and the quantity of boats on the coast.

49,260. Can you go further to sea now and fish with better effect in consequence of improved boats and better tackle?—Yes, we have better materials and a different style of fishing.

49,261. When did that improvement begin?—It began to my knowledge about four years ago. Perhaps it may have commenced before that, but I think I am right in saying about four years.

49,262. You are not a line fisherman?—No, I never fished with a line.

49,263. There is no line-fishing here now?—No, there is not.

49,264. Do you remember when there was any line-fishing?—I do.

49,265. You were then a line fisherman?—No, I was not.

49,266. Was line-fishing successful here?—It was.

49,267. What kind of fish were caught then?—

Generally haddock, and small cod and large ones sometimes.

49,268. Have the haddock entirely disappeared?—We cannot see any here now.

49,269. There are no haddock here now?—No.

49,270. What was the reason the line-fishing was entirely given up here?—I think the cause of it was that they could not find the haddock, they were the principal fish that were being caught by the line then.

49,271. Had there formerly been a large and valuable haddock fishery here?—No; there were a few boats here which generally went out in the morning; they were out about four, five, or six hours; they shot their lines and came in. Four men fished in a boat, and they would sometimes get from 2*l.* to 4*l.* and 5*l.* worth of fish.

49,272. (*Mr. Lefevre.*) What sized boats were they?—Yawl boats.

49,273. Open boats?—Yes, and they carried one sail.

49,274. With four men in each?—Sometimes five.

49,275. (*Mr. Caird.*) Did the haddock-fishing suddenly cease?—That I cannot tell, because I was not in the place at the time it did cease.

49,276. Have you ever heard any reason assigned for it?—I have heard the old fishermen say the reason the haddock went off the coast was, because trawling killed the spawn and the small fish.

49,277. Was it trawling in the bays or in the deep sea?—Both; the Dublin trawlers trawled in both waters.

49,278. Were you long engaged as a trawler—for any time?—Some two years.

49,279. In the deep sea or along the coast?—Principally down the coast.

49,280. In-shore?—Yes.

49,281. Along the coast?—Yes; I trawled one winter in Campbeltown Loch in Scotland.

49,282. What fish did you get here?—Generally plaice and flukes; sometimes haddocks when we went down to Clogher Head in 18 fathoms of water.

49,283. Was that before any restriction was adopted?—Yes.

42,284. Were there many boats then engaged in trawling?—From here there would be six or seven at that time.

49,285. Did they make a good business of it?—Sometimes they did.

49,286. On the whole did they make a good business of it?—On the whole I think it did not pay.

49,287. Was there line-fishing at the same time?—At that time there were one or two boats fishing with lines in the winter season.

49,288. Did the line fishermen or the trawlers make the best wages?—I should suppose that the line men did.

49,289. Did you continue trawling until it ceased to be profitable?—Yes, it was not profitable when I was at it. I did not consider that I could make a living by it.

49,290. Did you kill much of the small brood of the fish?—I was very young then, but I remember seeing small fish not fit for anything thrown overboard which had been killed by the trawl.

49,291. Were they not alive?—No, they would be dead when they came in in the trawl.

49,292. Was there a large proportion of them in that state?—I cannot give the amount, but I have thrown them out myself.

49,293. Did you ever see any spawn in the trawl?—I cannot say that I have, but I have heard the fishermen say they have seen spawn in the trawl.

49,294. (*Mr. Lefevre.*) How old were you then?—Fourteen years of age.

49,295. You were a boy on board?—Yes.

49,296. How many men were there?—Six men and a boy.

49,297. What was the size of the boat?—From 30 to 32 tons.

49,298. Do you recollect what were the earnings which each man made?—The earnings sometimes differed. I cannot strike an average. Sometimes they got 1*l.* in a week, and at others not half a crown in the week.

49,299. You cannot say what the average was?—No, I could not strike an average, but the average was so small that the men could not get a living out of it.

49,300. Would it average 6*s.* a week?—I suppose it might, or a little more.

49,301. Do you know that the Dublin trawlers, the larger class of vessels, only carry three men and a boy?—Yes.

49,302. Do you think the reason why the trawler you fished in did not pay was that it carried too many men?—That might have a tendency towards it; but the vessels have been gradually improving. They have finer vessels now with larger trawls and winches to haul the trawls.

49,303. A vessel of 40 or 50 tons manned by three men and a boy is more likely to pay than a vessel of 30 tons manned by six men and a boy?—Yes, the shares in our vessels would be less, and in addition the large trawlers kill more fish, because they can go out into deeper water.

49,304. Do you recollect when the trawlers you speak of gave it up altogether?—No, I do not.

49,305. Do you mean to say that there were only one or two hookers then at work?—I think there were plenty at this place. I will not be positive, but I think there were only two this last winter I mean at the trawling.

49,306. They were only yawls?—No, there were large boats of 30 tons and so besides the yawls.

49,307. How many of those yawls were there?—Six or seven.

49,308. The hookers you speak of were of the same class of vessels as the trawlers?—Yes, about 30 or 35 tons.

49,309. (*Mr. Caird*). Did you not go to the deep-sea trawling at all?—No, we did not.

49,310. You were within that line of restriction which has been mentioned?—Yes.

49,311. And you say that trawling within that line ceased to be profitable before the restriction was adopted?—Yes, it did.

49,312. The boats were beginning to give it up altogether?—Yes, they got slacker and fewer.

49,313. Is there any desire on the part of the fishermen on this coast to resume trawling within that line?—I think not. Any man who can keep clear of a trawl on this coast will do so if he can earn a livelihood by long-line fishing or herring-fishing.

49,314. Because he makes better wages?—Yes.

49,315. That is the ground upon which he would keep clear of trawling?—Yes.

49,316. (*Mr. Lefevre.*) The trawlers were badly found then, were they not?—The Dublin boats now are much improved.

49,317. Were not your boats badly found formerly?—No, they were fishing in the same style.

49,318. Were they fit to go any distance?—Yes, they were fit to go in the Channel if they wished.

49,319. Were they fit to trawl regularly any distance from the coast?—I think they were, but they were not as fit as the Dublin vessels.

49,320. Do you think that enforcing a line of prohibition had any bad effect on the trawling on the coast?—Not on this coast.

49,321. You do not think it interfered with the ground on which the trawlers trawled?—No, it did not, because I do not think they have ever observed the line.

49,322. Is there any trawling within the line of prohibition now?—Yes, I see them fish there.

49,323. The Dublin trawlers?—Sometimes the Dublin boats, but generally they are outside, but the boats from Balbriggan do.

49,324. You do not think they observe the restriction?—No, they do not.

49,325. How many boats are there at Balbriggan?—Seven, I think.

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49,326. Do you know what number of men they carry?—From three to four men; three men and a boy and four men, I think.

49,327. When you were trawling was a winch used on board the trawler?—Not on the one I was in, but some of the boats did use a winch.

49,328. I suppose, then, that not having a winch you wanted more men?—Yes, that was the cause—not having a winch.

The witness withdrew.

N. Quin.

NICHOLAS QUIN called and examined.

49,329. (*Mr Caird.*) Are you a fisherman here?—Yes.

49,330. Have you long been acquainted with the state of the fishery here?—I went to sea in 1812.

49,331. Can you tell us from your own recollection whether there are as many boats engaged in the fishing here now as there were in the earlier time to which your memory extends?—There were a great number of fishermen then in addition to the herring-boats. We were then engaged in long-line fishing, and we fished round to Bofin Island and to Sheep Haven.

49,332. Had you large boats then?—Yes.

49,333. It was during the bounty time?—Yes, there was a premium on the fish then. We had 3*d.* on every fish that would bear the stamp on the tail, but afterwards the bounty was done away with. We fished first, however, for the bounty.

49,334. Was a second payment established then?—Yes, we had a second premium paid on every fish killed.

49,335. Who paid it?—We got it from England.

49,336. From the Government?—Yes.

49,337. Was that inducement to go on fishing for a bounty discontinued?—Yes.

49,338. It was another description of bounty?—Yes; but it was more an inducement to the men. The men all got a share of it, whereas the bounty all went to the owners.

49,339. Up to what year was that premium given?—After the bounty was done away with.

49,340. Until when?—It was not of long duration. To the best of my knowledge it lasted for about three years.

49,341. Was it given up in the year 1821?—No, it was not given up until after that. We had a bounty on the deep-sea fishing in 1821, after the herrings. Then we got our boats fitted out here, and we had of course a certain number of nets to a certain number of men, and we had to make 60 shots before we could obtain the bounty; but we found it a thing almost impossible to do.

49,342. Then you used to buy fish from other people?—No, only what we killed ourselves. We went on the east coast of Scotland to fish upon the bounty. We fished in this channel, but we had to put in 60 shots before it was a complete season for us.

49,343. What mode of fishing was that; long-line fishing?—No, herring-fishing. This was after the bounty was taken from the long-line fishing.

49,344. While the bounty continued on the long-line fishing did you then sometimes fish on the east coast of Scotland?—No; but we did on the north-west coast of Ireland round to Bofin Island.

49,345. You also fished in Ireland with long-lines?—Yes.

49,346. Which of the two coasts did you find most profitable of fish?—Towards Bofin Island.

49,347. You found more there than on the east coast of Scotland?—Yes. If we could make two shots with our lines we could make a good week's work of it.

49,348. How long have you discontinued fishing off Bofin Island?—Since the bounty has been taken off.

49,349. It did not pay to go?—No.

49,350. Then that system has been entirely discontinued?—Yes.

49,351. Then it was altogether supported by the bounty?—Not entirely; we had the fish as well.

49,352. But when the bounty was withdrawn it did not pay?—When the bounty was done away with the men who owned the vessels would not fit them out because they said it was not paying them.

49,353. Was that the principal cause of the falling off in the number of boats engaged in the white-fishing here at that time compared with the present?—In my opinion it was.

49,354. They were not prevented at that time from fishing anywhere on the coast?—They fished off this place, but they chiefly went round there because the fish were more plentiful. They made them up on the vessel, and had them ready for the market when they came home.

49,355. Are the fish on this coast now not as plentiful as they were in your earlier recollection?—I think they are.

49,356. They are quite as plentiful?—Yes; the ling and the conger eel and those kinds are pretty plentiful out here to those who follow them, but they are not as plentiful as they were on the north-west coast of Ireland.

49,357. At any time?—No.

49,358. Is there any mode of fishing practised on this coast which you think injurious to the interests of the fisheries?—Not that I know of, unless trawling is injurious to the spawn of fish.

49,359. Have you been in a trawl-boat?—When I went an apprentice first that was my occupation.

49,360. But not since then?—Yes, I was in one of the Dublin trawlers.

49,361. Were you out in the deep-sea trawling?—Yes, out in the Channel.

49,362. How long ago?—In the years 1820 and 1821.

49,363. Has the deep-sea trawling been practised ever since 1820?—Yes, and long before that.

49,364. It is a very old mode of fishing?—I think it was about 1816 when we had the first of the trawlers; they were English trawlers that came over here.

49,365. Did they at that time fish upon the same fishing grounds which the trawlers go upon now?—They fished in shoaler water than they do now.

49,366. They go into deeper water now?—Yes, they go more out into the Channel. Any place where they can find out a bank is the best place for fishing.

49,367. Do you remember when the restriction was established ordering that no trawling should take place within a certain line?—Yes. At the time I speak of, when we went round the coast as far as Sheep Haven and to Bofin Island, and sometimes to Horn Head, we were prevented trawling by an old Act of Parliament within the headlands, and we did not trawl within the headlands.

49,368. But there has been a restriction passed in reference to your own place; are you aware of the restriction which passed in 1851?—I had nothing to do with trawling then.

49,369. You have observed the state of the fishery here since that time?—Yes.

49,370. Are you of opinion that the restriction then established along this coast prohibiting trawling within that line has been advantageous or otherwise to the fisheries?—I have not seen any restriction. They have always been trawling here.

49,371. Then there has been no difference since that regulation was passed?—Not a bit. There were a few boats fishing in the offing at one time and the officers stopped them. That was the only time I ever knew them to be stopped.

49,372. Then you tell us that the restriction is not really observed here?—Not now, and I never knew

of any interference except in the instance I have mentioned. A few of the Balbriggan boats were stopped at that time and their trawls were taken from them.

49,373. How long did that prevent them from going upon the restricted ground?—It did not prevent them at all. They were fined some small sum I believe.

49,374. And they now fish as if there were no restriction established?—Yes.

49,375. Has that regulation had no effect either one way or another with regard to the produce of fish?—No, I think not.

49,376. (*Mr. Lefevre.*) Do you recollect how many boats formerly went fishing off Inishbofin?—There were about nine in number. There were seven, eight, or nine fishing for three years for the bounty there.

49,377. Not more than that?—No, and they were all from this place.

49,378. All from the Skerries?—Yes, but all the Galway fishermen fished there too.

49,379. When did they give up going there?—Since the bounty was taken away.

49,380. Where did they go after that?—They betook themselves to other employments.

49,381. And then they took to trawling?—Some of them did.

49,382. Do you recollect the first year that trawling was commenced by the Skerries boats?—No, I do not. All the boats belonging to the place were trawling when I can first recollect.

49,383. When you were a boy?—Yes, there were 30 or 40 of them.

49,384. As many as that?—Yes; I suppose there were 50 boats at the fishing when I first went to the sea.

49,385. Then it is a very old trade in this place?—Yes.

49,386. Older than the Dublin trawlers?—Yes; but the Dublin trawlers beat them, because the people here have not been able to fit themselves out.

49,387. The Dublin trawlers have better boats, and they are manned by fewer men?—Yes; their boats have been got up by companies, and our people are only poor industrious people.

49,388. Did the Dublin men trawl over the ground the Skerries men trawled over?—Yes.

49,389. And they soon drove them off the ground?—Yes; because they had better means, and were all strong men. Our people were only poor men endeavouring to make a livelihood out of it.

49,390. Have the men who used to trawl taken to herring-fishing or gone away?—Some of them are dead, but some of them go yet.

49,391. The others have taken to herring-fishing?—Yes, they have all taken to herring-fishing now; they get a better livelihood by it.

49,392. What fish did you take in the trawl?—Soles, and turbot, and plaice, haddock and all kinds.

49,393. They were all brought into this port here?—Yes, they were brought in here to go to the Dublin market.

49,394. Can you give us any date or mention any year when the trawling began to fall off?—It began to fall off to my knowledge in 1821. It fell off then from what it was before; it fell off greatly then.

49,395. Ten years ago were there many trawlers?—No, there were only about five or six trawling here about 10 years ago.

49,396. There were not more?—No.

49,397. Were those the old boats which had been used in 1820, or had any new ones been built?—There had been many new boats built since, and some of the old boats are here on the coast yet, but of course they have had to be made nearly new since those dates.

49,398. Were there any of the larger class of trawl-boats built since the year 1836 here?—No; I do not know if any have been built in this place since 1836.

49,399. Because in 1836 there had been no trawlers built since 1820. Then I presume that all the boats now laid up were built before 1820?—When they could not pay at the fishing they turned them into carrying vessels.

49,400. Did they go off to other work?—Yes.

49,401. (*Mr. Caird.*) When you had a white fishery here did the local fishermen fish in the same way at the same season of the year as the Dublin trawlers?—Yes; but our people tried different ways at the fishing from what they did.

49,402. What different ways did they try?—They would be at long-line fishing here in the winter and trawling in the summer time. As long as they were able to work the long-lines round the north-west coast of Ireland they went round there when there was a bounty.

49,403. (*Mr. Lefevre.*) Why is it that the Balbriggan men have continued trawling when it has been given up from the Skerries?—They have no other means of making their bread.

49,404. Does it answer to the Balbriggan men still?—I think it answers, as some fish in that way still.

49,405. The men at Rush are line fishermen?—Yes.

49,406. They make it pay still?—Yes, they make a better livelihood by the lines.

49,407. How is it that there are no line fishermen in the Skerries?—The old men dropped it altogether and the younger branch of our people were not brought up to it.

49,408. What do the fishermen of the Skerries, who fish in the herring season, do at other times?—They carry potatoes round the coast.

49,409. They do not fish at all in other seasons?—No.

49,410. The herring season only lasts five months?—Between five and six months, from May until Christmas.

49,411. In other parts of the year they go in coasting vessels?—Yes.

49,412. (*Mr. Caird.*) The Dublin trawlers fish the whole year round with the trawl?—Yes, unless in the summer season when they cannot get men to man them; they go in the herring-boats then.

49,413. When your coasting boats were trawling you did not fish the whole year round with the trawl, did you?—No. They are a different kind of boat we have now for fishing boats compared with the coasting boats.

The witness withdrew.

JOHN KNIGHT called and examined.

49,414. (*Mr. Caird.*) You are a fisherman at Rush?—Yes.

49,415. Have you had a long experience there in the fishing?—Yes, for 35 years.

49,416. What kind of fishing is practised at Rush?—Ling-fishing, cod-fishing, and conger eel-fishing, and in former times there was haddock-fishing, but the haddocks have left us altogether.

49,417. Is it only line-fishing that you practise?—Yes.

49,418. Is there no trawling?—We use a trawl to get bait.

49,419. You trawl for bait?—Yes.

49,420. What kind of bait?—Flukes, gurnard, and plaice.

49,421. Do you get them in-shore?—In-shore with the trawl. We trawl in 30 fathoms of water and from that down to five fathoms.

49,422. Are there many boats engaged in trawling for bait?—All the long-line fishermen in the place trawl.

49,423. How many boats are there?—Ten, and from eight to 10 men in each of them.

49,424. Are they decked boats?—Yes.

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49,425. What is the tonnage of them?—From 20 to 35 tons.

49,426. What is the rig?—They are smack rigged, all but one wherry, which has two masts.

49,427. How many lines do they carry?—Each man will have from 15 to 20 lines.

49,428. How many hooks on each line?—Sixteen or 17 on an average.

49,429. (*Mr. Lefevre.*) Are the same boats employed in trawling?—Yes, they trawl for bait; they trawl twice a week.

49,430. But only for bait?—Yes.

49,431. Not to supply the market?—No, unless we get a turbot or some fish like that.

49,432. ((*Mr. Caird.*) Has the number of boats increased or diminished within your recollection?—It has decreased, by means of the bounty being knocked off.

49,433. Do you remember the time when there were a good many more boats at Rush than there are now?—Yes, I remember when there were 30 boats, or nearly 30.

49,434. About the same size as the present boats?—Nearly the same; perhaps not quite as large.

49,435. Then the decrease took place in consequence of the withdrawal of the bounty?—Yes.

49,436. Not in consequence of a falling off in the supply of fish?—In consequence of that too, but we get as good hauls of fish in the summer now as we did 20 years ago.

49,437. Do you find that the catch of your boats now on the ground that you frequent for fishing is as good as it was some years ago?—At times it is.

49,438. On the whole do you make as good a fishing as you did some years ago?—Just the same. We make as good a livelihood by it.

49,439. Do you get any haddock?—No, we get no haddock at all.

49,440. Do you recollect when there was much haddock caught?—I do.

49,441. What is the cause of the falling off of the haddock?—The trawling.

49,442. Do the trawlers get many haddock?—They did when they first commenced to trawl.

49,443. When did they cease to be as numerous?—Somewhere about 15 years ago. Every year they have been getting less and less, and within the last four or five years there have been none at all.

49,444. Have you attempted to fish for them further out at sea?—Yes.

49,445. And have you found them further out?—There are no haddock at all in the Channel.

49,446. Have they left the Channel altogether?—Yes, and in consequence of trawling, I think.

49,447. Is there any other fish that has declined in a similar manner?—Yes.

49,448. What?—The codfish.

49,449. They are not as plentiful as they were formerly?—No.

49,450. Would you give the same reason for that?—I cannot exactly say that it is the trawl which is making the codfish so scarce, but some winters we get more than we do in others.

49,451. Do they get any cod in the trawl?—No, only an odd time or so; the Dublin trawlers do occasionally.

49,452. They do?—Yes, in the spring of the year when they are on the banks to spawn they catch cod in the trawl.

49,453. The trawling in the deep sea has continued as long as you can recollect?—Before I can recollect they were trawling.

49,454. Has it had any effect upon your fishing as a line fisherman?—Yes, a very great effect.

49,455. Has it had any effect upon line-fishing except with regard to the haddock?—Yes, we have cast our lines in the evening and have found a great part of them taken away by the Dublin trawlers.

49,456. That is when the Dublin trawlers happen to come across your lines?—Yes.

49,457. Is that a frequent occurrence?—Yes, very often.

49,458. Is there no regulation to prevent them?—None at all, and they will not give up our lines to us, except an odd time when they bring them ashore and throw them all down in a lump.

49,459. Is that of frequent occurrence?—Very often, especially in the winter time.

49,460. Is there no regulation to prevent anything of that kind?—None, unless we could find a man trawling the lines away and go to law with him.

49,461. You could then prosecute him for doing an injury to your lines?—I have never seen it done, and yet they do great harm to us in regard to our lines.

49,462. Do you say that you trawl for bait yourself?—Yes.

49,463. In the daytime or at night?—Mostly in the daytime, very seldom at night.

49,464. Is that the only bait you use?—In the summer time we catch some mackerel up to this time.

49,465. Do you use that for bait?—Yes, the mackerel and gurnards we get on the hand-lines.

49,466. Have you a good supply of bait?—Sometimes we have, and sometimes it is scarce.

49,467. Do you ever use mussels or anything of that kind?—No, we use no shell-fish except for the haddock. When we had the haddock formerly we dredged for scallops.

49,468. Have you found the turbot increasing or diminishing in supply?—Turbot has decreased and soles too.

49,469. Do you get many soles on your hand-lines?—None on the hand-lines; we get them in the trawl when we trawl for bait.

49,470. You do get them when you are trawling for bait?—Yes, black sole, and sometimes turbot and plaice.

49,471. Do you also follow herring-fishing?—No.

49,472. Do the fishermen at Rush not take to the herring-fishing?—There is only one boat there that does.

49,473. Do you find a better catch of white fish at the time the herrings are on the coast?—Yes, there is, especially of ling.

49,474. Is that the time when you are most successful with your fishing?—It is; but at present the long-line fishing is pretty fair. We get a good many conger eels, but we have a good way to go out, nearly to the Isle of Man, in order to keep clear of the trawl-boats.

49,475. (*Mr. Lefevre.*) You say that your hookers are employed all the year round with the long-lines?—Yes.

49,476. With the exception of two days a week when they are trawling?—We do not trawl more than once a week for bait.

49,477. Is that all the year round?—Up to Christmas; there is no trawling then until the summer time again.

49,478. When do you begin trawling?—About May.

49,479. And you trawl one day a week?—Sometimes we have a sweep every day to get bait for the lines.

49,480. Do you know the restriction as to trawling from Dunany Point to St. Patrick's Island, and from St. Patrick's Island to Howth Head?—Yes.

49,481. Have you observed that restriction?—No, I have trawled inside it.

49,482. Is that the case with all the Rush boats?—Yes.

49,483. Does anybody interfere with you?—A man had his trawl taken away once and was summoned and fined 1*l.*

49,484. Your object is to catch small flukes?—Yes, for bait.

49,485. Do you not find them near in-shore?—Yes; we make bait of all sorts of fish we take except turbot, and black sole.

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49,486. Do you catch any large proportion of turbot and black sole?—No, it is only an odd turbot that is got.

49,487. Do you get plaice?—Yes.

49,488. Do you use plaice for bait?—Yes.

49,489. What are your seasons for line-fishing; what fish do you catch from Christmas onwards?—Cod from Christmas until May.

49,490. All cod?—Yes, all cod. We rarely get a haddock.

49,491. What is your ground for the cod, is it just off Rush?—No, east of Howth and east of Clogher Head.

49,492. What distance from the shore mostly?—In the spring of the year we will be four leagues from the shore.

49,493. Not further than that?—No.

49,494. What do you do in May?—We fish out deeper then. We go in 50 or 60 fathoms of water, and from that right down through the Channel off the County Down.

49,495. What do you catch then?—Conger, ling, cod, and skate.

49,496. Do you catch turbot then with the long-line?—No.

49,497. Or sole?—Some odd times we get a halibut, but we catch no soles. Our hooks are too large for the sole.

49,498. How long does that season go on?—As long as the good weather continues.

49,499. Until when would you say?—At present we are fishing out there until the end of September or the middle of October. We are now buying herrings for bait. At times, when we can get them cheap, we take them and go to the deep water.

49,500. Do you find it a good bait for the cod?—Yes, the best.

49,501. And for ling?—Yes.

49,502. When should you say that the ling-fishing season in the deep water is over?—The ling-fishing is over now. We get some ling, but the proper season is over.

49,503. What fish are you getting now?—Conger eel mostly and a few ling.

49,504. How long will that go on?—Until the bad weather sets in.

49,505. What fish do you catch then?—We go to work with the cod, and go on until May.

49,506. Then during the herring season you are fishing outside the herring-nets?—Yes; we take care we do not come in among them; they would drag our buoys away from us.

49,507. In the winter season do you find that the trawlers come upon your lines?—Yes; they drag our lines away.

49,508. Did you ever take the number of the trawlers who did that?—In the night-time we cannot see them.

49,509. You only shoot your lines at night?—We generally like to have them in the water before the night-time, but the trawlers trawl night and day.

49,510. Do you sometimes shoot your lines in the daytime?—Yes.

49,511. Do you find that you catch more fish on the rough ground or on a sandy bottom?—Sometimes we do, and at other times we do not. The ling mostly keeps on clean ground.

49,512. Where do you get the cod?—The cod go on rough and smooth ground.

49,513. Do you catch many sole on the long-lines in-shore?—We catch no sole at all on the long-lines.

49,514. What bait do you use in-shore?—Whelks.

49,515. You do not catch any sole at all?—No.

49,516. Do you occasionally catch a turbot?—Only seldom a turbot.

49,517. Are your hooks too large for the soles?—They are too large for any small fish.

49,518. Do you catch many plaice?—No; an odd time we get a plaice, but very seldom.

49,519. Then you do not think that the line of restriction as to trawling has had any effect in preventing trawling within that line?—We do not mind it.

49,520. Do the Dublin trawlers trawl within the line?—Yes, night and day. I have seen them this week trawling on it.

49,521. Do they trawl in the daytime or only at night?—Night and day. This week they have been trawling there night and day.

49,522. Have the Coastguard never interfered with them?—I never saw them do so.

49,523. Do you think it would be possible to prevent trawling between St. Patrick's Island and Howth Head?—I think so.

49,524. You think the Coastguard could prevent it if they thought fit?—I think so, but I do not think that trawling inside does any injury.

49,525. It does no injury?—No. The fish mostly spawn out in the deep water on the rough ground, but the haddock was a real native of the coast until the trawlers came upon it. I have seen small haddocks not three inches long in my own trawl.

49,526. Do you think that trawling in deep water does more harm than trawling in shallow water?—I think it does.

49,527. What fish spawn out in the deep water?—The haddock always make for deep water in the spring of the year when they spawn.

49,528. Do the cod spawn in deep water?—Yes, but they are a shallower fish than the haddock in the spawning season.

49,529. Have you observed the Balbriggan trawlers?—I have seen them there.

49,530. Do they trawl within the limits?—I cannot say.

The witness withdrew.

W. Lee.

William Lee called and examined.

49,531. (*Mr. Caird.*) You have heard the evidence of the previous witness?—Yes.

49,532. Do you agree generally with all he has stated?—Yes.

49,533. Is there anything you would like to add to what he has said, or upon which you would wish to give us further information?—I was trawling 14 or 15 years ago when we were making a haul for haddocks or anything we could come across, and we got 1,700 haddocks in one haul.

49,534. Was that in the deep sea?—Yes, in 40 fathoms of water. I counted them from curiosity.

49,535. How long was that ago?—Fourteen or 15 years, and if I were to trawl there now I should not get one on the same ground.

49,536. How far was it from the land?—About four miles from Rockabill.

49,537. Is that fishing ground at present trawled over by the Dublin trawlers?—Yes, they trawl over it constantly.

49,538. And are there no haddocks found there now?—No, none at all; and as to cod we have got 20 score of cod in a shot, and now if we can get a hundred at any time in the winter, or six score or seven score, we think it a wonder; yet we used to get 20 score.

49,539. Did you get that number commonly?—Yes, and 17 and 18 score.

49,540. On the same complement of lines?—Yes.

59,541. Have you not better lines now?—Yes, they are longer.

49,542. They have more hooks?—Yes.

49,543. Do you go further to sea?—There is a medium in cod-fishing; sometimes we get them in-shore, sometimes in 30 or 40 fathoms of water.

49,544. Do you find them on the same ground you

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used to find them in former times?—Yes, but they are very scarce.

49,545. They are scarcer now?—Yes, we think it a wonder if we get a hundred or six or seven score now, when we could get 20 score in former times.

49,546. Are there more boats now from Rush than there were then?—No, there are not more than 10 now and there were 20 then.

49,547. Fifteen years ago?—It is about 20 years since we had all those boats.

49,548. Within the last 15 years have the boats increased or fallen off?—They have decreased.

49,549. Within the last 10 years have they increased or fallen off?—They have decreased since 10 years ago. I think we have less boats than ever we had at Rush.

49,550. Are they bringing in more fish than ever they did 10 years ago?—No, except conger or cod they only bring in very few, and of haddock they bring in none.

49,551. Taking the whole of the fish brought into Rush, is the quantity increasing or diminishing compared with what it was 10 years ago?—There is no decrease in the conger eel. We get them plentiful; no trawl can damage them. We get them out in the deep water, on the muddy ground where the trawl cannot go.

49,552. Do you trawl out in deep water?—Yes, for bait, but they have spoiled our trawling there. They have taken all the bait away; we cannot get any if we trawl there now.

49,553. Do you trawl now in the bay?—Yes, for bait.

49,554. Do you think that your trawling in the bay does any injury to the line-fishing?—Yes, I think the trawl hurts the long-line fishing every way, no matter where they trawl. I have pulled out spawn from the trawl itself; the loops of it have been full of it, and I have flung it overboard.

49,555. Was that in the deep water or in the shallow water?—Both in the deep water and in the shallow water.

49,556. What season of the year was that?—The summer season.

49,557. What kind of spawn was it?—I cannot describe the sort of spawn.

49,558. (*Mr. Lefevre.*) What did it look like?—It looked like small beads or berries joined one to another.

49,559. Did it look like a bunch of candles?—No, they were small things like grapes mostly.

49,560. Are you sure that it was not whelk spawn?—I know that well.

49,561. What is whelk spawn like?—Like a honeycomb. We used to kick them before us on the strand like footballs.

49,562. Did you throw this spawn overboard again?—Yes; we threw it over the side of the boat out of our road.

49,563. Would you desire to see any restriction adopted that would prevent any particular kind of fishing that is now practised?—I do not know of anything except trawling, especially the Dublin trawlers. Nothing can stand their trawls. They are so heavy and weighty in themselves that nothing can stand against them. They are not the same as our trawls at all. If we were on the rough ground it would tear our nets or break our ropes, but they have got strong trawls with which they can trawl on the rocks or anywhere. It would take a good rock to bring them up.

49,564. You would wish to see trawling put a stop to altogether?—Yes, inside and out, and I can work a trawl as well as any man in Ireland.

49,565. Would you yourself wish to be prevented from trawling for bait?—Yes; I would take my chance of getting bait.

49,566. Would you get it in another way?—Yes.

49,567. You do not think it would be sufficient to prohibit trawling within the bays?—Well, I do not know. Everyone, even the Dublin boats, when it is blowing very strong would be glad to get in the bays to trawl when they can do nothing outside. The Dublin trawlers come in under that pretence as strong as they are.

49,568. Was it ever the case that the Rush boats did nothing else but trawl?—No, we always followed the long-line fishing.

49,569. Always the long-line fishing?—Yes.

49,570. When did you first begin to trawl for bait?—Always, as long as I can remember.

49,571. The same plan has been pursued as long as you can recollect?—Yes, as long as I can recollect we have trawled for bait. We have lines for mackerel, and we do not trawl if we can get some mackerel.

49,572. (*Mr. Caird.*) With regard to the herring-fishing, what herrings do you catch?—It is a shoal of large herrings that keep out in the deep water. They never come to the shore, at least we think so, and they spawn in very deep water, in from 60 to 70 fathoms of water. We see them every season.

49,573. What time of the year do they spawn?—I cannot tell; the herrings are always spawning. We see all kinds of small herring mixed up with herrings of a larger size. They are this size and that size, and you will see them all mixed up together in one day if you happen to come across them.

49,574. (*Mr. Lefevre*). In the same shoals?—Yes, I have seen them in the nets myself as small as the net can take them and from that up to a larger size. I have seen them as small as my finger among the mackerel.

49,575. (*Mr. Caird.*) I think you were going to say something about the shoals that spawn in the deep water?—We never see those large herrings in and about the shore, but we see them every summer out in the deep water.

49,576. Are they a large herring?—Yes.

49,577. What size are they?—Some of them are a foot long; they are as large as mackerel.

49,578. Are they caught at this season?—Yes.

49,579. By the drift-net fishermen?—Yes, in the deep water, but the weather is now getting broken and the fishermen are afraid to go after them.

49,580. Do they get more of them now than they used to get formerly?—I do not know.

49,581. Are the deep-sea herring full fish at present?—Well, I do not know. I do not know how the herrings spawn at all only as I see the small fish, or what sort of spawn it is. We see the little fish in the mouths of anything we catch with the hand-line.

49,582. (*Mr. Lefevre.*) What can you earn a week by the long-lines at Rush?—We make 2*l.* with some of the boats and from that to 10*s.*

49,583. Is that 2*l.* divided among the eight men?—No, 2*l.* a man and from that to 1*l.* and 10*s.*

49,584. What would be the average per man?—I cannot say.

49,585. Is that all the year round?—No, they sometimes get very little.

49,586. Do they make 10*s.* or 12*s.* a week all the year round?—They may get 10*s.* or 12*s.* a week.

49,587. Do the boats belong to the fishermen?—Yes.

49,588. Are the owners fishermen?—Some of them are, and some are not.

49,589. Are the others tradesmen in Rush?—Not all of them. A widow has two or three boats and some people in Dublin have two or three.

49,590. Do you share the profits?—Yes.

49,591. How much goes to the boat?—We have two shares for the boat, and they keep a boy, and half a share for the boy, and one share for each of the men.

The witness withdrew.

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The Rev. THOMAS GREEN called and examined.

Rev. T. Green.

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49,592. (*Mr. Caird.*) You have heard the evidence which has been given to-day ?—I have.

49,593. Do you think we have substantially had a full statement of the whole case as regards the fisheries at the Skerries ?—I held a meeting of 12 or 13 persons engaged in the fisheries, and the evidence given to day embodies substantially the evidence given at that meeting.

49,594. Is there anything that occurs to you which might be added in addition to what has been stated ?—There are a few facts I can speak of from conversing with the fishermen. In the first place, with regard to trawling, the trawl-net used by the fishermen here is larger in the mesh than that of the Dublin trawlers and does much less injury. They complain that the trawl-net of the Dublin trawlers is smaller in the mesh, and that the smallest class of fish is taken. In addition to that, they have a kind of apron with which they protect the trawl and which will admit of nothing passing through it; that was a fact stated at the meeting held here and it was generally concurred in.

49,595. (*Mr. Lefevre.*) What is the mesh used by those men ?—The exact measurement I could not get at.

49,596. It is mentioned in the report of 1836 as $2\frac{1}{2}$ inches from knot to knot ?—I do not know. There are some men here who can give evidence as to the mesh.

49,597. (*Mr. Caird.*) Is there any other point which you wish to mention ?—Yes, there is another point. The object of the inquiry is to ascertain whether the fish is diminishing or increasing, and the fact of their increasing is concluded from the fact that a larger number is caught; but it must be borne in mind that the Scotch train of nets is that which is used here. That is as deep as the Cornish men use, but the Cornish men are not as successful as they were years ago. If I were to represent the fishing by its results I should say the fishing is declining, but that the Howth and Skerries fishermen by using the Scotch train have had better results. It may be that there are more fish caught than fish left to be caught.

49,598. But the supply of fish has increased to the public ?—Yes; but the question is, whether it comes from a smaller quantity than the smaller supply came from before.

49,599. Is there any other point you desire to mention to us ?—Another point is, as to the Sunday fishing. All concur in the observation that on Monday and in the early part of the week there is a very successful fishing, and we attribute that to the fact that the fish get two days' rest.

49,600. They are undisturbed for two days ?—Yes. The fish must be disturbed by the boats going in among them, and I think it is for the real interest of the fishing during the summer time that all fishing should be prohibited on the Sunday and even the Saturday too.

49,601. (*Mr. Lefevre.*) You spoke of a meeting having taken place here ?—Yes, I collected the men together on a Sunday evening.

49,602. With a view to this meeting ?—Yes; to select the most intelligent of the fishermen so as not to have confusion arising in consequence of having bad witnesses coming forward. There is another fact I might mention, all are unanimous in requiring some regulation of the fishery itself, especially with regard to not shooting the nets before sunset. They require that there should be some Government cutter to go among the fleet and give a signal. They say that that is done at Stornoway in Scotland, and they see no reason why the same regulation should not be established here, where you have Englishmen, Manxmen, Scotchmen, and Irishmen all fishing together.

The witness withdrew.

EDWARD D'ALTON called and examined.

E. D'Alton.

49,603. (*Mr. Caird.*) Have you been stationed here for some time in command of the Coastguard ?—For about a year and a half.

49,604. Have you any instructions here to enforce the regulations in regard to trawl-fishing within certain limits upon this coast ?—I believe such instructions have been given but not in my time.

49,605. They have not been repeated to you ?—No.

49,606. Do you not consider it to be part of your duty to prevent fishing within those limits ?—Certainly it is my duty; an Order in Council some time ago was issued, that within a straight line from the east point of Saint Patrick's Island to Clogher Head no trawling was to take place and I assure you that more trawling has taken place inside that line than outside of it.

49,607. But you have no instructions to enforce that Order in Council ?—I never received any.

49,608. Do you not hold it to be any part of your duty, or has your superior officer not told you that it was your duty, to prevent trawling within that prohibited line ?—Never.

49,609. You have not taken any measures to prevent it ?—I have never taken any measures, inasmuch as if I did it would positively be more than we with our small force here could do; it would take up all our time.

49,610. You could not follow your legitimate business of looking after the revenue ?—I could not.

49,611. But at any rate you have not any directions to do so ?—No, never.

49,612. Has any one complained against you for not doing so ?—No.

49,613. Is there any other Coastguard officer in this part; is there one at Balbriggan ?—There is a Coastguard station at Balbriggan.

49,614. Have any instructions been issued there ?—I am not aware.

49,615. Have you ever seen any interference whatever with the trawl fishermen within the limits ?—Never.

49,616. They are allowed to trawl there or not as they please ?—Yes.

49,617. (*Mr. Lefevre.*) How many Coastguard stations are there between St. Patrick's Head and Clogher Head ?—Balbriggan is one, Nannywater two, and the mouth of the Boyne three.

49,618. Yours makes four ?—Yes; and Clogher Head is the extreme point.

49,619. That would be five ?—Yes.

49,620. How many men are there at each on the average ?—There are six or seven men at each station.

49,621. Do you think their united force would not be sufficient to make the regulation observed ?—No doubt it would, but our legitimate duties would have to be neglected.

49,622. How many additional men would be required to enforce that regulation ?—A boat's crew at each station.

49,623. An addition of six men at each station ?—No, of four.

49,624. Do you think that with that addition it would be possible to exclude trawling within the headlands ?—Yes, I do.

49,625. Would it be necessary that they should row at night ?—Certainly.

49,626. Do the Balbriggan boats trawl within that line ?—I believe so.

49,627. And do you think the Dublin trawlers do so also ?—Certainly.

49,628. Have you observed them yourself ?—Yes; always inside the line, but very seldom indeed outside.

49,629. And is that the case also within the line

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from St. Patrick's Head to Howth Head ?—That I am not aware of.

49,630. You do not know that line so well ?—No.

49,631. I suppose the ground between St. Patrick's Head and Clogher Head is particularly favourable for trawling ?—It must be, because all the trawling goes on inside those points.

49,632. Can you give us any accurate information as to the number of trawlers in Balbriggan ?—No, I cannot.

The witness withdrew.

H. Kappock.

HENRY KAPPOCK called and examined.

49,633. (*Mr. Caird.*) Are you a fisherman here ?—Yes.

49,634. You wish to make a statement with regard to your herring-nets having been carried away by trawlers ?—Yes; they were carried away by the Dublin trawlers.

49,635. Where was it, and when ?—It would be four miles north of St. Patrick's Island.

49,636. What was it that happened ?—A trawler, about nine o'clock at night, came across our train and tore three of our nets. One was taken away altogether and the other two were torn.

49,637. Was that within the line from St. Patrick's Head to Clogher Head ?—Yes, it was within that line.

49,638. Did you make any complaint or find out which boat had done it ?—I had a small boat attached to the fishing-boat that carried two or three men, and I put off with it and got on board the trawler, and gave him a hand to clear the nets of his trawl. He went to work at once to haul his trawl up.

49,639. Did you get the nets clear ?—Yes, but we got them greatly torn.

49,640. It was purely accidental on his part, I suppose ?—Well, we had our light up and they had only a small crew on board. They ought to have left one man on deck to keep watch. I think they had left a boy there to keep watch and he had gone to sleep.

49,641. Was he trawling at that time ?—Yes, with his head on the land.

49,642. Is that the only instance in which you found a trawler coming across your nets ?—That is the only one since I have been fishing.

49,643. Did you get any compensation from him for the destruction he had committed ?—He was not agreeable to give me anything, and I had to put the case into the hands of the magistrates at Dublin.

49,644. What happened then ?—I got paid.

49,645. (*Mr. Lefevre.*) You took his number ?—Yes, and the name of the boat.

49,646. Is most of the herring-fishing here carried on outside that line from St. Patrick's Head to Clogher Head ?—From this time to Christmas most of it is carried on inside that line.

49,647. In the early part of the season how is it carried on ?—Then it is outside.

49,648. Is that the best part of the season ?—The early part of the season is the best part.

49,649. Then more than half the herring-fishing is carried on outside that line ?—Yes, two-thirds of it.

The witness withdrew.

T. Derham.

THOMAS DERHAM called and examined.

49,650. (*Mr. Caird.*) Are you the owner of a trawl-boat here ?—No, but a brother of mine is.

49,651. Do you fish in a trawler ?—Yes; but I have been herring-fishing all this summer.

49,652. Have you been a trawl fisherman for some years ?—Yes; I have been fishing for 24 or 25 years off and on.

49,653. Is there any other trawl-boat belonging to this place ?—Not at the present time.

49,654. Were there in former times ?—There were once, perhaps, as many as a score.

49,655. What has been the cause of their being discontinued ?—The enlargement of the boats for the potato trade, which was good for a time. That made them too large for fishing, and they were then employed in running fresh herrings to Liverpool and elsewhere. By that means the class of men who had been in the habit of trawling wore off, and the younger men knew nothing about it.

49,656. Is yours the only boat left ?—Yes, the only one.

49,657. Do you go out to the deep sea to trawl sometimes ?—Yes.

49,658. What is the size of your boat ?—Thirty tons.

49,659. What is the length of the beam ?—Forty feet.

49,660. What is the size of the mesh of your net ?—There is a difference somewhat in the net, the part nearest the vessel is about 5 inches.

49,661. What is it towards the bag of the net ?—It would be somewhere about 3 inches.

49,662. Is the smallest mesh you have about 3 inches ?—It is rather more than 3 inches when first made, but by getting tarred and wet it creeps up to a little less than that.

49,663. On the average it is about 3 inches ?—Yes.

49,664. Do you fish in deep water in part of the season, and in shallow water in another part ?—Yes.

49,665. Do you fish all the year round with the trawl ?—Very near all the year round.

49,666. Will you tell us the different seasons and the different places you fish in ?—At this time of the year we trawl outside Clogher Head up to 18 fathoms of water; then when the plaice fall in we go into five and six fathoms, and from that to two fathoms.

49,667. Within the bay ?—Yes.

49,668. Then are we to understand that during the summer season you fish within the prohibited line in deep water ?—Yes.

49,669. And as the season progresses you come inside to follow the plaice ?—Yes.

49,670. During the winter do you fish inside that line ?—Yes.

49,671. What kind of fish do you get there ?—Plaice.

49,672. Anything else ?—Sometimes a few hake, sometimes cod, sometimes turbot, and sometimes sole.

49,673. Do you catch many small fish ?—Yes, small flukes and grey gurnard.

49,674. Do you catch many unfit to be sold in the market ?—Yes, a good many too small for the Dublin market, but we preserve them for our family use; they are divided among the men.

49,675. Are there large quantities unfit for use that are thrown overboard ?—There is no doubt a small quantity destroyed. Most of them they bring up alive on the deck and throw overboard, and perhaps some others may be dead.

49,676. Would there be a large proportion alive ?—There would be a good many living when we throw them out.

49,677. Do you find that there is a larger proportion of small fish thrown overboard in shallow water or in deep water ?—Very often I see more in deep water.

49,678. Is the quantity of small fish you catch with the trawl either in deep water or shallow water on the increase or decrease, compared with what it was in former times ?—I have seen plaice in four fathoms of water, there are plenty at a certain time of the year, as much as there was when I first went to sea.

49,679. They are as plentiful now ?—Yes.

49,680. Do you agree with the evidence we have had to day, that the haddocks have decreased ?—Yes; in 1851 there was a law put in force by the officers of the Coastguard to protect the shore, and some men

when they were not able to earn bread outside were obliged to come in-shore; then, because they were fishing in-shore it was said they were breaking the law which had been made by the Coastguard here for protecting the coast. I saw the Coastguard fire a shot at the boats; the boats abandoned their trawl by slipping it and putting a buoy upon it so as to enable them to get it again. I did not see what harm they were doing, because there was a proper season for the men to catch flat-fish inside, namely from this time forward until Christmas, and it is during that time that they fish inside.

49,681. What boats fish there?—The Balbriggan boats and ours, but we have only one boat now at the Skerries.

49,682. That has no reference whatever to the decrease of the haddocks?—In 1851 the law was made to prevent the trawl fishermen from fishing inside. Some of the Clogher fishermen did not trawl at that time; they have two or three trawlers now. The fishermen were afraid to fish in the bay, but I saw the haddock men come with their boats and shoot their lines across the trawlers; it came after that that the haddocks went away altogether, and it is a mystery for any man to know the reason.

49,683. Did they go away suddenly?—Yes.

49,684. Do you not admit in any way what was said by the line fishermen, that it was in consequence of the spawn of the haddock being destroyed by trawling?—It did a great deal of harm to the spawn of the haddock, but they do not spawn in this bay.

49,685. Where do they spawn?—My father was an old fisherman and he always said that out here to the east of Lambay there was a bank where the fish mostly spawned, when the nights got long in this time of the year. I have often heard the fishermen say they wished for a breeze, or an east wind, to drive the fish off into the bay; and yet the trawling went on, and by constantly continuing it they have torn away the spawn on the ground on which the fish spawned.

49,686. Then you think it is trawling that has injured the haddock-fishing?—No doubt outside, but there is no spawn of any sort along the bay, unless it has the spawn of flat-fish in it. The haddock and the herring go to the rough ground to spawn, and a man will not shoot his trawl where there is rough ground. We go by the marks on the land where we are to shoot our trawl; if any accident happens we take a mark and keep clear of that place again.

49,687. (*Mr. Lefevre.*) Do you agree with the other witnesses that the Dublin trawlers trawl within the limits?—Yes, they trawl in as far as we do, from this time up to Christmas.

49,688. Do they not fish off the shore after then?—No.

49,689. Where do you go after Christmas; do you still fish within the limits?—Yes, still within the limits, and when the days get a little longer we trawl outside again. There are days when the weather will not allow us to trawl in deep water, and then if the nights are fine we get out and trawl in deep water.

49,690. Have the Balbriggan boats increased or not?—At one time there were 15 or 16 boats in Balbriggan.

49,691. How many are there now?—They wore away until there were only one or two.

49,692. How many are there now?—Perhaps as high as eight.

49,693. They have rather increased then?—Yes, they have been less since I went to sea, and now they are increasing again.

49,694. How do you account for the trawlers falling off at Skerries?—The owners took to speculating and something else.

49,695. Do you make as good a profit out of the business as you did?—I have seen as much got out of trawling of late years as I saw when I first went to sea, but I do not think that the fish are as plentiful as they used to be.

49,696. Do you think you can make more by trawling than by line-fishing?—Our people have not followed line-fishing for many years back. There is a good deal of loss attending line-fishing; they have to trawl in order to catch bait.

49,697. Is there a good deal of expense incurred in procuring bait?—They have to work a trawl for bait which may put them into from 10*l.* to 20*l.* expense.

49,698. You say that the Coastguard tried to enforce the regulation established here?—Yes they did.

49,699. How long did they try to enforce it?—About a couple of years.

49,700. After that they did not try?—The men were afraid and very often they had the net put down alongside without dragging it.

49,701. The Coastguard enforced the regulation for two years and then it fell off?—Yes.

49,702. After that they did not prevent trawling within the line?—No, because the officers here and the officers at Balbriggan saw that the men were not able to fish outside, and that if they were not allowed to fish inside they would have nothing to do but to beg.

49,703. What would be the effect on the Balbriggan trawlers and your own of enforcing the line of prohibition; suppose the Coastguard stopped trawling within the line from Clogher Head to Saint Patrick's Head what would be the effect on the trawlers?—The men might stop in-shore because their boats cannot go to the deep water to contend with the Dublin trawlers whose boats are of 70 or 80 tons.

49,704. The Dublin boats are better fitted to keep far out at sea?—Yes.

49,705. Your boats are not fit to go far out?—No. They are in general not half the size of the others.

49,706. Then in fact the prohibition would put a stop to your trawling altogether?—Yes, and to the Balbriggan trawlers. There is only one here and it would not be of much matter whether she stopped or not.

49,707. How many men are there in each of the Balbriggan trawlers?—From five to six.

49,708. Is that not a large crew for boats of that size?—It is an old system they practise; they worked in that way formerly and they carry it on still.

49,709. The Dublin trawlers have only three men and a boy?—Yes, three men and a good strong boy, or two small boys.

49,710. They are larger vessels?—Yes, but they have purchases instead of working by hand.

49,711. For hauling in the rope?—Yes.

49,712. Would it not answer for you to haul up the trawl with a winch?—Yes.

49,713. What are the earnings of a Balbriggan boat?—They might average, if they follow it throughout the year, about 10*s.* a week; some weeks they might get 20*s.* or 25*s.*, some 30*s.*, some only 8*s.*, and some 12*s.* or 15*s.*

49,714. Do you trawl within the line drawn from St. Patrick's Island to Howth Head?—I do not trawl much on that side.

49,715. Do you ever trawl in Dundalk Bay?—No, I never trawl in Dundalk Bay.

The witness withdrew, and the inquiry was adjourned to Balbriggan.

Balbriggan, Dublin, Saturday, 17th September 1864.

PRESENT:

BALBRIGGAN. J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

J. Carton.

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JAMES CARTON called and examined.

49,716. (*Mr. Caird*). Have you long been a trawl fisherman here?—Yes, for 40 years.

49,717. And you are well acquainted with the fishing on the coast?—Yes, as well as any man you can find.

49,718. Do you remember the time when there was a prohibition made against trawling within a certain line?—I do.

49,719. Have you, since that prohibition was established, continued to fish both outside and inside that line just as you please, in the same way that you did before?—Just the very same.

49,720. It has made no difference in your trawling?—No; it is according as the weather is. If the weather is fine we go further off, and when it is wild weather we come close in. We follow the fish inshore.

49,721. You come inside when the weather is very bad?—Exactly.

49,722. And you go into the deep when the weather is fine?—Yes.

49,723. Do you not find in shallow water in the summer time, in warm weather, that you can get more fish?—No, they are scarcer in the summer time, far scarcer in the summer time. Fish get to the deep in the summer.

49,724. During the last 40 years have you and the fishermen here followed trawling on this coast?—Yes, during the whole of that time.

49,725. Were there many more boats employed in trawling 20 or 30 years ago than there are now?—Yes, a good many more than there are at present.

49,726. Did they begin to decline at the time of the potato famine?—Yes; it would be somewhere about the famine time.

49,727. Had the famine anything to do with it?—No; they had been falling off before and they have been falling off since.

49,728. Had the number of fish you were able to catch begun to fall off in quantity?—No, it had not.

49,729. (*Mr. Lefevre*). What was the reason of the decline in the number?—The owners were not able to keep them after the bounty was taken off.

49,730. (*Mr. Caird.*) When the bounty was taken off the boats fell off in number?—Yes.

49,731. (*Mr. Lefevre.*) Did they give a bounty on the fish caught by the trawl?—We always had 1*l.* each for the boat.

49,732. Were not the trawlers used at that time also as hookers during a portion of the year?—At a certain season of the year they were trawling, and the rest of the year they were hooking.

49,733. These boats were employed as hookers in order to get the bounty?—Yes.

49,734. And as trawlers for the rest of the year?—Yes.

49,735. They did not get the bounty for fish caught by the trawl-net?—No; they got the bounty for the hookers, and they hooked during part of the year.

49,736. Then when the bounty was done away with it was no longer an object to keep so many vessels here?—No.

49,737. Do your boats now fish sometimes with the hook as well as with the trawl?—No, they do nothing but trawl now.

49,738. Do you follow trawling the whole of the year round?—Yes, constantly.

49,739. (*Mr. Caird.*) Have you no other occupation?—I go with an odd cargo of seed potatoes between this and Scotland.

49,740. At what time of the year do you do that?—In January and February; but for one boat that does that there are ten which follow trawling the whole season round.

49,741. Is the quantity of fish you catch increasing or diminishing?—It is still increasing.

49,742. Is there any particular kind of fish that has been fished out?—The haddock is the only fish that has failed.

49,743. Can you give any reason for the failure of the haddocks?—No I cannot give any reason for it.

49,744. Do you find that when you are trawling your trawls can go on the same ground one after another with success?—Do you mean in catching flat-fish?

49,745. Yes?—The flat-fish are fully as plentiful as ever I remember.

49,746. Do you get any turbots?—Yes, a great number of turbot, brill and sole.

49,747. Do you get them now?—Yes, at present.

49,748. Inside the prohibited line?—Yes.

49,749. And outside also?—Yes; I see no difference.

49,750. Have you observed that in consequence of fishing for a long time within that prohibited line the quantity of fish you can catch with the trawl is diminishing?—Not in the least.

49,751. Are there just as many now as there were before?—Yes, as far as I can recollect.

49,752. Do you get a better price for them?—Yes, far better.

49,753. Then is it a better business now?—I think it is in the best time of the year. Now is the best time for trawl-fishing.

49,754. How long does it go on?—From this time until Christmas.

49,755. You do not follow the herring fishery at all?—No.

49,756. Do you find at the time the herrings are on the coast that you can get better hauls of other fish?—Yes, there are more hake and turbot, but the turbot are fully as plentiful without the herring fishery as ever I saw them.

49,757. At present?—Yes.

49,758. Do you get any cod with the trawl?—We get an odd one occasionally.

49,759. Not many?—No, only a few odd ones.

49,760. Have the number of plaice increased?—Yes.

49,761. And are they as good in quality as ever they were?—Yes; more were got last year, this time 12 months, than I ever remember for 30 or 40 years.

49,762. Do you get many sole?—Yes.

49,763. What do you consider a fair fishing of sole for one day's work with the trawl?—Sometimes five and six pairs, or 10 pairs. When we get out in the deep water we get eight and 10 pairs and three and five pairs in a haul.

49,764. Do you make good earnings by the trawl fishing?—Yes, pretty fair.

49,765. Do you make more than the line-fishermen?—I think we do equally as well.

49,766. How many men have you in a boat?—Five or six.

49,767. Do you think that each of those five or six men have as good or better earnings than the same number of line fishermen?—Sometimes they get far more and sometimes less.

The witness withdrew.

THOMAS CARVAN called and examined.

BALBRIGGAN

T. Carvan.

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49,768. (*Mr. Lefevre.*) Are you a fisherman here ?—Yes.

49,769. A trawl fisherman ?—Yes.

49,770. What is the greatest number of trawlers you recollect here ?—There were 17 sail of trawlers here at one time.

49,771. How long ago ?—30 years ago or more.

49,772. Did they begin to fall off in number ?—Yes.

49,773. Ten years ago how many were there ?—Ten years ago I suppose there were as many as there are now—about eight or 10.

49,774. Since that has the number decreased ?—Yes, they have fallen off since then and they have increased again since.

49,775. You cannot go out to fish as far as the Dublin boats can ?—No, we cannot.

49,776. Do the Dublin boats come within the line of prohibition ?—Yes, as often as we do.

49,777. Do you know that the Dublin boats only carry three men and a boy ?—Yes.

49,778. What is the reason you carry five and six ?—Because we work on a smaller piece of ground and in shallow water. They go out in the deep water backwards and forwards and they can keep their trawl out.

49,779. Their boats are larger than yours ?—They are double or three times as large.

49,780. If they can work their boats with three men and a boy how is it that you require five and six men to work yours which are so much smaller ?—We make our hauls shorter and oftener.

49,781. Do you work your trawls up with a winch?—Yes.

49,782. How often do you take it up ?—Every two hours, or three or four hours. The Dublin boats will go sometimes for eight hours.

49,783. Is an extra number of men necessary in your boats ?—We could not do without them because we must keep our trawl on the ground where the fish are.

49,784. Do you believe that the supply of fish is increasing rather than diminishing ?—It is increasing every day, particularly in the shallow water where no herrings ever spawn. We cannot get close enough to the shore at present after the fish.

49,785. Do you catch more plaice and soles in the shallow than in the deep water ?—Yes, double and treble the quantity.

49,786. At what time of the year ?—Up to the present time; from this till Christmas.

49,787. From September until Christmas ?—Yes.

49,788. And after Christmas where do you go ?—After that the fish go to the deep.

49,789. Do you follow them ?—We follow them as long as we can and as long as the weather will allow us.

49,790. Do those who can employ their vessels in the coasting trade after Christmas ?—Some odd ones do ; perhaps one out of 10 will go for a load of potatoes and upon other business.

49,791. Do the others follow trawling all the year round ?—Yes, they have nothing else to live by.

49,792. What would be the effect upon the fishermen and boats here if the regulations were strictly carried out so as to prevent trawling within a line from Clogher Head to St. Patrick's Island ?—We might go to the poorhouse. There would be nothing else for us to do ; our vessels are not fit to go to the deep in bad weather.

49,793. Are they not fit to go where the Dublin boats go ?—No, except on a fine day. Upon such a day as this they might go out.

49,794. Would it also take away the best of your fishing ?—Yes.

49,795. (*Mr. Caird.*) Would these fish be caught by anybody else if you did not catch them in the trawl ?—No.

49,796. Would the line-fishermen get them ?—No, they would not.

49,797. Do you send your fish to Dublin from here ?—Yes, all goes to Dublin.

49,798. All by rail ?—Yes, it goes to Dublin or Liverpool.

49,799. Does any of it go by steamer to Liverpool ?—Some of it goes from Drogheda, and from Liverpool to London sometimes.

49,800. Have you any idea of the largest quantity you ever sent away by rail on the same day ?—I don't know the largest quantity sent away altogether. The largest quantity I ever got by fishing was 80 score of plaice in three hours.

49,801. With one trawl ?—Yes, with one trawl in three fathoms of water three parts of a mile from the shore.

49,802. Was that a common fishing ?—Yes, and if we were to go half a mile or a quarter of a mile further off we should get nothing.

49,803. If these fish had not been taken by you in the trawl they would not have been taken by the line ?—No, the line fishermen would not have taken one of them.

49,804. (*Mr. Lefevre.*) Do you catch many small fish ?—No, not any but what some person can use. We catch none that we can say are not of use. Our meshes are large.

49,805. What is the size of your mesh ?—Three inches from knot to knot.

49,806. Do you mean on the line ?—Yes, I suppose it will be six inches when pulled out straight.

49,807. Is the mesh smaller at the pocket of the net ?—Yes, but that is the smallest of the mesh, in the other parts it is from six to seven inches.

49,808. Do you not bring up a certain number of fish that are unsaleable ?—No, none but what some poor person can use.

49,809. What are those small fish mostly ?—What we call flukes.

49,810. Are there any turbot and soles ?—No.

49,811. Do you mean to say that you never take up small soles ?—No, unless after a heavy breeze of wind they roll in, and a few small ones get entangled in the net.

49,812. What size are they ?—Three or four inches. We generally get them alive and throw them out.

49,813. Do you get any small turbot ?—None but what are of use. We get them both small and large, but we get none that some gentlemen cannot use.

49,814. Do you ever take any small cod ?—No, no small cod.

49,815. Any small haddock ?—No, none that I have ever seen, either in Scotland or England.

49,816. Did you formerly catch any haddock in your trawl ?—Yes, thousands of them.

49,817. Were they good sized fish or small ones ?—They were all good sized fish.

49,818. When did they begin to disappear ?—About 10 years since, I suppose.

49,819. Before that had you a pretty regular supply ?—Yes, we had a very fine supply. We got from 10 to 20 and 30 score, after four hours dragging with the trawl.

49,820. What do you think has been the cause of the falling off in the haddocks here ?—I am unable to say what has banished the haddocks.

49,821. What should you say the men earn by trawling here ; what wages ?—Sometimes they earn 1*l.* a week for their share, at other times not 10*s.*, at other times not 5*s.*; sometimes they get as much as 30*s.*

49,822. What will be the average throughout the year ?—16*s.* or 18*s.*

49,823. Do the boats belong to the fishermen here ?—Yes, they do.

49,824. How are the men paid ?—The owner of the boat gets two shares for the wear and tear of the boat; each man gets a share. The owner finds the boat and all the materials; he gets two men's part and each man gets a share.

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49,825. Are all the boats owned here by the fishermen?—Yes.

49,826. Have any boats been built or bought lately?—None have been built here for the last 30 years, and if any poor man is not able to repair his boat it must lie there.

49,827. Do you ever use the boats for the herring fishery?—Not the trawl-boats.

49,828. Are they not fit for that?—No; they are too heavy.

49,829. If trawling were stopped within the line of prohibition would the boats be fit for any other kind of fishing?—No, they would not.

49,830. Could they be used as hookers?—In the summer time they might, but not in the winter.

49,831. If you used them as hookers would they catch the same class of fish you do now?—Of course in the summer season.

49,832. What would you catch with the hook and line?—Cod, skate and conger eel.

49,833. But not the same fish you catch now?—No.

49,834. Are your boys brought up to the same business?—Yes, all our young men are brought up to the same business, and we follow it throughout the year.

49,835. (*Mr. Caird.*) You say that you have lately made some very large hauls of plaice?—Yes.

49,836. Has that been of recent occurrence; was it this year? Yes.

49,837. Were the hauls you got as large as you ever made before?—Yes, they are not here at present but we expect to get them in the course of another fortnight. They come in regularly after the food as naturally as anything else.

49,838. Is the food upon the ground?—Yes, and the trawl cleans the ground so as to enable the fish to get at the food.

49,839. Do you find that your trawling on the ground has not prevented the regular return of the fish?—It has not done so in my day, and I have been 50 years at it; but the fish have been increasing every year.

49,840. It is quite as great as ever it was?—Yes.

49,841. You think the fish are increasing?—They have been increasing more for the last few years than ever I remember.

49,842. (*Mr. Lefevre*). Do you ever trawl over the same ground day after day in succession?—Yes, for a few hours at a time, we have been working over the same spot for weeks.

49,843. Do several of the boats sometimes follow one another closely?—They follow one another constantly.

49,844. Is there any difference in the quantity each will get?—No; one boat coming along will get as much as another and when they come back again they will get the same quantity of fish and perhaps more.

49,845. Have you ever trawled in Dundalk Bay?—Yes.

49,846. Since trawling there was prohibited?—No; not for the last 15 or 16 years.

49,847. Did it ever form a good portion of your fishing ground?—Yes, there are as fine fish in Dundalk Bay, if we were allowed to catch them, as we can take anywhere.

49,848. How is it that you have left off fishing within Dundalk Bay and yet have continued fishing within the other line of prohibition?—Because it was strange ground. It was too much out of our road, and if a southerly or easterly wind came on it was not easy to get out of it.

49,849. Then it was not because you were prohibited from trawling that you gave it up?—We always got a living along this shore and this was the place upon which we constantly trawled.

49,850. Did the boats from Carlingford fish in this bay?—No, there were never any boats belonging to Carlingford trawl-fishing that I remember.

49,851. We were told that there had been five or six trawlers there?—Not within the last 40 or 50 years.

49,852. Is this the only place along the coast where the fishermen have trawl-boats?—This place and Ringsend are the only places where there are any trawl-boats and we have no other business to live by.

49,853. Do the Rush hookers fish in this bay?—Yes, they come among us for bait.

49,854. Do they fish for bait?—They set their lines in the deep.

49,855. Do they trawl in the bay for bait?—Yes.

49,856. Do they set their lines here?—In the winter time they do.

49,857. Then do you not come across the long-lines of the Rush hookers?—No.

49,858. (*Mr. Caird.*) Do you look out for herring-nets when the herrings are on the coast?—Yes.

49,859. Are you careful not to keep among them?—We haul our trawls if we come near them.

49,860. Do you trawl at night?—Seldom during the herring fishery; we lay the boats up then.

49,861. Why do you do that?—Because we are afraid of doing harm to the herring-nets. We can get good wages on the quay and we never shoot a net.

49,862. (*Mr. Lefevre.*) Would it not answer for the men here to have herring-boats as well as trawl-boats?—We are not able to get them. There is no one to assist us.

49,863. Then you do not make money enough out of your trawling to set up other boats?—No; we are scarcely able to keep our families, and those men who have herring-boats do not get them by their own earnings; they have gentlemen to help them.

49,864. Do you earn enough money to enable you to keep your trawls in good condition?—No.

49,864*a*. Are they falling out of condition?—They are falling off every day. There is a poor man here with a big family who carried away his mast and his boat is laid up in consequence. He cannot get a new one.

49,865. Then it is not as profitable a business as you have said?—A man with seven or eight children and a wife to support upon 17*s*. or 18*s*. a week cannot save much out of that.

49,866. Do the men take potato grounds here?—No.

49,867. Then the fishermen here have no land to depend upon?—No, all that we get is out of the bottom of the sea; and if that is taken away we may go and suck our fingers. At this season of the year we can get the best of plaice, gurnards, turbot, and soles; but if you were to keep us a mile from the shore we might as well stop in the harbour.

49,868. When does the season begin?—From this time up to Christmas.

49,869. Just as the weather begins to get cold?—Yes, and the nights long.

49,870. The fish come into shallow water?—Yes, they come naturally into shallow water then.

The witness withdrew.

J. Rogers.

JOHN ROGERS called and examined.

49,871. (*Mr. Lefevre.*) Are you a fisherman here?—Yes.

49,872. Are there any seine-nets used in this bay?—Yes.

49,873. How many?—They are used by a gentleman of this country, Mr. Thomas Preston, who kills more small fish in a day than we should kill in hundreds of years.

49,874. How many of these nets are there?—I cannot tell.

49,875. Are there three or four?—There are more than 20.

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49,876. Are they habitually used along the coast?—Yes, whenever they think proper to go out.

49,877. Do they catch many small fish?—Yes, they catch an abundance of them no larger than this (*measuring*) only fit to feed the pigs with.

49,878. What kind of fish are they?—Small turbot, plaice, brill, and sprats.

49,879. (*Mr. Caird.*) Yet that does not diminish the fishing here?—No.

49,880. It makes no difference?—No.

49,881. (*Mr. Lefevre.*) Have they used these nets for a long time or only recently?—They have been used for the last 20 years.

49,882. They do not use them specially for catching small fish?—They use them to catch trout and mullet.

49,883. And mackerel?—Sometimes small soles, plaice, salmon, turbot, and brill.

49,884. What is the mesh of the net?—The mesh is not an inch.

49,884*a*. Are they more calculated to catch small fish than your trawl?—Yes.

The witness withdrew, and the inquiry was adjourned until the 21st of September, at Greenock.

Greenock, Renfrewshire, Wednesday, 21st September 1864.

PRESENT:

JAMES CAIRD, Esq., M.P. (Chairman.) | G. SHAW LEFEVRE, Esq., M.P.

GREENOCK.
W. Gallacher.
21 Sept. 1864.

WILLIAM GALLACHER called and examined.

49,885. (*Mr. Caird.*) Have you been for many years a fish dealer and fish-curer here?—Yes.

49,886. And you are well acquainted with the different varieties of fish brought to the Greenock market?—Yes.

49,887. Can you tell us from your experience whether the fish caught in the sea here are increasing, stationary, or diminishing?—They have been decreasing for a number of years.

49,887*a*. What kind of fish in particular do you find is diminishing?—In fact all kinds have been diminishing.

49,888. Do you refer to white fish other than herrings?—They are both alike; the white fish are diminishing quite as much as any other fish.

49,889. What kind of white fish was found here in considerable quantities in former times?—Whiting and haddock, but whiting especially.

49,890. And are whiting not got here now?—Very few.

49,891. Can you recollect at what time any perceptible diminution took place in the catch of whiting?—About eight or nine years ago.

49,892. And with regard to haddock, were they ever found in any great abundance here?—Not here, but down about Campbeltown.

49,893. Was there ever any large quantity of white fish caught here other than herrings?—Between this and Campbeltown there were great quantities caught.

49,894. But taking a line to the east of Arran was there any very large quantity caught?—Yes.

49,895. Has it perceptibly diminished?—Yes, it is clean gone.

49,896. Were there any flat-fish caught?—Yes, a good many.

49,897. Any soles?—Yes.

49,898. Turbot?—Yes, and turbot.

49,899. And have they also diminished?—I cannot say much about them, the boats are not trying them in the way they used to do. They are trying them on the bank up here, but not down there. They used to get a good many out of it, but the boats are not fishing now. There are not more than two trawlers in Campbeltown which are trying for them now where there used to be eight or nine.

49,900. Is it beam-trawlers that you mean?—Yes.

49,901. Do you know what is the reason the fishing has been partially abandoned?—The reason is that most of the fishermen went away to engage in the boats going to Howth and the Isle of Man herring-fishing. The trawlers cannot get crews for their boats.

49,902. Do the men find a more profitable fishing elsewhere?—Yes, they find it more profitable to go to the herring-fishing. The men at the herring-fishing are all paid wages, but they were on shares at the trawling.

49,903. Is it because the fish have ceased to be so plentiful, or because the men have found a more profitable occupation and have gone elsewhere, that the fishing has been abandoned?—When these men were engaged in the herring-fishing there was no trawling. It was from this time until the new year that they generally went out to trawl. They are not out trawling now, but there are no fish coming up this way. All that we are getting now is just a few small codlings and whiting.

49,904. Where are they caught?—At Campbeltown.

49,905. Are they line-fish?—Yes.

49,906. There is some trawling on some of the banks off Greenock?—Yes.

49,907. Beam-trawling?—Yes.

49,908. What kind of fish do they get with the trawl?—Flounders and flat-fish.

49,909. Flounders and plaice?—Yes.

49,910. Has the supply of flounders on these banks increased or diminished of late years?—It has increased this year, more so than in the last five or six years; they have done uncommonly well.

49,911. Where are those banks situated?—Just right opposite this harbour.

49,912. Do you know what depth of water there is where they fish?—The place where they fish is on the other side. It mostly ebbs at low water. It is on the other side of the bank.

49,913. Is that towards the entrance to the Gare Loch?—Yes.

49,914. Is it up the Gare Loch?—No, it goes up by the hill across Helensburgh.

42,915. Have you any idea of the length and breadth of the bank?—I cannot say.

49,916. Has the bank been constantly fished in the same manner for many years?—Yes.

49,917. Has it been more productive this year than for many years?—Yes, there have not been so many fish taken off it for eight or nine years.

49,918. Can you say that the mode of fishing practised there is injurious or otherwise to the fishing?—Well, I cannot.

49,919. If that method of fishing has been practised for many years, and if the fishery has been better than for many years, one would naturally conclude that it has not been injurious to the fishing?—I have got fish off it for the last 35 years, and I am sure that for 20 years we have not got as many as we have got this year.

49,920. Has the number of men and boats increased?—The number of boats has increased, and is still likely to increase. There are two or three more

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going to fish there, I believe, and there are six boats at the present time.

49,921. Are the boats and the trawls larger than they were?—They run from eight to ten tons on the average each boat.

49,922. Do they trawl in the day or the night?—They trawl both by day and by night, but generally with the tide.

49,923. Do they make a good business of it?—Generally they do.

49,924. Is the price of the fish caught in the trawl increasing?—The price is very steady; 16*d.* they get for them.

49,925. Is there any other trawling in the Clyde, in the waters near to Greenock?—No, there is nothing else.

49,926. Is there any trawling near to Cumbrae or the Island of Bute?—Yes.

49,927. Are there banks there?—Yes.

49,928. Do they continue to yield as much fish as they used to do?—I cannot say. None of them have been tried lately.

49,929. Have you heard it alleged that on the bank opposite Greenock, which seems to be so successfully fished, any spawn has been destroyed by the trawl?—I cannot say.

49,930. Have you ever seen any small or immature fish brought in by the trawl?—Not by the trawl, but I have by the lines.

49,931. Are any of the small fish caught in the trawl thrown overboard again as unfit for the market?—I never knew one to be thrown over the side. The mesh of the net is too large to allow the small fish to stay in.

49,932. What is the size of the mesh of the net?—About 2 or 2½ inches.

49,933. Does it get small at the cod end?—I cannot exactly say.

49,934. (*Mr. Lefevre.*) Do they catch nothing but flounders on that bank?—Nothing but flounders.

49,935. (*Mr. Caird.*) Have you had occasion to observe the condition of the herrings caught by the drift-nets and those caught by what is termed trawling?—The difference?

49,936. Yes, the difference in their condition?—I have got them often, but I cannot say much about the condition of the herrings. The trawled herrings were generally plumper and finer.

49,937. Are they finer fish?—Yes, and plumper.

49,938. Have you ever cured the trawled herrings?—Yes, thousands of barrels of them.

49,939. Can you cure them as successfully as the drift-net herrings?—Yes, and they have taken better in the market, and I have got a better price for them.

49,940. That is the trawled fish after they are cured?—Yes.

49,941. Then is the price of the trawled herrings usually higher than the price of the drift-net caught fish?—For a number of years we used to give more for them because the drift-net herrings were always smaller.

49,942. Does the trawl-net catch both large and small herrings?—It is very seldom that they take small herrings; they take them in the Kyles of Bute but about Tarbert I never saw them get any of them.

49,943. You say that the trawled fish are larger and finer in quality as compared with the drift caught fish?—Yes.

49,944. And that that is shewn by the price they realize?—Yes. I have seen at Ardrishaig Point as high as 24*s.* given for trawled herrings, where the net herrings would not bring more than 14*s.* a barrel.

49,945. Have you noticed whether on looking at the fish the trawled fish are much injured in their scales or otherwise?—They are generally not as well scaled as the drift herrings although I have sometimes got drift-net herrings nearly as bad. If they get a large shoot they may even be worse.

49,946. Are the trawled fish chiefly sent to the fresh market?—Yes, but they cure a great number of them.

49,947. Is the fresh market an increasing market?—It has been decreasing because there has not been so large a quantity caught. There is not a box of herrings coming in now for ten that used to come.

49,948. But the demand is what I refer to?—The demand is good, but we cannot get the quantity.

49,949. What I mean is this, suppose there was a good fishing now, and looking back to your experience of a good fishing in former times, would a larger proportion of the catch go into the fresh market now than would have been the case years back?—Yes.

49,950. There is a larger demand now for fresh fish?—Yes.

49,951. In comparison with what it was in former times?—Yes, if it could be got, but we cannot get it.

49,952. Has the price of herrings much altered within recent years?—Yes, a great deal.

49,953. In what way? Go back for five or six years and tell us in what way it has altered?—We were selling herrings for from 25*s.* to 30*s.* a barrel and for the last two or three years we have been selling them at 2*l.* 5*s.* 0*d.* Last week I sold herrings for 2*l.* 7*s.* 0*d.* a barrel, and three years ago I should have been glad to have got 27*s.* a barrel for the same quality of fish.

49,954. Has the quantity caught in Loch Fyne been increasing progressively?—No.

49,955. Has it been diminishing?—Yes, it has been diminishing for the last two or three years, and Mr. Hutchinson, the agent for the Loch Fyne boats, will be able to tell you that he has not been carrying one box for ten that he formerly carried.

49,956. It is a bad fishing this year in Loch Fyne?—Yes.

49,957. Is it an unusually bad fishing?—It was as bad last year.

49,958. (*Mr. Lefevre.*) Was it as bad last year as it is this?—Yes.

49,959. But in 1862, the year before that, the fishing was the best ever known in Loch Fyne for many years?—Yes, but for the last two years the fishing has been very slack.

49,960. (*Mr. Caird.*) What is the slackness in the fishing ascribed to?—I cannot tell.

49,961. There has been no trawling during that time?—No.

49,962. Practically the trawling during those two years has been entirely suppressed?—Yes.

49,963. (*Mr. Lefevre.*) Trawling was put a stop to in 1861?—Yes.

49,964. (*Mr. Caird.*) Then during 1861, 1862, 1863, and 1864 there has practically been no trawling in Loch Fyne?—No.

49,965. Nor in the Kyles of Bute?—No, nor in any of the places about here.

49,966. Then the diminution in the fishing for the last two years cannot be ascribed to trawling?—No, because there has been no trawling to injure the fishing.

49,967. Speaking as an extensive fish-curer what is your opinion, either from your own knowledge or from what you have learned, as to the advantage or disadvantage of permitting trawling for herrings?—I believe it was of great advantage to the public at large as the herrings were always cheaper when trawling was practised.

49,968. Do you in any way ascribe the higher price of herrings to the cessation of trawling?—Yes.

49,969. Is that because a smaller quantity has been caught?—Yes, and the price on that account has always kept up.

49,970. Was that your opinion when you were examined before the Commission a year or two ago?—Yes, I had the same opinion then. I have not altered my opinion.

49,971. At that time it would appear from the evidence that the majority of the curers here had an opinion against trawling?—Yes, they had.

49,972. Have they in any way changed their

opinion?—I think that most of the Glasgow curers have changed it.

49,973. Do they not think now that trawling is injurious to the fishing?—No. They are not now getting the quantity of herrings they used to get. They wanted me to sign a petition against it, and I told them they were doing an injury to themselves if they stopped trawling, as all the herrings got from Loch Fyne would be few enough to supply the fresh market, but if they allowed trawling the fresh buyers would take the trawled herrings and allow the net herrings to go to the salters. I think the curers have now seen their mistake; they have not been able to get trawled herrings and they have been obliged to obtain great quantities during the last two years from Norway. I believe they always had plenty of herrings in Norway, but the people could not send them here as our prices were too low.

49,974. Since the discontinuance of trawling the prices have increased and have allowed of the importation of foreign herrings?—Yes.

49,975. Have you ever heard it alleged that the trawl-net is injurious to the spawn and the brood of herrings?—I cannot say that.

49,976. You have no knowledge upon that point?—No.

49,977. Have you any opinion in regard to the advantage or disadvantage of the close-time which prevails on the west coast from the 1st of January to the end of May?—We had always good herrings in January, in Loch Fyne.

49,978. Had you any large quantity of herrings in Loch Fyne in January?—Yes, the best fishing we had in the whole season was in January.

49,979. That has been entirely put a stop to by the close-time?—Yes.

49,980. Can you tell us when the close-time began?—It commenced I believe in 1861. It commenced when the trawling was stopped.

49,981. (*Mr. Lefevre.*) There were several Acts that did away with trawling?—Yes.

49,982. (*Mr. Caird.*) It was the Act of 1860 that introduced the close-time?—I think it was.

49,983. Then it came into operation in 1861?—Yes.

49,984. The fishing in 1862 was a very successful one?—Very successful.

49,985. So that the close-time of 1861, if it had any effect at all, was not disadvantageous to the fishing?—No.

49,986. But in 1863 and 1864 you say there has been a very bad fishing?—Very bad.

49,987. And during that period the close-time has been rigidly observed?—Yes, the fishing of 1862 was good, but it has been bad ever since.

49,988. Then as shown by the fishing of 1863 and 1864, as far as it has gone, the close-time has been of no advantage?—It has been of no advantage; we have not had one third or one fourth of the quantity of herrings we used to have.

49,989. I think you stated that the herrings were in fine condition always in January?—Yes.

49,990. Did they take the market readily?—Yes.

49,991. Have you any idea what quantity of herrings were caught in January in Loch Fyne?—I cannot say; the Fishery officer can tell you better than I can.

49,992. Is there a desire on the part of the fishermen as far as you know and of the fish-curers that the close-time in regard to the month of January at least should cease?—I think it should cease in January.

49,993. Is there a general desire that it should be observed strictly from the beginning of February until the 1st of June?—I think so.

49,994. Is that the general opinion?—Yes; I have spoken to several upon the subject, and that appears to be their opinion.

49,995. Do you think from the experience you have had in the fishing that it would be an advantage to the public that the close-time in the month of January should be discontinued?—Yes.

49,996. Because the fish are in good condition at that time, and there is no apparent advantage in having so long a close-time?—Yes, and the fishermen got large quantities of herrings in that month; it was generally the best fishing month in the season.

49,997. (*Mr. Lefevre.*) What was the condition of the fish in January?—They were in fine condition.

49,998. Was the roe getting larger at that time?—You would not know the difference.

49,999. (*Mr. Caird.*) Do they begin perceptibly to lose condition as the season goes on?—Yes.

50,000. (*Mr. Lefevre.*) Do the herring spawn at all in Loch Long?—Yes, we have got quantities of full herrings in Loch Long and in Gare Loch.

50,001. But there is no considerable fishing there, is there?—No there has been none this season.

50,002. They do not come up there until after the close-time sets in?—I have seen them get fine good herrings in the month of June.

50,003. I think you said there was a very small fishing in Loch Long?—The fishing is small, but the herrings are always large.

50,004. What time of the year do they spawn in Loch Long?—I cannot say; it was generally some time in the month of August that they spawned there, but I cannot say for a number of years back whether that continued to be so.

50,005. Have you yourself ever used a trawl net for herrings?—No, never.

50,006. Then you have only bought herrings from the trawl fishermen and cured them?—Yes.

50,007. Have they sold you all the fish they catch in the trawl net, or have they selected fish from the trawl net and sold them to you?—No, they just send them as they get them counted out of their boats.

50,008. Have you found them nearly all of the same size or do they vary?—They were just the same as the net herrings; we get some larger and some smaller, but we get just the same among the drift net herrings.

50,009. Did you not get a considerable number of small fish also?—No.

50,010. Much smaller than are caught in the drift-net?—No, as a general thing the fish were larger.

50,011. But were they not mixed with small fish?—Sometimes, but they were not as much mixed as those caught by the drift-nets.

50,012. Was there any time of the year when you observed a larger number of small fish than at any other time?—Yes, at the latter end of the season.

50,013. Did you find that you got as large a price for your trawled herrings when they were cured as you did for the drift fish?—We generally got more because they were larger.

50,014. Did you not sort them yourself?—Our own men salted them.

50,015. Did you take out the larger ones and cure them?—No.

50,016. Did you salt all as they came?—Yes.

50,017. Did you cure many herrings yourself that were caught in January?—We used to cure a great number in January; more so than in any other month.

50,018. Did they fetch as good a price in the market as the others?—Yes, just the same.

50,019. Where would they be caught mainly?—From Minard up to the head of the loch, but I was seldom out on the ground.

50,020. You say that not much is to be gathered from the returns of the fishing since 1861, because although in 1862 there was a good fishing, in 1863 and 1864 there had been a great falling off?—Yes.

50,021. So that it does not tell much one way or the other?—No.

50,022. Either upon the question of trawling or upon the question of close-time?—No, I do not think so.

50,023. You think there is not much to be gathered from these data as to whether the close-time has been

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of advantage or not?—I think the close-time in the month of January is a disadvantage.

50,024. Has the number of boats fishing during the open-time increased since the close-time was established?—I cannot say that.

50,025. The number of fish caught in 1862 was very considerable?—Yes.

50,026–7. It was nearly three times the amount caught the year before?—I believe it was.

50,028. You spoke of whiting being supplied to the market here?—Yes.

50,029. Where were they caught?—Mostly at Largs and Campbeltown.

50,030. Were they caught by the long-line?—Yes.

50,031. How many boats are there fishing with long lines from Greenock?—There are only some two boats fishing now, but they get nothing but flounders.

50,032. Was there in former times a larger number?—Some time ago there were six.

50,033. What class of boats were they?—They were only small skiffs.

50,034. With two or three men in each?—Three men.

50,035. There are now only two boats?—Only two.

50,036. Can you form any opinion as to the cause of the falling off of the whiting?—Well, I cannot say what it is. We used to be able to get any quantity at Campbeltown. We could get what would fill any number of boxes, but it has so fallen off now that there is scarcely a box to be got.

50,037. Do the boats from Greenock fish over the same ground as the Campbeltown men?—No.

50,038. Was there any trawling on the ground where the whiting were caught?—Not that I am aware of. In the sound of Kilbrannan they used to get great quantities of whiting.

50,039. There is no supply now in these estuaries except of flounders?—No, they are getting very few round fish at Campbeltown, such as small codling and whiting.

50,040. Can you recollect any time when whiting were caught up as high as Loch Long?—Yes.

50,041. How long ago?—We have got a great many here during the last two years out of Loch Long and Gare Loch.

50,042. How are they caught?—With a net.

50,043. With a trammel-net?—With a net five or six inches to the mesh.

50,044. Is it a fixed net?—Yes, I think it is fixed.

50,045. Or is it used as a drift net?—I cannot say, I never saw it used, but I have seen the fishermen take as high as 20 and 30 and even as many as 60 hake with the herrings. Down the Sound of Kilbrennan there might be plenty of cod and conger eel got, but they cannot get bait.

50,046. What is the reason of that; is it on account of the close-time?—Yes.

50,047. Then the close-time has operated as a disadvantage to the line-fishing?—Yes it has hurt the line fishermen very much. They can get no other kind of bait for cod or ling.

50,048. Was January a good month for catching cod and ling?—Yes, very good.

50,049. And hake?—Yes; in fact from November and December the fishing was very good. The fishermen used to get large quantities of them both in those months and in January and February.

50,050. You are not prevented from taking bait for the line-fishing in November and December?—No; but the boats will not give up the herring-fishing then.

50,051. They would not take to cod-fishing until the herring season is over?—No.

50,052. Then the line-fishing has been put a stop to by the close-time preventing them from catching the bait?—Yes.

50,053. Would it be possible to permit the catch of herrings for the purpose of bait and to keep up the close-time for herring-fishing generally?—I think it would. The fishermen say that if they only got a basket or two they would ask for no more, and they could get that at almost any time when the weather was moderate.

50,054. Would it be possible to permit fishing to that amount without letting in the larger fishing?—Yes, I think so, and I would allow it. They could be fined for taking them to sell, or any person buying the herrings for sale could be fined. Permission should only be given to the fishermen to take the quantity they wanted for bait. I knew them last year to slip out and take as many herrings as would bait their lines, but before they came in they had to rub up the bellies of the fish they had caught for fear any pieces of the herrings should have got into their stomachs.

50,055. I suppose that was because they were afraid of being summoned for having herrings in their possession?—Yes.

50,056. Then practically the enforcement of the close-time has put a stop to line-fishing during the close months?—Yes, and formerly during those months we used to get large quantities of ling and cod and eels at Tarbert, Campbeltown, and Kilbrennan Sound.

50,057. As high up as Loch Long?—Yes.

50,058. And also conger eels?—Yes, a great many conger eels.

50,059. (*Mr. Caird.*) Have you as a curer found that the trawled herrings are ever so heated as to be incapable of being cured?—I have never seen that.

50,060. Then if such an assertion as that were made, so far as your experience goes, you think it would be incorrect?—I have never seen it. During the last 40 years I have never known the herrings to be spoiled except upon one occasion when there was a late catch in the Kyles of Bute on a Saturday night; they would not take them out because they were afraid of the minister, and on Monday morning they were spoiled.

50,061. (*Mr. Lefevre.*) Do they ever mix the drift-net and the trawl-net herrings together, or do they cure them separately?—They have generally been cured separately, because the trawled herrings being larger will fetch more money. In fact there are very few of the curers willing to take the small drift-net herrings when they can get the large trawled herrings.

The witness withdrew.

W. McCullogh.

WILLIAM MCCULLOGH called and examined.

50,062. (*Mr. Caird.*) You are a fish-curer in Glasgow?—Yes.

50,063. And have been so for some years?—Yes, for 18 years.

50,064. Then are you well acquainted with the state of the fisheries in the Firth of Clyde?—I am pretty well acquainted with it. I should be at all events.

50,065. Have you formed any opinion as to the advantage or disadvantage of the system of fishing with the trawl-net as it is called in Loch Fyne?—Yes, I have formed a decided opinion against it.

50,066. What reasons do you give for that opinion against the system?—Because I have seen them at one time getting a great amount of trawled herrings which they have sent into the market, and which has reduced our market very much. At other times when we could not get trawled herrings I have found the other herrings going up very much. In point of fact the people who traded in herrings did not know what to do.

50,067. Then your first objection is that sometimes the market is over supplied with fish?—Yes, it is glutted at times, but there is no regular time. Some-

times there is a very great glut and at other times there is nothing coming in at all, and the herrings will rise in price 10*s.* or 12*s.* a barrel. There is no steadiness in the market at all.

50,068. During the time the trawling system was permitted by law was the average price of cured herrings as high as it is at present ?—I have known the price higher.

50,069. But what was the average price ?—I daresay it would be as high.

50,070. Has there not been a considerable rise in the price during the last two years ?—No, there has not. In 1862 there was a great reduction of price at the latter end of the season on account of the cod-fishing.

50,071. What may be the average price per barrel for cured herrings at the close of the fishing ?—It depends on each year's fishing.

50,072. Do you remember the price for some years back ?—I remember the price at the close of 1862. They were down as low then as 20*s.* and 21*s.* a barrel.

50,073. What was it in 1861 ?—I cannot recollect just now.

50,074. Can you not go further back than 1862 ?—I could not unless I examined my books.

50,075. Was it much higher in 1861 ?—It was.

50,076. Was it as high in 1863 ?—I consider that it was higher.

50,077. What was the price then ?—At the latter end of the season it was 30*s.* per barrel.

50,078. What other objection have you to the system of trawling ; do you know anything about its being destructive to the spawn or brood of fish ?—We consider that it is. We never see the quantity of other fish coming to the market which we used to see in former times.

50,079. Do you mean of white fish ?—Yes of white fish. We have never seen the quantity of white fish come into the market since trawling was allowed.

50,080. Then you think that it destroyed the spawn of other fish besides herrings ?—Yes, we think so. We are of opinion that it was torn up with the herrings when they were trawling for herrings.

50,081. Have you ever seen spawn taken up in the trawl ?—Yes, repeatedly, as thick as my finger.

50,082. In any large quantity ?—Yes, at Ballantrae I have seen it so thick that you could float a barrel with spawn.

50,083. We are now speaking of herrings in Loch Fyne and the Kyles of Bute ?—About four years ago I saw them taking up spawn in the Kyles of Bute.

50,084. What kind of spawn ?—Herring spawn.

50,085. Was it in any large quantity ?—I could fill a spoon full among the herrings.

50,086. Among a whole boat of herrings ?—Here and there among them. I saw that especially one time at the ferry at Kaimes four years ago.

50,087. Have you found that the fish caught by the trawl are so injured as to be unfit for curing ?—There is one thing I know, and that is that we can never find a trawled herring that is not a little blackish at the bone in curing.

50,088. Do the trawled fish bring as much as the herrings caught by the drift-net ?—It depends on the size. We used to get small trawled herrings and large trawled herrings too.

50,089. Do they salt them ?—No, but we get them at different times. They did not always get large herrings in the trawl. They as often get small herrings as large.

50,090. Which on the average brought the best prices ?—The large herrings, of course.

50,091. But which kind ; those caught by the drift net or those that were trawled ?—If the herrings were of the same size the drift-net herrings would bring more money.

50,092. Are there any other objections that occur to you against the mode of fishing by the trawl ?—There is another objection which I think is a serious one.

50,093. What is it ?—The fishermen who used to trawl became very much demoralized and very outrageous. They became so outrageous that they did not care what they did. The drift-net men told me that they frequently went among their nets and robbed the nets, in addition to which they cut away the buoys. Now that is a very serious objection I think.

50,094. Is it not a fact that the quantity of fish caught in Loch Fyne has diminished last year and this year ?—Yes.

50,095. And there has been no trawling whatever ?—None, as far as I am aware.

50,096. None at any rate has been permitted ?—No.

50,097. Any that has been done must have been on a very small scale ?—Yes, just so. In 1862 there was a superior year ; that was two years after the trawling closed.

50,098. Only one year ?—Yes, only one.

50,099. The law was passed in 1860, but did not come into operation that year ?—No, it came into operation in 1861.

50,100. Then 1862 was the second year after the system had closed ?—Yes, more fish were caught in Loch Fyne that year than I can ever remember.

50,101. Do you know whether the general opinion of the fish-curers in Glasgow is in favour of continuing the system of trawling or not ; what is their opinion with regard to the advantage or disadvantage of continuing trawling ?—I believe that the majority there are against it.

50,102. Have they not altered their opinion ?—No, I have been constantly in conversation with them but I am not aware that there has been any alteration.

50,103. Have you any opinion as to the advantage or disadvantage of a close-time in the herring fishery ?—I should be very much inclined to ask for another month if it is found that good herrings can be obtained in that month.

50,104. Do you mean the month of January ?—Yes.

50,105. You think that the month of January might be included with advantge in the open season of fishing ?—Yes.

50,106. Are the fish in good condition then ?—Yes, they are in better condition then than they are afterwards.

50,107. And are a good many fish caught ?—Yes, among the Northern Islands and in Loch Fyne.

50,108. Are they sold fresh or cured ?—The majority is cured at that time of the year.

50,109. In January ?—Yes, especially in the Northern Islands. They are all cured in the north about Portree in Skye. I have heard the Gairloch fishermen complain of the want of bait in January. That is the general time they get the codfish in Gairloch. I believe that the fishing for codfish has very much fallen off in consequence of the want of herring bait.

50,110. Herring bait being the best bait for cod ?—Yes, I believe so.

50,111. Do they not fish cod in the months of February and March also ?—Yes.

50,112. Then as far as bait goes it would be of advantage to the fishermen to take bait in those months ?—Yes, but if you give them those months for that purpose in the loch you must give them that time everywhere else.

50,113. I believe you have no practical knowledge of the white-fishing other than herring-fishing ?—Yes, I have cured codfish.

50,114. You do not cure any codfish caught in the Firth of Clyde ?—No.

50,115. They are caught more in the north and among the western islands ?—Yes, cod and ling.

50,116. Have you any knowledge of the yield of white fish in the Firth of Clyde other than herrings ?—No.

50,117. You do not deal in those fish ?—No.

50,118. (*Mr. Lefevre.*) Could not the line fisher-

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men get bait from the east coast?—They get mussels sometimes.

50,119. But I mean herrings?—I think it would be too far away for them to get them from the east coast.

50,120. Did I understand you that it would be desirable that during the close-time the fishermen should be allowed to take herrings for bait or not?—I would not go beyond the month of January.

50,121. After that you would stop the taking of herrings altogether even for bait?—Yes.

50,122. Do you think that it would not be possible to permit the taking of herrings for bait?—You could scarcely draw a line.

50,123. Would they catch them for other purposes—for sale?—It would let in an inroad. It would be scarcely possible to allow trawling then.

50,124. Is the month of January the best month for the line-fishing?—It used to be the best month. I have heard sad complaints from the Gair Loch fishermen and the long-line fishermen who used to go over to Scalpa and get their herrings there.

50,125. Do you agree with the last witness that the line-fishing in this estuary has been virtually put a stop to in consequence of the fishermen not being able to get bait?—As far as the deep-sea fisheries go there was never much cod and ling got in this loch; they were mostly got outside.

50,126. How far outside?—Five or six miles; mostly about Ailsa Craig and on towards Campbeltown.

50,127. Further up the loch than that is there not a considerable quantity taken?—There has been a considerable quantity of whitings got about Campbeltown, and I believe they used to trawl where they got those whitings.

50,128. But there has not been any quantity of cod, ling, and conger got?—No, they are further out.

50,129. Have you yourself ever purchased herrings from the trawl fishermen?—Never.

50,130. Not for curing?—Never.

50,131. You have always made your purchases from the drift fishermen?—Yes.

50,132. Then you do not agree with the last witness that as a rule the trawled fish are rather larger than the others?—No, they are larger at times, the same as the drift-net herrings are. Perhaps for one week you may get large herrings, and then another week only get small ones. That is especially the case in Loch Hourn. In Scalpa we are getting large ones. It does not follow that the trawl-net always takes large herrings. In the majority of cases it will be only small herrings that the trawl-net will take.

50,133. Are they different shoals of fish?—Yes.

50,134. Do the shoals run generally of the same size, or do you find small and large herrings mixed up in the same shoal?—We sometimes find them mixed up and at other times they are all large, while at other times they will be all small.

50,135. Can you state of your own observation whether the trawl fishermen ever caught a great variety of fish in the same catch; for instance, some very large and then going down to very small in the same haul?—I have seen them myself delivering fish out of the boats along the quay at Tarbert, the greater part of which were small ones but with a few large ones mixed up with them. I have seen them with very large fish and with very small ones in the same catch.

50,136. What were the smallest fish the trawlers took?—I have seen them taking herrings from 1,400 to 1,500 to the barrel, and I have seen them taking them as large as not to be more than 500 or 600 to the barrel.

50,137. Would those smaller fish when cured fetch a good price in the market?—Not if other fish were in competition with them.

50,138-9. Was there no demand for small herrings?—Not in our market. We can sell half-a-dozen barrels of large herrings when we cannot sell one of small herrings.

50,140. You also spoke of the line fish, and said that while trawl-fishing was permitted you did not take the same quantity of line fish on account of the small fish being taken in the trawl?—It was the herrings I referred to.

50,141. What sized small herrings did you refer to as being taken—those you have just mentioned?—Just so.

50,142. Were these the smallest size you have known to be taken?—I have seen them in the Kyles of Bute at the latter end of the season take herrings as low as 2,000 to the barrel; it was a disgrace to see them taken.

50,143. What time of the year was that?—About four years ago. It was the last year they were permitted to trawl.

50,144. But what time of year was it?—In the month of December.

50,145. Did you see them yourself?—Yes, I saw them sent on shore. No one would buy them.

50,146. What was done with them?—They laid there till they rotted.

50,147. Were any of them sent to the market?—Yes, lots were sent to the market and sold at 5*s.* and 6*s.* a box.

50,148. You spoke of spawn being taken up in the trawl, are you sure that it was not spawn coming from the full fish?—I expect it was spawn coming from the fish, from the large herrings that they caught at that time.

50,149. It was not spawn taken up from the spawning-ground?—No. I think they had been spawning there, and the spawn was taken up among them or they were fish ready to spawn.

50,150. Fish ready to spawn and spawn dropping out of the fish were taken up?—I think so.

50,151. It was not spawn dragged from the spawning bed?—What I saw led me to think that the fish were ready to spawn, and that they spawned when the net took them up.

50,152. There is considerable difference in dragging spawn from the spawning ground and taking fish in the act of spawning?—I do not think they would trawl the spawn up so readily unless the fish were ready to spawn.

50,153. You think the fish were on the spawning ground?—Yes.

50,154. Did you observe the fish yourself?—I observed the spawn sticking hard together. I think if the fish had spawned after they had been caught in the net the spawn would not have got so close together and been so thick; it would have been more loose. There is another serious objection I wish to make with regard to the fishing, and that is to the small nets used in Loch Hourn. They are just now catching very small herrings, and all that is done in consequence of using very small nets. The small nets they use are killing all the herrings just now.

50,155. What are the nets you speak of?—They are drift-nets for herring-catching. They are nets of a smaller mesh than the legal mesh.

50,156. Do they shrink by use to very much less than the legal mesh?—Yes, they are far less. I believe there is an Act against them, but there is no one to look after enforcing it. There is no Fishery officer in the north challenging the nets, but, on the contrary, they get permission to fish with anything. I think if there is an Act against the one thing there ought to be an Act against the other.

50,157. How many meshes to the yard have they shrunk to?—To above 40.

50,158. What sized fish will they take?—They are taking fish just now 2,000 to the barrel. I have two or three barrels in Glasgow at this time that are as many as 2,000 to the barrel.

50,159. Is there a considerable quantity of those fish sent to Glasgow just now?—Yes.

50,160. Is it sold as fresh fish in the market?—No, all cured.

50,161. You spoke of great quantities of trawled fish being thrown into the market at one time which

you said was injurious to the curers ?—Yes, it is decidedly injurious to the trade.

50,162. Was the principal quantity of it sold in the market as fresh fish or bought by the curers ?—It was sold both as fresh fish and cured.

50,163. Then the effect of its coming into the market was to lower the price of fish and that affected the price of cured fish ?—Yes, and hurt the curer so that he did not know what he was doing; it made him disgusted and rather inclined to push himself out of the trade.

50,164. You found it to your disadvantage to have the prices constantly going up and down ? You would rather have the prices even ?—Yes, that has been the case for the last two or three years.

50,165. Do you think the public would rather have them level ?—It is of no advantage to the public to pay 40*s.* a barrel to-day and 20*s.* a barrel to-morrow.

50,166. Do the poor people here buy fish to cure them themselves by salting them ?—It is very rarely they do. I do not think they do. Those who want fresh fish buy them fresh, and those who want salt herrings buy them salted.

50,167. They do not take the advantage of a cheap market ?—No, they have not so much economy about them.

50,168. The country people do not do that ?—No ; when they want a barrel of salt herrings they buy them salted from the curer.

50,168*a*. I suppose the curers take advantage of the low price and buy large quantities when they are thrown upon the market ?—At times they do.

50,169. And I suppose also that there is a large demand for fresh fish at that time ?—The demand for fresh fish becomes lower, and the price gets down generally as the quantity must be got through ; they must be sold, because they will not keep fresh.

50,170. Do the poorer class buy large quantities of fresh fish ?—They do.

50,171. Particularly while the price is low ?—I have seen them buying when the price was dear as well as when it was low. They buy what they want whether the price is low or high. They are the cheapest food they can get.

50,172. You do not think the price makes any difference with the poor purchasers ?—I have not found it to be so in my experience.

50,173. Then is it the curer only who gets the advantage of the low price ?—I do not see that the curer gets it either ; the fish are forced upon the market, and they must be sold for whatever they will bring.

50,174. I suppose it does not very much affect the price of the cured fish in the long run taking the year through ?—No, but it affects the demand for cured fish very much for a time.

50,175. (*Mr. Caird.*) Have you ever cured any trawled fish yourself ?—No, but I have seen them when they were cured, and have judged them before the Fishery officer.

50,176. You have not cured them yourself ?—No.

50,177. Then you cannot speak as to whether they are so heated in some cases as to be unfit for cure ?—I have seen them cured in Glasgow when I consider that they were not fit to be cured.

50,178. Do you know whether the market for fresh herrings, as compared with the market for cured herrings, has been increasing ?—In the towns it has been, but not in the country.

50,179. But it has in the large consuming towns ? —Yes.

50,180. Is a large proportion of the fish caught now sent into the market fresh ?—Yes, a much larger proportion than there used to be from Loch Fyne.

50,181. Has there been a large quantity of herrings imported here ?—There has.

50,182. When did that begin ?—It has been the case for the last six or seven years.

50,183. Has it been increasing ?—Well, it has been. Not this year, but the year before there was a large quantity of Norwegian herrings in this market.

50,184. Are they good fish ?—Some of them are, and some of them are very inferior.

50,185. Are they equal to your own drift-caught herrings when cured ?—The large fish that come in are not cured as well as they should be, or they would be as good as ours. They would be quite as good as ours if they were properly handled and properly cured, but they are not as well up to curing them as we are.

50,186. Is there any brand upon the herrings cured here ?—No, we find our own name the best brand we can put upon them.

50,187. Have you no desire for the Government brand ?—Not on the west coast. We do not send them away to the foreign markets, but send them to the home markets, and the better we can cure them the better we can sell them.

50,188. Your herrings are recognized in the market by your own names as the brand ?—Yes.

50,189. And the name of the curer is a guarantee taken by the purchaser for the quality of the cure ? —Yes, but they are opened and examined besides.

50,190. There never has been any demand on the part of the curers here for the use of the Government brand ?—Not that I am aware of. There has been no such demand on the part of the west coast curers.

50,191. (*Mr. Lefevre.*) You spoke of great variations in the price occasioned by trawled herrings being thrown into the market ?—Yes.

50,192. Can you give any instance of the difference of price between two market days ?—I could not exactly name a day, but if I referred to my books I could.

50,193. Without naming a day can you mention what the difference of price would be ?—There would be such a difference as 10*s.* or 12*s.* a barrel.

50,194. Falling from what ?—From 2*l.* a barrel down to 30*s.*

50,195. In one day ?—Yes, in one day.

50,196. (*Mr Caird*). Taking the interests of the consumer into consideration, can you tell us whether the advantage or disadvantage of trawling for herrings has been shown by an increase or decrease in the total supply of fish ?—I do not think I could show that.

50,197. Or by an increase or decrease of the price ? —I think I have referred to the decrease in price already. I say that it is of no advantage to the consumer to have to pay 40*s.* a barrel one day and 20*s.* another. I think on the average there has been no advantage to the consumer at all.

50,198. If you take the interests of the consumer to be represented by the quantity of fish that go into the market in the course of the week, would you say that the quantity supplied to the consumer under the present state of the law, when there has been no trawling, has increased or decreased ?—I think it has neither increased nor decreased since trawling has been given up, taking one year with another.

50,199. Then we are to conclude if it has not increased, that so far as that goes there has been no advantage to the consumer in consequence of giving up trawling ?—Well, I do not think there has. If you want a supply of herrings, then is the time that the Norwegian herrings come in to fill up the gap.

50,200. You, as an opponent of trawling, admit that as far as an increase in the supply to the consumer throughout the year is concerned there has, so far as it has gone, been no increase of the supply of herrings in consequence of the suppression of trawling ?—None, except in 1862, the second year after trawling was prohibited ; there was a great increase then, but we have not had any increase since. I rather think there has been a falling off for the last two years.

50,201. If trawling were again permitted, would there be an increase in the quantity ?—I cannot say that. We cannot tell what the fish will do. I dare-

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say the men with the largest experience know very little of the run of herrings, when they are going to come and when they are going to go.

50,202. You have not yourself formed any opinion as to whether the herrings breed in the lochs or whether they come from the open sea?—I think they must breed there, or they would not be spawning there.

50,203. Do you know whether the dog-fish have been increasing or diminishing, or whether they go and come?—They go in great shoals. Sometimes there are a good many, and at others there are scarcely any.

50,204. Have many been seen this year?—No, but in the previous year there was a large number.

50,205. Last year?—We generally find more off Stornoway and the Island of Lewis.

50,206. The cod and all other kinds of fish prey on the herrings?—Yes, they follow after them.

50,207. (*Mr. Lefevre.*) Is there any part of the seas in which you have observed that the supply from the trawlers was greater than from another part?—In the month of December, when the fish came through the Kyles of Bute they go to the spawning beds off Ballantrae. There used to be an immense gathering there.

50,208. Was the supply by the trawlers then very large?—Yes, they got them in the narrows, and killed them almost altogether. That is the time when I saw such very small herrings.

50,209. Then the last month of the season was most favourable for the trawlers?—Yes.

The witness withdrew.

D. Douglas.

DONALD DOUGLAS called and examined.

50,210. (*Mr. Caird.*) You have for a number of years been acquainted with the white-fishing in the Firth of Clyde?—Not exactly white-fishing. I have seen it and I have been about it, but I have been more particularly connected with the herring-fishing.

50,211. Have you ever trawled for flounders on these banks?—No, I have trawled for herrings.

50,212. But not for other white fish except herrings?—No; I presume you mean beam-trawling?

50,213. Yes.—No.

50,214. Your experience has chiefly been in connexion with the herring fishery?—Yes.

50,215. Where did you fish?—At Strachur, opposite Inverary; then at Tarbert, and as far as Caradon. I have been drift-net fishing and trawling.

50,216. Do you think that the two kinds of fishing can be carried on together without disadvantage?—Yes, to the greatest extent. The trawler does not put out his net where he can get spawn. The trawler in olden days, about 40 years ago, would require to jump on the rocks and draw everything on shore on the banks. Now-a-days they shove their engines out as far as they can, and shoot their nets out in deep water.

50,217. Do they not haul them on shore?—No.

50,218. Do they bring the fish on board?—Yes, they could trawl in the middle of St. George's Channel now.

50,219. Have you ever seen any spawn brought in by the trawl-net?—No, they could not bring it in in a place like that.

50,220. What was the quality of the fish you usually got with the trawl net?—We have had from 10 to 12 and up to 30 and 40 barrels of the finest trawled herrings in the months of January and September. They would run from about 550 to 600 in a barrel. The shoals of small herrings they would not get in one case out of ten.

50,221. Do you think the shoals of herrings caught by the trawl are different from those caught by the drift-nets?—They are larger herrings, and they are better, and they are one-third more valuable.

50,222. They are better in quality?—Yes.

50,223. Do they take the cure as well?—Yes, they have been cured just as well. Mr. McCullogh says he could detect them, but I think not if they were properly cured.

50,224. Do you take some small herrings as well as large herrings at the same time?—There may be a few mixed up with them sometimes, but very seldom. The shoals of small fish and the shoals of large fish do not go together generally speaking; they may in one case out of 10, but not more.

50,225. Do you ever catch fish so small as to be unfit for the market?—No.

50,226. You always turn them to account?—They tell me that in the Kyles of Bute they get them very small, but I never fished there.

50,227. Have you fished for herrings in January?—Yes, and cured them.

50,228. Have you found them in good condition then?—Yes, in capital condition on the 16th of January.

50,229. Were they as good as they were in September?—Yes.

50,230. Do you think it is a great loss to the public and to the fishermen that they should be precluded from fishing herrings in January?—Yes, and it is a great matter to the fishermen to be prohibited from getting 200 or 300 herrings in February or March for bait when they wish to go out after the line fish.

50,231. It is a great injury to them?—Yes, it is a great injury to them that they do not get liberty to take 100 or 200 of herrings in those months.

50,232. Have you fished with herrings as bait for line fish?—Not particularly, but I have been in a boat with those who do.

50,233. (*Mr. Lefevre.*) Have you cured both trawled fish and drift herrings?—Yes.

50,234. Have you ever mixed them together in the same lots?—No, I cannot say that I have. When I buy drift-net herrings I cure drift-net herrings, and it is the same with trawled herrings. The trawled herrings are most profitable and most successful to the buyers.

50,235. When you have cured two lots of herrings, one of drift-net herrings and one of trawled herrings, of the same size, have you observed any difference in the market price?—The trawled herrings would bring more.

50,236. Why?—Because they are larger and better.

50,237. But, assuming them to be of the same size; did you often buy them of the same size as the drift-net herrings?—There may be a difference of one shilling or two shillings in a barrel for the name of the thing but it is a mere cypher.

50,238. Which would get the best price?—They tell you that they would rather have drift-net herrings, and perhaps they would deduct about a shilling a barrel.

50,239. What is the reason of that, do they look rather brighter?—Not a bit. If you get herrings mangled in the water or on board the drift-net boat they are as much injured and without a scale on them as the trawl-caught herrings. In the case of trawled herrings, if you take them out as soon as the bag comes in you will only find that there are a few of the afterings that are at all injured, and when they are put in the boat they sell cheaper than the rest, perhaps they may have been mangled a little.

50,240. You say that the public do give one shilling or two shillings more per barrel for drift herrings when they are of the same size as the trawled herrings?—Not a bit, you will sometimes pay dearer for trawled herrings than for drift herrings.

50,241. I thought you said that when drift-net herrings and trawled herrings are of the same size the public would give one shilling or two shillings more for drift-net herrings?—The buyers will but not the public.

50,242. Do you mean the curer?—Yes, but not the public.

50,243. Not the public when the herrings are cured?—Quite so.

50,244. But the buyer will give one shilling or two shillings more?—Yes.

50,245. Then I suppose he makes it good again out of the public?—Yes, he is always looking for himself. The question with the curers is to get this close-time established and to get their herrings cured and put in stock. Then they know one another's price and can put the public at defiance.

50,246. I want to know what the reason is that induces the buyer to give one shilling or two shillings extra for drift-net herrings?—He does it to keep up his policy.

50,247. Do you think it would be possible during the close-time to permit the catching of herrings for the purpose of bait?—It would be a great object to let the fishermen have a basket now and then.

50,248. Do you think it would be possible to allow such a catch of herrings and at the same time to prevent it for the purpose of sale?—I think they ought to be allowed to get a few baskets of herrings for bait. I would allow one boat in five to go out and catch a lot of herrings and distribute them among their neighbours under the superintendence of the police. One boat might go one night and another another.

50,249. Would it not be difficult to insure that the fishermen did not take more than were sufficient for bait?—It would be impossible for them to do so, they would be captured at once and put into gaol if they did it. They cannot do it at present.

50,250. How would you have the regulation carried out?—I would authorize one boat to go out at a time.

50,251. To catch as many as they liked?—No.

50,252. Only a sufficient quantity for bait?—Yes.

50,253. If they caught more than was necessary for bait would you have them throw away the remainder or allow it to be sent to the market?—They would take very good care that they would not catch more than they wanted. They know where there is a good shoal of herrings and where there is not and they would know how much they ought to take and would take only that quantity, so that they would do neither themselves nor any other person any harm. I would not allow a boat's load to come in for sale but I would allow one boat to go out and catch the quantity and divide it amongst the rest for bait.

50,254. Would you restrict them to a certain quantity of herrings?—Yes, according to the number of hooks they had on their lines.

50,255. But if they shot their nets and caught more than the number?—They could not catch many more. A porpoise or a dog-fish would eat as much or more than they would capture.

50,256. If they caught more than sufficient for bait would you prohibit them from selling it?—Not if the herrings were middling good. In that case I would not, but they should not make a practice of it.

50,257. Would it be possible to permit that, and at the same time generally to enforce a close-time?—Quite so, but at the same time I would give them the month of January as an open time.

50,258. Do you think that a close-time as regards the trade generally is a good thing?—Yes, there is nothing like it.

50,259. Is that on the ground that it benefits the fish?—Yes, and it enables the natives to attend to other occupations. Every boat is shifted on shore.

50,260. On that ground you approve of a close-time?—Yes. There is no smuggling, and they are not jealous of one another. All the Loch Fyne and Arran and Largs men go away to other things, and there is no jealousy.

50,261. Do you think that the enforcement of a close-time keeps up the fish; that it prevents the destruction of the fish?—It prevents it in the Kyles of Bute. When the fish come in there they are very small, only about one and a half or three inches long, and it prevents smuggling going on, and it gives the fish a chance of taking the Channel again.

50,262. Do you mean by smuggling catching small fish?—Yes.

50,263. The drift-nets will not take the small fish?—There are some of the drift-nets that can catch them small enough.

50,264. I suppose that is where they are smaller than the legal size?—Yes, when they are less than 36 meshes to the yard.

50,265. But the ordinary drift-net would not catch any large number of small fish?—All the nets that are required to be 36 meshes to the yard ought in the first instance to be 34½ because they will shrink a little after they are used.

50,266. Is there a considerable number of drift-nets used of which the mesh is less than the legal size?—Yes, and the reason of that is, that when they run from the open Channel and come into the Kyles of Bute in October and November they begin to capture the small fish.

50,267. Do you think there is a considerable number of nets of less than the legal mesh?—I do not think there are many but there are blackguards in every place, and we cannot avoid it. There are good and bad in every place you go to; there are some black sheep wherever you go.

50,268. (*Mr. Caird.*) Have you observed, as a fisherman in Loch Fyne, that sometimes the best fishing of the season is in the upper part of the loch and sometimes in the lower part?—Sometimes they get what they call the gut-pock herrings; that is herrings which if you squeeze you will see worms coming out of them. I have been told by the fishermen that a great number of these herrings have been caught in the month of October, but when they leave they will begin to get fat fish. They go up the loch and when they return they are got opposite Otter Ferry in the month of December or January; but then the close-time is on for the Tarbert and Largs people and they cannot get them. I believe that is the thing that caused the row between the fishermen.

50,269. Do you think that these herrings come into condition when the close-time begins?—Yes.

50,270. You say you have fished both in the upper and lower parts of the loch?—Yes.

50,271. Do you mean that in the same year you have been fishing in the upper part of the loch, and also in the lower part?—Yes.

50,272. In some years did you have a better fishing in the upper part and in some years a better fishing in the lower part?—Yes.

50,273. The trawling was almost exclusively carried on in the lower part of the loch?—Yes, there was very little towards Inverary.

50,274. Almost all the drift-net fishing is in the narrow part of the loch?—I have seen them trawling up from Tarbert to Ardrishaig.

50,275. In the narrow part of the loch?—Yes.

50,276. But the trawling principally goes on in the lower part of the loch?—Yes, it used to be carried on in the broader part of the loch.

The witness withdrew.

JOHN MCCLEAN called and examined.

50,277. (*Mr. Caird.*) You have had a long experience as a fish-curer here?—Yes, for forty years.

50,278. Have you formed any opinion yourself as to the advantage or disadvantage of the mode of fishing called trawling for herrings, as practised in the Firth of Clyde and Loch Fyne?—My opinion is that trawling is against the fishing.

50,279. You think it injurious to the interests of the fishing?—Quite so.

50,280. Has your opinion been in any way modified

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since you gave your evidence in 1862 ?—There has been nothing to change my opinion since then. I do not think that trawling has anything to do with a larger shoal or a smaller shoal coming in. Trawling has nothing to do with that. You get poor fish when a smaller shoal comes in, but that has nothing to do with trawling.

50,281. The shoal of fish is quite independent of either one mode of fishing or the other ?—Quite independent, but trawling destroys a great number of herrings when they do come in.

50,282. Does it destroy them without sending them to the market ?—Yes.

50,283. In what way ?—If a heavy shoal comes in they will put down their trawl into it, and take an immense quantity, but they will not lift one-fourth part of it.

50,284. What becomes of the rest ?—It falls to the ground, becomes dead, and putrifies in the water.

50,285. Have you seen it ?—I never was a trawler, but I know that it is done.

50,286. Then that is mere suspicion on your part is it ?—No, the men have done it; they have told me so themselves.

50,287. Have they told you that they have caught fish in such large quantities that they could not be got into the boat, and that on that account a considerable number were lost ?—Yes, that is my opinion. When trawling began first, they hauled their nets ashore the same as they drag a net for salmon. They go further into the loch now and shoot their nets in a different way; I have known them bring in large quantities to the beach. They would wade out into the water as far as they could and lift them by basketfulls, but I have seen large quantities lying around, which the boats could not contain.

50,288. If there had been more boats could they have taken them all ?—Yes, but they could not calculate upon there being so great a quantity.

50,289. If the object of fishing is to catch a large quantity of fish that seems to be a very successful plan ?—Yes, but they leave as many on the ground as they take away.

50,290. Is it likely that fishermen, endeavouring to make as much as they can by their labour, will throw away fish needlessly if they can avoid it ?—They do not throw them away, but the boats can carry no more.

50,291. Does that often happen ?—It did when they began first. I do not know if they do that now when they take them in the open sea.

50,292. You cannot tell us whether under any different system there is a loss of fish ?—No; but when trawling began first the fish were all dragged on shore.

50,293. But lately when trawling was permitted that system was not followed ?—No, not taking them on shore, but if they came across a shoal of fish near to the shore they would surround them.

50,294. Your first objection is, that a large quantity of fish was thrown away because it could not be brought ashore ?—Yes, it was left in the water.

50,295. And became unfit for food ?—Yes, and even those that were got were in such a state that the blood did not come out of them. I could tell a barrel of trawled herrings from a barrel of drift-net herrings very easily.

50,296. Have you heard the evidence of other witnesses who tell us that trawled herrings bring as good a price as the drift-net herrings ?—I heard the last witness.

50,297. Have you yourself ever cured any trawled fish ?—I would not buy them while I could get net herrings. I cannot recommend them as being as fit for human food as the net herrings.

50,298. Are they not finer fish often ?—They are larger often, and would be finer if they were caught by nets.

50,299. What is the particular process in the trawl-net fishing by which they become so injured as to be unfit for human food ?—There is such a quantity taken in a boat that it has a bad effect upon the market; often they cannot get them in on that day, there are so many of them; but those who have drift-nets know the quantity which has been taken, and two hours afterwards there is no market for fish at all.

50,300. But do not the drift-net fishermen get heavy and light hauls also ?—Yes, but not such heavy hauls as the trawl-net fishermen.

50,301. If they were left free to follow their trade as the drift-net fishermen are and were not hurried or frightened by the fear of being detected, could they not make arrangements for bringing their fish to market as favourably as the drift-net fish ?—They were not hurried before the law was made.

50,302. And were they inferior then ?—Yes; I heard Mr. Methuen, the late curer, asked what difference there was in the value of a barrel of trawled herrings, and that of a barrel of drift-net herrings, and he said 20*s*.

50,303. Twenty shillings a barrel ?—Yes.

50,304. Would you as a herring-curer say that there was that difference ?—I would not buy them at all.

50,305. If no herrings were coming into the market except those caught by the trawled nets, would you refuse to buy them ?—Not if there were no others, but there are always drift-herrings as well as trawled herrings.

50,306. Have you ever bought any trawled herrings ?—Not to my knowledge.

50,307. Then you cannot speak from experience ?—I have had experience in seeing them bought and sold, although I have not bought them myself.

50,308. Is it not the fact that large portions of them are cured ?—Yes.

50,309. And sold in the market ?—No doubt of it.

50,310. Do they bring a much less price ?—Yes.

50,311. Is there a considerable difference in the price ?—Yes. The trawled herrings have always the blood about them. The blood goes right through the fish, and it is impossible to take it out of them. The drift-herrings are brought in quick, and gutted, and the blood comes freely away from them, whereas the trawled herrings always look black at the bone.

50,312. For the supply of the fresh market is the trawled fish as good as the drift-net fish ?—Yes, if it is got to market quick; but if they are killed in great quantities, and are long in coming, they are not as good. For instance, if a steamer coming in this afternoon had 300 boxes of trawl-caught herrings, and half that quantity of drift-herrings, buyers would give 2*s*. 6*d*. for the trawl-caught herrings and 3*s*. 6*d*. for the drift.

50,313. Without looking at them ?—Yes.

50,314. Is that the case with all the buyers ?—It is generally speaking.

50,315. Do you know whether within the last two years the supply of fish from Loch Fyne has considerably increased ?—Two years ago there was as large a quantity as ever I knew.

50,316. That was in 1862 ?—Yes.

50,317. But I mean taking 1863 and the present year ?—It has not been so large, but nobody can give any notion of what the reason is.

50,318. But nevertheless it is the fact ?—It is, but may be they may go north and south for 30 or 40 years. We get a great season one year and not much the next year. We can never give any account of the herrings in that way.

50,319. Was it not the case that the greatly increased take of 1862 was ascribed to the stoppage of the trawling ?—I never thought it.

50,320. It was given as the reason, was it not ?—It was by ignorant people.

50,321. You do not think that the system of getting herrings by the trawl, or by the drift-net affects the quantity that comes into the market ?—No, if a large body of fish comes into the Channel the trawling has nothing to do with it. They come into the Channel and up they go into the loch.

50,322. You think the fish are injured rather in the

process of catching them than that the quantity that may come is injured?—Yes.

50,323. It is an objection physically to the mode of catching fish?—Yes, to the mode of catching fish, and I have no doubt that they lift great quantities of spawn.

50,324. But you do not yourself know anything about it; you cannot speak from your own knowledge?—I have seen the boats when they have been fishing at Ballantrae throwing out baskets of spawn.

50,325. In what sort of condition are the fish then?—They are not fit for eating in February.

50,326. Are they brought to the market?—Yes, and are forced into Liverpool and the English markets where the people have not much skill with regard to them.

50,327. But they were taken in the market and consumed?—Yes.

50,328. Although they were in an unfit condition for the market?—Yes.

50,329. Have none of those fish come lately to the market?—The law prohibits them entirely now.

50,330. There is nothing of that kind now?—No.

50,331. Then what you state with respect to the spawn does not refer to Loch Fyne, but to the fishing banks of Ballantrae?—There may be spawn in any place. I do not believe that we understand where spawn is to be found. There may be spawn in every place.

50,332. What opinion have you in regard to the advantage or disadvantage of the present close-time from the 1st of January until the 1st of June?—I think it is very necessary along here as far as the Mull of Cantire, but I would have no close-time from the Mull of Cantire to Cape Wrath.

50,333. Have not good herrings been taken in the month of January in Loch Fyne?—I have had boats for 30 years and I have never sent them out in the month of January. It would be of no benefit to fish for herrings then, and I have always taken the boats in.

50,334. Have you found the herrings in good condition then?—They have been coming in very seldom of late, but generally they were not in such good condition.

50,335. Then you do not want any change in the period of close-time?—No.

50,336. You do not desire that the fishing should be open in the month of January?—Not on this side of the Mull of Cantire, but I think it ought to be on the other side.

50,337. Why do you draw a distinction?—The reason is that I have seen large quantities of small fish coming into the Kyles in February.

50,338. We are not speaking of the month of February, but I wish you to confine yourself to the month of January?—I think February should be more protected than January.

50,339. The question I put to you is, whether you desire to have the fishing open in the month of January?—I cannot say particularly as to January, but I am quite positive as to February and March.

50,340. It is pretty generally agreed that there is an advantage in the close-time then, as regards the condition of the fish; but it is alleged, with regard to the month of January, that the fish are in good condition then, and that they might be taken with advantage to the public?—Yes, that may be the case. I say nothing against the fish in January.

50,341. Then you would not apply your objection as to the line you draw from the Mull of Cantire to the north to the month of January?—No, I think there would be no occasion for it then at all.

50,342. Do you think the fishing should be open in Loch Fyne in the month of January?—No, only from the north to the Mull of Cantire.

50,343. Then why do you make that distinction?—Because I never saw trawling north of the Mull of Cantire. It is only drift-net fishing that is practised up to Cape Wrath, and there is no necessity for any close-time.

50,344. In any month?—No.

50,345. Have you any experience or knowledge of the Stornoway fishing?—Yes.

50,346. Are you aware that their opinion is clearly in favour of a close-time in March and April and part of May?—I am not aware of that; but I know that in February and March the fishermen may be starving north of the Mull of Cantire and that they are not allowed to put a net out.

50,347. If codfish can be caught in Loch Fyne in the month of January why not fish them there as well as on the other side of the Mull of Cantire?—I have no objection to the month of January.

50,348. (*Mr. Lefevre.*) Have you any boats of your own?—Yes.

50,349. How many?—Four.

50,350. What did they cost you?—From 60*l.* to 90*l.*

50,351. Each?—Yes.

50,352. And the nets?—Twenty barrel of nets will come to 60*l.*

50,353. How many men go out in each boat?—Four and three in the small ones.

50,354. How do you pay them; is it by the share?—No, they get so much a month and a shilling for every cran they take.

50,355. How much a month?—Generally 2*l.* a month and a shilling a cran.

50,356. Do you provide nets and boats and everything?—Yes.

50,357. Do you buy herrings as well?—Yes.

50,358. Do the curers buy from the same men or go into the market and buy whatever fish comes in?—The curers sometimes send a vessel to buy the fish where the fishing is going on, and she hoists a flag to show that she is a buyer.

50,359. Do the curers have regular customers of whom they buy?—No, perhaps Tom, Dick, or Harry may come and offer us 50*s.* telling us that that is the price, but then another may come and offer us 60*s.* and then we go to him.

50,360. Does that take place on the quay here?—No, they go alongside the vessel and they take the herrings on the deck.

50,361. You have a vessel out there?—Yes, buying at the place where the fishing is going on.

50,362–73. Then when trawling was practised in the loch did you give instructions to your buyers not to buy from the trawlers?—Yes, but there is no trawling in the north.

50,374. Do you not think the fish come into the lochs for the purpose of spawning?—No, I never did think that.

50,375. What is the process of curing here; do you gut the fish?—We put them on the vessel's deck, throw salt on them, then gut them, and put them in tubs and into barrels; we let them stand till next day and head them up.

50,376. When you gut the herrings do you observe that the drift-net herrings are better fish than the trawled herrings?—Yes, the blood comes away quite freely.

50,377–8. From the drift-net herrings?—Yes, and the herring is white, and when it comes to be consumed in the market it is quite white, while the trawled fish is black right through all up and down.

50,379. What is that due to?—The herrings taken in the trawl are crushed one against the other, there is always such a heavy quantity.

50,380. Do you mean that when they are thrown into the boat in such an immense quantity they are thrown together and crushed?—They take up in the trawl 10, 20, or 30 barrels at a time and there is a great weight of them put in the boat together, but if they are taken by the drift-net they are all caught by the throat and they are not crushed in any way.

50,381. Do you think that the superior quality of the drift-net herring is due to their being meshed?—No, I do not say that.

The witness withdrew.

GREENOCK.

J. Hunter.

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JOHN HUNTER called and examined.

50,382. (*Mr. Caird.*) You are a fish merchant and curer?—I am not a curer; I am chiefly a dealer in dried fish, but I have also been a dealer in herrings for upwards of 30 years. I never cured any, however.

50,383. You are well acquainted with the state of the fishing in the Firth of Clyde?—Yes.

50,384. In regard to other fish than herrings is the supply increasing or diminishing?—With regard to the white fish, in the small fish, haddock and whiting and fish of that sort brought here for the fresh market, there has been an extraordinary decrease for the last five or six years.

50,385. To what do you attribute that decrease?—If I felt at liberty to give an opinion at all I should attribute it to beam-trawling and to the disturbance of the fish beds in the river.

50,386. (*Mr. Lefevre.*) Where used the supply to come from?—The Largs people send large quantities here from the Kyles of Bute, and Tarbert, and from Campbeltown.

50,387. (*Mr. Caird.*) There is very little beam-trawling here now?—It is prohibited, I believe, now. The complaint was that beam-trawling was the cause of the slackening of the fish.

59,388. Was there any beam-trawling off Largs and the Kyles of Bute?—I cannot speak to that, but there was at Campbeltown.

50,389. Do you purchase the fish caught on the banks off Greenock and which would include a large supply of flat-fish?—I do not do anything in flat-fish. My business is chiefly, if not altogether, confined to the herring fisheries and to salted and dried fish such as cod and ling.

50,390. Have you an establishment in the Hebrides for the curing of fish?—No, I am a buyer and seller.

50,391. Do you buy from Newfoundland?—I buy in considerable quantities from there.

50,392. Where do you get your principal supply from?—Chiefly from Stornoway and the Island of Lewis, and Lerwick in Shetland.

50,393. Is the supply increasing?—The supply has been steady for some years. One year it may be a little up and another year a little down.

50,394. Has the price been pretty steady?—It has risen considerably since the beginning of the gold fever in Australia. One-eighth or a tenth part of all the cured ling goes to Australia. The ling about a dozen or 13 years ago was as low as 13*l.* or 14*l.* a ton, and now the price is about 20*l.* a ton.

50,395. Do you attribute that to so small a proportion as an eighth being taken to a different market?—Yes.

50,396. That has so materially altered the supply and demand as to affect the price in that way?—It has chiefly been the cause of the increased price of ling and codfish.

50,397. Has the supply of fish or the means of taking it increased in any degree with the increase of price?—Not materially.

50,398. It has not had the usual consequence of an increased price, namely, that of causing an increased endeavour to meet the demand?—Not to any extent. The ling-fishing both in Shetland and Lewis on the whole has been pretty much the same for many years. It may have been a little up one year and a little down another. This year, I believe, it has been somewhat less.

50,399. There has not been any particular change any year?—No, it remains stationary, but rather increasing on the whole.

50,400. With regard to herrings, you have had experience as a buyer of herrings?—Yes.

50,401. Do you cure herrings?—No, I do not cure any.

50,402. Do you buy cured herrings?—Yes, I have done so for 30 years.

50,403. Do you buy fresh herrings?—No.

50,404. Nothing but cured herrings?—No.

50,405. Do you limit your purchases to herrings caught in a particular manner?—I have never bought trawled herrings to my knowledge. I once bought a lot of herrings and was imposed upon. A quantity of herrings were sold to me for drift-net herrings, which I thought were trawled, but I never bought any to my knowledge.

50,406. Where do you buy your herrings chiefly?—I buy them as they come to market. If the fishing is good in Loch Fyne I get the best supply there, but when the fishing has been deficient there we get the bulk of our herrings from the west of Ross-shire.

50,407. You do not go round Cape Wrath?—None of those herrings come here.

50,408. Do none of the east coast herrings come here at all?—No, they would not be used here.

50,409. Do you send any of your herrings abroad?—Occasionally we send a few in firkins to Austria, but there is no such thing as a shipment of herrings to any part of the world out of our own locality.

50,410. Then the question of the brand does not arise here?—No, the brand would be of no use here. It never has been of any use on the west coast of Scotland, and it may be a question whether it is of any use anywhere.

50,411. Your herrings do not go to markets where a value is placed upon the brand?—No.

50,412. Has the price of cured herrings materially increased of recent years, or has it much altered?—It is impossible to give a proper answer to that question, because the price is affected by the quantity that comes into the market. It is very noticeable that some years a large lot of herrings are in Loch Fyne. For instance, in 1862 there was an immense quantity there; indeed it was the largest fishing I ever remember. Last year the fishing was tolerably good, but this year up to the present time it has been very indifferent, and the price will be affected very much according to the quantity that comes in.

50,413. (*Mr. Lefevre.*) As far as the season has gone is the catch much less than it was last year?—I think so, but I have scarcely seen a barrel of Loch Fyne herrings at all. They have gone to Glasgow, but there have been very few here.

50,414. (*Mr. Caird.*) Has the price increased in consequence?—The price of all cured herrings coming to this market last year and this year has been high, whereas in 1862 it was lower than ever I remember it.

50,415. Was that from the great quantity which came in then?—Yes.

50,416. Going back to one or two years before 1862 what was the price as compared with what it is now?—Perhaps this year the price has been higher than it has been for a number of years; say the last 10 years.

50,417. Then during the time trawling was permitted the price was not as high as it is at present; is that the fact?—I could not answer that distinctly. My memory will not carry me back as far as that. I have a very strong impression that even before trawling was permitted by law it was winked at and carried on. My impression is strong that that practice tended to the destruction of the herring, and consequently to their scarcity. The first deep impression I got upon that subject was five or six years ago when in the months of February and March fish were brought into the market and chiefly sent to England, which, in my opinion, were actually unfit for human food. Whether that was the case or not they were herrings that were scarcely the length of your finger. They were perfect trash, but, if they had remained in the sea, in the course of a couple of years there would have been millions of herrings more. The food of the people was destroyed in that way at that time and from that moment I have had a very strong feeling, even with the experience of the last two years, during which the law has been enforced, that trawling ought not to be permitted.

50,418. (*Mr. Lefevre.*) What year are you speaking of?—The year I refer to was about six years ago. The herrings were caught in the months of

February and March. There were immense quantities of herrings brought into the market of the size I have described, and they were a kind of fish I would not put upon my table.

50,419. (*Mr. Caird.*) Were they trawled herrings?—Yes, wholly.

50,420. Were they from Loch Fyne or the Kyles of Bute?—They were from the Kyles of Bute chiefly, if not solely.

50,421. That has now been discontinued?—Yes, it is not allowed now.

50,422. Yet the effect of that discontinuance has not been to increase the supply of herrings in Loch Fyne?—There was no trawling in 1861, and there was no material increase in 1861, but in 1862 the increase was marvellous.

50,423. But that was not the case in 1863?—Then in 1863 there was an ordinary sort of fishing, and this year up to the present time the fishing has been very slack.

50,424. Then you cannot argue anything from the result of the discontinuance of trawling either in favour of or against it, as it has in both cases been more and less?—In 1862 when the fishing became very plentiful we had a sort of notion that the discontinuance of trawling had something to do with it, but my opinion has altered since the fishing has got slack.

50,425. You do not hold to that opinion now, seeing that it has not had much effect?—I am pretty much of the opinion of Mr. McClean, that we do not know where the herrings come from and what year they will be plentiful or slack.

50,426. You think that is altogether independent of trawling?—Yes, except so far as trawling destroys immense quantities of the small fish.

50,427. You spoke of a particular year?—The impression that trawling was injurious first took hold of me in that year.

50,428. Did you see an immense supply of small fish in any year except that?—I never saw so many as in that year.

50,429. Was that a plentiful year for fish?—From the new year up to July there was just an ordinary season, I believe.

50,430. (*Mr. Lefevre.*) Can you state distinctly what year it was?—It was about six years ago, but it will be very easy to get information upon the matter by communicating with David Hutchinson and Company, who bring all the fish to market.

50,431. That was before the close-time was enforced?—Yes, it was after Christmas and new year's day.

50,432. (*Mr Caird.*) The taking of that fish could not occur now?—No.

50,433. That objection is removed, and it is not possible to occur during the present state of the law?—Not as long as the close-time is enforced.

50,434. Have you formed any opinion as to the advantage or disadvantage of maintaining a close-time from the 1st of January to the 1st of June in the Firth of Clyde?—When I gave evidence before the previous Commission I said from the 1st of January to the 1st of July, but since then my opinion is changed, and I am inclined to think there should be a month longer open time.

50,435. Do you find the fish in good condition on the 1st of January?—They are not so good as in the other part of the season, but they are still pretty good fish.

50,436. Are they good marketable fish?—A large quantity of herrings was got in Lewis last year in the month of January, and those herrings were quite suitable for the Irish market.

50,437. Have you bought fish which have been caught in Loch Fyne, or anywhere in the Firth of Clyde, in the month of Jynuary, and found them to have been of a marketable quality?—I do not remember ever buying cured herrings in January. I have seen them come fresh.

50,438. Do they generally go fresh to the market at that time?—Yes, the curers generally, without any law to prevent them, stop curing about Christmas time.

50,439. (*Mr. Lefevre.*) What is the market for your cured fish; where do you sell it?—Do you mean the dried fish?

50,440. No, the herrings. Do they go abroad?—No, it is almost entirely a home consumption.

50,441. They do not go to the Mediterranean?—No, none of them. Some cured red herrings may go, but no white herrings.

50,442. You say you never bought trawled herrings. You have made that a rule, I suppose?—I never bought any to my knowledge.

50,443. Were there any merchants who devoted themselves entirely to trawled herrings; were there any curers who cured only trawled herrings?—I never knew any curers in Greenock who bought trawled herrings. They have been bought in Glasgow, but always under the rose. They would rather have the others if they could get them.

50,444. But there was a considerable number of trawled herrings cured was there not?—Yes, I believe so, sometimes.

50,445. Would they have a separate brand?—There is no brand here.

50,446. Would the curer put a brand on them himself to indicate that they were trawled herrings?—There is no brand used at all on the west coast. A or B may have his mark on the barrels, and C and D may have theirs.

50,447. There is nothing by which the public could judge whether the herrings are trawl-caught herrings or drift-caught herrings?—No, until the barrel is opened.

50,448. Would they see the difference then?—Yes. Any shopkeeper, who is in the habit of selling herrings, would know at a glance.

50,449. What would be the difference?—The trawl-caught herrings have a dull sooty appearance, whereas the other herrings are clear and shiny.

50,450. To what do you attribute that?—When the herrings are taken with the drift-net every herring is killed in its own hole. In the case of the trawl all the herrings are caught in an immense heap, and in struggling and dying they rub the scales off and destroy each other.

50,451. Is there any difference in point of quality?—I think if they get the scales rubbed off they do not cure as well as if they had the scales on. Then there is another thing. If trawled herrings or drift-net herrings are allowed to remain with the blood in them, they will not cure well. Except they use the knife as soon as possible and cut their throats, the blood does not come away. That is not so much the case in the drift-net herrings as in the trawled herrings. You could not cure a snared rabbit, nor would you cure beef if you did not first bleed it.

50,452. Do you think that the process of meshing the herring lets the blood out of the fish?—I think the process of drift-net fishing is such, and the fish are only taken in such quantities that they can be gutted in a few hours and the blood let out. They are handled easier than the fish caught in the trawl-net, and you have nice, sweet, well-cured fish; but if your herrings are caught in large quantities, as they are sometimes caught by the trawl-net, then they not only get spoiled outside and knocked and bruised about by each other, but they are much longer in being bled.

50,453. There is nothing peculiar then in the mode of catching, but the fact that the trawl-killed herring cannot be gutted as soon as the drift-net herrings?—Yes, and the drift-net herrings are not thrown in such a heap together.

50,454. But when they take the fish from the drift-net they throw them in a heap together?—Yes, they stand the same chance then. I never saw a trawl-net worked, but I understand it bags them all up, perhaps a ton of them at a time, and it is impossible that they can be cured before sundown.

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J. Hunter.

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50,455. But a large quantity may be sent off to the fresh market, and the buyer can cure what proportion he thinks fit; whatever he has time for?—If you trawl herrings in the proper season of the year, from the 1st of June to the 1st of January and February, you get them in large quantities. It would not affect the quality of the fresh herrings. They are never gutted, but they are taken to Glasgow and other markets and sold fresh.

50,456. For other purposes you think the trawled herring is as good as the drift-net herring?—It is not as good.

50,457. Why?—Because the scales are rubbed off, and they are much knocked about.

50,458. That is from being thrown in a heap in a boat?—Yes.

50,459. By using more boats the heaps would not be as large, and the herrings would not be so much damaged in that way?—As I stated before, the trawl-net occasionally, and indeed very often, falls in with an immense load of herrings, and it is impossible to bring them ashore or put them alongside the boats to be taken on board without destroying them to a large extent.

50,460. (*Mr. Caird.*) Have you any knowledge at all of the pilchard-fishing in Cornwall?—None.

50,461. Then you are not aware that the pilchards are caught by the seine-nets in the same way, and there is no complaint of the difficulty of salting and curing them?—I am not aware of that.

50,462. (*Mr. Lefevre.*) The pilchard is not gutted, would that make any difference; it is salted without being gutted and sent off to the market?—I cannot speak as to the pilchard.

50,463. Do you know whether any large quantities of Norway herrings are sold here?—Yes, I have bought and sold them myself.

50,464. Are they caught by the drift-net?—I understand they are caught in a different way from the drift-net fishing, but not by trawls. I understand they are bagged in the fiords or bays of Norway and enclosed in nets. The result is that they are never so nice and sweet as our herrings.

50,465. Do they not fetch as good a price as the drift-net herrings here?—No.

50,466. Is it an inferior price?—Yes, much less than the Scotch cured herrings. Perhaps their herrings are better occasionally than ours, but the price is very much lower. We had Norway herrings last year ranging from 1,500 to a barrel up to 700 and 800, so that the same difference prevails there as here. My opinion is that the herrings caught on the western coast of Ross and Sutherlandshire are about the same as those caught in Loch Fyne.

50,467. One of the witnesses stated that one of his objections to trawling herrings was that it threw great quantities of fish upon the market at one time. Do you entertain the same objection?—No, I do not hold that; I am a free-trader.

50,468. You do not think that is a serious objection?—No.

50,469. Do you think the public get an advantage from the depreciation of price brought about in consequence of a great quantity of fish thrown into the market?—The public, of course, if there is a great supply, get the benefit of it, and if that were the only evil effect of trawling I would not say a word about it; but my notion is that if the practice of trawling is authorized by the law, it would in the end destroy the fishing inside the Mull of Cantire. It ought never to be allowed even as high as Tarbert or in the upper part of Loch Fyne.

The witness withdrew.

L. McDonald.

LEWIS MCDONALD called and examined.

50,470. (*Mr. Caird.*) You are a fish-curer I understand?—I cure a little.

50,471. And you are a buyer of fish?—I buy very few.

50,472. Are you a practical fisherman?—I fish. I have a boat or boats that fish and the fish that they take I cure.

50,473. You have been acquainted with the fishing in the Firth of Clyde for many years?—Yes, for nearly 60 years.

50,474. Are you acquainted with the white-fishing other than the herring-fishing, in the Firth of Clyde?—I have not done anything for a long time with white fish.

50,475. Can you tell us if the white-fishing other than herrings is increasing or diminishing here?—I cannot tell. I know that in this neighbourhood the fish are much scarcer in the water than they were.

50,476. Are you acquainted with any reason to which you can attribute that?—No; I find it the same on the whole of the coast. It is the same in the north of Scotland. When I used to go north, thirty years ago, we could get any quantity of cod or haddock, but now we can scarcely get any.

50,477. How long is it since that change took place?—It has been taking place gradually for the last 10 or 12 years.

50,478. Have you ever heard it said that the frequent passage of steamers up and down and the disturbance of the water has had any tendency to frighten away the fish?—That has been said, but I do not think there is any truth in it.

50,479. There can be no truth in it as regards the herrings in Loch Fyne?—No, and I think there is no truth in it as regards the north Highland lochs. They are seldom visited by any steamers at all.

50,480. With regard to the herring-fishing, are you practically acquainted with the different modes of fishing by trawl and by drift-net?—I never fished with a trawl.

50,481. Then you cannot give us any opinion of your own gathered by your own experience as to the quality of the fish caught by the trawl or the drift-net?—I have seen the fish caught by the trawl; I have seen them frequently.

50,482. What is the quality of them as compared with the quality of the drift-net fish?—I think they are the same fish. They may be larger. There is a kind of herring in Loch Fyne which they do not take by the drift-nets at all.

50,483. What is your opinion as a practical man as to the advantage or disadvantage of the trawl system of fishing in regard to the herring fisheries?—Do you mean in regard to the extermination of the fish?

50,484. I mean in regard to the supply of fish to the public?—I think if trawling is permitted, the public would be much better supplied and more cheaply with fish. That certainly is my opinion.

50,485. From what do you draw that opinion?—From what I have seen of the trawlers. I was two years ago in Tarbert and there were 400 or 500 boats then fishing with the drift-nets and there were two boats that went out smuggling with the trawl and I believe those two boats were taking in more fish than the 400 or 500 that were fishing with the drift-nets.

50,486. Are you speaking just now after a careful consideration of the facts when you make such a statement as that?—Yes.

50,487. And from your own personal observation?—Yes.

50,488. Two boats fishing with the trawl killed as many fish as 400 or 500 boats fishing with drift-nets?—That was my impression at the time.

50,489. Have you had frequent occasion to observe the process of fishing with the trawl?—No.

50,490. You have not often seen it?—I have not seen it.

50,491. I do not mean this year, but when it was permitted?—I have not seen them fishing, but I have

seen the trawl-boats after they have come in with their fish.

50,492. Then do you tell us that the discontinuance of the system of trawling, it now having been entirely put a stop to by the law, has diminished the supply of fish to the market?—That is my opinion.

50,493. Do you attribute the falling off of fish in this and previous years to the discontinuance of that mode of fishing?—I believe if trawling had been permitted for the last two years back the supply would have been much greater than it has been.

50,494. Do you think the fish have been on the coast, but have not been caught because that mode of fishing has not been adopted?—The fishermen tell me that there are plenty of fish upon the coast.

50,495. Have you observed the quality of the trawled fish as compared with the drift-net fish?—I have seen them in the boats, but I have only bought very few of them.

50,496. Have you cured them?—Yes, a few of them.

50,497. Did they cure as readily as the drift-net fish?—Yes, just as good.

50,498. You found no difference?—I do not see why there should be any difference. I believe that the trawled herrings, instead of being longer in coming to the market, come quicker into the market. It is generally the case with the drift-nets, that when they haul the nets they haul the herrings in with the nets. Then there is another process gone through which is what they call shaking or taking the fish out of the nets. That generally occupies a very considerable time, and the herrings if they are long among the nets deteriorate very much in quality, whereas the trawlers do not require to go through that process at all. When they haul up the trawl, as I understand, they have baskets or some machinery by which they take the herrings out of the nets at once, put them into a boat, and send them away to the market. They are generally in readiness to be put into the boxes or barrels before daylight.

50,499. Do you believe that while the system was allowed, any large proportion of the fish caught by the trawlers was thrown back into the sea, or left on the shore, the catch being so great that the people could not dispose of them?—I think that has been the case.

50,500. Did that occur very often?—It has been the case when they got very great quantities and the way I accounted for it was, that trawling was just in its infancy when it was declared illegal. The poor trawlers went out then and if they were caught they were often heavily fined. Therefore, they went out as it were to smuggle.

50,501. They went out by stealth?—Yes, and they were not prepared for great hauls; but if trawling were legalized then those engaged in trawling could make better arrangements.

50,502. To get rid of the fish with advantage?—Yes, and they would get them taken into their boats.

50,503. Do you think it is a cheaper mode of catching fish than the drift-net fishing?—I think so.

50,504. The boats and nets are cheaper and cost less money?—Yes, much less.

50,505. What is the difference between the cost of a drift-net boat with its fleet of nets, and a trawl-boat with her nets?—I should think that a trawl and a boat would not exceed 30*l*. and I consider that any man fitting out a boat with drift-nets would find it cost him altogether for the boats and nets 150*l*.

50,506. Are the same number of men engaged in each boat?—There are four men in a trawler, but generally there are two boats connected with a trawl. Two boats go together as far as I understand. They may have a trawl in each boat, but whatever they take is divided between the two boats.

50,507. So that it is eight men that the take of the one net is divided among?—Yes.

50,508. How many men fish in a drift-net boat?—The smaller boats have three and the larger ones four.

50,509. Would you consider that in the course of a season the quantity of fish got by the trawl-boat would be equal or greater than that got by the drift-boat?—I think generally speaking the take would be much greater by the trawl-boat.

50,510. Then the conclusion would be, that that is a much cheaper mode of effecting the same object?—I believe it is much cheaper.

50,511. Do you know if any quantity of small immature fish is caught by the trawl that would not be caught by the drift-net?—I cannot speak from my own experience further than what I have heard.

50,512. What have you heard?—I have heard that in the Kyles of Bute in February and March there are great quantities of small fish taken.

50,513. That is in the close-time when fishing is not now permitted?—Yes.

50,514. But in the legal fishing time would they be caught?—I have not heard of small fish being caught in any other season.

50,515. Have you ever heard of or seen spawn caught in the trawl-net?—I never heard of it, nor do I believe that the fish spawn where they trawl.

50,516. Have you formed any opinion as to the advantage or disadvantage of having the month of January included in the close-time?—No, I have not.

50,517. Do you find that the fish are in good condition in the month of January?—I never fished in the month of January except very long ago and the fish were not so good then, but I have been told that in the Kyles of Bute last year they had good fish in January if they had been allowed to fish them.

50,518. With regard to the white-fishing other than herring-fishing, do you think it a great hardship to the fishermen that they cannot get bait during the close-months?—Yes.

50,519. And that it has tended to diminish the supply of fish during those months to the market?—I think so.

50,520. (*Mr. Lefevre.*) Are there many drift-boats belonging to Greenock?—I do not think there are many, but I do not belong to Greenock.

50,521. Where do you belong to?—To the opposite side,—Helensburgh.

50,522. Do you recollect any considerable take in Loch Long or Gare Loch?—I do, but it is long ago.

50,523. How long ago?—Eight or ten years ago there was a very good fishing in Gare Loch.

50,524. And in Loch Long also?—Yes, in Loch Long.

50,525. How was it before that?—Before that, for a long time, there was very little in either of the lochs. About 40 years ago there used to be a regular fishing in both lochs.

50,526. Has any cause been assigned for the disappearance of fish from those lochs?—I cannot assign any cause.

50,527. Do you think the greater traffic of the steamers has had anything to do with it?—No, I do not think so.

50,528. Is there still a very considerable amount of fishing in the Firth of Clyde up as far as Gourock and as far as Rothesay?—Very little. There is very little inside of Cumbrae or the south end of Bute.

50,529. But up the Kyles of Bute there is a good deal?—Yes, in the narrows.

50,530. In Rothesay Bay?—There are not many there, but they are got in considerable quantities in the loch abreast of Rothesay Bay.

50,531. Loch Strivan?—Yes.

50,532. Do you agree with some of the previous witnesses who have told us that trawled herrings would not fetch as good a price as drift-net herrings when cured?—I give my own opinion, and I have already stated what I believe to be the fact.

50,533. You have yourself bought trawled herrings and sold them?—Yes.

50,534. Do you find that the public ask any questions as to whether the herrings are trawled or drift herrings?—Well, no, they never ask any questions, and some that I sent out were sent out on the understanding that they were trawled herrings.

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50,535. Do you put your name on the barrels containing both kinds of fish?—We do not put our name on the barrels; there is just a mark that we put on the barrels.

50,536. A trade mark, I suppose?—Yes, and that trade mark is put on the document that accompanies the barrels.

50,537. Do you put that trade mark indifferently on the trawled and the drift fish?—Yes.

50,538. Is there any difference in the price?—No, I have not found any difference. Other people may have done so, but I have not.

50,539. Have you ever mixed the two kinds of herrings in the same barrel?—Not often.

50,540. Do you find that the drift fish are more regular in size than the others?—I never found that they were. I have found as great a difference in the drift-net fish as in those caught by the trawl. I never bought many trawled fish. I have, however, bought some lots of them but not many.

The witness withdrew.

JOHN STEPHENSON called and examined.

J. Stephenson.

50,541. (*Mr. Caird.*) You are a fisherman at Tighn-na-Bruaich in the Kyles of Bute?—Yes.

50,542. Do you get other kinds of fish than herrings there?—Yes, at times we follow hand-line fishing.

50,543. Is there any beam-trawling off your coast? Yes, at times.

50,544. For flat-fish?—Yes, for flounders.

50,545. Is it some of the fishermen of your own place that do it?—No, there is nothing of the kind along our coast at all. They all come from this place or Glasgow.

50,546. Do they come to your place?—Yes, along Loch Riddan. We have tried to get them out of our way at the time we were shooting our nets.

50,547. Have they been there lately?—Two years back.

50,548. Not since then?—No, I did not see them last year.

50,549. Then the practice is not common now?—I cannot say that it is, but I saw two down at Rothesay Bay working last spring.

50,550. But they are not there daily?—No, not daily; they do not belong to the place.

50,551. What kind of fish do you catch with the hand-lines?—Whitings and small cod. We only get a few whitings.

50,552. Are there only few fishermen employed in that?—They are gentlemen who fish on the coast in that way.

50,553. Not for the market?—No, for their own use.

50,554. Is there no trade carried on there for the supply of the market with white fish?—Yes, there is deep-water fishing, such as hake-catching, with deep-water nets set at the bottom. They take hake and cod.

50,555. What time of the year do they do that?—All the winter, when they drop the herring-fishing.

50,556-7. Do you use any bait?—No, we use deep water nets.

50,558. What kind of fish do you catch?—Hake, cod, and stemlocks, and ling, and some large haddocks.

50,559. In what months of the year?—They stop the herring-fishing at the commencement of the new year, and they carry on the other fishing until the commencement of the herring-fishing again, or rather until the time comes for preparing to go to the herring-fishing.

50,560. Has that been the custom as long as you can recollect?—No, it is about two or three years since it commenced.

50,561. Then it is quite a recent introduction?—Yes, it is a new thing altogether.

50,562. What led to the introduction of that mode of fishing?—I cannot say.

50,563. Who began it?—I cannot say that either.

50,564. Are there any fishermen at Tighn-na-Bruaich who practise that now?—Partly.

50,565. Are there many engaged in it?—There are a good many off Rothesay and Port Bannatyne.

50,566. Are they very successful?—They are doing better than the herring fishermen, I believe, and they are making more money.

50,567. Is the supply of fish from that mode of catching increasing?—It was less last year.

50,568. (*Mr. Lefevre.*) Have they given up line-fishing in order to take to it?—I do not think they were following the long-line fishing.

50,569. (*Mr. Caird.*) You do not fish with the net in that way?—No.

50,570. Then you cannot speak of your own knowledge upon the matter?—No, I have only seen them. I can see them fishing daily.

50,571. How many boats are engaged in it?—Every one that chooses to commence. It needs a smaller sized boat and another kind of net altogether, and every person cannot set up two trains of nets, one for herring-fishing and one for hake-fishing.

50,572. (*Mr. Lefevre.*) What time do they set those nets?—They set them in the evening and they haul them in the morning.

50,573. Before sunset do they set them?—Yes, about sunset.

50,574. What time do they take them up?—In the morning, as soon as they can see daylight.

50,575. Do they ever leave them out all day?—Not to my knowledge.

50,576. Are the nets anchored?—Yes, they are all anchored, and they have buoys attached to each end.

50,577. (*Mr. Caird.*) Then they are set in the evening and lifted in the morning?—Yes, they are hauled in the morning.

50,578. Can you tell us if a large supply of fish is obtained for the market by that kind of fishing?—I think there is more than there used to be. I have seen them sold for from 6*d.* to 1*s.* a piece and sometimes 1*s.* 6*d.* a piece.

50,579. What are they sold for now?—There are none at present.

50,580. But what do they fetch at the time they are fished?—Last year they fetched from 6*d.* to 1*s.*

50,581. Is the price falling?—It did not fall much last year, not a great deal, because they were not so numerous.

50,582. Are you a herring fisherman?—Yes.

50,583. Are you a trawl fisherman or a drift-net fisherman?—I have always been at the drift-fishing.

50,584. Have you ever fished with the trawl at Tighn-na-Bruaich?—No, I never saw a trawl drawn in my life.

50,585. Is there no trawl-fishing there?—Yes, in the Kyles of Bute. The Loch Fyne herrings come down there at the latter end of the fishing mostly. They keep to the shore all along and we follow them with our nets.

50,586. With your drift-nets?—Yes.

50,587. Has there been no trawl-fishing there?—Yes, all the trawlers used to come there at the latter end of the season.

50,588. They come from Loch Fyne?—They come from Tarbert and all the places they chose.

50,589. You never saw them fishing?—I never saw a trawl drawn in my life.

50,590. Then you have not seen what was got in the trawl-net?—I have seen an abundance of what they have caught in the trawl-net. I could smell them for six weeks after they had been taken in the trawl. I have seen the ground where the trawlers have taken the fish covered with dead fish and they would stink for six weeks after the trawlers went away.

50,591. Did they get them in such quantities?—Yes, and I have seen the poor people of the Kyles

getting barrels to place them in for their own use after the fishermen had gone away.

50,592. Then it was a great advantage to them to get them in that way?—It might be, but they were always complaining of them.

50,593. Who were complaining?—Themselves; there were so many herrings raised and spoiled and taken away altogether from use.

50,594. Were there more herrings got then than are now got by the drift-net fishermen?—I cannot say that there were, but when the fish got jammed in the deep water with the shoals very thick the trawlers could manage to take in all the lot and keep them there until such time as they were able to take away with them what they chose, but there were times when their trawls broke owing to there being so large a number of herrings. They also heated and hurt one another to such an extent that there was scarcely a scale left upon them, and when the scales are taken off the herrings, when you come to pack them in barrels, they stick and become jellied as there is not a scale to separate one herring from another.

50,595. Have you ever seen that?—Yes, I have seen it.

50,596. Have you cured trawled herrings?—No, I never cure trawled herrings. I never did.

50,597. Have you seen trawled herrings cured?—No, except by the country people who have lifted a barrel or two after the trawlers have gone away.

50,598. Those fish would be partly destroyed?—They were taken out as soon as they could get them.

50,599. But in consequence of the entire stop which has been put to trawling there has been no trawling on your coast for two years?—No.

50,600. Have you had an increased supply of herrings for your drift-nets?—We have had at the latter end of the season, but we have had none at the fore end for two or three years.

50,601. Then it has not done you much good?—In Loch Strivan we have had no herrings for two or three seasons. The season before then was extraordinarily good.

50,602. Has there been no advantage to you from the discontinuance of trawl-fishing?—I cannot say whether the trawl men were doing any harm in that way or not.

50,603. You cannot say whether they did harm or good?—Not in that way, for the herrings which were coming to Loch Strivan were coming early and spawning there.

50,604. (*Mr. Lefevre.*) Were you deputed to come here by the persons who signed this petition?—Yes, together with two other men.

50,605. Where do the fishermen who signed this petition live?—Just along the shore in our neighbourhood.

50,606. What is the name of the place?—Tighnna-Bruaich.

50,607. How many of them are there?—There are not the names of half of them there; the notice was so very short, we did not see it until Monday. We went out in the fore end of the week and were not gathered together again until Saturday.

50,608. Then the feeling of the fishermen there is very much against trawling?—Yes, and no wonder. There are many who were trawling themselves at one time who are drift fishermen now. They know what the consequence would have been better than I do because I never wrought with a trawl in my life.

50,609. Did the fishermen practise trawling for some time?—Yes, for a time.

50,610. Are they now all drift fishermen?—Yes, they must be. There was a vessel caught there last year; she was seized and taken from the men who were fined in Rothesay.

50,611. Were they trawling for herrings?—It could not be proved properly. They urged me to give them some herrings to overlay two or three barrels with, but mine were herrings that I had caught by drifting.

50,612. Yours were drift-herrings?—Yes, there are no trawlers now.

50,613. Then were they drift-herrings on board this vessel?—Yes, but it was a few days past the close-time.

50,614. Have you any other objection to make to trawling than those you have already told us?—I cannot say any more about it.

50,615. Do you think that any number of small fish were taken by the trawlers?—I do not think it at all, but I am sure of it. I have seen 2,500 herrings sold for sixpence in Coldrie, because they could not get them off in any other way. I saw a man buying them for his pigs.

50,616. What time of the year was that?—I think it was in February.

50,617. That has been put a stop to by the close-time?—This was before there was any stoppage.

50,618. But since the close-time has been enforced that could not occur?—They could not get small herrings there now. We are obliged to haul the drift-nets now and again and the small herrings would go through the net; the net would not be able to hold them; it is impossible in a drift-net to get small herrings.

50,619. If the trawl-net were used during the open-time do you think it would catch a considerable number of small fish?—I do not think it at all, because I am sure of it. They will take in the small fry of the herring along with the large ones. It is quite easy to understand that. I heard one of the witnesses say something about encircling the fish in deep water and not coming on shore at all, but they can use their nets in the middle of Loch Fyne and draw them in bodily, teeming the fish into the boat the same as a pocket of meal.

50,620. Do you recollect how many trawl-nets there were used in the Kyles?—I cannot say.

50,621. Was there a considerable number?—Perhaps 200 or 300 and sometimes not half that number. There were a great deal too many of them, however. We could not get our own nets set out and they would carry away our bouys if we did not get out of the way.

50,622. Do you think the two modes of fishing could not be carried on together in the Kyles of Bute?—I do not, and the fishing could not continue long if we all got trawls, and in addition there would be murder if that happened, because I should be for shooting here and you would also be shooting there, and there would be nobody to interrupt us. We should very frequently all be wanting the same spot.

50,623. Do the trawlers and the drift men wish to fish on the same ground?—There would be no use in the drift fishermen fishing if trawling is to go on. They would be obliged to get a trawl the same as the rest and work with it as long as they could.

50,624. Were there many of those trawl-nets owned by the fishermen around your part?—There was a good deal at one time.

50,625. Were they fishermen living in your part or mostly fishermen who came from Tarbert?—They were about the part I live in as well as Tarbert. Those who could purchase the two kinds of nets had them. The trawl-net and the drift-net are not the same thing at all.

50,626. Have you got a drift-net boat of your own?—Yes.

50,627. And a net?—Yes a small one, but a good many of us join with one another and have half a boat and a train between two.

50,628. Are you of opinion that the trawling should not be allowed again?—I am. It ought not to be allowed.

50,629. Have you formed any opinion with regard to the close-time?—As far as I understand last year the fish were very good in the early part of the close-time. The night I had to drop it I got four maze, that is, 2,000 fish, and I cured them for my own use with the exception of 300 which I gave to a man who lost his vessel. I found them a good deal better than

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they were at the fore end of the month. We all considered that that was on account of the herrings shifting from Loch Fyne. I have been fishing there until the 4th of March before now.

50,630. Do you think the fish come up the Kyles after they leave Loch Fyne?—They go down the shore seeking their way out again. The people of the place could hear them plainly for more than two months after we dropped fishing.

50,631. Do you think the close-time begins too early?—For my part, so far as our place is concerned, I would rather that we lost June altogether and got the month of January instead.

50,632. You would begin the close-time from the 1st of February and go on until the end of June?—Yes. We would rather close that month, and get January for fishing upon our coast.

50,633. Do you think it would be of advantage to have a close-time from the 1st of February?—I would not ask to fish longer than February.

50,634. You do not desire to see the herring-fishing allowed all through the year?—No.

50,635. Do you think that a close-time does good?—Yes.

50,636. Do you fish with the long-lines yourself?—No, I never had a long-line of any consequence.

The witness withdrew.

J. McCarter.

JAMES MCCARTER called and examined.

50,637. (*Mr. Caird.*) Have you anything to add to the evidence given by the previous witness who comes from the same quarter; do you agree with what he has stated?—I have been a fisherman myself.

50,638. Have you ever fished with the trawl?—Yes.

50,639. Have you found it an easy mode of catching fish?—Not very easy. People have to work with it before they can catch fish.

50,640. Can you make a better catch with the trawl than with the drift-net?—No, I have done better with the drift-net than with the trawl.

50,641. You have done better on the whole?—Yes.

50,642. Do you think the system of trawl-net fishing is injurious to the fisheries generally?—I am convinced of it.

50,643. What harm does it do, do you think?—It was doing a good deal of harm, in my opinion, at times.

50,644. What harm did it do?—In the first place, I have seen boatloads of herrings lying dead which were never lifted after they had been killed by the trawl.

50,645. You say you have been a trawl fisherman yourself?—Yes.

50,646. Have you done that yourself?—No.

50,647. Have you caught them in such quantities that you have been obliged to leave them lying?—We may have left a few lying, but we have generally managed to lift most of them.

50,648. Was it generally the case that the fishermen managed to lift most of them?—At times it was.

50,649. What other objection have you to trawling?—In the next place, if we are working with the drift-nets close to where the trawlers are we are troubled with them and cannot fish.

50,650. The trawl-net fishes in shallower water than the drift-net?—It fishes both in deep and shallow water.

50,651. And cannot the two be carried on together?—No, not in the one place. That will never do.

50,652. Can the trawl-net be used where the drift-net cannot be used?—There may be a chance place where it can.

50,653. Is it often the case that there are quantities of herrings in particular places where the drift-nets cannot be used and the trawl-net might be used with advantage?—We could shoot a small piece of drift-net in any place where they can trawl.

50,653*a*. Do you think that since trawl-net fishing has been put a stop to altogether it has been of any advantage to the fisheries in increasing the quantity of fish caught by the drift-nets?—For my part I think we have had a better fishing since trawling was put a stop to. The first year after it was stopped we had a very good fishing, and last year the fishing was pretty fair.

50,654. How has it been this year?—It has not been very good yet, but the weather has been very coarse for the last four weeks. It was pretty fair in the first part of the season.

50,655. (*Mr. Lefevre.*) Do you think the fish are still in the loch; do you think the fish are there, but that they have not been caught on account of the weather?—I believe there are fish there and they were caught in the fore part of the year.

50,656. Has the coarse weather prevented you from going out?—We cannot fish in coarse weather. We can neither trawl nor carry on any other sort of fishing in bad weather.

50,657. Have you ever seen the trawled fish cured?—Yes, some of it.

50,658. Did they cure well?—We were not pleased with it.

50,659. It is stated in this petition or memorial which you have sent to us from Tighn-na-Bruaich that the fish taken by the trawl are unfit for curing by becoming heated and being knocked about more by the trawl than by the drift-net?—Yes, there is no doubt of that. They are knocked about and frightened.

50,660. In consequence of that do they become heated; have you ever noticed that that is the case?—Yes. The whole of the scales are off them when they are caught in the trawl. Perhaps they may take 200 or 300 which are not, but the great body of the fish would be in that condition.

50,661. Had you a share in a trawl-net yourself?—Yes.

50,662. How long?—For a number of years.

50,663. When did you give it up?—I gave it up some time ago.

50,664. Was that when the law forbade your fishing?—Yes.

50,665. Did you make a good livelihood by it while it lasted?—Yes, I could always make a livelihood by it.

50,666. Did you make a better livelihood by the drift-net or by trawling?—I was fishing with the drift-net also. It was only at the latter end of the year that I fished with the trawl. I fished with the drift-net in the summer.

50,667. Was it only late in the season when the fish came close in-shore that you used the trawl-net?—The fish came close in-shore all through the season, but we commenced trawling at the latter end of the harvest time when the fish came into the Kyles of Bute.

50,668. Were they abundant then in the Kyles of Bute?—Yes.

50,669. Then you fished nearer home?—Yes, but we went some distance from home also.

50,670. What distance from the shore would you go out with the trawl-net?—We trawled in the middle at times; half way across to the other side.

50,671. Across what?—Wherever the herrings were. If the herrings were in the middle, half way across, we should go out there to trawl for them. It was not in the shallow water that we trawled along.

50,672. In what depth of water can you trawl; is there any limit as to the depth of water?—I cannot tell that. When we were trawling in the deep water the trawl would not go to the bottom. It would be right on the surface, at the top.

The witness withdrew.

ROBERT MCLEAN called and examined. GREENOCK

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50,673. (*Mr. Caird.*) You are a fisherman at Largs?—Yes.

50,674. What kind of fish do you get at Largs other than herring?—We get a number of white fish. We used to catch whiting, cod, ling, and haddock with the lines after this time of the year, and in the winter time after the herring-fishing was dropped.

50,675. Do you not catch them now?—No, they are not to be had. I cannot be positive whether it will be eight or 10 years, but it is somewhere near about that time, since the whitings became almost extinct.

50,676. And are the other fish you then caught not to be had either?—There are a few cod and ling caught, but there have been very few haddock for some years; in point of fact there have been scarcely any.

50,677. What is the cause of that?—There have been various reasons. My opinion in reference to the decrease of white fish on this coast is that they trawl too many of them away on the Cantire coast with the herring trawl-nets. The white fish go into shallow waters where there is a clean sandy bottom, and if these trawl-nets make a circle round the fish they take them pretty clean away. About the beginning of the new year they are generally working away west of us. When the fish begin to leave Cumbrae, they go round by the back of Bute to the Cantire coast. The fishermen used to follow them that way, and in some seasons they got immense quantities of them at Campbeltown. It is in the spring of the year, towards the beginning of the year, that these fish spawn, probably in March or April, or somewhere about that time, and I think that the system of trawling for herrings at that time of the year has had a very bad effect. It has nearly extirpated the whitings altogether.

50,678. Do you mean by the destruction of the spawn?—By destroying them in a spawning state. I cannot be positive where they spawn, whether they spawn exactly on our shores or not; it is very difficult to follow them in all their different habits.

50,679. Have you ever seen these different kinds of fish caught in the trawl-net with the herrings when they were fishing for herrings?—They have been caught on our side of Cumbrae, and I have seen when they were trawling in Lightfoot Bay in the spring of the year large quantities of small haddock, small cod, and small trout, caught in the trawl-nets by so narrow a mesh that you could scarcely put your finger in it. They were trawling at the time for small herrings for bait.

50,680. If the regulation with regard to close-time, which now prohibits fishing in February, March, and April, were rigidly carried out, that injury could not be sustained?—It would not be so severe; there is no mistake about that.

50,681. It could not occur at all?—Wherever they trawl at any season of the year they would do injury. The fish are very small now. The spawn deposited in March or April is only small just now, and a trawl working among it would take in the whole of those young fish. When I first went to the herring-fishing I used to put out a line for white fish, and I could get fish at any time along any of the bays from Skipness Point, or from Tarbert to Campbeltown; but during the years that trawling was carried on there were no fish to be got. I can bring forward the testimony of the people living on the coast now who say that since trawling has been stopped there is an appearance of the return of fish to the coast.

50,682. Since trawling has been given up?—Yes, since trawling was prohibited.

50,683. You think that trawling is injurious at any time of the year to the young of other fish than the herring?—Yes, I certainly do, except ling. I do not suppose they set in-shore, but the codfish and the white fish, and the young haddock do.

50,684. Was there ever a large quantity of fish caught at Largs?—Yes, there was a large quantity sent to Greenock and Glasgow.

50,685. Has that ceased now?—Almost entirely. We used to fish in 25 or 30 boats, and that number has now been reduced in the present day to about six. Last summer there was not such a thing as a line-fishing boat at all until within a few weeks. Yet they used to get haddock and various other kinds of fish with the line. I do not attribute the whole of the decrease of the haddock to trawling them in-shore, but I think that is very injurious to the haddocks. I have heard a great talk about getting them for bait, and I think it very injurious to the fish along the Firth of Clyde to allow them to get herring bait and catch the spawning fish at that season of the year. That is one of the great causes of our fish being far too much fished.

50,686. In the spring months?—Yes, there are far more fish caught with the hook without the trawl at all than the sea can keep up.

50,687. Then your view would go to put an end to fishing either by trawling or by lining?—If it was practicable I would have a close-time for a month or so for the heavy fish as well as for the herrings.

50,688. You would have a close-time for the white-fishing?—Yes, in the Firth of Clyde; there are none cured in the Firth of Clyde; they are generally sent fresh to market, and at that season of the year they are not very good; they will not buy them after the middle of April.

50,689. As a practical fisherman can you suggest any plan by which any regulation can be adopted which would tend to increase the supply of white fish?—Do you mean cod?

50,690. Yes, and other white fish also?—There would be difficulty in the matter.

50,691. Do you ever catch any flat-fish?—We get a few but not many.

50,692. Is there any beam-trawling on your shore at all?—They catch flat-fish by what they call the small-line-fishing. The fishermen who work for the heavy fish work about 300 or 400 hooks, with from one to one and a half to three fathoms between the hooks. The small-line fishermen work with from 1,500 to 1,800 hooks for whiting and small cod and haddock, and such like fish as that. If anything could be done perhaps it would be as well to limit the catch with the heavy lines, and have them to work with the other lines. That is what they used to do with us long ago before they got the herring bait. Then they went for a few of the heavy fish, but subsequently they caught a great number of the heavy fish full of spawn when they were going up to Greenock direct from Tarbert. It has been since then that the fish have fallen off so.

50,693. (*Mr. Lefevre.*) Are you yourself now fishing with the line?—I have been fishing with lines more or less for a number of years, but last year I was not. The year before I was.

50,694. Have you yet observed any increase in the quantity of line-fish caught since trawling has been done away with?—There is an appearance this year of a few more whiting, but it will take some time before the spawn can get properly grown up.

50,695. Do you think that the four years during which trawling has been stopped are not sufficient to enable the fisheries to show an improvement?—I think they are scarcely sufficient. There used to be large quantities of whiting caught, and there have not been within the memory of man so many years without a large take as there have been since trawling was first practised.

50,696. How long is it since there was a large take of whiting?—Seven or eight or ten years.

50,697. Did the haddocks disappear about the same time?—The haddocks continued later, because they are a fish that are more in the deep water.

50,698. When did they disappear?—For three or four years they have been very scarce.

50,699. What do you use as bait during the close-time?—During the whole of the year we mostly use buckie for cod, and the haddocks will take it sometimes,

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and we cut up conger eel for ling. We find that a very good bait for ling, and if we have a tide to suit we can go to the shore and procure shell-fish for bait. That makes a good bait, but there is a great deal of labour in obtaining it. A great many of the fisherman say they cannot get bait, but I think if they were willing to work they could get plenty of it. There are many places in which shell-fish could be obtained, which would make capital bait for other fish.

50,700. Before the enforcement of a close-time for herrings did you use herrings for bait? — Very seldom; sometimes the fishermen did use them when they got them from Tarbert. They got them when they were working with the trawl in the spring. That was the time when they caught heavy fish in a spawning state.

50,701. Did they catch larger fish with the herrings than with the buckie?—They caught more of them; it had the effect of clearing up the ground. If I were to shoot a line with buckie bait at the time the fish are spawning, I should not catch many of them, but I could get a great many with fresh herrings. I think that a buckie on the whole is as good a bait for a cod as a herring when they are not spawning.

50,702. Do you recollect the time when there were beam-trawlers at work down the loch?—Yes, they are working every year down the coast.

50,703. How many of them?—I am not able to say how many; we used to have three or four out from Largs 10 or 15 years ago. It would perhaps be about 21 or 22 years since they commenced there first. When they commenced beam-trawling down with us they got large flounders weighing five or six pounds, but the effect of trawling has been in a great measure to do away with those large fish. There is scarcely one of those full-grown spotted-back flounders which we used to have then to be got now. They have gradually cleared them away as they have gone on fishing them. There used to be two or three boats belonging to Fairlie which were working for some years. I believe that one of the Greenock boats also went down and worked there, and the experience of the fishermen has been that if they were getting cod or ling, whenever the trawlers began to work over the ground, as they frequently did for three times a day, the next day they got nothing at all, or only a few small cod.

50,704. That was the case after trawling?—Yes.

50,705. Did the trawlers take the small cod?—I do not suppose they did. I do not suppose it is more than the disturbance occasioned by the beam of the trawl, but the beam-trawl I consider, in going over the ground and stirring the herrings and other fish that are spawning does great harm. There used to be a class of herrings on this coast before trawling commenced which deposited their spawn during the middle of the harvest, but since trawling became prevalent that class of fish year by year has been becoming extirpated in the Sound of Kilbrennan and Loch Strivan.

50,706. Is there now only one class of fish in the lochs; do the herrings only spawn early in the year?—When I was at the fishing first we used to get a great number of fish in the lochs. We got a great number of small herrings after the large herrings went away, and they left us after they had spawned.

50,707. What time did those herrings spawn?—We generally went to look after them about the middle of August.

50,708. Were they full fish then?—Yes.

50,709. Do you now never see any of them?—There are very few to be seen now.

50,710. (*Mr. Caird.*) Is there any of the trammel-net fishing, described by the previous witness as being practised for the last two years in the Kyles of Bute, practised off your coast?—Yes, we all work at one system of fishing.

50,711. You fish with the trammel-net off your coast?—Sometimes in the early part of the year I fish with the trammel.

50,712. When did you begin to fish with trammels; how long is it since you began to use that kind of net?—It was with the trammels I began to fish first.

50,713. Is that many years ago?—Twenty years.

50,714. What is the size of the net of the trammel?—A trammel with two barrels is 200 yards long.

50,715. Is that the kind of net spoken of as being anchored at the bottom of the sea for the catching of ling and hake?—No.

50,716. You do not use that net?—No.

The witness withdrew.

H. Morris.

HUGH MORRIS called and examined.

50,717. (*Mr. Caird.*) You are a fisherman at Largs?—Yes.

50,718. Do you concur with the previous witness that the white fish, other than herring, has much decreased on your coast of recent years? — Yes, greatly.

50,719. What is the cause of that?—I cannot very well account for it; we used to blame the flounder-trawling for disturbing the fish at night.

59,720. Was there any flounder-trawling on your shore?—Yes, I have trawled for them myself.

50,721. Is that done now?—There were two boats working at it last winter.

50,722. Were they successful?—They did very little.

50,723. Has flounder-fishing with the trawl-net diminished?—Yes, down with us; that may not have been the case off Greenock Bank, but it has been down with us.

50,724. You say you have fished with it yourself?—Yes, for two or three years.

50,725. Did you kill anything besides flounders with it?—Some chance times we killed a cod.

50,726. Did you do any injury to the spawn?—No, I never saw spawn in the net.

50,727. What harm did it do then?—When we were working for white fish we have been working long-lines, when a trawler has come after us trawling. The result has been that when we came to work over the same ground again, we could not get half the quantity of fish.

50,728. After the trawls had passed over the same ground?—Yes, we would shoot our lines afterwards, but we always thought that the trawling had disturbed the fish.

50,729. Are you a herring fisherman?—Yes.

50,730. Do you approve of trawl-fishing or not?—Yes.

50,731. Did you ever try it?—Yes.

50,732. Is it an easy mode of catching fish?—I do not know; it is sometimes very successful, and at other times there is a great deal of work for very little fish.

50,733. What harm does it do?—I have seen it take flounders and small fish the size of half-a-crown. A great number of herrings also were taken.

50,734. Did you take small herrings?—There were some small herrings taken too.

50,735. Was there no large quantity of small herrings taken?—I have seen the time when we have been getting them very small, when we have been drawing them for bait.

50,736. Were they so small as to be of no use for food?—They were of no use for food.

50,737. Were they lost altogether?—We generally took the smallest and baited our lines with them.

50,738. What size would they be?—They were quite small; perhaps four or five inches long.

50,739. What is the principal injury done to the herring-fishing by the use of the trawl?—I think it breaks up the fish and disturbs them.

50,740. Did it break the shoals of fish?—Yes, and

disturbed them. It scattered them away a good deal.

50,741. Have you observed that when you have been fishing with the trawl ?—Yes.

50,742. Was it in a quarter where the drift-net fishing was going on ?—Not, it was about Cumbrae, just off Largs. I never trawled about Tarbert or at Loch Fyne.

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The witness withdrew.

DANIEL MCEWEN called and examined.

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50,743. (*Mr. Caird.*) You are a fish-curer in Greenock ?—Yes.

50,744. Have you been for a number of years acquainted with the whole of the fishing interests of the west of Scotland ?—Yes.

50,745. But especially the herring-fishing ?—Yes, the herring fishing principally, but the cod and ling as well.

50,746. Have you observed the consequences of the recent legislation in regard to trawling for herrings in the Firth of Clyde and Loch Fyne ?—Yes.

50,747. What has been the effect of that legislation in your opinion ?—I think it has proved a decided benefit both to the public and to the parties interested in the herring fishery.

50,748. The effect of that legislation was in the first place to prohibit trawling ?—Yes.

50,749. And in the second place to establish a close-time ?—Yes.

50,750. Do you approve fully both of the total prohibition of trawling and of the close-time as it at present exists from the 1st of January to the 1st of June ?—I approve entirely of trawling being suppressed, and I may say that, while my opinions have not been in accordance with the close-time as fixed by law, I have no objection to its being continued. At the same time I think it should be relaxed until the 1st of February, and if there is to be any change of the law, the 20th of June, I think, would be the most fitting time to commence operations.

50,751. Does that opinion extend beyond the close-time in the Firth of Clyde ?—To the entire west coast of Scotland.

50,752. South and west of Cape Wrath ?—Yes.

50,753. Would you make no distinction on any part of that coast in the close-time ?—No.

50,754. From the Mull of Galloway to Cape Wrath ? — Yes, the only relaxation I would give would be liberty to fish for herrings for bait for white fish.

50,755. You would not allow them to fish herrings in the month of January for sale ?—Yes, in that month I would.

50,756. As a fish-curer, having experience on the subject, you would recommend the month of January to be made an open month ?—Yes, and from the 20th of May until the 20th of June I would have a close-time.

50,757. (*Mr. Lefevre.*) During that time would you allow them perfect liberty to fish for bait ?—Yes.

50,758. (*Mr. Caird.*) In what way would you control that liberty or restrict it ?—If any herrings were caught or sent to the market for sale they would be liable to be seized.

50,759. Do you think a restriction of that kind would be sufficient to prevent fishing for herrings except for bait during February, March, April, and May ?—Yes, I think it would be quite sufficient.

50,760. Do you know whether any restriction preventing fishing for bait would be injurious to the white-fishing ?—I would not go the length of saying that the restriction which has been established here has been injurious, as the decrease in the catch of white fish may have arisen from other causes. It may have arisen from the laziness of the fishermen themselves. They have been in the habit of getting a sufficient supply of bait by going out for a short distance and using a small piece of net, and they complain that they are now required to go out some miles further for a different description of bait.

50,761. Are you aware that in that season, in the opinion of the most experienced fishermen, the herring bait is the best for cod ?—I am not aware of it.

50,762. If they state that in their opinion the herring is the best taking bait for cod would that be a reason for allowing them to fish for bait at that time ?—I do not coincide in that opinion.

50,763. But you have no particular knowledge of the fishing ?—No further than that I have seen it conducted. I do not think the fishermen will state that as a reason, or that no other bait is good. Herrings at certain seasons of the year may be the best bait but at other times they are not.

50,764. Is it only during those particular months that they use herrings ?—At other times the fish would not take them.

50,765. Then you are perfectly satisfied with the state of the law as it at present exists, totally prohibiting the use of the trawl-net for the catching of herrings ?—I think it ought to be totally prohibited in every shape and form.

50,766. Do you think the prohibition has been beneficial to the supply of fish to the public ?—Yes.

50,767. Do you think that it has increased the supply of fish to the public ?—Yes.

50,768. Have more fish been caught since the prohibition was made or not ?—I think, if you will take the period of years, up to this time, during which it has been enforced, that there has been an increase in the quantity of herrings caught.

50,769. The bill was passed at the end of 1860 ?—Yes, and the law was enforced in 1861.

50,770. The fishing in 1861 was a better fishing ?—Yes.

50,771. In 1862 there was a remarkably fine fishing ?—Yes.

50,772. In 1863, again, there was a middling fishing ?—That was caused by coarse weather.

50,773. But it was nevertheless the fact ?—Yes.

50,774. It was a poor fishing ?—Yes, I believe so.

50,775. And during the present year there has not been a successful fishing ?—I think the fishing on the west coast has been more successful than for some years past.

50,776. Has the fishing in Loch Fyne been as successful as it was in 1862 ?—Yes, the fishing in Loch Fyne set in about this time of the year in 1862, and if we have good weather I think we may have as good a fishing as we have had on the average of ten years.

50,777. But as far as it has gone during the four years this law has been enforced there has only been a remarkably good fishing in one year ?—Yes, we never had anything approaching it before.

50,778. In the other three years the fishing has only been an average ?—Yes, in two of them.

50,779. You do not include the present year ?—No, nor 1861 as one of those years.

50,780. In 1861 the Acts that are at present in force were not in existence ?—The entire suppression of trawling in Loch Fyne by Act of Parliament was not in existence in 1861.

50,781. Was the Act passed in 1861 ?—Yes.

50,782. Then it did not come into force until 1862 ?—No, 1862 was the first year of the decided suppression of trawling.

50,783. (*Mr. Lefevre.*) There was an Act in 1861 but it was not quite effectual ?—No, it was not.

50,784. (*Mr. Caird.*) Can you specify the objections you have to the system of fishing by trawling ?—Yes, I can give them to you very distinctly from a petition which I see here from the Inverary fishermen.

50,785. Will you tell us from your own knowledge what your objections are to the mode of fishing by

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the trawl?—In the first place I object to the trawl-nets in consequence of their catching a vast amount more fish than they are able to land. Often when they get heavy loads of fish they kill from ten to one hundred times the quantity they are able to take ashore.

50,786. Do you consider that by that mode of fishing they are very successful in catching herrings?—Sometimes; at particular times they are.

50,787. Would it not be possible, if trawling is found so very successful a mode of fishing herrings, to adopt such arrangements as would enable the fishermen to take ashore all the fish they catch?—I do not think that is possible with the trawl-net.

50,788. Could not the trawl-nets, gear, and boats be so improved as to admit of their doing all these things in a more business-like manner?—I believe they could be improved, but I do not think it would be possible for them to land all the fish they catch.

50,789. Why would it be impossible for them to do that any more than it is possible for the drift-net fishermen to land their fish?—The drift-net fishing is quite a different thing; the net is suspended in the water; the meshes will only catch a certain number of herrings, and the buoys attached to the nets keep them floating. The nets are attached to the end of the boats and they are always hauling them in. They cannot catch more herrings than the number of meshes in the net, but the trawl-net can surround the fish and there may be hundreds or thousands of barrels in the inside of the circle which they make with their net. It is quite impossible for the boats to take those herrings out, for this reason, that as soon as the bulk of the herrings gets into the net, the dead herrings tumble through and fall to the bottom of the water, and those which have more life and which get less smothering are only taken to the shore if the water is shallow.

50,790. Is that in consequence of the mode of fishing, or is it in any other way necessitated by the fishermen being obliged to fish by stealth, owing to the present state of the law?—I do not think that that has any effect. I do not think that the fishermen fishing by stealth has anything to do with the cause of their losing so many. I know, from personal experience, that before trawling was suppressed there were thousands of barrels of herrings lost in Loch Fyne, although there was no attempt on the part of the Fishery Board, or of the Fishery officer, or the steamer, to put down trawling.

50,791. (*Mr. Lefevre.*) Was that in the year 1853 or in 1854?—It would be from 1853 up to 1860.

50,792. (*Mr. Caird.*) Was it very common for that to be the case?—Yes, almost in any case if they fell in with a heavy shoal of herrings. It was quite impossible to avoid it.

50,793. Then the objection is that they catch too many fish by that mode of fishing?—They catch more than they are able to land; they destroy herrings without any cause for it.

50,794. What is your next objection?—My next objection is that they break up the shoals of herrings.

50,795. Have you reason to know that from any experience of your own?—I think, in 1859, in the months of October and November, there was a good fishing for herrings in Loch Fyne. There was no trawling going on then in the upper part of the loch, but in the course of a few days afterwards the trawlers went up among them and commenced trawling. The consequence of that was that before the fishing season was half over almost the whole of the herrings went away out of the loch. That I believe was generally the case when the trawlers went to work among them.

50,796. But there were shoals of fish up in the narrow part of the loch before trawling began?—Yes, and they would remain there until December or January I believe. The same thing has happened in other years.

50,797. Is it the case, that in certain years, in the upper part of the loch,—the narrow part,—the takes of fish are more successful than in the broader part, and that in other years the fishermen are more successful in the lower part; does the catch vary in that way?—I believe it does.

50,798. When trawling was practised there was it carried on to a much greater extent in the lower part of the loch than in the upper part?—I believe the principal part of the trawling was carried on from Skipness Point.

50,799. Were the herrings in the lower part of the loch more numerous than in the upper part?—They varied. Some years they were better in one part and some in another.

50,800. If a system of trawling which you think calculated to break the shoals was so much practised at the entrance of the loch and at the lower part of it, would that not most likely be followed by this result, that the shoals would never get up in large quantities to the upper part of the loch at all?—If you allow trawling to go on in the lower part of the loch the consequence will be that you will have little or no herrings in the upper part.

50,801. But was that the case when trawling was permitted in the lower part of the loch; was there not a good fishing in the upper part then?—There was never a good fishing in the upper part of the loch when there was a good fishing in the lower.

50,802. But while there was trawl-fishing carried on in the lower part of the loch has there not been a successful fishing in the upper part?—Not as a rule.

50,803. Have there not been years in which there has been a successful fishing in the upper part of the loch, notwithstanding that trawling has been carried on in the lower part?—There might be an exception, but it would only be for a short time, when the two were practised at the same time.

50,804. Can the two be practised at all without the one being a serious injury to the other?—I don't think they can.

50,805. Is not trawling oftener practised in the shallow parts?—It is more successful there, but the drift men can fish in shallow water just as well as the trawlers can. They oftentimes fish with the net touching the bottom.

50,806. We have had it stated to us in evidence that the fish which are often caught by the trawl are in smaller shoals and a larger sized fish than those which form the larger bulk of the catch with the drift-nets?—My experience is that you will catch herrings of different sizes with the trawl-net, from the size of a minnow to the largest size it is possible to get them.

50,807. (*Mr. Lefevre.*) What length?—Some will be very small. I have seen 9,000 herrings in one barrel, caught in the month of October.

50,808. Caught by the trawl-net?—Yes, by the trawl-net. A legal sized drift-net would not catch at the outside herrings of a smaller size than 1,600 to the barrel.

50,809. (*Mr. Caird.*) What was the size of the mesh of the trawl-net?—They have them of all sizes, from one-inch downwards.

50,810. Have they not a legal size like the drift nets?—No.

50,811. Could not a legal size be enforced?—I don't think that would affect the question at all.

50,812. For what reason?—The mesh of the net does not continue of the same size as when it is suspended in the water. It can be stretched out, and a great bulk of herrings coming into it jams the meshes all up together.

50,813. (*Mr. Lefevre.*) Do you mean that the fish in the middle of the shoal would not have an opportunity of escaping?—Yes, supposing the net had a mesh of five or six inches to only one inch in width, the bulk of the herrings pressing against it would not have an opportuuity of escaping through the mesh. The mesh is strained by the pressure against it, when the fish get jammed up.

50,814. That would only be the case when the takes are enormous?—They will never fish with the trawl

except when they see a shoal of herrings. They will not put out their nets except where there are fish.

50,815. (*Mr. Caird.*) Do I understand you to say that the dragging of the net contracts the mesh?—Yes.

50,816. And therefore a regulated size of the mesh, if it was the same as that of the drift net, would not be followed by the same result?—Not at all.

50,817. Have you observed whether in general in the takes of the trawl-net the fish are larger than those caught in the drift-net?—I think they are much smaller.

50,818. Smaller on the average?—Yes. Now they would be very much smaller.

50,819. Have you seen herrings caught by the trawl-net cured?—Yes.

50,820. Have you cured them?—Yes.

50,821. Do you find that they cure as well as the others?—No, they do not.

50,822. What is the difference in that respect?—The fish are much the same as if you were to take a cod and bleed it and attempt to cure it afterwards. It will not cure if you keep it for any time without its having been bled.

50,823. Is it not the fact that there are many barrels of trawled herrings cured and sold in the market?—It was the fact.

50,824. When the law was not enforced?—Yes.

50,825. Did they sell at inferior prices as compared with drift-net caught fish?—I think they did almost invariably.

50,826. Was that because they were inferior in quality?—Yes.

50,827. Did they find a better market in the fresh market?—I think not. I think the same sized herrings caught by drift-net men would always fetch more. If you got herrings 500 to a barrel, caught with the drift-net, and herrings of the same size caught by the trawl, the drift-net herrings would command a better price in the fresh market than the trawled herrings.

50,828. Although of the same size?—Yes, the drift-net herrings always command a better price.

50,829. Do they look better?—Yes, and they are better to eat. You will not find the difference so much in fresh herrings as in cured herrings, but at any time they will not command the same price as the drift-net herrings.

50,830. When they are sold fresh is that the case?—Yes, when they are sold either cured or fresh.

50,831. (*Mr. Lefevre.*) What would be the difference in price?—That will altogether depend upon the market. If there are a great many trawled herrings and a few drift-net herrings the difference will be more than if there are a great many drift net herrings and a few trawled herrings. In that case it would not be so much.

50,832. To what extent do the prices vary?—I have known a difference of 1*l.* in a barrel of herrings, and I have known also when the difference has been only 5*s.* If there are only a few trawled herrings the difference between them in that case will be less, because the herrings will be in better condition.

50,833. (*Mr. Caird.*) Was the result of trawl-fishing to increase the supply and lower the price?—I don't think it was. There might have been an increase in the supply, for the time being, if they got heavy shots, just the same as is the case at times with the drift-net men. If we have a heavy fishing it will beat down the price in the market, either for fresh or cured fish. Of course it naturally depreciates the price, and if on the other hand there is a small fishing it sends the fish up in the opposite direction.

50,834. Is there any objection which you have to urge against trawl-fishing?—Yes, I think it injures the spawning ground.

50,835. Have you seen any injury done by the use of the trawl-net to the spawning ground?—I have not seen it, but I know from many who have been fishing and who have been seeing it that it is the case.

50,836. Was that the case when they were fishing in the open season, or was it more so when they used to fish in the spring months?—In the month of August you will get plenty of foul herrings; at least they used to get them at the head of Loch Fyne. They spawn at the head of Loch Fyne and in Loch Ridun in shallow water, and if you allow trawling to go on there the result will be that you will trawl up the spawn from the bottom of the water.

50,837. (*Mr. Lefevre.*) What months do you allude to?—The months of August and September, but I do not know that they do not spawn all the year round.

50,838. (*Mr. Caird.*) Is that the case in particular parts of the loch?—Yes.

50,839. The places you mention are in the upper part of the loch?—Yes, at the head of Loch Fyne and in Loch Ridun.

50,840. Would it not be possible to adopt an enactment by which the spawning grounds might be excepted from trawling?—No, I think not, I do not think the fish limit themselves to those two particular places.

50,841. Are you aware as a fact that the trawl-net does bring up the spawn of herrings?—Yes, I think there cannot be the slightest doubt of it; I have not seen it done, but I have known it to be the case. I have seen spawn which has been lifted in the Kyles of Bute after the trawlers had recently passed over the spawning bed.

50,842. Was that in the month of September?—No, in the spring months.

50,843. Can you give us any instance in the months of August and September, in the open fishing, in which the spawn of herrings has within your knowledge been taken up by the trawl-nets?—I can only give you that instance in the Kyles of Bute, and that was in the close-season. I cannot give an instance such as you desire at present, but I have no doubt that I could if I would put myself to some little trouble.

50,844. Trawling for herrings in the upper part of the loch has always been illegal?—The trawlers never went there to trawl for herrings for two reasons. In the first place the other fishermen would not allow them, and in the second place they would not be able to get a price for the fish at that season. They would only get spent herrings and they would get little or nothing for them.

50,845-6. (*Mr. Lefevre.*) The herring that is usually taken here does not spawn in August or September?—They have been spawning to a large extent in former years in Loch Fyne.

50,847. But the close-time has been fixed on the ground that the herrings spawn between January and June?—As far as my information goes, I believe it is a different class of herring that frequents the loch in the months of August and September to those which are here at an earlier period. I believe they are local in their habits.

50,848. The herrings you get are mateys; they seldom have roes in them?—Yes, they have a considerable quantity of spawn at this moment. They have more or less spawn in them now.

50,849. They are not full fish?—You can get an odd herring which is a full fish.

50,850. But the bulk of them are not?—They spawn in January and February and March.

50,851. (*Mr. Caird.*) You say that in the upper part of Loch Fyne it would not have paid the fishermen to take the fish because they would have been out of condition and almost unsaleable?—Yes.

50,852. Would not that be a sufficient motive to prevent the fishermen from fishing?—I don't think it is a motive to prevent them from fishing at all, because I have seen them selling herrings in Glasgow when they have only been getting 1*s.* 6*d.* for five or six thousand of them. It would not pay them to fish under such circumstances but still they persevered in it.

50,853. It would not pay them at that season of the year?—No.

50,854. That season is what is now the close-time?—Yes.

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50,855. Then that fishing is discontinued now?—Yes.

50,856. Have you any other objection to trawl-fishing?—No, I think that is about the extent of my objections.

50,857. (*Mr. Lefevre.*) Do you know whether the trawl fishermen since they have been prohibited from fishing with the trawl have all gone into the drift-net fishing?—I think that almost the whole of them have and they have been pretty successful with their drift-nets.

50,858. Have you bought any of their take for curing?—Yes.

50,859. Have you reason to know that they are as well satisfied with the drift-net fishing as with the trawl-fishing?—So far as I can discover from their personal opinions—if they were allowed to speak their opinions entirely unfettered they would be much inclined to keep the law as it at present stands. I think that drift-net fishing is more lucrative to the fishermen than trawling.

50,860. Have you any boats of your own?—Not directly but indirectly I have.

50,861. Have you advanced money upon them?—Yes.

50,862. Have you also vessels out purchasing herrings?—Yes.

50,863. When herrings were being caught by the trawl did you give instructions to your men not to buy the trawled herrings?—No.

50,864. Did you buy trawl-caught herrings?—Yes, while it was quite legal to buy them I did as other people did.

50,865. Did you mix them with the other herrings at all?—No.

53,866. Did you sell them under a different brand?—We object to the brand. We use none at all.

50,867. Have you no trade mark at all?—No.

50,868. (*Mr. Caird.*) You have no brand of your own?—We brand no name at all.

50,869. (*Mr. Lefevre.*) Have you no mark at all?—No; we sell our herrings the same as we would a barrel of flour or a barrel of meal; we object to the brand in all shapes.

50,870. Did you sell herrings bought from the trawlers as trawled herrings?—Yes, but we had great difficulty in selling them, although they were cheaper to the consumer; we had great difficulty in selling trawled herrings.

50,871. Were the purchasers able to tell the difference?—They would not buy them at all in many cases.

50,872. Did they always examine each barrel of herrings; were they sold open?—We sometimes sell the herrings without their seeing them at all, and at other times they come and look at them.

50,873. Was there a difference in the trade for drift-net herrings and for trawled herrings?—Yes, the consumer would not buy trawled herrings as readily as he would buy drift-net herrings.

50,874. Was there the same difference in the fresh market?—Yes.

50,875. Do you agree with the other witnesses that a larger class of herrings was caught by the trawl-net than by the drift-nets?—There was at one time, perhaps 15 or 20 years ago, and until within the last five, six, or seven years ago, a class of herrings of a pretty large size running from 500 to 600 per barrel; they were pretty regularly caught in the early part of the season by the trawl men, but those herrings have been entirely destroyed by the trawl-nets. There is no such thing got now with very little exception; probably they may get a few hundred in June.

50,876. Were they caught by the drift-net also?—Yes; I do not think there is a class of herrings of any size in Loch Fyne that would not be caught by the drift-net.

50,877. They would not be habitually caught by the drift-net?—No.

50,878-80. Then do you agree with the witnesses who have told us that a much larger class of herrings than that generally caught by the drift-net was caught by the trawl-nets?—No more than that there is no restriction of the size of the mesh of the nets. The mesh is generally one inch from knot to knot, but where there is a larger class of herring they use a larger size. They always work with a larger sized mesh in the early part of the season.

50,881-84. What is the size of that mesh?—From 32 or 33 to 35 to the yard.

50,885. When you speak of the trawl-nets injuring the spawning ground do you mean that they dragged the spawn from the ground where it has been deposited?—Yes; sometimes they land the spawn on the shore, and if they do not land it on the shore it is dragged and lifted from the bottom of the ground, so that the other fish can get at it and devour it. The natural coating upon it is torn off and the other fish then devour it.

50,886. Have you seen it landed in that way?—I have seen it brought ashore in the trawl-nets.

50,887. Is there a considerable portion of the upper part of Loch Fyne in which the trawl-net can be used?—They can use the trawl-net in any part of the loch.

50,888-9. And drag it ashore in any part of the loch?—If there are rocks they cannot do so, but they work the nets in the way that we call circle-fishing, and when they lift the herrings they are more or less injured.

50,890. Was a large proportion of the trawling in deep water, before it was put a stop to, carried on?—No; in the greater part of the trawling of late years the nets were all dragged ashore.

50,891. By a limitation of the place where trawling should be carried on, could any of the evil you mention be remedied?—I cannot see any way at all by which trawling could be allowed to go on in any part of the west coast of Scotland.

50,892. Have you paid any attention to the catch of pilchards in Cornwall?—No.

50,893. Does not that resemble the trawling on this coast?—I think not.

50,894. Are you aware that they take large quantities of pilchards in the same kind of nets?—I understand that they work the pilchard seines in Cornwall, that they take the seines and surround the fish and keep them in a limited space, and that they then lift the pilchards out of the seine.

50,895. Could not that mode be adopted here?—I don't think it could be adopted with regard to herrings.

50,896. Is it different from circle-net fishing in deep water?—Yes.

50,897. In what way?—In circle-net fishing in deep water the boats go round about and form a circle, and if there is a heavy shoal of fish the fish that are in the bottom of the circle, being compressed, die and drop through to the bottom; you can only lift a limited quantity out of the whole. In point of fact you are killing fifty thousand times more than you are able to land in your boats.

50,898. Is that from bringing the net tight round them?—Yes.

50,899. In order to prevent them from escaping?—Yes, they kill immense quantities at one time. My late uncle bought no less than 100 barrels of herrings from one person that had been lifted on shore at Ardlamont. They had been killed by the trawlers and left there. I have not the least doubt that there would be 10 or 20 times that quantity carried away by the tide.

50,900. When the herrings are dragged ashore this kind of loss does not take place?—It takes place inasmuch as lots are killed and drop out of the net before they can get it into shoal water.

50,901. In regard to the condition of the fish, to what is the inferior condition of trawled fish due, do you think it is due to their not being meshed?—The herrings that are caught in the drift-net bleed from the neck, the trawled net herrings are smothered and do not bleed at all.

50,902. Is their condition also due to their being heaped up in masses ?—Yes.

50,903. Which do you think the greater of the two evils ?—I cannot tell you. I have not paid sufficient attention to the subject. I think that smothering and blocking them up in that way are both very bad.

50,904. (*Mr. Caird.*) Is there anything you desire to add to your evidence which I have not asked you? —Yes. There is another matter to which I should like to direct your attention. In the late report upon this question the Commissioners gave as our reason for being opposed to trawling, that it is a trade question, and that we desire to prevent it for our own purposes. Now I distinctly deny that. I say that if trawling is proved to be beneficial, if it really does increase the quantity of herrings, it is our business to be decidedly in favour of trawling, but I cannot see that we have any ground of that kind for supporting it.

50,905. (*M. Lefevre.*) We have heard that one objection to trawling is that it throws upon the market a large quantity of fish, and that it causes great irregularity in the price ?—I don't think so.

50,906. Do you attach importance to that objection ?—Not the slightest. It is all bosh.

50,907. Do you think the public would be rather benefited than otherwise in that way ?—It makes no difference if there is a large quantity of fish, whether they are trawled or drift-net herrings ; the public get the benefit. I have never found the price of herrings so low either in the fresh or the cured market as it has been since trawling was abolished.

50,908. You say that the fish sold in the market during the prohibited time ought to be liable to be seized ?—Yes.

50,909. Is there any supply coming from other places at that time ?—Yes, from the east coast.

50,910. How would it be possible to distinguish between the east coast fish and the west coast fish ?— The fish distinguish themselves by the quality.

50,911. But would it not be difficult to enforce a regulation of that kind ?—No, there would not be the slightest difficulty.

50,912. (*Mr. Caird.*) You say that since trawling has been abolished fish have been low in price ; do you refer especially to 1862 in which there was a very large catch of fish ?—Yes.

50,913. Not to the year or two which have elapsed since ?—No, but I believe that in this year up to July herrings were as cheap as ever they were.

50,914. Last year were they not dear in price as compared with the price when trawling was permitted ?—I think it was much about the same.

50,915. Then the price has not altered for the average of years ?—We have not had sufficient time to average the years yet ; we have only had two years of it.

50,916. But it was an exceptional year to which you referred as giving the lowest price of the fish ?— Yes, it was the best year's fishing we ever had.

50,917. Was there not nearly four times the quantity of fish caught that year than was caught in any other season ?—I don't think that.

50,918. By the returns of the Fishery Board that was so ?—The Fishery Board returns are not worth the paper they are written upon.

50,919. In 1861 by these returns the total catch of herrings was 20,246 barrels and in 1862 it was 79,893 which is very nearly four times as many ?—Yes ; you are referring now to the total catch throughout the whole season I think.

50,920. Yes.—Not to the quantity caught in Loch Fyne ?

50,921. Yes, there were 20,246 barrels caught in the one year and 79,893 in another; that would account for the falling off in the price that year ?—Yes, to a certain extent.

50,922. (*Mr. Lefevre.*) Though you say these returns are not to be relied upon for the total quantity, do they give a comparison of one year with another ? —They are very rough returns.

50,923. For instance, do they give a correct return of herrings shipped in boxes ?—I do not think with regard to the west coast that there is any reference to fresh or cured herrings. The returns furnished to the board are anything but accurate.

50,924. But would the Custom House returns be accurate ?—There are no Custom House returns.

50,925. Would it be possible to collect accurate statistics ?—Not in the manner in which they are now obtained.

50,926. Would it not be possible to collect them in some other way ?—Yes, it is quite possible by compelling each boat which is at liberty to fish for herrings to give returns of the number of fish caught, and they might be required at the end of the season to give the total quantity they had got.

50,927. How do they ascertain the quantity cured ? —They ask me how many I have cured ; but there are thousands of barrels they never know anything about.

50,928. Even of cured herrings ?—Yes ; I think in 1859 they gave the number of trawled herrings taken in that year, at 7,130 barrels or boxes. We were certainly a little astonished by the returns they gave that year. We took some little interest in the matter, and we were greatly astonished at the number of trawled herrings they gave, especially when we knew that from the 1st of June to the 30th of May 4,037 barrels had been carried by one steam boat company in Glasgow alone.

50,929. Then you do not attach much importance to these statistical returns of the Fishery Board ?— Not the slightest importance.

50,930. Not as being comparatively accurate one year with another ?—They may to a certain extent be accurate but I think not generally. With their mode of sending officers round Loch Fyne it is quite impossible for them to get accurate returns.

50,931. Do you refer to a particular table or the whole returns ?—I take their whole returns as referring to the west coast of Scotland. I can easily make out that 10,000 boxes of herrings came into Glasgow in the one year in which they gave the total returns at 7,000.

50,932. Do you find that the price of herrings depends upon the take in Loch Fyne or upon the take upon the whole coast ?—It depends upon the take on the whole coast; not upon the take in Loch Fyne.

50,933. With regard to the price of Loch Fyne herrings, does that depend upon the take in Loch Fyne or do you find that when the herrings are abundant on the east coast they reduce the price of Loch Fyne herrings ?—The east coast herrings have no influence upon those on the west coast.

50,934. Could you not give us a return of the Loch Fyne herrings for a series of years that would indicate the comparative prices ?—I think the prices would do so.

50,935. Can you make out such a return ?—Yes, I will send it to your office. There is another matter which I object to and that is the brand.

50,936. (*Mr. Caird.*) You have no brand here ?— No, we object to the brand; we think it injurious to the fish-curers.

50,937. You do not speak from any personal knowledge of the subject ; you do not have the brand here ? —I speak from this amount of knowledge, that I frequently see the east coast herrings, and I know that they are not equal to ours.

50,938. You do not buy the east coast branded herrings ?—No, I would not buy branded herrings at all.

50,939. They are chiefly sent to the foreign markets ?—Yes.

50,940. Have you any special information you can give us that could lead us to rely upon your opinion, as you have had no experience of the trade to which you refer ?—If you mean with regard to my knowledge of shipping herrings to the Continent then you are right, but not in regard to anything else.

50,941. As we understand from the inquiries we have made on the east coast, branded herrings do not come into the market here, but they go chiefly to the Continent, so that any value attached by the east coast

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curers to the brand arises from its giving a value to the herrings in the foreign markets?—It is only a fictitious value.

50,942. That is a matter of mere argument and opinion?—I think the fact that they are not able and that they do not cure beyond a certain mark is sufficient to condemn the brand altogether.

50,943. What do you mean when you say that they do not cure beyond a certain mark?—They have no interest in curing better than the brand.

50,944. (*Mr. Lefevre.*) You have no wish for the brand here?—No, I would not give twopence for it.

50,945. Is it usual for the merchants to put a trade mark on the fish here?—No.

50,946. Do the merchants when they have bought the herrings from the curers do so?—No, they rely upon the curers selling them a good article.

50,947. Do they put no retail mark upon them?—Not the slightest.

50,948. No name?—No name or anything. I should also like to say that I think the laws which have been recently passed ought to have eight or ten years trial before any opinion can be formed on the matter. I don't think the two or three years that have elapsed a sufficient time to enable us to see whether they have been injurious to us or not. I also think it would be of great importance to the community of fishermen and to all parties interested in the matter that there should be a general inquiry into the habits and natural history of the herring. I think that is a subject which has been much overlooked, and almost nothing is known of it at all. I think it is of the greatest importance that there should be a Government inquiry into the subject.

50,949. (*Mr. Caird.*) You think there ought to be a scientific inquiry?—Yes.

50,950. (*Mr. Lefevre.*) You would also give the close-time a further period of trial?—I am of opinion that you might allow the fishery to go on until the 1st of February without much injury to the fishery, but while I am of that opinion I am also firmly of opinion that there should be no herring-fishing allowed in the month of May on the west coast. No doubt you will get parties interested in the matter to tell you that you should allow the fishing to go on all the year round; but I am looking now at the matter for the benefit of the public.

50,951-2. Do you object to fishing at that time on the ground that the fish are spawning then?—I object on the ground that they are spawning and are in bad condition. I have known them sent to London, and in place of getting any money for them I have been actually money out of pocket by them.

50,953. Were they spent fish?—They were almost unfit for human food. That is the case almost every year. I believe that fishing in May is very injurious to the fishery generally. In my opinion it is an injury both to the trade and to the fishery.

50,954. You believe that four years is hardly a sufficient time to enable you to test the merits of any scheme of legislation?—We have hardly had four years. We are only now in the third year, and I don't think that is sufficient time to say whether the legislation which has taken place has been injurious or beneficial. I think we ought at least to have 10 years. I believe that if you were to permit trawling in Loch Fyne and to sanction the use of trawl-nets in place of drift-nets you would very soon destroy the whole of the fishing there.

50,955. Then do you think the fishermen generally are in favour of the use of the trawl?—I think with exceptions they are almost unanimous in condemning it.

50,956. But you infer that they would take to the use of the trawl-net?—Yes, for this reason, the trawl-net can be got cheaper than the drift-net.

50,957. In fact the fishery can be worked cheaper in that way?—Yes.

The witness withdrew, and the inquiry was adjourned until the 22d September, at Ardrishaig.

Ardrishaig, Argyleshire, Thursday, 22d September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

JOHN M'KIVER called and examined.

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50,958. (*Mr. Caird.*) You have been stationed here for several years, I understand, during the period of the herring fishery, as the Fishery officer?—No, I am only stationed here during the period the officer of the district is absent at Wick for the branding season.

50,959. For a succession of years you have taken his place here?—Yes.

50,960. Then you are acquainted with the general character of the fishery carried on in Loch Fyne?—Yes.

50,961. Can you describe what is the present state of the fishery, as compared with what it has been for some years past, in regard to the yield of herrings?—It has been the worst season known for a number of years for the take or catch of herrings.

50,962. As far as it has gone?—Yes.

50,963. During what period does the herring fishery continue here?—At present it is allowed to begin on the 1st of June, and, since the close time commenced, they drop the fishing on the 30th of September.

50,964. During what months is the fishing most successfully prosecuted?—It differs according to the season; sometimes it is better at the latter end of the season, and at other times it is better earlier.

50,965. Four months of the fishing season have now passed?—Yes, nearly four months.

50,966. Generally speaking, the most productive part of the season has now passed?—No, it has been heavier after this.

50,967. Do you usually have the heaviest fishing after this time?—I cannot say that we usually have it, but in 1862 it was so.

50,968. Then you cannot say yet whether there will be a good or a bad fishing on the whole?—No, I cannot say yet. In 1862 there was a large fishing, and it was heaviest after this time up the Loch at Inverary.

50,969. Is there any striking difference in different parts of the Loch in the yield of fish, taking one year with another?—I cannot say.

50,970. Can you tell us the number of boats employed in the fishing now in Loch Fyne?—There will be about 500 at present.

50,971. Are they mostly boats belonging to the district, or are there any strange boats coming here?—There are a number of strange boats from Ayrshire, Campbeltown, Ross-shire, and Arran.

50,972. They are all drift-net boats, I suppose?—Yes.

50,973. Are any of the boats that were formerly used in trawl-fishing now employed in drift-net fishing?—There is no trawling now.

50,974. But are the boats that were employed in trawling employed now in drift-net fishing?—Yes.

50,975. They have been found capable of being employed in that way?—Yes.

50,976. How many are there won engaged in drift-net fishing that were formerly engaged in trawling?—I cannot say exactly.

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50,977. You cannot give us any classification of these 500 boats as to size?—No.

50,978. Do you know how many men may be engaged?—They run from two in the small boats up to four and five in the others.

50,979. From two to five men?—Yes.

50,980. Can you tell us the length of the fleet of nets carried by the larger boats?—No, I cannot; the fishermen know that better than I do.

50,981. Is there an increased number of boats compared with what the number was a few years ago, or is the number diminishing?—There has been a diminution; there were more boats last year.

50,982. How many were there last year?—If I had my books I could tell you.

50,983. You know the fact that there are a lesser number of boats this year than last year or the preceding year?—Yes.

50,984. Has the number of men also decreased in the same ratio?—They come here from different places when they hear of a good fishing, and that makes the increase. Boats come here from Campbeltown, the Kyles of Bute, Ayrshire, Arran, and the Ross-shire coast. This year there has only been a slack fishing, and that has caused the diminution.

50,985. What proportion of the fish caught in the Loch is sold fresh, and what cured?—Do you mean this year?

50,986. I mean as a general rule.—I cannot say at present, but if I had my books I could.

The witness withdrew.

N. Leach.

Neil Leach called and examined.

50,987. (*Mr. Caird.*) You are a drift-net fisherman?—Yes.

50,988. Have you been long engaged as a drift-net fisherman in Loch Fyne?—Yes.

50,989. For how many years?—25 years.

50,990. And you have full knowledge and experience of the mode of fishing in this Loch?—Yes.

50,991. Have you fished in all parts of the Loch?—Yes.

50,992. Both in the Upper and Lower Loch?—Yes.

50,993. What is the size of the boat in which you fish?—About 22 feet keel.

50,994. It is a half-decked boat?—Yes.

50,995. How many men are there in it?—Three.

50,996. And what is the length of the nets which you employ when you are fishing?—14 barrels.

50,997. Fourteen lengths?—Yes.

50,998. How much is each length?—A hundred yards.

50,999. So that the boat altogether shoots 1,400 yards of nets?—Yes.

51,000. What is the depth of the net?—Eight fathoms.

51,001. Is that about the average size and depth of the whole shot of nets in each boat?—Yes.

51,002. At what distance from the shore do you generally shoot your nets?—We do not go out very far from the shore, if we are once off the shore.

51,003. What is the nearest distance from the shore at which, in any state of the wind, you would shoot your nets?—About half a mile or a quarter of a mile.

51,004. You would not like to be nearer the shore than half or a quarter of a mile?—It would be according to the place in which we were fishing. It might be that the water would be shallow, and in that case we dare not come near the shore.

51,005. But in any case, whatever might be the state of the wind and the shallowness of the water, do you ever come nearer than a quarter of a mile of the shore?—Yes.

51,006. How close do you come?—Within four fathoms of water sometimes.

51,007. What distance may that be from the shore at any time?—It will not be very far off the shore—four fathoms.

51,008. Is it where the water is deep that you come closest to the shore?—Yes.

51,009. In shallow bays you do not shoot your drift nets?—Yes, sometimes.

51,010. But never in less than four fathoms of water?—No.

51,011. If your nets are eight fathoms deep they would touch the bottom of the ground?—Yes; many times they do.

51,012. Do you not anchor your nets when they are set?—No.

51,013. Do you hang by them all night?—Yes.

51,014. Do you observe any particular time for the shooting of your nets?—Yes.

51,015. Do you ever shoot them before sunset?—No.

51,016. Is there any regulation upon that point?—There used to be a cutter here to keep the regulation, but she is not used as she was formerly.

51,017. Does anybody enforce the regulation that no nets shall be shot before sunset?—No.

51,018. Do the fishermen shoot their nets when they think right?—No.

51,019. Do they observe any rule among themselves?—No.

51,020. Does every man just do as he likes?—They do not shoot until the sun is down.

51,021. Have you ever observed any ill effects from the nets being shot before sunset?—Not here, but at Stornoway they used to shoot them before sunset.

51,022. If you shoot them before sunset, does it prevent the fish from rising?—Indeed I do not know.

51,023. What is the object of not shooting the nets before sunset?—I cannot say, but no doubt, it is for the benefit of the fishery. Very likely they do not do it from a dread of frightening the fish away.

51,024. Then you do not shoot your nets before sunset because you are afraid of alarming the fish?—No.

51,025. Do any of the drift-net boats observe any particular distance between the drift of each set of nets as to where they shoot their nets?—Not very much.

51,026. How close may one drift of nets be shot to another?—You might heave a stone from one to another.

51,027. Are they in a line running across the Loch?—Yes.

51,028. Is the whole number of boats nearly across the Loch altogether, with successive nets?—No.

51,029. Do they keep in particular parts of the Loch?—Yes.

51,030. You tell me that you shoot 14 lengths out of your one boat?—Yes.

51,031. And each of those lengths is 100 yards?—Yes.

51,032. That is 1,400 yards altogether?—Yes.

51,033. Do you shoot it out in a straight line from one end to another, as near as you can?—Yes.

51,034. Will another boat then shoot within a stone's throw of you, as near as possible?—Yes.

51,035. And another boat will follow?—Yes.

51,036. And so on, until they go nearly across the Loch?—Yes.

51,037. Have you ever observed how many lines will be stretching across the Loch in that way?—No.

51,038. Will there be 50 such lines across the Loch?—No.

51,039. Do the boats of the different fishing stations go to fishing grounds of their own, or do they go to any grounds that they happen to choose, no matter

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what particular port they come from?—It does not matter where they go.

51,040. Do the Inverary boats come down to where the Ardrishaig boats fish?—Yes.

51,041. Do they fish together?—Yes.

51,042. Just where they find the herrings to be, most of the boats will fish?—Yes.

51,043. Generally speaking, where are the best takes of herrings got—in what part of the Loch?—About the shallow here is the best part.

51,044. In the neighbourhood of Ardrishaig?—Yes, and in the lower part of Loch Fyne.

51,045. Is it a better fishing above Otter Point or below it?—Below it.

51,046. What is the average breadth of the Loch above Otter Spit?—I do not know.

51,047. Is it two miles?—Perhaps about a mile and a half.

51,048. What will the average breadth be below the Otter Spit?—I do not know.

51,049. Three or four miles, I suppose?—Yes, about four miles.

51,050. Do you remember the time when the trawl-fishing was going on?—Yes.

51,051. Did the trawl-boats go very much above the Otter Spit?—Sometimes.

51,052. Which end of the Loch did they most frequently fish? the upper or the lower part?—The lower part.

51,053. That is the widest part?—Yes.

51,054. Were they in the habit of coming among your drift nets while you were fishing?—Not very often.

51,055. As a usual rule they did not fish on the same ground?—Yes, they did.

51,056. Did they come in among your nets while you were fishing?—Yes.

51,057. Did they come between the rows of nets that were set at a stone's throw from each other?—They would heave the trawl beside the nets in the middle of the sea.

51,058. Have you seen them doing that?—Yes.

51,059. During the night, at the same time your drift nets were set?—Yes.

51,060. When your drift nets were set across the Loch, did the shoals of fish come up and down the Loch, or did they rise from the bottom?—I do not know.

51,061. It is said that the trawl-boats break the shoals of fish. Have you heard that stated, or have you seen it done? do they break the eye of the shoal?—I am sure they will, when they get close in-shore; if they trawl about the shoal they will break it.

51,062. Have you, as a fisherman, observed whether you have been more successful with your drift nets since a stop has been put to the trawling altogether than you were before?—Yes.

51,063. You had one very good year in 1862?—Yes.

51,064. Was last year a very good year?—Yes, last year was a very good year too.

51,065. Was it any better than it was before 1862?—Yes.

51,066. And what does it look like this year?—This year it has been very slack.

51,067. There is no trawl-fishing now?—No, I do not think there is.

51,068. Can you give us any opinion as to the advantage or disadvantage of having a close time in the fishing? Do you approve of not being allowed to fish from the 1st of January till the 1st of June?—Well, I do not know.

51,069. Have you ever fished in the month of January?—No, I did not ever fish past New Year's Day.

51,070. You have never at any time fished in the month of January?—No, not past New Year's Day.

51,071. Have you any other business than that of a fisherman?—No.

51,072. Do you follow fishing from year's end to year's end?—Yes.

51,073. When the herring-fishing is not going on, what do you do?—I work ashore.

51,074. At any kind of farming work you can get?—Yes, any kind of work.

51,075. What harm did trawl-fishing do to you as a drift-net fisherman, when it was allowed to go on?—Well, they were doing harm in bringing down the price, and many other things.

51,076. Was that by bringing a large supply into the market?—Yes.

51,077. And in that way they did injury in lowering the price of your herrings?—Yes.

51,078. Is there any complaint you have against them besides that? Were the herrings they caught larger in size than yours or not?—I do not think they were.

51,079. Is there no other reason you can give for your objection to trawling, but that it lowered the price of the fish?—I think, if trawling is allowed to go on, we may drop fishing by drift-nets altogether.

51,080. What for?—Because we will not get what will keep us at it.

51,081. If trawling was allowed to go on, would you become a trawler?—No.

51,082. Would you give up drift-net fishing?—Yes.

51,083. Is that because you believe you would not be able to catch fish any longer?—Well, I do not think we should.

51,084. But can you give us any other reason than the one you have already stated, that trawled fish lower the price of fish generally, and render the fishing less productive to you;—have the trawlers ever damaged your nets?—Yes, and they have stolen some of them too.

51,085. The trawling used to go on in the Loch for some years, without much objection, before the trawlers went into the narrow waters above Otter Spit,—is that not so?—Yes.

51,086. And was it after they began to go into the narrow waters above Otter Spit that the objection of the drift-net men to them chiefly arose?—Yes.

51,087. Was that because they came more into collision with one another in the narrow waters?—I do not know.

51,088. Do you notice whether the dog-fish have increased in Loch Fyne of late years?—I do not know.

51,089. Do you ever see any dog-fish?—Yes.

51,090. Do you ever catch any in your nets?—Yes.

51,091. Did you ever see the trawl men catch any?—No, I never saw them take any.

51,092. Do you think that the two kinds of fishing could go on together?—No.

51,093. You, as a practical drift-net fisherman, can answer this question—could the two kinds of fishing, trawling and drift-net fishing, go on together, if some regulation were adopted by which the trawlers would only be allowed to trawl near the shore in the bays?—I do not know. If they got liberty to trawl near the shore, they would trawl where they liked.

51,094. Do you ever, in your drift nets, catch very small herrings?—Yes.

51,095. Very small ones?—Yes.

51,096. What size is the smallest?—They will be rather longer than your finger.

51,097. Do you catch many of the small ones?—No.

51,098. How many of them will go to a barrel?—Sixteen hundred or seventeen hundred.

51,099. Is it often the case that the drift-net fishermen catch fish of that size?—No.

51,100. Do they catch them along with the better sized fish?—Yes; sometimes they will catch small.

51,101. Do they catch small and large together?—Yes.

51,102. Then they are not all of equal size in the drift nets?—No.

51,103. What size is the mesh of your net—is it an inch ?—Yes, fully an inch.

51,104. When you are shooting your drift nets, is there much disturbance made in the water ?—No.

51,105. Are there many boats at one place and at one time shooting their nets ?—Yes.

51,106. Have you ever seen the trawlers working in daylight ?—No, I have not seen them working in daylight.

51,107. (*Mr. Lefevre.*) You have yourself never trawled ?—No.

51,108. Were there more trawlers from Ardrishaig than drift-net fishermen, at any one time ?—I do not know.

51,109. How many were there, do you know at all ?—No.

51,110. Were there many boats employed in trawling from Ardrishaig ?—Yes.

51,111. You cannot give us a notion of how many ?—No.

51,112. Did the trawlers from Tarbert come up as high as this ?—Yes, they used to come to the Otter Point.

51,113. And trawl among your nets there,—did they ever do that ?—No, they did not trawl away our nets at Otter Point.

51,114. Did they trawl among your nets ?—No, we did not see them trawl among our nets there.

51,115. But they used to come up as high as that ?—Yes.

54,116. Were there times when the trawl fishermen would catch fish when you could not ?—No.

51,117. Would they ever have a good take of fish and you none ?—Yes, if they could get the fish near to the shore, so that they could pull it in with their trawls.

51,118. When the trawlers were alongside the shore, they would catch fish when you could not catch any in your drift nets ?—Yes, because they could circle their trawls round the fish and haul them in.

51,119. Would they take a large catch of fish in a night when you took none,—was that ever the case ?—Yes, sometimes they would catch a good deal.

51,120-2. When you had no success with your nets ?—May be we should get none.

51,123. You say that they lowered the price of fish with their large takes ?—Yes.

51,124. Did you get the same price as they did on those occasions ?—May be we would.

51,125. Did you get as high a price as they did ?—Yes.

51,126. Did you ever get a higher price ?—Sometimes.

51,127. What was the reason of that ?—Sometimes the drift-net herrings would be rather larger than the trawl-net herrings.

51,128. And then you got a larger price ?—Yes.

51,129. When the size of the fish caught in the trawl and in the drift-net was the same, did you get the same price ?—Yes.

51,130. You got no better price than the trawl fishermen ?—Sometimes we might.

51,131. I mean when the size of the fish was the same; in that case was there ever any difference in the price ?—Yes.

51,132. Did you get a better price than they did ?—Yes.

51,133. What difference would there be ?—There might be sixpence or a shilling a hundred.

51,134. What was the reason of that ?—Because the drift-net herrings were better than the trawled herrings.

51,135. You think that the net fish were better than the trawled fish ?—Yes.

51,136. How was that ?—It was better looking.

51,137. Was it because the scales were not rubbed off as much ?—Yes.

51,138. Was that often the case or only sometimes ?—It was often the case.

51,139. Should you say that, as general rule, the drift-net fish brought a better price than the trawled fish ?—Yes.

51,140. Would the trawl nets ever catch larger fish than you would catch with your drift nets ?—Sometimes they would.

51,141. What was the reason of that,—were the fish too large for your drift nets ?—No, there would be both small and large.

51,142. You say that sometimes the trawl nets caught larger fish than you caught ?—Yes.

51,143. What was the reason of that,—would not the fish mesh themselves in your nets ?—I do not know.

51,144. Did you ever catch the large sized herrings that the trawl nets used to catch ?—Yes.

51,145. Would you catch in your drift nets the largest size of herrings that are caught in the Loch here ?—Yes.

51,146. Then they could mesh themselves in your nets ?—Yes.

51,147. Was there any difference in the size of the fish at the beginning and at the end of the season ?—Yes.

51,148. Did you catch larger fish at the beginning of the season ?—Yes.

51,149. Did you use nets with a larger mesh at the beginning of the season ?—Yes.

51,150. In order that you might catch the larger fish, was that the reason ?—No, we used to have new nets at the first part of the season.

51,151. And in the latter part of the season you used the older nets,—was that the case ?—Yes.

51,152. And then you caught rather smaller fish ?—The old nets will catch as large herrings as the new ones.

51,153. You found no difference then ?—No.

51,154. What difference between the old and new nets would there be in the number of meshes to the yard ?—There is not much difference.

51,155. How many meshes to the yard would there be in the new nets ?—Thirty-four.

51,156. What would it shrink to in the course of time,—how many meshes would there be in the old nets ?—The old nets would be about 35 meshes to the yard.

51,157. Did you not use the old nets in the latter part of the season, in order that you might catch a smaller class of fish,—was not that the case ?—No.

51,158. What made you change the nets ?—We were taking the good nets in and keeping them safe.

51,159. Then you thought in the latter part of the season that an old net would do as well as a new one,—was that so ?—Yes.

51,160. And the weather was rather worse,—was that the reason ?—Yes.

51,161. Do you know whether any fish spawn in the Loch here in August and September ?—I do not know.

51,162. Did you ever observe any fish spawning at that time ?—No.

51,163. In what condition do you find the fish in August and September,—are they full fish ?—No.

51,164. What condition are they in ; are they mateys still ?—We get some full.

51,165. There are some among the shoals that are full of spawn ?—Yes.

51,166. Do you ever take up spent fish in September ?—No.

51,167. Never ?—No.

51,168. Then you have no reason to think that they spawn in August and September ?—I do not know.

51,169. Do you know what time of the year the fish do spawn in the Loch ?—No.

51,170. Have you ever observed them spawning ?—No.

The witness withdrew.

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L. M'Tavish.

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LACHLAN M'TAVISH called and examined.

51,171. (*Mr. Caird.*) You are a drift-net fisherman?—Yes.

51,172. And you have been for some years a fisherman in Loch Fyne?—Yes.

51,173. What part of the Loch do you generally fish?—All parts of the Loch. I fish in any part in which I can find herrings.

51,174–5. Where do you live, in Ardrishaig?—No. At Gilphead.

51,176. You have followed the drift-net fishing for a good many years?—Yes, for seven or eight years now.

51,177. There has been no trawl-net fishing for the last three years here?—No.

51,178. Have you seen any good effect result from the discontinuance of trawling; has it been beneficial to you as a drift-net fisherman?—Yes.

51,179. In what way?—The trawlers take the fish in all ways, in every place where they can find them, and in places where we cannot drift our nets, alongside the shore. If they come foul of them, they will cut them.

51,180. Do the trawl-net fishermen fish where you cannot fish?—Yes, but they can shoot their nets near the shore.

51,181. How near the shore do you shoot your drift nets?—It is according to the place we are in.

51,182. According to the depth of water?—Yes, and according to the ground too.

51,183. Do you ever shoot your nets in the shallow bays along the Loch?—Yes.

51,184. How close in-shore do you shoot them then?—As close as we can find the herrings.

51,185. In the place in which the trawl men would have fished if they had permission?—Yes.

51,186. Can you fish every bit of the Loch the trawl-net fishermen can fish?—Most of it.

51,187. In every place?—Yes, most of it; but they can haul their trawl nets in on bad ground better than we can.

51,188. Then, in your opinion, as a drift-net fisherman, you can fish every bit of the Loch that can be fished by the trawl-net fishermen?—Yes.

51,189. What harm did the trawl-net fishermen do to you when they were permitted to fish with the trawl?—They did that much harm, that all would have come to be trawlers altogether, and then we should have caught all the fish in one season.

51,190. Let us hear what your objection is to trawling?—If trawling is permitted, they will all commence with the trawl, and fish all the Loch out in one season altogether.

51,191. Would all the drift-net fishermen become trawl fishermen?—Yes.

51,192. Why would they do that?—Because they would have a share of it with the rest, but they would get no price for the fish. They would not be trawlers if they could help it.

51,193. If permission were given to fish with the trawl, all the drift-net fishermen, you say, would become trawl fishermen?—Yes.

51,194. And that is because they could catch more fish by trawling than by fishing with drift nets?—Yes, and they could not get any price for those they would catch with the drift nets.

51,195. They would get no price for the drift-net fish?—No, the trawl-fish would take down the market so much that it would not be worth fishing for them.

51,196. Would there be such a large supply got by the trawl fishermen, and would the price be so much reduced, that it would not be worth while fishing?—Yes.

51,197. Is that the case you make out against the trawl men?—No, it is not.

51,198. What else is there?—It is not only what they would catch, but they would leave fish to spoil and rot in the bays.

51,199. Have you seen a large quantity spoiling and rotting in the bays, which have been caught by the trawl-net fishermen?—Yes, and I have lifted them too.

51,200. Was that after the time that trawl-fishing was prohibited by the law?—It was after and before too.

51,201. Was it done while trawl-fishing was a sort of illegal and stealthy transaction?—Yes.

51,202. Have you seen it done when they were allowed to fish with the trawl in the same manner as you were allowed to fish with your drift nets?—Yes.

51,203. They caught so many fish that they were not able to use them?—Yes, one half of them rotted; they came ashore in cart-loads.

51,204. Were they good fish?—Yes, they were the same as they had themselves.

51,205. Were they the same as you would catch in the drift nets?—They were not as good as those we would catch in the drift nets.

51,206. They were not as good?—No.

51,207. How is that?—From the tossing they would get; that would make them not look as good.

51,208. The tossing they got in large quantities makes them look worse than if they had been caught in the drift nets?—Yes, such was the bulk and the pressure one upon another.

51,209. If there had been a demand for them, and they had been sold at the time, would they have brought the same price, or a less price than drift-caught fish?—They would have brought a less price.

51,210. For what reason?—Because they did not get the same usage.

51,211. Is it because they were more roughly handled?—Yes.

51,212. Do they bleed differently?—The blood is all through them; they are black to the bone.

51,213. Do they not cure well?—No.

51,214. Have they never been sold to the curers?—They have been sold to curers, but they do not fetch as high a price as drift-net fish.

51,215. In the fresh market do they not fetch as good a price as the drift-net fish?—I cannot say; I never sold any; but some of the buyers here can tell you that.

51,216. How long ago is it since you saw any large quantity left in the water dead and unfit for food?—About three years since.

51,217. Where was it?—Down in Mahol-dubh Bay.

51,218. Were you fishing with your drift net at that place at the time?—Yes.

51,219. And you made a good catch at the same time?—Yes.

51,220. Was the trawl net to which you refer trawled inside of you at the time?—Yes, it was inside of us.

51,221. Did they come among your nets at that time?—They were close to our nets.

51,222. They trawled inside of you?—Yes, inside our nets.

51,223. Where you were not fishing?—Yes.

51,224. Were they not quite close to your nets?—Yes, that night.

51,225. Was that the only night that season in which you saw fish left in the water which could not be made any use of?—No.

51,226. In what other place have you seen it?—Down in Brentfield Bay.

51,227. Was that the same season?—I cannot exactly say; but I think it was the same season.

51,228. Were you fishing upon that night with your nets in the same place where you saw the trawl-boat with so many fish?—Yes, outside of it.

51,229. You were fishing outside of it?—Yes.

51,230. In what depth of water was the trawl-boat fishing at the time?—In about one and a half or two fathoms.

51,231. Was that too shallow for your nets?—Yes; we could not get a chance of working there.

51,232. (*Mr. Lefevre.*) Did the trawl net reach to the bottom of the water?—Yes.

51,233. (*Mr. Caird.*) Was that the time trawling was prohibited?—No.

51,234. Was there any large quantity of fish left rotting in the sea that night?—Yes, five or six boat-loads.

51,235. Was it all caught by one boat's nets?—Yes.

51,236. Was it on a Saturday?—It was on a Friday; but I could not say when exactly.

51,237. One boat had caught them in such large quantities that it was not able to handle them with the number of men in the boat?—The boat could not carry them.

51,238. If there had been more boats, could they have sent them to the market?—Other boats went after them and got them.

51,239. Then they were not lost?—They got them up with dredges, but not half of them.

51,240. Did you take some?—I did.

51,241. Did you sell them for curing?—Yes, I did.

51,242. Then they were fit for curing?—Yes.

51,243. Is there any other case in which you have seen fish left in the sea that no use could be made of, from their being caught in too large a number?—We could not raise them from the bottom after they had been lying there, unless it was in shallow water.

51,244. You have mentioned two occasions on which you saw that; can you mention any other?—No.

51,245. In the whole course of your experience have you never seen it but twice?—No, not in that season.

51,246. Have you seen it in any other season?—Yes.

51,247. The same thing?—Yes.

51,248. Is it a very common thing for the trawl-net fishermen to get such very large hauls of fish?—Yes if they fall in with them.

51,249. Do you think the trawl-net fishermen can make more money by their fish, and catch a larger quantity with the same labour than you can?—I think they can.

51,250. Is it a cheaper mode of catching fish?—It is cheaper.

51,251. And easier?—I do not know about the easiness of it.

51,252. Have the trawl-net men harder work than you?—I do not know. Sometimes we have hard work, and at others it is not very hard work. I suppose they will be the same.

51,253. Have you noticed the size of the fish caught by the trawlers?—They catch all sizes.

51,254. Do they catch larger fish than you with your drift nets?—No.

51,255. Never on any occasion?—No.

51,256. Can the largest fish which come into the Loch mesh in your inch nets?—Yes.

51,257. Do the trawl fishermen catch smaller fish than you do?—Yes.

51,258. Have you seen them catch any large quantity of small fish?—Yes, I have.

51,259. What size?—The size of cuddies, some of them.

51,260. What length?—I cannot tell you exactly the length of them.

51,261. What are cuddies?—Small saithe.

51,262. About the length of your finger?—Yes, some of them.

51,263. Have they caught large quantities of them?—Yes.

51,264. Did you ever catch any that size in your drift nets?—No, very seldom.

51,265–6. (*Mr. Lefevre.*) What time of the year have you seen those small fish caught?—I have seen them caught in March.

51,267. Have you ever seen those small fish caught during the open season?—No.

51,268. (*Mr. Caird.*) They are not found here during the regular fishing season?—They do not go for them here.

51,269. (*Mr. Lefevre.*) I suppose it was a whole shoal of small fish?—Yes.

51,270. Do you ever find the trawlers take with large fish a mixture of small fish?—Yes, they take small and large together.

51,271. What size will the small ones be then?—Some large and some small.

51,272. What is the smallest?—I cannot exactly tell you the smallest.

51,273. Have you observed that during the open season?—No.

51,274–5. Then you are speaking of the time before the close time was enacted?—Yes, about then.

51,276. Before the close season was enacted, did the trawlers often trawl during what is now the close time?—I have not seen many trawling since trawling was dropped.

51,277. But when trawling was common in the Loch did they often trawl in the months of February, March, April, and May?—Yes, down about Tarbert and the Kyles of Bute.

51,278. But as high in the Loch as this?—No, not up here.

51,279. But down below they did?—Yes.

51,280. It was then you observed the small fish?—Yes.

51,281. But not at any other time?—No.

51,282. (*Mr. Caird.*) Have you ever seen them take up spawn anywhere?—No, but I have not been looking much after them.

51,283. Have you ever formed any opinion yourself as to the advantage of a close time in the month of January? Did you ever fish herrings in January?—Yes.

51,284. Did you find them in good condition then?—Yes.

51,285. Fit for the market?—Yes.

51,286. Do you think it is a hardship that the fishermen are prevented from fishing in January?—Yes, they should have January to fish for herrings at any rate.

51,287. Do you approve of a close time in February, March, April, and part of May?—Yes.

51,288. Do you think that is of advantage to the fishermen and to the supply of fish?—Yes.

51,289. To the increase of fish?—Yes.

51,290. If there is no fishing allowed in those months would very few small fish be taken?—Yes, very few.

51,291. (*Mr. Lefevre.*) You would not have the open time extended beyond January, would you?—No, only to the end of January.

51,292. Do you think it would do harm to allow fishing during February, March, April and May?—Yes.

51,293. On what ground?—Because the herrings spawn at that time.

51,294. Have you observed them spawning at that time?—Yes.

51,295. Have you seen the fish taken up spent during those months?—No, but if you catch them in the nets the spawn will come out of some of them.

51,296. If you take them in the drift nets at that time you take them with the spawn coming out of them?—Yes.

51,297. In what months is that the case?—In the months of February, March, and August too.

51,298. You have taken fish spawning in the month of August?—Yes.

51,299. That is during the open season?—Yes.

51,300. Are there many fish spawning at that time or only occasionally?—There used to be, but there are very few now.

51,301. How long ago used that to be?—About 10 or 12 years since.

51,302. But you have not observed it since then?—Not many of them.

51,303. Did you observe shoals of fish that were

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just ready to spawn at that time or only occasional fish ?—Yes.

51,304. Were there shoals of fish ?—Yes.

51,305. Do you ever observe an occasional fish full of spawn among the shoals you take now ?—No.

51,306. Did you at that season ?—No.

51,307. The whole shoal runs full at the same time ?—Yes.

51,308. And the fish are in the same state ?—Yes.

51,309. Have you taken up no fish this year that have been spawning ?—No.

51,310. How high up the Loch do you think the fish spawn ?—At the very head of Loch Fyne, I think.

51,311. Quite the head ?—Yes.

51,312. Do you think they go there in great numbers —Yes.

51,313. Was it there you observed the fish spawning in August and September ?—Yes, and over the back of the craigs at the Silver Craig.

51,314. How long have you been drift-net fishing ?—For eight years.

51,315. Do you recollect 10 or 12 years ago ?—Yes.

51,316. Were you fishing then ?—No.

51,317. Then, how did you observe what you have told us ?—I was at work at the time.

51,318. You have told us of the spawning of the fish at that time ?—Yes, I have seen the spawn of the fish at that time.

51,319. Were you out on the water then ?—Yes, at nights.

51,320. But you were not fishing ?—No.

51,321. Then since you have fished, you have not observed the fish spawning in August and September ?—We will find them full of spawn about the months of February and March.

51,322. But since you have been drift-net fishing, you have not observed them spawning in August and September ?—No.

51,323. Were the trawlers in the habit of fishing generally inside, between you and the shore ?—They would fish anywhere. They would take their nets in the middle of the Loch.

51,324. But, as a general rule, did they fish more often between you and the shore ?—They got bigger hauls of fish if they got them inside the shore.

51,325. Then the big hauls you spoke of, when the fish were taken in such abundance that they could not be carried away, were got close in-shore ?—Yes.

51,326. Have you seen such big hauls in the open water ?—No.

51,327. Have you seen them taken in such abundance in the middle of the Loch that the trawlers were obliged to leave them, and could not take them home ?—No.

51,328. Have you often been out with the trawlers, and seen them at work ?—I have been out with them once or twice.

51,329. Have you ever seen the trawlers get a haul of fish in the middle of the Loch, when the fish have been squeezed and jammed together, and killed, so that they sunk to the bottom ?—No, they do not get such hauls there. There is room in the deep water for the fish to sink below the net.

51,330. But do they die from being squeezed together ?—No, they will get away from the nets.

51,331. Then you do not think that it is the case that the fish are sometimes caught in the middle of the Loch, when the net squeezes them so tight together in a circle that the fish die, and sink to the bottom and are lost ?—No, I do not think that is the case, but on shallow ground they all jam together on the inside.

51,332. And then the fish are killed ?—Yes.

51,333. They could be all taken on shore if there was time to do it, and there were sufficient boats to carry them away,—is that the case when trawling is taking place in shallow water ?—Sometimes, when they get their own boats full, they leave the rest.

51,334. That is because they have not boats enough to carry them away,—is it not so ?—I suppose it is.

51,335. They could, if they chose, take all the fish up if they had boats enough to carry them away,—is that what you mean ?—I suppose they could.

51,336. Is there much ground in-shore where the trawlers cannot fish ?—They can fish on most of the ground.

51,337. But there is some ground where they cannot fish ?—There is ; they cannot fish on bad, shallow ground.

51,338. Is that from the rough bottom ?—It is because they cannot haul the nets on shore.

51,339. They cannot haul the nets towards the shore ?—No.

51,340. Is there much of that ground ?—There is some of it.

51,341. What proportion of the whole Loch, should you say ?—I cannot exactly tell you.

51,342. Can you say what is the difference of price got by the trawlers for their fish as compared with what you get yourself, as a drift-net fisherman ?—Generally, threepence or sixpence a hundred, according to the season in which they are caught.

51,343. Is that from the curers ?—Yes.

51,344. In the fresh market, what would be the difference ?—I cannot say.

51,345. Do you think they get the same price in the fresh market ?—I do not know, I am sure.

51,346. Would the curers buy both trawled fish and drift fish at the same time ?—Yes.

51,347. But they always made a difference in the price ?—Yes.

51,348. Could you yourself tell a trawled herring from a drift caught herring ?—Yes.

51,349. Could you tell the difference when the fish are cured ?—Yes.

51,350. Do you think that a barrel of trawl-caught herrings will fetch a less price than a barrel of drift-caught fish ?—Yes.

51,351. What is the difference when they are cured ?—They will not be as good.

51,352. But what is the difference in price ?—I am sure I cannot tell you.

51,353. What is the difference in the appearance ; are the trawl-caught fish not as bright in appearance ?—No, they are not as bright as the drift-caught fish.

51,354. Is there any difference in the eating ?—Yes.

51,355. What is it ?—One is full of blood inside, and the other is pure to the bone.

The witness withdrew.

R. Morison.

ROBERT MORISON called and examined.

51,356. (*Mr. Caird*). You are a drift-net fisherman ?—Yes.

51,357. Have you had a long experience in this loch as a drift-net fisherman ?—Yes.

51,358. How long ?—About 24 years.

51,359. Have you fished in all parts of the Loch ?—Yes.

51,360. What part of the Loch do you generally find the best for fishing ?—Occasionally one place is good one time, and another at another time.

51,361. In the early part of the fishing season, do you find the lower part of the Loch better than the upper part ?—Very often.

51,362. Then does the upper part improve as the fishing goes on ?—Yes, it does very often, at the latter end of the season.

51,363. Is the upper part the best for fishing then ?—Yes.

51,364. Do you remember the time when trawl-net fishing was allowed to go on ?—Yes.

51,365. Do you consider, as a drift-net fisherman, that trawl-net fishing was injurious to your business ?—For my own part, I found that the drift-net fishing proved better for me.

51,366. You have fished in both ways ?—Yes.

51,367. Did you find that you could make a better living by drift-net than by trawl-net fishing ?—Yes, by drift-net fishing. I have been longer at it than trawling.

51,368. Do you think the doing away with trawling has been of any advantage to you as a drift-net fisherman ?—That is more then I can tell you ; in some points it might be of some advantage to us.

51,369. In what points ?—Such as killing the small sile, which is often killed in the trawls.

51,370. Do the trawls destroy some of the small fish ?—Yes.

51,371. Was that only done during the months that no fishing is allowed at all now ?—Yes, mostly.

51,372. There being no fishing allowed in those months now, the trawl net cannot effect that destruction ?—There are some of those small herrings about during the open fishing season too.

51,373. In what months ?—In the month of June and the beginning of July.

51,374. Is there any large proportion of small herring in those months ?—Yes, we see them playing in the morning, about the rising of the sun, near the shores. I have seen them taken in-shore by the trawl nets at that time.

51,375. During the months now set apart for close time they did most mischief in that way ?—Yes.

51,376. As a drift-net fisherman, can you say whether, if trawl-fishing was permitted during the open months of the fishing, it would do much harm in that way ?—I think not, if the legal mesh was used.

51,377. The legal size, is a one-inch mesh ?—Yes.

51,378. That is the legal mesh ?—Yes.

51,379. Is that the size you think best ?—Nothing smaller than that ought to be used.

51,380. Would it give complete security, that if none of the nets were allowed to be smaller than one inch in the mesh they would not kill small fish unfit for sale ?—I think so.

51,381. Have you ever noticed when they have been drawing the trawl net in, whether the mesh opens or gets smaller ?—It opens.

51,382. Does it get larger instead of smaller ?—Yes, in the middle of the net but not at the end.

51,383. Do you think the two modes of fishing could be carried on together without injury to the drift-net fishing ?—They were carried on for a time ; they were used very extensively in the lower and wider part of the Loch.

51,384. They were principally used in the lower part of the Loch ?—Yes.

51,385. Did a great difficulty arise when the trawl was introduced into the upper and narrower part of the Loch ?—I think there were some disputes before then.

51,386. In the lower part of the Loch ?—Yes.

51,387. How did those disputes arise,—do you remember ?—They arose because one party thought it was doing harm, and the other party thought it was not.

51,388. Were the trawl fishermen fishing among the fleets of drift nets ?—They were fishing with their circle nets in the middle of the fleets of drift nets.

51,389. Were they not fishing along the shore ?—They were fishing in both ways.

51,390. In which way do they most interfere with the drift-net fishing ?—I have seen them shoot sometimes alongside the shore; they would come and shoot the trawl alongside my nets and haul it up on the shore.

51,391. Inside of you ?—Yes, and they would take away all the herrings inside of me.

51,392. Would those herrings have meshed in your nets, if the trawl had not been there ?—Very likely some of them would have done so.

51,393. When that was done, did you have an inferior catch, and not succeed as well in taking fish ?—Yes.

51,394. Can you as a drift-net fisherman shoot your nets in every part of the loch that a trawl fisherman can fish in ?—Yes.

51,395. Can you shoot drift nets as close in-shore in the shallow bays as the trawlers can fish in with advantage ?—Yes.

51,396. Do you often fish in the shallow bays with your drift nets ?—Yes, especially at the beginning of the season.

51,397. What kind of net will catch the best quality of fish ?—I have seen very good herrings caught with both of them, and I have seen very bad herrings caught with both of them.

51,398. Have you seen as many small fish caught with the drift net as with the trawl net ?—No.

51,399. When you say bad herrings, what do you mean ?—Bad in quality.

51,400. You did not speak in reference to the size, but with regard to the appearance of the fish ?—Yes.

51,401. Have you ever observed the two kinds sold on the same day together ?—Yes.

51,402. Is there any difference in the price ?—Yes.

51,403. What is the difference ?—That depends on the quality. In July, five years ago, herrings were sold at 12*s.* the hundred. I sold 20*l.* worth of drift-net herrings at that time, and trawled herrings were sold at the very same figure on the same day.

51,404. Trawled herrings were sold at the same price ?—Yes, but some of the trawled herrings and some of the drift-net herrings sold the same day at 8*s.* I think.

51,405. Was there no difference in the price of the trawled fish and the drift-net fish on that day ?—Not that I am aware of.

51,406. Were they both bought by the curers at the same time ?—No, they were bought by the cadgers.

51,407. The fresh buyers ?—Yes.

51,408. Did both kinds sell equally well in the fresh market ?—Yes.

51,409. Is there a difference when they come to be cured ?—I have never cured any but for my own use. I have cured both trawled herrings and net herrings, and I have cured them both very well.

51,410. Did you find that the trawled herrings would cure as well as the others ?—Yes.

51,411. Do you see any difference with regard to one class of herrings being better bled than the others ?—No, not in those that I cured.

51,412. Were they as white at the bone as the others ?—I have seen drift-net herrings as black in the bone as the trawled herrings.

51,413. Then do you not agree with the statement we have heard that the drift-net herrings are in a better condition for the market than the trawled herrings ?—I do not agree with some of the points I have heard.

51,414. Is that one of them ?—Yes.

51,415. Have you ever observed the trawl-nets dragging up spawn ?—No.

51,416. Or destroying it ?—No.

51,417. Do you consider that the trawl-net fishing is a cheaper mode of fishing than the drift-net fishing ?—In what respect ?

51,418. Which of the two do you think you can make most money by ?—For my own part, I think I can make most money by drift-net fishing.

51,419. And therefore you continue to be a drift-net fisherman ?—Yes.

51,420. Because you have been very successful at it ?—Yes.

51,421. How many men are required to work a trawl net, as compared with a drift net ?—Eight men.

51,422. That would take two boats ?—Yes.

51,423. What is the length of the trawl ?—They have them of different sizes, some of them would be 200 yards in the net, but they creep in ; perhaps they would be altogether from 70 to 90 fathoms.

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51,424. Do they generally, as far as you have observed, have the same sized mesh as the drift net?—No.

51,425. Are they generally smaller?—Yes.

51,426. Are we to understand from your evidence that, if there were some regulation by which they were made of the same mesh as the drift-nets, there would be less objection to their use?—I think that would be better.

51,427. That would remove some part of the objection which the drift-net fishermen have to trawl nets?—It would remove some of my objections to them.

51,428. Do you, as a drift-net fisherman, think that the two modes of fishing may be carried on together?—They might be carried on together, I think.

51,429. Are there any regulations that could be adopted by which the two modes of fishing could be carried on together with advantage? Is there any regulation you could suggest to us?—I cannot say at the present time.

51,430. (*Mr. Lefevre.*) This has been a bad season so far?—Yes.

51,431. Do you think the fish are in the Loch?—Yes, there are some fish in the Loch.

51,432. What is the reason, then, that you have had a bad season; has the bad weather prevented you from taking them?—We consider that the ruling of Divine Providence is the reason.

51,433. But has the weather been bad, so that you have not been able to fish?—It has been stormy, but not so stormy that the people could not work the herrings.

51,434. When they did go out, did they not get good catches?—They did not get as good catches as I have seen them get.

51,435. Have you ever known the trawlers to have good takes in their nets when you have not?—Yes.

51,436. What was the reason of that?—They could get them closer in-shore than the drift-net men could.

51,437. Have they got good catches of fish on the same night that the drift-net fishermen have got very little?—Yes, I have often seen that.

51,438. On the other hand, have there been occasions when the drift fishermen have got fish, and the trawl fishermen have got none?—Yes.

51,439. They then got their turn?—Yes.

51,440. I suppose the trawlers only occasionally got a heavy take of fish?—Yes, they got them often when they were regularly working at them; but altogether the drift-net fishing is more regular than the trawl-fishing.

51,441. Were the trawlers out every night?—Not on moonlight nights; they do not work so much by moonlight.

51,442. What was the reason of that?—They cannot see the herrings in the water.

51,443. It was not from fear of being detected?—It was not from fear of that, but because they could not see the herrings in the water. There was no burning in the water to enable them to see the herrings.

51,444. When the nights were dark, would the trawlers be out every night?—Yes.

51,445. Would they often come back without having made hauls?—Sometimes they would; occasionally they have come back without having made hauls.

51,446. If they were to work this year, would they catch fish when you were not taking them?—I have no doubt they might at times.

51,447. Have you got a boat of your own?—Yes.

51,448. Have you more than one?—No; only one.

51,449. And have you nets of your own?—Yes.

51,450. Do the fishermen generally own boats here?—Yes.

51,451. Do they get any assistance from the fish-curers?—Not that I am aware of.

51,452. They save money, and buy boats themselves, is that so?—Yes.

51,453. And nets?—Yes.

51,454. How are they generally paid? Do the men who go out share the results of the boat's take?—Some of them have a boat and a train themselves, and the men who go out with them share with them. Perhaps one man will have a boat and half the nets, and another man will have half a boat and nets.

51,455. When a fisherman has no share in the boat or nets, is he paid by share?—Yes, he gets a share.

51,456. Do you fish at other times of the year besides fishing for herrings?—Do you mean in the winter time?

51,457. Yes, in the winter time?—No.

51,458. Do you go to farm work at that time?—I have been accustomed to go to sea.

51,459. Are there many fishermen belonging to this place who fish all the year round?—Some of them do.

51,460. How many of them should you say?—About 30 or 40.

51,461, Do they fish with the same boats?—No, with smaller boats.

51,462. Have all the men who were engaged formerly in trawl-fishing taken now to drift-net fishing?—Yes, hereabouts.

51,463. Are they as a rule a younger set of men than the drift-net fishermen?—No, there will be both young and old.

51,464. What do you say about a close time; do you think the open time ought to be extended for a month or not?—I think we should get another fortnight at the least.

51,465. Then do you think that it ought not to be a month?—It is very seldom that I have seen anything done here in the latter end of January. I have seen a little, but not much.

51,466. Have you seen many fish caught in the beginning of January?—Yes, I have often, and it was a very good fishing too.

51,467. Were the fish in good condition?—Yes, very good.

51,468. As good as they are earlier in the season?—Yes.

51,469. Then you would not extend the open time beyond the middle of January?—I would not object to that.

51,470. Have the fishermen any difficulty in getting work on the land at that time of the year?—Yes, there is no work going on here then.

51,471. Then have they nothing to do during January?—No, there is no work carried on here except by those who are working at the white-fishing.

51,472. Are there many fishermen who are doing nothing in January?—A good many of them go to sea in the winter time.

51,473. In trading vessels?—Yes.

51,474. Some of them do nothing for want of work?—Yes, some of them, and some of them are mending their nets, and passing their winter in that way.

51,475. (*Mr. Caird.*) Is there any other white-fishing in Loch Fyne except for herrings; are any haddock, or cod, or ling, or flat-fish caught?—Yes.

51,476. Do you follow that kind of fishing?—No.

51,477. Are there many fishermen in the Loch who do?—There are 30 or 40 in this village.

51,478. Have you observed that the season for fishing, varies very much, one year with another, as to its relative productiveness? With regard to herrings have you sometimes a very good season, sometimes a very bad one, and sometimes a middling one?—Yes.

51,479. Has that variation taken place as much since trawling was put a stop to as it did before?—Yes.

51,480–4. Do you think that that variation is quite independent of any mode of fishing that might be adopted?—Yes.

51,485. You think it has very little effect?—Yes, very little effect; it may have a little, but not much.

51,486. We find in the fishery returns that in one single season, in the year 1861, there were 20,246 barrels of herrings caught in Loch Fyne of all kinds, and that in 1862 there were 79,893 barrels caught,

that is nearly four times as many in 1862 as 1861 ?—Yes.

51,487. Do you think that that increase in 1862 was in any way caused by putting a stop to the mode of fishing by trawl nets ?—No.

51,488. You do not think that that had anything to do with it ?—No, there was a large quantity of herrings that came in that year.

51,489. A larger quantity came into the Loch ?—Yes, more than there had been for a good many years.

51,490. It is the largest fishing as far as any record goes since 1844 ?—Yes, the fishing of 1862 was very good.

51,491. There has not been any fishing in all the years we have down here in this list which has been at all equal to that of 1862 ?—No.

51,492. I suppose that is in accordance with your own observation ?—Yes.

51,493. (*Mr. Lefevre.*) Did you hear what the last witness said about the loss of fish when they were trawled in-shore ?—What was that ?

51,494. He spoke about the destruction of fish and of their being left to rot in the sea ?—I did not notice that.

51,495. He said that some years ago, when trawling was carried on close in-shore and they had large takes of fish, the trawlers left the fish in the water, being unable to carry them away, and that a great many of them rotted away,—have you ever observed anything of that kind ?—Yes, occasionally.

51,496. How often would that occur in the course of a season ?—That is more than I can tell.

51,497. Would it occur often ?—It would depend on what quantity they were getting, or if there were boats to remove them.

51,498. To take the herrings of them ?—Yes.

51,499. That would only occur when the take was very considerable ?—Yes.

51,500. When there was an average haul, would there be any loss in that way ?—No, unless the net got torn, or something of that sort.

51,501. When the net was in good order, would there be any loss of fish ?—No, there would be no fear of any loss.

51,502. They would take all the fish away ?—Yes.

51,503. If they had boats enough ?—Yes.

51,504. When the haul was made in the middle of the Loch, in deep water, did you ever notice that the fish were killed, and sank to the bottom ?—In deep water ?

51,505. Yes.—No.

51,506-7. You have observed nothing of that sort ?—No ; there might be a chance one, but not many.

51,508. You never saw any loss or destruction of herrings in that way ?—No.

51,509-10. Have you ever observed the fish squeezed by the trawl being closely brought round them, and being killed by the great weight of fish in the trawl, and all sinking to the bottom of the water ?—No.

51,511. Have you observed anything like that ?—No.

51,512. Have you often observed the trawl yourself being worked in deep water ?—Yes.

51,513. Do you think you would have seen it, if anything of the kind had occurred ?—Yes.

51,514. You have suffered annoyance from their working among you ?—Yes, sometimes.

51,515. Was that often the case ?—It was more so out in the middle.

51,516. In the middle of the Loch ?—Yes.

51,517. Then is it your observation that the trawlers fish mostly in-shore, or that they often go out in the middle of the Loch ?—Very often they range the shore first.

51,518. In the beginning of the season ?—In the beginning of the night when they are out fishing.

51,519. If they caught no fish, would they go further out ?—Yes.

51,520. Can you state, as a rule, whether the great amount of fish taken by the trawlers was taken close in-shore, or out in the deep water ?—It was taken in-shore.

51,521. When they were fishing in-shore they did not disturb you so much ?—Not so much.

51,522. Did you ever yourself lose any nets in consequence of the trawlers coming among you in that way ?—No.

51,523. Did you ever think that you lost fish in consequence of the trawlers coming and working close to you ?—I think I made a remark about it a short time ago. Their nets might be shot along the shores, and they might be trawling alongside of us, and then they would get the fish which probably we might have got.

51,524. (*Mr. Caird*). When you were fishing out in the deep water, having your nets set in deep water, did they do much injury to you ? The question I put to you before was, whether they did you any injury near the shore ?—Yes.

51,525. (*Mr. Lefevre.*) I want to know if they did you any injury when you were fishing out in the deep water ?—I have seen a little injury done, and a person who is speaking in the way I am now, must give his evidence according to what he has seen himself.

51,526. You are quite right, we want to get at your own observations in the matter.—Then, I have seen it done. One night a fellow made a range with his trawl, near the end of my nets. I noticed the spot where he hauled his nets in, and there was nothing like the quantity of fish in my nets, near that place, that there was in the rest.

51,527. There was nothing like the quantity of fish that there was in other parts of the net ?—No.

51,528. Then you think that the trawlers caught the fish that would have come to you ?—Yes.

51,529. Do you think there could be any regulation to prevent the trawlers interfering with the drift-net fishermen ?—No, I do not think there could.

51,530. What would you say to a regulation to prevent the drift-net fishermen from fishing within a certain distance of the shore, so that the trawlers might fish inside, and the drift-net men outside ; would that be a hardship on the drift-net fishermen ?—The drift-net men would not fish outside, if they could get herrings inside.

51,531. Do any fishermen from Cornwall come to fish here ?—No.

The witness withdrew.

INVEN MITCHELL called and examined.

51,532. (*Mr. Caird.*) You are a regular drift-net fisherman ?—Yes.

51,533. And you have been a drift-net fisherman for a number of years ?—Yes, since I could work at anything.

51,534. In what part of Loch Fyne do you chiefly fish ?—I fish from Campbeltown to Inverary.

51,535. Have you fished in every part of the Loch ?—Yes.

51,536. On all this side of the Frith of Clyde, to the west of Ardlamont Point ?—Yes, as far as Stornoway ; I have fished everywhere except on the east coast of Scotland.

51,537. As a drift-net fisherman, have you observed any advantage to you in consequence of the prohibition of trawl-fishing altogether, since the trawl-fishing was put a stop to,—have you gained any advantage from that ?—I think we have.

51,538. Tell me what the advantage is ?—Well, I think in all ways. In my experience, as far as I can understand the matter, I think the trawl men have been doing us as much harm as could be done to us.

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In the first place, we could not go anywhere where they were working or they would cut our buoys or tear our nets.

51,539. Have they cut your buoys and torn your nets?—They never cut mine, but I have seen them running with the train of nets and taking the herrings.

51,540. You have seen them crossing your train of nets?—No, they have been running below the train and taking away the herrings.

51,541. How were they running below it?—When our train has been fishing, I have seen their wee boats coming and lifting the train and taking away the herrings.

51,542. Out of your nets?—Yes.

51,543. The herrings that had meshed in your nets?—Yes.

51,544. That was stealing the herrings that belonged to you?—Yes, indeed it was.

51,545. Was that a common thing to be done?—I do not know.

51,546. Have you seen it done?—I have seen it myself.

51,547. How often have you seen it done?—Two or three times. I thought it was one of those wee boats.

51,548. That was just the same thing as a thief stealing your property?—Yes.

51,549. That has very little to do with trawl-net fishing,—they did not do that with the trawl net?—No.

51,550. They did it with their hands?—Yes.

51,551. What other objection have you felt to be removed by the withdrawal of the trawl-net fishing?—Since it stopped?

51,552. Yes.—Nothing but this,—I think if trawling had been carried on as it was before, we should not have fished as well all this time. If they had been carrying on since trawling was stopped as they did before, we should not have been doing well in Loch Fyne as we have done of recent years.

51,553. You had a good fishing in 1862, the year after trawling was stopped?—Yes, that was a good fishing.

51,554. Was that the best fishing you can remember?—Yes, since the big herrings went away. It was the best fishing I have seen in Loch Fyne, but I think it was the trawling that stopped those big herrings altogether.

51,555. Did the trawlers catch the big herrings?—It was not that they caught so many of them and brought them into the market, but they took such quantities that they rotted in the water and no person got them at all. I have seen that with my own eyes.

51,556. How often?—Only once, but I have heard of it often. I saw it once down the Loch, and many saw it as well as myself. They had enclosed a body of fish about 200 yards in length, and I saw them coming ashore with so heavy a draught in the trawl net that they found it impossible to haul them in.

51,557. Because there was such a large quantity in the net?—Yes, I have not in my mind now how many boat-loads were taken out of the trawl before they could take it in, but I heard some persons say that the fish were about the depth of an oar. They got them in as far as that, and they could not get them in any further.

51,558. (*Mr. Lefevre.*) Was that the depth of the water?—Yes.

51,559. (*Mr. Caird.*) Were the herrings in thickness as deep as the length of an oar?—Yes, I was told so, and there were boats besides that each took their fill out of it. They lifted them with baskets out of the net and put them into the boats. I was on shore at the time, and I saw horses and carts employed in drawing the fish to the land. Then I went down myself and saw another tier coming in and they had to lift the net and let the fish lie.

51,560. Was it all on the same day?—Yes, they could not lift them all in. When the east wind came they were drawing them in-shore. I went down where they were, and found large bulks of them in-shore; many others as well as myself lifted them up.

51,561. What time of the year was it?—I am not sure but I think it was about this time.

51,562. How many years ago is it?—I am not sure, but I think it is four or five years ago this season.

51,563. Is that the only instance in which you saw that happen?—Yes, and an immense quantity was left there to rot.

51,564. Was there a very good catch with the drift nets at the same time?—I do not think there was. I have seldom seen the drift-net men have a good fishing when the trawlers got a good fishing.

51,565. When you have seen such large quantities of fish taken as you have described, has it always been in shallow water near the shore?—The trawlers can go very far out; they have such a length of ropes now, and they can bring the nets in and haul them ashore. Where the people have got good shoots with the drift nets lately they would not have got them at all if trawling had been allowed. At this time we consider that the herrings are coming very thick into Loch Fyne, but we have never seen such fine herrings as there were before they commenced trawling. We drift-net fishermen think, however, that the fish will now come in, in the same way as they did at first before trawling was allowed.

51,566. Have they been getting larger?—Yes, every year since the trawling was stopped.

51,567. You have been catching finer herrings?—Yes, larger and better.

51,568. Are they finer and better this year?—I have not been up this season, but I have heard that they were very good.

51,569. Are you not a herring fisherman now?—Yes, but I have not been up Loch Fyne yet.

51,570. Where have you been fishing?—At Campbeltown and Tarbert, but I am thinking of going up.

51,571. Have you seen the trawlers catch spawn in the trawl nets?—I have seen them catch small fish of all sizes, and I have seen them left to rot. I have heard many other fishermen say that they have seen them lying in lumps in the places where the trawlers have been working.

51,572. If they had had enough boats, could they have brought them ashore?—Yes, but they would have been of no use to them; the scales were taken off them, and they were spoiled in different ways. They were not herrings such as those we catch in our nets; they were all spoiled.

51,573. Were those that were brought ashore in the boats brought off in baskets and so on, and used for food?—They could use them, but they were not as marketable, and would not sell as well as drift-caught fish.

51,574. Did they go to the market?—The fish buyers would put them away, but the curers would not take them of us.

51,575. Do the curers not buy fish caught in the trawl?—They do not like it just now.

51,576. There is no trawling just now?—No.

51,577. When trawling was permitted, and you saw it going on, and the drift-net fishing going on, was it then that you observed that the curers would buy one kind of fish just as well as the other?—I cannot say anything about that.

51,578. Have you yourself ever cured any fish?—Yes.

51,579. Have you ever cured any trawled fish?—Only very little of it.

51,580. Have you cured any?—Only about half a barrel.

51,581. Did they do well?—Yes, but not as well as the fish caught in Loch Fyne, in the drift nets; they are always black in the bone.

51,582. Your fishing last year was not a very good one, was it?—Well, it was middling.

51,583. Was it as good as it was the year before?—No, not in Loch Fyne.

51,584. Is there any other reason you can give against allowing trawling to be permitted?—Well, I

can give one more reason, and that is, that if trawling is to be carried on our fishermen will be starved out altogether; and if we all become trawlers, so far as my opinion goes, I think we shall kill the fish in Loch Fyne in a very short time. We should take them all ashore in six nights, and there would be no more during the whole of the season.

51,585. Do they all come in at the same time, and could you catch all the fish in six nights that are caught at present in the whole of a season?—Perhaps not; but I know this, that if the trawlers are working in any place one night, we need not go to work there, because the fish are so frightened, that if they are there at all they remain down at the bottom.

51,586. Have you not had good hauls with the drift net at the same time that the trawlers have been getting good hauls?—We might have a day of good fishing when the trawlers were working, but we never got a good succession of takes when the trawlers were at work.

51,587. Did you never fish herrings in the month of January?—I think I have when I was younger.

51,588. You cannot speak very particularly about it?—It was when I was very young, and I did not fish much at it.

51,589. (*Mr. Lefevre.*) Are you a fisherman all the year round? do you fish at other times of the year, for instance, during the close time?—We are willing to work for ourselves at any time we can get liberty to fish, but, at the same time, we should like to give the fish fair play.

51,590. You would not approve of the herring fishery being carried on in the close season?—I should like it to be carried on until the first of February.

51,591–3. You would extend the open time a month?—Yes; I think the fishing is stopped too soon every year. It would be better if we had liberty to carry on the fishing a little longer.

The witness withdrew.

JOHN BRUCE called and examined.

J. Bruce.

51,594. (*Mr. Caird.*) You are a fisherman in Loch Fyne?—Yes.

51,595. Were you in the habit of fishing with the trawl when trawling was permitted?—Yes.

51,596. Do you now follow the herring-fishing?—Yes.

51,597. As a drift-net fisherman?—Yes.

51,598. You have done that because you have not been permitted to fish with the trawl?—I always followed the drift-net fishing when trawling did not prosper.

51,599. You followed them both?—Yes, I always carried on both.

51,600. Did you have both kinds of nets?—Yes.

51,601. Did you find at times a greater advantage in fishing with the one than the other?—Yes. The fish would not set as well in-shore some seasons as others, and then we used the drift nets.

51,602. Would that be for the whole or part of the season?—Sometimes on moonlight nights we used our drift nets, and carried our trawls back.

51,603. Was that when you could not see well and observe where the herrings were?—Yes.

51,604. Then you would use the drift nets?—Yes.

51,605. Was it common among the trawl fishermen to have both kinds of nets?—It was common throughout all this district here.

51,606. Throughout this part of Loch Fyne?—Yes.

51,607. Then the prohibition of the trawl-net fishing has had the effect of putting a stop to that alternative mode of fishing?—It has been a total loss to us, the want of trawl-fishing.

51,608. You have since confined yourself to drift-net fishing?—Yes.

51,609. Has that been a disadvantage to you?—Yes; we had to dispose of our gear, at a low rate, to other persons further north.

51,610. When you were allowed to fish in one way or the other, could you make a better season than you can do now, when you are limited to one mode of fishing?—Certainly we could always. When we saw the fish, we could take them by the trawl. We generally had it by our side, and whenever we saw the fish take off the shore we had our drift nets.

51,611. Do you think the two modes of fishing can be carried on with advantage together?—I think they could. I don't see any reason why they should not, if proper regulations were kept.

51,612. Have you ever, as a trawl fisherman, been in the habit of circle-net fishing among the rows of drift nets?—Yes.

51,613. Is that injurious to the drift-net fishing?—I don't see how it can be, if the trawlers do not get foul of the nets.

51,614. Would you not be likely to take fish that would mesh themselves in the drift nets?—We take fish, but we see many fish in the drift nets which we do not get.

51,615. On the whole, have you been most successful, as a trawl fisherman, when you have been fishing in the shallows along the shore, or out in deep water among the drift nets?—In-shore we consider the best for trawl-fishing.

51,616. Was trawl-fishing most followed in-shore?—Yes.

51,617. Was it in such shallow water that it could not be fished with drift nets?—They can fish in very shallow water by anchoring the drift nets. If they cannot drive, they put an anchor to the end of the nets, and it will hold them. The tide would tear all their nets to pieces if they came into contact with the bottom while they were drifting.

51,618. Do they often anchor their nets?—Yes.

51,619. Is it a common thing to anchor drift net in such situations?—Yes.

51,620. Then you are of opinion, as a trawl fisherman, that drift nets can be used in any part of the Loch where the trawl nets can be used?—It is injurious to the drift nets to go near the bottom.

51,621. (*Mr. Lefevre.*) When the tide runs strong it would work the nets along the bottom?—Yes; if the drift net comes into contact with the bottom, and there is nothing holding, it is generally carried away altogether.

51,622. (*Mr. Caird.*) Is it for that reason that the drift-net men do not choose, even if they could, to go into shoal water?—Yes; and another thing is, that such a quantity of nets is out now that the back ropes could not hold them. The anchors are not strong enough. The boats have as much as 600 fathoms of drift nets, and they cannot venture near the shore with such a quantity of nets in the shallow bays.

51,623. You found the shallow bays most productive for your trawl-net fishing?—Yes.

51,624. Have you, as a trawl-net fisherman, caught fish in the bay in such immense quantities that you have been unable to make use of them for sale, and have allowed them to lie and be lost?—I never saw that, except an odd time or two, when we were pursued and had to leave the net and all behind; that is since the Acts were got against us.

51,625. When that mode of fishing was permitted, did you never see it?—Not if there were a sufficient number of boats to take the fish away, or unless a storm of wind came on and broke our net.

51,626. It never happened unless there was some unexpected occurrence of that kind?—I have seen a gale of wind come on when we have been obliged to leave the net and make clear of the shore altogether, although the net had a great quantity of herrings in it; but I never knew many herrings to be left on the ground if everything was favourable; we were always too keen to get them out.

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51,627. Have you ever seen them caught in such quantities by the trawl net that considerable numbers have been spoilt and rendered unfit for food?—Never, if we can get help handy.

51,628. Can you generally get it handy?—Yes, we have given the drift boats one half for carrying them.

51,629. Was that because you took so much more than them?—They might be going in with nothing themselves, and in that case they would engage to assist us, and take in a last or two of herrings. They would have one half themselves, and give us the other, and that was better than allowing the fish to be lost.

51,630. Have you often done that?—Yes.

51,631. Do you admit the charge which has been made against you, that a large quantity of fish is often lost in consequence of being taken in such large numbers?—I do not admit it at all, unless in the case of a storm coming on, or something which we could not foresee.

51,632. Does that seldom happen?—It was very seldom. I saw such a quantity of herrings taken only once or twice.

51,633. Only once or twice in all your experience?—Yes. I saw one time a large quantity of herrings taken, when the drift men caught hold of the net and caused the loss of a great quantity.

51,634. Is the quality of the herrings caught by the trawl much the same as of those caught by the drift net?—We used to take large herrings with the trawl in July, and we got 28*s.* 6*d.* for trawl-net herrings. It was the highest price I ever got. They were very large fish.

51,635. Were they larger herrings than would mesh in the drift net?—They were larger than I ever saw meshed in a drift net. They would run about 400 to the barrel.

51,636. What is the average number to a barrel of drift-net herrings?—From 800 to 1,000. They are good herrings at that.

51,637. Are the largest and finest fish commonly caught by the trawl net?—We have seen some that would not mesh in a drift net but which we could take by the trawl-net.

51,638. (*Mr. Lefevre.*) What was the reason of that?—They got very fat, and they would not swim about, so as to mesh readily.

51,639. (*Mr. Caird.*) Practically, you found that you got the biggest herrings in the trawl net?—We killed them larger with the trawl net than with the drift net.

51,640. Have you often found a great variety of fish caught in the trawl net at the same time?—Yes, where an illegal mesh was used.

51,641. Was there much difference in the mesh of the net that you used in the trawls?—Yes; some of them were as narrow as 40 rows to the yard.

51,642. What should it be?—The standard is 36 rows to the yard.

51,643. That is, a one-inch mesh?—Yes; we should not be able to take any sile with a net 36 meshes to the yard.

51,644. By that you mean, small herrings?—Yes.

51,645. What time of the season, taking the commencement of the fishing season in June, do you get the finest fish?—Generally about July.

51,646. They are the largest and finest fish then?—Yes, they are about the richest fish then; they are very fat at that time.

51,647. Have you ever, during the present state of the law as to the close season,—there being no fishing permitted from the 1st of January to the 1st of June,—have you ever, in fishing with the trawl, caught any small herrings, unfit for food?—There was no person about this district that wrought with the trawl at that time. We did not fish for these small herrings, but I believe they fished for them in the Kyles of Bute.

51,648. During the spring months?—Yes.

51,649. But since that has been stopped, have you seen small herrings caught in the trawl in the open months, in June, July, August, and so on?—Not if the mesh was of the proper size.

51,650. Do you not catch more small herrings in the trawl net in those months than in the drift nets?—The herrings caught by the drift-net boats are generally from 1,000 to 1,200 a barrel; and I have seen the trawl-boats take them 400 to a barrel in July and August.

51,651. But, on the average, during the time the drift-net and trawl fishing was going on, have you observed that they have caught smaller herrings than they were able to catch with the drift net?—No; we generally took about the same.

51,652. If a regulation were made that the mesh, either for the drift net or the trawl net, should not be smaller than one inch, would that prevent the catch of small herrings?—Yes, certainly; that is the only remedy, in my opinion.

51,653. When you draw the trawl, does it open the mesh or close it?—It allows it to hang more open.

51,654. Then the hauling of the trawl net does not make the mesh smaller?—No, it is quite the reverse.

51,655. If the smallest mesh of the net was an inch mesh, could it not enclose herrings that would not mesh in an inch mesh?—No, it would not enclose such small fish as would not mesh in an inch drift net.

51,656. Would you not enclose both large and small?—There might be a few that would not get out of the belly of the net when they were jammed up.

51,657. But, as a practical trawl fisherman, you deny that you ever did destroy any quantity of small or immature fish during the open month of the fishing?—I deny it, for my part.

51,658. Did you catch other kinds of fish besides herrings with the trawl nets?—Yes.

51,659–60. What other kinds?—We caught large quantities of mackerel, which are very destructive to the sile, and we caught also saithe and stenlock.

51,661. Did you catch any large quantity of dog-fish?—Yes, one year we did.

51,662. Have you seen them caught with the drift nets?—Yes, often, in Loch Fyne. One year they were very destructive, both to the nets and to the herrings, but they have not been so destructive as they were four years ago. They were very bad then.

51,663. Has putting a stop to the system of trawl-net fishing been a great loss to the general supply of fish?—I think it has increased the quantity of vermin greatly; they destroy the young fry and sile.

51,664. Such as you have named?—Yes, mackerel, saithe, stenlock, dog-fish, hake, and eels.

51,665. Have you caught greater quantities in the trawl net than in the drift net?—They don't get any in the drift net. It is a rare thing to see one hundred in a drift net.

51,666. Then you not only killed large quantities of herring in the trawl, but you also killed the enemies of the young herring?—Yes, we killed great quantities of them too.

51,667. During the period trawl-net fishing has been put a stop to altogether, do you think there has been a larger supply of fish to the market than if trawl-net fishing had been allowed to go on as in former times?—I have no doubt there would have been a larger supply if trawling had been continued. We are getting very few now with the drift nets, whereas, if we were trawling, we could get plenty of herrings. There are plenty to be seen in the bays and along the shore, where we used to fish before.

51,668. If you were allowed to take your option of fishing either in one way or the other, as you thought most advantageous to you, do you think you could get more fish than you do?—Yes.

51,669. On the ground that sometimes you would

take more with the trawl than with the drift nets?—Yes; we should be sure of them with the trawl, if we saw them in-shore. I may say that, for nights, we could not get them with the drift nets, on account of the quantity of vermin about. The coal-fish are so plentiful, that they take them out of the nets as soon as they go in; and if we were to shoot our drift nets among them, perhaps we should not get one of them.

51,670. You cannot get herrings, in consequence of their being eaten in the nets?—Yes, by these vermin.

51,671-2. (*Mr. Lefevre.*) Do they leave the heads?—Yes, I have seen the heads, which is plain proof that the fish have been taken from us by the vermin.

51,675. (*Mr. Caird.*) With regard to the quality of the herrings caught by the trawl net and the drift net, can you tell us whether, in selling your fish, you are obliged to take a lower price from the buyers for trawl-caught fish?—I never saw the fishermen getting a lower price, unless for a chance lot. Perhaps there might be a boat that had a few drift-net herrings, and some person would take a fancy to them, thinking them to be better. As a general rule, we get as good a price for the one fish as for the other.

51,674. Do your trawl-fish chiefly go to the fresh market?—Yes.

51,675. How is that?—One reason for it is, that we could send a greater quantity of herrings with the trawl than with the drift nets. Before we could get 100 maze of herrings shaken out of the drift nets we could send 500 maze of trawled herrings away.

51,766. The time occupied in clearing the nets is so much less?—Yes.

51,677. Is that the reason why so large a proportion of fresh herrings used to be sent by the trawl-boats as compared with the proportion sent by the drift-boats?—Yes, I have sent away 20 or 30 boxes in one boat.

51,678. If a box of trawled herrings and a box of drift herrings go away together in the same boat are the salesmen or the purchasers able to distinguish between them?—It would be very difficult to do so. I don't think they could.

51,679. Would the result be that there would be a difference in price?—Not unless we gave them some inkling. I have seen them take the scales off them if they have been careless in handling them; but when the trawl-net herrings are properly handled they are as well scaled as the drift-net herrings.

51,680. Is there any truth, as far as you have seen, in the assertion that drift-net herrings are better bled, and therefore cleaner at the bone, than trawl-net herrings?—I cannot see it.

51,681. The assertion is, that in the one case the herrings bleed from the neck when they are meshed, and in the other that they are smothered altogether in the nets?—If you put herrings on the top of one another in the boat they will die, and if you put them down with the nets on the top of one another, what is the difference? They are smothered then also.

51,682. I understand that the herrings are dead before they come in from the drift nets?—I have often seen them living.

51,683. Then you do not admit the truth of that assertion?—Not a bit of it. I have cured as good trawled herrings as any that have been got by the drift nets.

51,684. Do you find that the curers will buy trawled herrings as readily for curing as drift-net herrings?—I have always found a market for them, and I have seen drift-net herrings just as dull if the market happened to be stocked.

51,685. Have you yourself sold trawled herrings to any of the curers?—Yes.

51,686. Do they readily buy them for the purpose of curing?—I have sold as many as 80 barrels to Mr. M'Ewen, of Glasgow.

51,687. Did he know that they were trawled herrings?—Yes.

51,688. Did he cure them?—I cured them myself.

51,689. And sold them to him as trawled herrings?—Yes.

51,690. Did you get as good a price for them as they were getting for drift herrings?—I had a few barrels of drift-net herrings also, and there was only 1*s.* a barrel difference. I think the only objection he had was that they were trawled herrings, and that it did not arise from the quality of the fish. In point of fact, they were much better fish than the drift-net fish.

51,691. (*Mr. Lefevre.*) Then there is a difference generally of 1*s.* per barrel in herrings caught by the trawl and herrings caught by the drift nets?—They may object to herrings in the former case, and say that they are only trawled herrings, but that was only to try and make a better bargain.

51,692. (*Mr. Caird.*) Was that at the time trawling was prohibited?—No, before it was prohibited.

51,693. When it was allowed?—Yes, when we were working freely at it. I have seen a boat in company with us working with drift nets when we were using the trawl. They have not been able to get any fish, and sometimes we have given them a few out of our boat, and they have been able to go to the quay with those fish and get 1*s.* a 100 more for them than we could get for ours. I have also heard it remarked that they were the best drift-net herrings they had seen that day.

51,694. Where has that occurred?—Just out yonder, on Ardrishaig Quay.

51,695. (*Mr. Lefevre.*) But the trawl fishermen have submitted to take less for their fish?—Yes, they did not scruple as much about 100 maze of herrings as the drift-net fishermen would about two or three maze.

51,696. You think that if you were only bringing in a small quantity of fish you could not afford to sell them at so low a price as if you were bringing in a large quantity?—Yes.

51,697. (*Mr. Caird.*) Then in consequence of the large supply the price was reduced?—Yes.

51,698. Not in consequence of the quality of the fish?—No.

51,699. You have cured both?—Yes.

51,700. Have you eaten the cure of both afterwards?—Yes, I generally kept trawled herrings for my winter use, considering that they had an advantage over drift-net herrings.

51,701. Did you keep them as a matter of preference?—Yes.

51,702. Because you believe them to be the best herrings?—Yes.

51,703. You have not observed that the trawled herrings when cured do not keep as well as the drift herrings when cured?—No.

51,704. Then you do not agree in the assertion that that is the case?—Not at all. I have sent them to different parts of the kingdom, and even to London.

51,705. Cured trawled herrings?—Yes, I have sent them away, and got orders for more.

51,706. Did you ever find that any of the curers refused to buy your trawled fish?—They never refuse them, but they try to get them cheap.

51,707. (*Mr. Lefevre.*) Are there no curers who come to Ardrishaig who refuse to buy trawled fish?—Not that I am aware of; but I always see much less of them than of the fresh buyers. We dealt more with the fresh buyers, but we traded also with the curers.

51,708. (*Mr. Caird.*) They would readily take them if you had them?—Yes, I wish I had what would supply them now.

51,709. Do you remember the time when there was very little trawling above Otter Spit in the narrow waters of the Loch?—I never mind when there was trawling above Otter Spit, except one season when the whole of the herrings drifted into the Loch.

51,710. Do you call the waters above Otter Point, Loch Fyne?—Yes, the fishermen went in with their trawls, but it was only natural that they should go where the fish were.

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51,711. Generally speaking, trawling has been carried on below Otter Spit?—Yes.

51,712. In the broad waters of the Loch?—Yes, about Otter Ferry; that was always a good place for trawling.

51,713. (*Mr. Lefevre.*) Was trawling carried on just at that spit of sand?—Yes.

51,714. (*Mr. Caird.*) Have you ever heard any complaint made as to the trawl fishermen taking up the buoys and cutting the nets of the drift men?—I have heard it blamed upon the trawlers when it was the drift men who were doing it to their neighbours. I remember that there were some trawl men taken up at Otter Ferry—some Tarbert men were charged with doing that, but it was found that it was done by the Minard men.

51,715. By their own drift-net men?—Yes, by a man who had never trawled in his life.

51,716. Has there been a bad feeling between the trawl and the drift-net men?—Yes.

51,717. In consequence of the prohibition of trawling?—No, while it was carried on.

51,718. What was the reason of that?—The one thought the other interfered with his welfare.

51,719. Do you think it would be likely to cause a bad feeling, if the trawl men took to their circle-net fishing between the rows of drift nets?—The trawlers would have the same feeling towards them if they shot 20 or more barrels of nets, when they had only six to earn their bread by.

51,720. Is it not the case that the circle nets generally go after the drift nets are down?—No, unless they can find the fish in-shore. They preferred fishing in-shore, and it was only a chance time that they went into the channel to fish.

51,721. Have you formed any opinion as to the advantage or disadvantage of having January made an open fishing month?—During the last ten winters we had splendid herrings in the Kyles of Bute, and when we had to close our fishing about three years ago we killed up to the last day of the fishing. They were excellent fish, and I had permission from the Royal Commission who came here then to cure them for them, in order that they might see them.

51,722. Were they caught in the month of November?—Yes.

51,723. Do you remember when you were allowed to fish in January?—Yes.

51,724. Did you catch good fish then?—Yes.

51,725. You think it would be of advantage to the fishermen, and that it would increase the supply of fish, if permission were given to fish in that month?—Yes.

51,726. Do you think it would injure the permanent fishing in Loch Fyne if you were allowed to fish in January?—I do not.

51,727. Are you in favour of a close time in the other months of the present close time season?—I am a fisherman throughout the whole year, and whenever one mode of fishing is done I turn to another, but the herring-fishing is, perhaps, of the greatest advantage to me. If the season were open I should have bait for my line-fish, and I should have other advantages which I cannot obtain now in the close season. There are other men who have other means of living than by the sea in the winter time, and they do not approve of opening the close months.

51,728. Do you think it would injure the brood of fish, if you were permitted to fish in February, March, and April?—I don't think it would.

51,729. Do not you think the herrings to some extent spawn in Loch Fyne?—Yes, but not in January. They spawn down about Troon and Ballantrae.

51,730. When do they spawn here?—About the 12th of August.

51,731. Have you seen spawn disturbed by the trawl nets?—No, but I have seen it in the drift nets.

51,732. Is that when the fish have discharged the spawn?—Yes, in the nets. It sticks very hard to the drift nets, and I have seen times when it has been necessary to break the net in order to take it off.

51,733. You do not admit the charge that the trawl net is destructive to the spawn?—I never saw it in the trawl net, but I have often seen it in the drift net.

51,734–5. (*Mr. Lefevre.*) You say that you have seen spawning fish in August. Were they the same fish as those you caught early in the season?—I don't know whether they spawn twice in the season, but we generally get them here about the 12th of August. We do not get them again until we fish them about Ballantrae, in February and March. Then they are very full, and it is very rare not to get a few of what we call razor herrings—spent fish. We may get them a fortnight or three weeks after they spawn, but only a few. We get them in the drift net, and we call spent fish here razor fish.

51,736. Have you observed any falling off in the quantity of fish spawning in August?—There are not so many, I think, but I do not go to the ground where they spawn. It is generally on the rough ground that they spawn hereabouts.

51,737. Whereabouts in Loch Fyne?—About ten miles, just as you turn and go up Loch Fyne on the west side.

51,738. In what depth of water?—Some parts are not more than three fathoms. It is very bad ground. The tide is strong also.

51,739. Have you ever dragged the trawl nets through them?—No.

51,740. Can you do so?—No If there is a clean place we may heave it out upon it, but we cannot trawl upon the rough ground.

51,741. Have the drift-net fishermen worked it?—Yes.

51,742. Have they anchored there?—No, the tide is too strong.

51,743. Have they sunk their nets in order to take the fish from the bottom of the water?—They have drifted there, and sometimes they have had their nets damaged. At other times, when they have not had their nets damaged, they have got good shots of full fish.

51,744. Do the full fish fetch as good a price then?—No, unless for the fresh market; we don't cure them here.

51,745. Do they get as good a price for the fresh market?—Yes.

51,746. Did these fish form a considerable proportion of the fish caught in August?—Some years we do not see any at all.

51,747. How long is it since you have seen them?—There have been very few for the last two or three years, but I saw great quantities taken in the Loch 20 or 25 years ago.

51,748. We were told that 12 years ago there was a great take of fish?—Not here at the head of Loch Fyne.

51,749. Do you not know whether the fish spawn also in February or March here?—I never found any of them here at that time. I got them with milt and roe in them, but not full fish.

51,750. Where do the fish spawn which you are catching now?—Down at Skipness Point, and I think some of them down about Ballantrae.

51,751. Then you are of opinion that they leave Loch Fyne before they spawn?—Yes, when we are out line fishing we notice the herrings in the water.

51,752. We have been told that the trawlers were in the habit of dragging their nets over the spawning ground?—The beam-trawlers were.

51,753. But not the trawlers for herring?—No.

51,754. They did not drag their trawls across the spawning ground?—I never saw a trawl net with spawn upon it, but I have seen it often on my drift nets.

51,755. When did you first begin trawling?—From the first time I went to fish.

51,756. How long ago is that?—Upwards of 30 years ago.

51,757. Was there a small amount of trawling then?

—There was not much until the month of January—from December until February.

51,758. Trawling at that time was quite late in the season?—Yes, it was late in the season. The large herrings, at the latter end of the season, on leaving Loch Fyne, kept in-shore, especially about the Otter, where alone trawling was carried on.

51,759. When did the trawlers become numerous at Ardrishaig? — They were always increasing, yearly.

51,760. What has been the greatest number of trawlers at Ardrishaig?—Our crews were divided into a few boats, and mostly every man in Ardrishaig was working at it.

51,761. Occasionally?—Yes.

51,762. Sometimes with the drift nets and sometimes with the trawl?—Yes.

51,763. How many boats would trawl at that time?—There might be 30 or 40 boats out of Ardrishaig.

51,764. Would the same boat do for drift-net fishing as well?—Yes, our boats are adapted for that. We have them properly built for that.

51,765. What is the length of the nets used by the trawlers?—From 65 to 70 fathoms.

51,766. What depth? — They are 18 score of meshes deep.

51,767. Have they an inch mesh?—Yes, but they are not all of that size.

51,768. Then were there a considerable number of nets used by the trawlers of less than one inch?—Yes, if they got them of the regular size at first, they shrunk a good deal.

51,769. Were they ever bought at less than the regular size?—Yes, we have had them made 38 rows to the yard.

51,770. Then they would shrink?—Yes, after a year or two they would shrink to 40 rows.

51,771. Do you find greater advantage in the larger size?—Yes, for ease in taking out the fish.

51,772. Did you send out boats beforehand to watch and see if the fish were in-shore?—We generally heard the news from one another.

51,773. Did you keep a look out for the fish?—Sometimes the neighbours would give us information and some encouragement to go out with our trawls.

51,774. Did you ever join the trawl nets together when you had a great shoal of fish?—No, they were too heavy for that.

51,775. When you had a great shoal of fish in a small bay, would you join them and go with double the number of hands to work the net?—No.

51,776. Sixty fathoms is the longest net you used?—From 60 to 65 fathoms.

51,777. Have you used the trawl net in the day-time?—Yes, in the evening, when we found the herrings close in-shore.

51,778. Not in the morning?—We generally trawl up to sunrise.

51,779. Were the fish not in-shore in the day-time?—They generally take off the shore when the day comes on. It is always in the night-time that they are closest in-shore.

51,780. If you did not find them inside did you row your boats out into the middle of the Loch?—Yes, we should go out for a certain distance backward and forwards.

51,781. Did you avoid the drift nets?—It would be of no advantage to us to go near to the drift nets where they had water, because generally the herrings would be broken up, and would also be on one side of the drift net. It would be according to the way in which the herrings were drifting, whether we saw them as plentiful on one side as on the other.

51,782. How long would it take to shoot your trawl net and haul it in?—I have seen it take perhaps an hour for a shot.

51,783–4. How long did it take to shoot your net?—We could shoot it in five minutes.

51,785. Have you ever observed that the fish die while they are enclosed in the net in consequence of the great squeezing they get from the body of the fish?—I have seen that when we had a great bulk, but although they did die, we lifted them.

51,786. Would you be able to lift them when you have taken the fish out in deep water?—It was not very common to get a big haul of herrings outside at all. We might make a nice night's work out of it, but never more than would pay wages.

51,787. When you have taken them outside, have you ever seen the fish die in consequence of being collected in great masses and jamming one another together?—No, they have too much room to go away. It is only a mere trifle we take, and the net is all open below. They get away down below the net altogether, and it is only a few that we get then.

51,788. Do you think that the setting of the drift nets outside prevents the shoals of herrings coming in-shore?—I think that shooting them too early in the day-time is injurious.

51,789. On what account?—Because the water is clear and the herrings see the nets.

51,790. Do they not rise then?—Very seldom. I have seen them flying in the water, and if we commenced to shoot then they would go away.

51,791. Then the fishermen, for their own sakes, would not shoot their nets too early?—There are some fishermen who are good at keeping regulations of that kind, and others who are not, and when one breaks through, he draws on another. When one shoots his net earlier, it brings the whole fleet round him doing the same thing.

51,792. Does that disturb the whole shoal?—Yes, it disturbs the whole of the water, in that respect.

51,793. When the drift nets are set out in the middle of the channel, have you observed that the shoals of fish do not come in-shore,—did you make any complaint against the drift-net fishermen on that account?—We never complained of them when they were working in the channel. It is generally one shoal that frequents the channel and another the shore. We get smaller herrings out in the channel than close in the bays in the summer time.

51,794. Have you often had great takes in-shore when the drift fishermen have been taking fish out in the middle of the Loch?—Yes.

51,795. What was the cost of a trawl net?—We generally calculated a good net to be worth 15*l.*, but nets were cheaper then than they are now, and I dare say one would cost 20*l.* now.

51,796. Did many of the fishermen own trawl nets themselves?—Perhaps eight men work a trawl net, and have a share a-piece in it.

51,797. And they were paid by share, I suppose?—Yes; perhaps two men would have the net, and the rest of the men would be on smaller shares.

51,798. On the whole, did they make more money by fishing with the trawl net?—There was one thing they had great benefit from,—they were not at the same outlay. One train of drift nets would cost a great deal more than a trawl net, and the drift nets would last four times as long as they do now.

51,799. How was that?—They were four days using the trawl net, and only one the drift net. In that way the nets and boats were kept in better order, and did not get as much damage. They were lying dry for weeks when they were not working them, and got no harm. If we were working them regularly, we might meet with heavy losses. Sometimes we have lost nearly half of our nets on the rocks.

51,800. If the trawl-net fishing were allowed now, do you think many of the drift-net fishermen would abandon the drift-net fishing altogether?—I think not.

51,801. Do you think both modes of fishing would be carried on at the same time?—I would carry on both, for my part.

51,802. Do you think that any limit as to the place of setting the trawl would be approved of by the trawl fishermen?—I think so, for my part. I think they would be willing to work in the most agreeable style anywhere where they could get liberty.

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51,803. In the narrow waters, such as the Kyles of Bute, could the two fishings be carried on together?—There is only a part of the Kyles of Bute in which they can trawl. Most of the water there is deep water, the shores are very bold, and trawling would not do well from Ardlamont to Kaimes Bay.

51,804. There is only a small part of the water that is fit for trawl-fishing?—Yes.

51,805. Then in the upper part of Loch Fyne?—In the upper part of Loch Fyne there is no place fit for trawling until you come down to Lachlan Bay and Otter Bay.

51,806. Then do you think, if trawling were permitted, it would only be carried on to a small extent in the upper part of Loch Fyne?—I do not think there would be much done in Loch Fyne. I do not know any place there where, one night out of twenty, the herrings would be got in-shore so close that you could catch them; and in deep water, if the herrings are disturbed, they go down very quick, even though they are there in great numbers.

51,807. Do the drift-net fishermen from Ardrishaig often fish up in the Upper Loch Fyne?—Yes, wherever the fish are heard of.

51,808. Then when the fish are up there, the whole Loch is filled with boats and nets?—Yes.

51,809. And it would hardly be possible for the trawlers to carry on their fishing there?—They could not work with the trawls when all the fleet have shot their nets.

51,810. Did you say that the trawlers used to go out before the drift-net fishermen?—In regard to shooting early?

51,811. Yes.—No; they generally go out after. A trawler generally waits till he sees the fish rising about the shore before he commences to work at all.

51,812. Is that after the drift fisherman shoots his nets?—They shoot their nets in the prospect of the fish rising about them.

51,813. If a trawl fisherman saw a shoal of fish about sunset, would he go out with his nets?—He would not meddle with the fish till he could get a proper advantage of them.

51,814. Do you mean until it got dark?—Yes; some greedy man might try to take them, but it would not be profitable to anybody.

51,815. Were you in the habit of trawling much in what is now the close time, before the close time commenced?—Yes, I have trawled a great deal at that time.

51,816. Through what months?—Every month in the year almost, but only just now and then; it might be that we were only trawling for three nights in a month.

51,817. Did you in those months catch any number of small fish?—I never saw them taking many small fish in our locality,—our nets were not small enough.

51,818. Did you sell your fish mainly for bait?—We got a market for them.

51,819. Was there any proportion cured?—I have seen them curing the smallest we have got.

51,820. Was there any curing carried on during those months?—Yes.

51,821. Do you think it has been any advantage to the fishermen that those close months have been enacted?—Perhaps it may have been of benefit to some of the fishermen, but a great hurt to others. Poor fishermen, who have no land to till and no labour to go to in the country, would like to remain at the fishing as long as they could earn a shilling by it.

51,822. Was there any drift-fishing during those months?—Yes, in the Kyles of Bute.

51,823. Did any number of fishermen go to that fishing?—Yes.

51,824. Was it carried on with the same regularity as during the rest of the year?—Yes, there was a great number of boats from all directions.

51,825. In the month of March?—Yes, I think the last night was the 7th of March.

51,826. How long ago was that?—21 or 22 years.

51,827. Do you fish with the line during the close months now?—Yes.

51,828. Have you found it any disadvantage being deprived of herrings for bait during those months?—It is a great disadvantage, and especially in taking eels. An eel will scarcely take any other bait except herrings.

51,829. Have you not purchased fresh herrings from the east coast?—We get them very soft, and an eel is a very saucy fish, it likes to have the bait very fresh.

51,830. What were the fish you caught in the close months?—Cod, ling, whiting, haddock, and flounders.

51,831. How far up the Loch do you fish?—Down Loch Fyne to Furness.

51,832. How many boats are there from Ardrishaig?—About 30 or 40. There are not more than 40 boats, I think.

51,833. Have you observed any falling off in the fish caught during the last four or five years?—There is one fish that has not been as plentiful for some years.

51,834. Do you mean the whiting?—Yes, and the haddock.

51,835. How long is it since they fell off?—They have been falling off for the last six years.

51,836. There is no beam-trawling in this Loch?—No, I only saw it tried twice in this Loch.

51,837. Have the cod fallen off?—They have not been plentiful for the last two years, owing to the want of bait.

51,838. You think they are there, but they have not been caught in such numbers?—They are not caught. We used to get a good supply on the small hooks.

51,839. What did you use for bait?—We used the shell-fish we call the scallop. We dredged them in considerable quantities from the bottom.

51,840. Has the number of fishermen fallen off?—I think they are rather increasing than falling off.

51,841. Notwithstanding the difficulty of getting bait?—I think there is about six times the quantity of material in the water for catching herrings that there was six years ago.

51,842. But I mean fishing with lines,—have the line fishermen fallen off?—No, I do not think so. The line-fishing has always been about a regular thing here.

51,843. Do you find the cod with herrings in their insides during the months of April and March?—Yes, we get them always with herrings.

51,844. In their stomachs?—Yes.

51,845. Showing that the herrings are here at that time?—Yes; we scarcely ever want herrings here in this Loch between this and Minard any day in the year.

51,846. Do you think that fishing for herrings during the close season should be allowed, for the purpose of bait at all events?—I think it should.

51,847. Would it be possible to allow fishing for herrings for bait, and to prevent them from being sold in the market for other purposes?—It would be troublesome and difficult to prevent it. Often a man could not help taking a larger quantity than he would want for bait; although he might not wish to take them, still they might be there, and it would be a pity to let them become useless, if they could be sold. There are places in the north, along this coast, where the fishermen are deprived of herrings until the close season sets in, and then they dare not touch them. I believe that has been the cause of great ruin in different places.

51,848. In 1862 there was a great season for herrings?—Yes.

51,849. If trawling had been permitted would there have been a still greater take, or did the drift fishermen catch the herrings that would have been otherwise caught by the trawlers?—I do not think they would have been troubled with trawls. It is a very laborious thing to work a trawl net.

51,850. Are the older men able to work it?—It is not very easy for old men to work it; they would be scarcely ever dry.

51,851. Do you think if the fishermen could do well with drift nets they would not want to use the trawl?—I never inclined much to the use of the trawl net if I could get plenty of herrings with the drift nets.

51,852. Do you think if trawling had been permitted this season there would have been a great take of herrings?—I am sure there would have been, as the herrings have been here in great abundance.

51,853. Can the trawlers sometimes fish in rough weather when the drift fishermen cannot go out?—Yes, all along the shore in the bays where the drift fishermen cannot work in breezy weather.

51,854. Do you often see plenty of fish that you cannot take with the drift net?—Yes.

51,855. What is the reason of that?—There is a great deal of fire in the water at this time of the year, and I think that is the cause of it. You can see the nets a great distance off in the water when it is dark.

51,856. Is that the case this year?—I think that has something to do with it, but there are some years when the herrings will not mesh well in the nets.

51,857. Is it ever the case that the herrings run too small to mesh themselves in the drift nets?—Run too small?

51,858. Yes. Is the class of herrings sometimes smaller one year than it is in other years?—I have seen a smaller class of herrings sometimes, but always through the year there were large enough herrings. We have got large and small, and we have had plenty of different shoals of herrings. I have seen, within the distance of a mile, every boat catching herrings, and catching them of a different quality. That did not show that there was any difference in the material with which they were caught, but it showed that there was a difference in every eye of the herrings—perhaps they were no better in one case than another.

51,859. (*Mr. Caird.*) I think you stated that many of the curers buy both trawled fish and drift-net fish?—Yes.

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51,860. If that is the case, why should there be such a general feeling among the curers against the trawl-net fishing?—I cannot say, but I have known the curers buy and be glad to get trawl-net herrings. One year, when there was considerable trawling going on, Mr. Methuen bought all he could get, even after the fresh buyers had got them.

51,861. Are there many fishermen like yourself, who fish alternately with one kind of net and then another, as they find it most advantageous?—The fishermen are mostly of that class about here.

51,862. About Ardrishaig?—Yes.

51,863. They like to have the two modes of fishing so as to be able to take to which they find most advantageous?—Yes.

51,864. Then you would like to be permitted to take to which you think best?—Yes, we should generally go to what we thought best.

51,865. Do you think the trawl men would be contented with a regulation permitting them to fish in the shallow waters along the shore, although they would still be prohibited from fishing in the deep waters in the middle of the Loch?—Perhaps they might be. I do not think the deep-water fishing is of any benefit to them.

51,866. Do you think it would be a great loss to them to be prohibited from fishing altogether in the deep water, which is more suitable to the drift-net fishing?—I do not think it would hurt them in the least. It would not hurt them here, because when they could not get the fish ashore by trawling they would get them in the middle of the Loch with their drift nets.

51,867. (*Mr. Lefevre.*) Do the drift nets belong mostly to the fishermen here?—Yes, all of them do here.

51,868. Have the fishermen still got trawl nets?—There are none who have any now, that I am aware of.

51,869. Then do you think that trawling has been entirely suppressed?—Yes, hereabouts.

The witness withdrew.

DUNCAN M'BRYEN called and examined.

D. M'Bryen.

51,870. (*Mr. Caird.*) Were you a trawl-net fisherman at the time trawling was permitted?—Yes.

51,871. Had you, like the last witness, a drift net as well as a trawl net?—Yes.

51,872. And did you fish the two different kinds, as you found it most convenient?—Yes.

51,873. Do you think it of advantage to be able to fish other one way or the other, as you could best take the fish?—Yes.

51,874. Do you agree with the previous witness that if the trawl-net fishermen were permitted to fish along the shore in the shallow waters that that would be a sufficient privilege for them?—Yes, I agree that it would.

51,875. Would you be contented with that as a compromise of the question between you and the drift-net fishermen?—Yes.

51,876. Although you were entirely prohibited from fishing in the deep waters?—Yes, we should agree with that.

51,877. In that case you would be able to take to your drift nets if the fish were in deep water when you could not fish with advantage along the shore?—Yes.

51,878. Can you say from experience that you catch a better class of herrings with the trawl nets than with the drift nets?—Yes, at times we do.

51,879. Large herrings?—Yes.

51,880. Have you ever known of any instance yourself in which you have caught so many fish with your trawl net that you have been unable to make use of some of them for food?—Yes, at one time.

51,881. Does that often occur to you?—No.

51,882. Was that at the time trawling was prohibited?—Yes.

51,883. And when you could not get time to bring them in?—Yes, on account of being pursued.

51,884. During the time it was permitted did that ever occur?—No, never.

51,885. Were you always able to make use of all the fish you could catch?—Yes.

51,886. Did you ever in your trawl nets catch fish that were unfit for sale during the months that are at present the open months for fishing?—No.

51,887. Did you fish in the months that are close time now with the trawl—I mean the spring months?—I have fished for bait in April and May.

51,888. Did you get many small fish then?—No, nothing but what was good for bait.

51,889. Have you never killed small herrings in your trawl nets?—No.

51,890. Not very small?—No.

51,891. Have you ever seen spawn in your trawl nets?—No.

51,892. If in this season you were permitted to catch fish with the trawl net as well as the drift net, do you think there would be a larger supply of herrings to the market?—I am sure of it.

51,893. Do you think there are many fish in the Loch now which escape being caught altogether, but which would be taken with the trawl net?—That is my opinion.

51,894. What leads you to form that opinion?—I have formed it from my experience of trawling. We see the fish now and we cannot take them with the drift nets.

51,895. (*Mr. Lefevre.*) Do you not think that the

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drift fishermen may take them some other night, although not that night?—They are of that opinion. They say, "let them alone this year, and we shall get them another year."

51,896. But would they get it some other night in the same season?—They have had three months of it now, and the fishing is not getting better.

51,897. And you think you might have made a successful fishing with the trawl nets, where the drift nets have been unable to make a successful fishing?—Yes.

51,898. Then you think the fish are there in the Loch?—Yes, we see them every night.

51,899. Close in-shore?—Yes.

51,900. (*Mr. Caird.*) Is that the general opinion of the fishermen here?—Yes.

51,901. Have you ever taken any large hauls when you have been out with your trawl nets in the deep water?—No.

51,902. Do you find that the curers will buy the fish caught in your trawl nets as readily as those which are caught in your drift nets?—Yes.

51,903. Are you willing to accept a smaller price for them?—If we get a large quantity, we are ready to dispose of them at a cheaper rate.

51,904. Is the reason that there is a difference in the price that there is a large supply?—Yes.

51,905. You have a larger quantity to sell, and can make a better return?—Yes.

51,906. You do not admit that it is because the quality is inferior?—No.

51,907. Have you yourself ever cured trawled herrings?—Yes.

51,908. And herrings caught in the drift nets?—Yes.

51,909. Have you noticed the result of the cure; were the trawled herrings as good as the drift herrings?—Yes, I often found them better.

51,910. In what respect were they better?—I have found them larger.

51,911. Would they keep better?—They eat better at any rate.

51,912. Do they keep better?—Yes.

51,913. Then do you or do you not admit that the trawled fish are not as well bled as the drift caught fish?—Some people say they are not, but I cannot see how that can be.

51,914. Have you not observed any difference at all in that respect?—No.

51,915. When you take the trawled fish and the drift caught fish fresh do you find more blood in one than in the other?—I never observed that.

51,916. Did you ever at any time fish herrings in the month of January?—Yes.

51,917. Did you get them in good condition in that month?—They are not as good then as they are in the months of June, July, and August.

51,918. Were they in a good marketable condition?—Yes.

51,919. Did they take the market readily?—Yes.

51,920. And have you seen good fishing got in that month?—Yes.

51,921. Do you think it is any loss to the public that there should not be any fishing allowed in January?—Yes, it is a loss to the fishermen in the first place, and to the public also.

51,922. Is it of no advantage to the brood of fish that there should be a close time in January as well as in the rest of the spring months?—No, I think the season should be open.

51,923. Do you approve of a close season at all?—No.

51,924. Would you have it open all the year round?—Yes, but I would require all men to fish with a legal net.

51,925. With nets of an inch mesh you mean?—Yes.

51,926. If the inch mesh was rigidly enforced, and no person was allowed to fish with a smaller net than that, would that obviate all the objections that can be raised as to catching small fish?—I think it would.

51,927. Could not the trawl net then bring small fish ashore?—I have never seen them take small fish ashore.

51,928. Was it common while trawling was permitted for the trawl fishermen to be also drift-net fishermen?—Yes.

51,929. Had they both kinds of nets?—Yes.

51,930. And the same boat was capable of fishing either with drift nets or the trawl net?—Yes.

51,931. It did not require two sets of boats?—No.

51,932. Only two sets of nets?—Yes.

51,933. Would the cost of the smaller boat used for the trawl-fishing, with the two sets of nets, be any greater than the cost of the larger boats, with nothing but the drift nets?—The cost of the large boats would be more.

51,934. Which on the whole, suppose trawling was permitted, would make the largest fishing in the course of the season?—The trawl-boat would.

51,935. The trawl-boat, with permission to fish with both nets?—With one net the trawl-boat would make the best fishing.

51,936. But if it had also drift nets, what would then be the case, do you think?—They would fish better still.

51,937. And make larger returns?—Yes.

51,938. From a smaller capital than the drift fishermen?—Yes.

51,939. (*Mr. Lefevre.*) Did you ever trawl during the month of February and March for any other purpose than getting bait?—Yes.

51,940. Did you sell the fish you caught in the fresh market?—Yes.

51,941. Did you get as good a price for your herrings then as you would at any other time?—Yes, I have got 4*s.* 6*d.* on the 12th of March for them.

51,942. For what quantity?—For 100.

51,943. In what condition were the fish then?—They were large fish.

51,944. Were they full fish?—No, they were spent fish.

51,945. Do you think that the herrings spawn up in the Loch in the months of February and March?—No, I do not think they do. They go to Ballantrae to spawn,—at least we say so.

51,946. Where did you catch those spent fish?—Along between this and Tarbert.

51,947. Do they come up here after spawning?—We think so.

51,948. Have you ever caught the fish just full of spawn,—ready to spawn, during what are now the close months?—When they came out of Loch Fyne we thought they went to spawn, and we got a number of them then.

51,949. Do you think that the enactment of the close time cut off a good deal of profit from the fishing?—Yes, it did.

51,950. Before the close time was enacted, what number of boats would there be herring-fishing during the months of March and April?—Not more than 14 or 15 boats.

51,951. Why was the number so small,—was it because they could not find the fish?—No, we were at the white-fishing then,—at the line-fishing for whiting and haddocks, but if there was some chance of herrings we went out with the trawl.

51,952. Were the herrings not in the Loch then in large numbers?—No, there were only very few.

51,953–5. They were not spawning fish?—No.

The witness withdrew.

DAVID BRUCE called and examined.

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51,956. (*Mr. Caird.*) Were you a trawl fisherman at the time trawling was permitted by law?—Yes.

51,957. Were you at the same time a drift-net fisherman?—Yes.

51,958. Was it a common custom among the trawl fishermen to have drift nets which they could use when they thought proper?—Yes.

51,959. Was it a common custom among the whole of the trawl men in this Loch?—It was the common custom among the men in this locality.

51,960. In Ardrishaig?—Yes.

51,961. What number of boats are there belonging to Ardrishaig?—About 100.

51,962. Were the whole of those 100 boats, or nearly the whole of them, in the habit of having both trawl nets and drift nets?—Yes, most of them.

51,963. Are they a smaller size of boat than those which are employed exclusively in drift-net fishing?—Yes.

51,964. They are adapted for going in the shallow water?—It is not for that.

51,965. What is it for?—We had them for trawling, and the big smacks could not trawl.

51,966. Then your boats could not carry as large a fleet of drift nets as the large drift boats could?—No.

51,967. What length of drift nets do you carry in your small boats?—Eight or ten barrels.

51,968. Would that be 800 or 1,000 yards in place of 1,400 yards,—is that so?—Yes.

51,969. What does a trawl-boat cost when new?—About 16*l.*

51,970. And your trawl nets?—They cost about 15*l.*, but they would run to 20*l.* now.

51,971. What is the cost of your fleet of eight or ten barrels of drift nets?—It will run close upon 100*l.*

51,972. Is it about 10*l.* a barrel?—5*l.* or 6*l.* a barrel.

51,973. How many barrels do you say your nets run to?—Eight or ten.

51,974. That will not come to 100*l.*?—Close upon it.

51,975. What would be the cost of 10 barrels of nets with all their gear and fittings?—About 6*l.* a barrel.

51,976. Then we may take it at 60*l.*?—Yes.

51,977. Then each boat with its trawl net and its drift nets altogether would come to about 96*l.*?—Yes.

51,978. What would be the cost of a drift-net boat?—They run from 40*l.* up to 50*l.* for the big smacks.

51,979. And what would be the value of the drift nets?—I cannot say.

51,980. Would it be 6*l.* a barrel?—Their nets are deeper than ours.

51,981. Are they more expensive than yours?—Yes.

51,982. Can you give us an estimate of what the cost would be?—They will run 7*l.* a barrel.

51,983. That would be about 138*l.* for a drift-net boat, as against yours at 96*l.*?—Yes.

51,984. Can you tell us whether when you were allowed to practise both modes of fishing just as you found it most advantageous, the one mode one night, and the other another, you could make between the two in the course of a season, as good a fishing as a drift-net boat of larger size with drift nets?—Yes, I think we could.

51,985. Then was it, in your opinion, a cheaper mode of catching fish?—Yes, it is a cheaper mode.

51,986. Has it been much loss to you to be deprived of the trawl mode of fishing?—Yes, it has.

51,987. Has it reduced the quantity of fish that would otherwise have gone to the market?—Yes, it has done that.

51,988. Speaking of this year in particular, do you agree with the previous witness, that whilst the drift-net fishing has not been very successful, you might have caught a great many herrings if you had been permitted to use the trawl net, which were not caught by the drift nets?—Yes, there are plenty of herrings on the coast.

51,989. Have you ever seen any very small fish caught by the trawl net?—No, I never saw any very small fish caught in the trawl net. I never saw any sile caught in it.

51,990. Would you approve of a regulation establishing an inch mesh for both trawl nets and drift nets?—Yes.

51,991. You think that would be a fair and proper thing to do?—Yes.

51,992. Would you be satisfied if you were allowed to fish with the trawl net in the shallow waters along the shore?—Yes.

51,993. And if you were not permitted to go into the deep waters where the drift nets are principally used?—Yes.

51,994. Do you think that could be done without disadvantage or injury to the drift-net fishermen?—I think it could.

51,995. Have you ever fished for herrings in the month of January?—Yes.

51,996. Did you catch them in good condition then?—Yes.

51,997. Do you think it is a loss to the public that the fishermen should not be allowed to take herrings in the month of January?—It is a loss to the fishermen and to the public too.

51,998. Do you think it would be of advantage both to the fishermen and to the public, that the law should be altered in that respect?—I think it would.

51,999. Would you desire to have part of the season a close time?—I think it should be open.

52,000. The whole season?—Yes.

52,001. Would that not lead to your destroying fish very small, that would afterwards have become marketable and useful?—I do not think so.

52,002. Would it not in any other way affect the supply of fish in a better season?—I do not think it would.

52,003. Where have you observed the shoals of herrings come from when they first enter the Loch?—They come from Ballantrae after spawning.

52,004. When do they begin to enter the Loch in the greatest quantities?—About the month of May.

52,005. Do you see them then coming into the Loch?—Yes.

52,006. Do they continue to come into the Loch in the summer season?—Yes.

52,007. Fresh shoals of herrings continue coming in?—There are always fresh shoals coming in.

52,008. Is the lower part of the Loch the best fishing ground in the earlier part of the year?—I have seen very good fishing in both parts of the Loch.

52,009. Have you fished in all parts of the Loch?—Yes.

52,010. (*Mr. Lefevre.*) Have you observed large shoals of small fish?—Yes, I have seen large shoals of small fish too.

52,011. What time of the year have you seen them?—Generally in the month of May, and before then.

52,012. Do you not think that the trawlers would take them if they were allowed to fish during the close time?—Well, I have no doubt that they would, but I never saw them take any about there except for bait.

52,013. Where do you think they would be taken?—Down about Tarbert where they used to work for them.

52,014. Did they work for the small class of fish?—Yes, and in the Kyles.

52,015. The Kyles of Bute?—Yes.

52,016. Did not the shoals come up as far as this?—Yes, through the year they did.

52,017. Quite small fish?—Yes.

52,018. What is the smallest size?—They are very small, from four to five inches.

52,019. Do you agree with the previous witnesses, that many of the trawl nets have been used with less than an inch mesh?—Yes.

52,020. What was the smallest mesh used by the

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trawl fishermen?—The smallest mesh we used about here was 38 rows to the yard.

52,021. Would it not shrink to less than that?—Yes, it would shrink to about 40.

52,022. Do you not think that if nets of that description were used, they would catch the shoals of small fish?—Yes, they would.

52,023. If there was a restriction as to the size of the mesh of the net of the trawl, and the fishermen were not allowed to use a smaller mesh than an inch mesh, would that prevent the taking of small fish?—Yes, I think it would.

The witness withdrew.

J. M'Kiver.

JOHN M'KIVER recalled and examined.

52,024. (*Mr. Caird.*) Can you tell us the number of boats engaged in the herring fishery in Loch Fyne during the last three years?—Yes.

52,025. Will you give us the number?—In 1862 there were 670 boats employed in Loch Fyne.

52,026. At what date?—On the 21st of September.

52,027. In 1863 how many were there?—In 1863 there were 680.

52,028. That was a slight increase?—Yes.

52,029. How many were there in 1864?—In 1864 there were 545—that is this year. Last week there were 545.

52,030. Then there has been a decrease of about one-sixth this year, as compared with each of the two preceding years?—Yes.

52,031. Has that arisen from the fishing being less successful?—Yes.

52,032. (*Mr. Lefevre.*) The boats have not come from a distance?—No.

52,033. (*Mr. Caird.*) Can you give us an estimate of the number of barrels of fish taken in Loch Fyne during the last four years from the commencement of the fishing season?—Yes.

52,034. Then will you do so?—In 1861, 9,624 barrels were taken up to the 21st of September; in 1862, 18,949 barrels were taken up to the 20th of September; in 1863, 11,220 barrels were taken up to the 20th of September; and this year, 1864, 7,929 barrels have been taken up to the 19th of September.

52,035. Then, as far as the season has gone, this year, as compared with last year, has been very unfavourable?—It has not been one half what it was in 1862.

52,036. And greatly less than 1863?—Yes, 4,000 less than 1863.

52,037. Do you know whether the condition of the fishermen has been improving or otherwise in Loch Fyne, in the course of your experience; are they improving in their personal circumstances?—They complain very much in Ardrishaig of the want of food sometimes.

52,038. (*Mr. Lefevre.*) How long have you been here on the station?—I only come here for 10 weeks in the summer time, and I have done that for the last 10 years.

52,039. Then you know nothing of what the fishing was previous to the enactment of the close time in this part?—No.

52,040. Do you think the number of boats belonging to Ardrishaig is increasing?—I think it is.

52,041. And at the other places along the Loch?—Yes, the boats are increasing.

52,042. Are they increasing at Inverary?—Yes.

52,043. And also is there a considerable number coming from other parts every season?—Yes, at the time the fishing is on, but those belonging to Loch Fyne have been increasing of late years.

52,044. How many of the 545 boats that are numbered this year belong to the Loch?—I cannot state that. They come from different places, Ayrshire, Campbeltown, and the Kyles of Bute.

52,045. You do not know how many come from a distance?—No. There are a number of Ballantrae boats at Tarbert at present.

52,046. Are the boats all of the two sizes we have heard of?—Yes, large smacks and small ones.

52,047. Are the large smacks half-decked boats?—Yes, with a small deck forward.

52,048. What is the length of the keel?—From 25 to 30 feet; some of them are larger.

52,049. Do any boats from a distance come here of a larger size?—They do from Campbeltown.

52,050. What is the size of those boats?—From 20 to 25 feet keel.

52,051. But are there any of 20 tons?—No, there are none of that size. They are only of eight or ten tons.

The witness withdrew.

Lieut. H. M. Dyer, R.N.

Lieutenant HUGH M'NEILE DYER, R.N., called and examined.

52,052. (*Mr. Caird.*) You are in command of the "Jackal," which has been stationed here to look after this coast?—Yes. I am superintendent of the fisheries on the western coast from Cape Wrath to the Mull of Galloway, though I am chiefly in Loch Fyne.

52,053. How long have you held that office?—Since May 1863.

52,054. Then your observation has not gone back to the time when trawling was permitted to be carried on?—No, there has been no trawling since I have been here. I have captured one trawl net which has been illegally working.

52,055. Then trawling may be said to be practically suppressed?—Yes.

52,056. On all parts of the western coast?—Not on all parts of the west coast, but in Loch Fyne. Trawling is not illegal where the herring fishery is not being carried on, and trawling is carried on for other purposes besides the catching of herrings.

52,057. Is trawling prohibited for every purpose in Loch Fyne?—Yes, during the herring fishery.

52,058. But during the period of the close time is it not?—It is not illegal for other fish than herrings during the close time; the net may be used then.

52,059. Is it employed during the close time for other purposes?—About Campbeltown it is for catching saithe.

52,060. But not about here?—I think not.

52,061. Do they catch immature herrings with it at that time?—No; if it were employed for catching herrings it would be illegal, but it might be employed in catching other fish during the close time.

52,062. Have you had occasion to direct your attention to trawling and drift-net fishing?—I know nothing about trawling. I have not seen it carried on. I know nothing about it, except from hearsay.

52,063. You have no personal experience or knowledge which you can offer to us on the subject?—No.

52,064. Have there been any prosecutions for any breach of the law with regard to trawling since you have been here?—There have been two or three prosecutions since I have been here for breaches of the law.

52,065. For trawling?—Two for trawling, and one for having possession of trawled herrings.

52,066. What was the result of those prosecutions?—In one case, the net was condemned, that was the case of using a trawl net, and in the other case it was not condemned. In the case of the trawled herrings at Inverary the other day, the herrings were not condemned; it was considered that the case was not proved.

52,067. At what time was it alleged that these

people had trawled?—The net we took was in August last, the vessel was in November.

52,068. Where did you find the net?—In Buck Bay, opposite Tarbert.

52,069. Did you find it working?—Yes, in the water.

52,070. Had the people left it?—Yes, they had made off.

52,071. They fled?—We found the men close to it, but not having seen them in the act of trawling, there was no evidence against them.

52,072. Is it part of your instructions to examine the size of the mesh of the net, and to enforce the regulations in regard to it?—Yes.

52,073. An inch is the smallest mesh you allow?—Yes, we allow no mesh smaller than 36 to the yard along the line.

52,074. That is an inch mesh?—Yes.

52,075. Do you consider it part of your duty to make a careful inspection of the fishermen's nets?—Yes.

52,076. On all this coast?—Yes, certainly.

52,077. Do you find generally that there is no fault to be found with the fishermen upon that point?—That is generally the case among the Loch Fyne men, but in the Kyles of Bute, in November last, I had occasion to seize some nets, and I found some of them as small as 40 to the yard.

52,078. Is that of rare occurrence?—Yes. That was the first season I was there, but I have heard that they have been fishing with small mesh nets for a small class of fish which come into the Kyles of Bute in the winter time.

52,079. Is there any other regulation you have enforced with regard to the fisheries here?—We see to the numbering of the buoys, and nets, and sails.

52,080. Are regulations in those respects enforced?—Yes, except with regard to the buoys, the Board of Fisheries is not too strict upon that point, It is a very difficult thing to look after. But with regard to the sails they are particular.

52,081. (*Mr. Lefevre.*) Do the fishing boats carry lights?—They do not, but they ought to carry them.

52,082. Is there any regulation about it?—Nothing except the Board of Trade regulation.

52,083. Is there any local regulation?—That is a local regulation, but it is the Board of Trade which considers the fishermen liable for any damage which may be done in case of a collision. They generally show a "flare-up" light,—that is enough for them; but sometimes the men go to sleep in the course of a night.

52,084. Have there been any conflicts among the men?—No.

52,085. You spoke of nets being used at Campbeltown for trawling?—Yes.

52,086. What fish are they used for?—Cuddies, small saithe, and they trawl for mackerel.

52,087. Are they not used for herrings?—They are if they can find herrings.

52,088. Is it possible to prevent their being used for herrings?—Such is the extent of coast we have to look after, that it is very difficult to do so, unless we have information. In May last, I was going into Campbeltown, when I came upon some of the boats, trawling for herrings, but they made off, and sunk their nets.

52,089. Have you seen the nets you speak of used for catching other fish than cuddies?—No, only for cuddies.

52,090–1. Do you think the fishermen here have trawl nets?—I do not think they have. I think the Tarbert men occasionally have, or they put a centre to their nets; they put a barrel of nets on each side of a centre.

52,092. And use it as a trawl net?—As a trawl net, if they get a chance.

52,093. Should you consider it your duty to seize any trawl nets which you found here, whether you had reason to believe they had been used for herrings or not?—If they were used for herrings I should, but not if they were used for other fish than herrings.

52,094. If you found them in the possession of the fishermen here, would you seize them?—Yes.

52,095. Would you throw on the fishermen the onus of proving what they were used for?—Yes.

52,096. Have you that power under the Act of Parliament?—Yes.

52,097. With regard to the close time, have you also directions to look after the observance of that?—Yes, we have to enforce all the fishery laws.

52,098. If you saw any herrings during the close season caught on the coast, would you destroy them?—No; we should seize them, and take them into port.

52,099. Wherever they might be?—Yes.

52,100. And have you the power there also, under the Act, of throwing upon the possessors the onus of showing how they got them?—Yes.

25,101. Have there been many cases of prosecutions?—There have been two this year.

52,102. And have you reason to believe that the close time is observed?—I think it is, except in Kilbrannan Sound. They take herrings there for bait, to a small extent.

52,103. Have you considered it possible to allow the fishing of herrings for bait during the close season, and to prevent it for other purposes?—Yes.

52,104. Do you think it possible?—Yes, I think they ought to be allowed to take them for bait.

52,105. Do you think it possible to prevent them taking herrings for other purposes, if they are allowed to take them for bait?—Yes, if a limited number were allowed, but not if general permission were given.

52,106. Would you license a certain number?—Yes.

52,107. If they caught more than was sufficient for bait, what would be done with the rest?—If they were sold, they should be liable to seizure in the market, the onus of proof resting upon the fishermen.

52,108. What would you do with the herrings if there were a great take?—If only a limited number of nets were allowed to fish, there could not be a great number of herrings taken, and they might eat them if they were not required for bait.

52,109. Would you prevent them from being sold in the market?—I think not, but the present Act does prevent them.

52,110. I am supposing that there was permission given to take them for bait during the close time. In that case, if the fishermen caught more than was sufficient for the purposes of bait, what would you do with the residue?—I do not think they would catch very many during the close time, except in the month of January; and if there were only one boat or so at the station fishing, they would not catch more than they required for bait. If they did, it would only be a trifle.

52,111. Do you think the herrings are not found up in the Loch during the close time?—Not to any great extent, except in January.

52,112. But at Ballantrae?—There is a good quantity there.

52,113. You would not permit them to be taken there?—Yes, they want them there for bait more than anywhere else.

52,114. Could they not be taken in great quantities during the spawning season?—Yes, they might.

52,115. And if you licensed a certain number of boats, would they not take more than was necessary for bait?—Yes, they might.

52,116. What means would you have of preventing the thing from spreading further than that?—The only thing would be to prohibit them from being sold in the market, and the fishermen then would give them away. If they could not sell them, they would not be wasted.

52,117. The markets for the west coast are Greenock and Glasgow?—Yes.

52,118. Might they not say that they came from

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the east coast?—Yes, but the onus of proof would be upon the fishermen. We should make them prove where they got the herrings from. With regard to fishing in the day-time, there is no law here to prevent the nets from being shot in the day-time. The French Convention Act does not apply to this coast.

52,119. Is there no regulation as to the time of shooting the nets?—No, they can fish when they like. There is no Act applicable to this coast. The only regulation is contained in the Convention Act, which does not apply except where French vessels are fishing.

52,120. Where is your vessel stationed?—As ordered by the Fishery Board, but generally at Ardrishaig.

52,121. Does it go to the northern part of Scotland?—Yes, to the Stornoway fishing, and as far south as the Bay of Luce.

52,122. (*Mr. Caird.*) Do the boats to any extent shoot their nets before sunset?—Yes, in the winter time, they shoot them in the Kyles of Bute before sunset, and they leave them sometimes until the middle of the day. I have seen them haul them in the middle of the day.

52,123. Is that injurious to the fishing?—I think it is far better. They are very crowded in the Kyles of Bute. And they are constantly foul of one another, and it is better that they should wait until daylight.

52,124. Have they large takes of fish there?—There are large takes in December, when they are fishing in that way in the Kyles of Bute.

52,125. Then you do not hold it to be of importance whether the fishermen let their nets remain in the water or not?—No.

52,126. You do not hold that to be of much importance?—No, and in the upper Loch I have seen anchored nets left all day.

52,127. In the upper part of Loch Fyne?—Yes, above Furness.

52,128. (*Mr. Lefevre.*) Do you think if the close time were done away with north of the Mull of Cantire, it would be necessary to license the taking of bait south of that?—No, I think they would get bait enough then.

52,129. (*Mr. Caird.*) But there is a great objection in Stornoway to do away with the close time altogether?—Yes.

52,130. (*Mr. Lefevre.*) Do you know what number of boats it would be necessary to license?—It would depend on the place. For instance, about the Ballantrae banks they would want more than here. This place is not half fished in the winter time. There are eight or a dozen boats from Ardrishaig, and a few from Tarbert; that is all.

52,131. What number would it be necessary to license altogether on this coast?—Do you mean altogether inside the Firth of Clyde?

52,132. Yes.—I would give them a dozen or 15 boats.

52,133. (*Mr. Caird.*) If any facilities were given for obtaining bait, do you think it would lead to an increase in the number of boats employed in the white-fishing?—Yes, there has been great trouble in collecting mussel bait and other things for bait. I think it would lead to a great increase. I have found them in Stornoway catching herrings in the close time with a hook and line for bait, but that was a very troublesome process and was hardly worth their while.

52,134. I suppose your instructions are confined to the herring-fishing?—Yes.

52,135. You have no instructions with regard to any other white-fishing?—No, nothing but herring-fishing.

52,136. Is the officer who preceded you on the coast now?—He is away at Rothesay.

The witness withdrew.

W. M'Cullagh.

WILLIAM M'CULLAGH called and examined.

52,137. (*Mr. Caird.*) You are a seaman on board the "Jackal"?—Yes.

52,138. And you have been in the "Jackal" for the last four years?—Yes.

52,139. You were here at the time the trawl-fishing was allowed, and since it has been prohibited?—It never was allowed, that I know of.

52,140. Have you, during the time you have been on board the "Jackal," frequently made seizures of trawl nets?—Yes.

52,141. Were there many prosecutions that followed those seizures?—Yes.

52,142. Were the people fined?—Sometimes they were, and sometimes they got off.

52,143. Have you noticed, in the course of the four years during which you have been in the "Jackal," whether there have been any cases of collision between the drift-net fishermen and the trawl fishermen?—No.

52,144. Was there ever any row between them at all?—Never that I saw.

52,145. Have you seen the trawl nets fishing among the drift nets at all?—No.

52,146. Have you seen them being fished along the shore?—Yes.

52,147. Were they very successful in getting plenty of fish?—Sometimes I have seen them catch a good many.

52,148. Have you seen any small fish caught along with the large herrings in the trawl net?—Yes.

52,149. Very small herrings?—Yes.

52,150. What time of the year?—At the end of December.

52,151. Have you seen the trawl-net fishing in the month of August or July?—I can recollect December, but I cannot recollect August or any other particular month. I recollect taking a net with a good deal of fish in it in December.

52,152. Were many of those fish small fish?—Yes.

52,153. Small herrings?—Yes, and there were a good many large herrings too.

52,154. What was the size of the smallest?—About five inches.

52,155. Five inches long?—Yes.

52,156. Were they marketable fish?—I do not know.

52,157. Could they have been sold for consumption as food?—I do not know anything about the markets.

52,158. Would you have eaten them yourself?—Yes.

52,159. Have you ever noticed the quality of herrings caught with the trawl nets, as compared with the quality of those caught by the drift net?—Yes, I have noticed it. The drift-net fish have more scales on them than the other fish.

52,160. Have you had occasion to observe that very carefully?—I have bought drift-net fish and trawl-net fish also.

52,161. Have you used both of them yourself?—Yes.

52,162. Which do you find the best to eat?—I do not know. I do not know any difference.

52,163. You cannot make the least distinction?—No.

The witness withdrew.

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William Dawson called and examined.

52,164. (*Mr. Caird.*) Are you a drift-net fisherman or a trawler?—I have been both.

52,165. You have heard the evidence given by Bruce and the other trawl-net fishermen?—Yes.

52,166. Have you anything to add to that?—Not much.

52,167. Are there some points on which you differ from them?—Yes, a little.

52,168. You are a drift-net fisherman?—Yes.

52,169. And you were also a trawl-net fisherman?—Yes.

52,170. You were in the habit of using the trawl when you thought it most advantageous, and then taking to the drift nets at other times and during the same season?—Yes.

52,171. You fished with both alternately, as you found it suit you best?—Yes.

52,172. What remarks have you to make in addition to the evidence already received from the trawl-net fishermen?—I wish to say that the trawl net will take small herrings if it is obstructed by large fish, but not to any amount. I wish merely to state the truth.

52,173. (*Mr. Lefevre.*) You admit that the trawl net takes small fish, but only in cases where it is obstructed by large fish?—Yes.

52,174. (*Mr. Caird.*) Is there a large proportion at any time of small fish?—With the exception of one season, about five years ago, I never saw much. In that season they caught them down at Burnfield. They were mixed herrings. Some of them would run 600 to the barrel, and about an eighth part of them would be mere sile.

52,175. That was one particular season?—Yes.

52,176. How was it that that was different from the others?—I have not seen it except in that season—in the open season.

52,177. That is the only instance in which you have seen the trawl net destructive of small fish?—Yes. The net was obstructed by large fish, and the small fish could not go through the mesh.

52,178. As a rule, is a large proportion of the fish caught by the trawl net small fish unfit for the market?—No. It is just as you come across the shoal.

52,179. Is it the same in the take of the drift fishermen the same night?—Quite the same, if they work with a legal net.

52,180. If you have the legal size of mesh in your net, will it prevent immature fish from being taken?—Yes, because the net is a square net, and as it is drawn through the water it is open. If it was three-legged it would close, but being square and being drawn at each of the four points the meshes are held open.

52,181. Have you any opinion as to making January an open month?—Yes.

52,182. What do you think of it?—It is a great injury to us.

52,183. The want of having power to fish in January?—Yes.

52,184. Have you found good takes of fish in January?—Yes. The close time was established merely to crush the trawlers in the latter part of the year, when they go out of Loch Fyne. The Upper Loch fishermen made it a law to suit their own purposes.

52,185. Are there not as many fish taken in the Upper Loch in the latter part of the season?—No.

52,186. Are they found in greater abundance in the lower part of the Loch in January?—Yes, down this coast and from here to Tarbert.

52,187. (*Mr. Lefevre.*) Do you think, if the trawl net enclosed a shoal of small fish they would all go through?—Yes. It might take a basket full, but not more.

52,188. Would they not jam in the meshes, and the great bulk be taken?—No, because there is such a pressure on the net it takes six men to draw it on board the boat.

52,189. What distance from the shore do you shoot it?—Our ropes at both ends are about 120 fathoms long, but I have seen them as long as 160 fathoms. When we have them about 40 fathoms we have the best takes.

52,190. Have you ever shot the trawl-net in deeper water, and then enclosed the fish and dragged them on shore?—Yes; as soon as we shoot our nets in deep water we take them in, but in that case we only take a small quantity.

52,191. Did you tow the net with the fish inshore?—Yes, if we were taken in a breeze of wind, but if the ground was clean and the weather would permit, we could get all the fish out of the net.

52,192. When you have enclosed a shoal of fish in the trawl net in deep water how do you take the fish out?—We have things made like shovels, with nets attached to them, and we shovel them out of the net into the boat.

52,193. Are they like landing nets?—Yes, just similar.

52,194. Will any quantity of fish escape at the bottom of the net?—We shoot the net like a half moon.

52,195. I mean in deep water?—We make a circle and come with both ends to the one boat.

52,196. Then there is no net at the bottom of the circle?—No, nothing but the sole rope of the net.

52,197. So that the fish could escape at the bottom?—You can see the fish going down distinctly through the ropes. There is a black speck where you see them go down.

52,198. Do you lose a good many fish in that way?—They are alive and they go away. We only take a few. I have seen 20 barrels taken.

52,199. You lose a good many in that way?—Yes, we only take a few, but if we are fishing in shallow water, and we can get to the bottom, we do not lose many.

52,200. But in the way you have described, in deep water a considerable number do escape?—Yes, we only get just a small quantity.

52,201. Do they get killed by being jammed together?—No, they are all going down alive.

52,202. You never saw them go down dead?—No, they cannot be dead.

The witness withdrew.

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Lieutenant Hugh M'Neile Dyer, R.N., recalled and examined.

52,203. (*Mr. Lefevre.*) Is this the section of the Act of Parliament to which you refer as throwing the onus on the possessor: "And the proof that such "herrings or herring fry, when sold or disposed of, or "offered for sale or disposal, or found in the pos-"session of any person in the ports, harbours, villages, "or other localities adjoining the said west coasts of "Scotland, were not taken contrary to the provisions "of the recited Act, shall be upon the party selling "or disposing, or offering to sell or dispose, of such "herrings or herring fry, or in whose possession the "same may be found?"—Yes.

52,204. Is there any inspection of the markets at Greenock?—Yes, by the Fishery Inspector.

52,205. Is it possible to tell the herrings caught on this coast from the herrings caught in other parts?—No.

52,206. Then the Inspector has no means of ascertaining whether the fish were caught on this or on the east coast?—No, he has not.

52,207. Then if he saw herrings there, unless he had some suspicion he would not seize them?—No, he would not go there, but he can always make them show where they got them.

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52,208. Supposing that trawling were partly permitted in this Loch, would it be possible to carry out any regulation, such as a limitation to within a certain distance from the shore?—No, I do not think you would get the two things to go on together as a matter of police.

52,209. Do you mean in the narrow water?—Yes, or generally.

52,210. You think that no limitation with regard to space could be carried out?—Not in Loch Fyne.

52,211. Suppose you permitted trawling in the lower part of Loch Fyne, say from Otter Point downwards, would it be possible to prevent it in the other part?—No, it would not be possible; we have not the means. If once you allow them to trawl at all you could not seize the trawl fish in the market, and then the only means of putting it down would be to catch them in the Act of trawling. I think that would be a very difficult thing in such a large extent of water.

52,212. Have you the power of seizing trawl-caught fish in the market?—Yes.

52,213. And you would throw the onus upon the possessor?—Yes.

52,214. Are there means of telling trawl-caught fish?—No, we can only suspect that they are trawl-caught fish, and make them prove where they got them from.

52,215. Are there any cases in which fish have been seized in that way in the market?—Not in the market, but on board a vessel, in a cured state.

52,216. Then any regulation permitting trawling from the shore would be equally difficult to be carried out?—Yes, we could not suppress it. The only means would be by the fish being seizable in the market.

The witness withdrew.

J. Kennedy.

JOHN KENNEDY called and examined.

52,217. (*Mr. Caird.*) Are you an officer in the county police of this county?—Yes, just now.

52,218. Have you had for some years the charge of this district, in regard to any breach of the herring fishery laws?—Yes, for more than three years.

52,219. Have you had occasion lately to interfere with the fishermen for any breach of the law with regard to trawling?—Not since last year. I have not had a case for 12 months.

52,220. Has there been nothing of the kind?—Not for the last 12 months; not in my district and Tarbert.

52,221. Were you in Tarbert during the time it was permitted by the law to fish with the trawl?—No, I was not.

52,222. The law, then, as it at present stands, is strictly observed by the fishermen?—Yes, it is.

The witness withdrew.

J. M'Norton.

JOHN M'NORTON called and examined.

52,223. (*Mr. Caird.*) Are you a drift-net fisherman or a trawl fisherman?—I have been working at both.

52,224. Have you anything to add to the evidence which has already been given to us on the subject?—The only thing I wish to say is, that it has been stated over and over again that much damage has been done by trawling, but it never has been mentioned that there is much more damage done by a train of nets.

52,225. Do you mean the drift nets?—Yes.

52,226. In what way?—There is as much damage done in one week by the drift nets as ever was done by trawling since it commenced.

52,227. In what way?—In feeding stenlocks and dog-fish. I have known myself, when there was a heavy fleet of boats fishing with drift nets, that more damage was done to the herrings in one week than I have ever known to be done by trawling since it commenced.

52,228. In what way can you prove that?—It is quite easily proved, because we know that the herrings are being killed all night, and that the fishermen are picking them out of the nets as fast as they can.

52,229. Is this what you mean, that the drift nets catch the herrings in a form well suited for the fish to prey upon them?—Yes.

52,230. From that, do you mean us to understand that they encourage those voracious fish to come into the Loch?—Yes; the herrings are all eaten up by those fish; there are none of them lost.

52,231. Have you anything more to say?—About the close season I should like to say a word.

52,232. Well, what is it?—I do not see that there is any use in a close season at all, because it is quite evident that if the legal net is kept in force it makes a season for itself, because when the herrings are so small that the nets would not catch them, no person would go out to fish for them.

52,233. You are of opinion that if the legal one-inch mesh was enforced throughout the whole of the Loch, it would be a sufficient close time in itself against the catch of immature fish?—Yes, they cannot catch anything worth catching, unless they have a mesh less than that.

52,234. Is there any other remark you wish to make?—No, only that this place is very badly off for want of bait. I work with lines in the winter time. I have had 15*l.* or 20*l.* worth of lines lying idle for two or three years for want of bait.

52,235. Were you in the habit of using herring bait?—Yes.

52,236. Are you now prohibited from taking it?—Yes. It is only large lines that I use, and I cannot use anything but herring bait.

52,237. Are you now obliged to lay your lines by?—Yes, they have been idle for the last two years for want of bait.

52,238. Then the prohibition has acted injuriously upon the other white-fishing as well as upon the herrings?—Yes.

52,239. Is that to a large extent?—Yes. Many times we cannot get haddocks without herring bait; no other bait will take them, and I dare say that is the reason why so few of them have been found. I have seen the time when plenty of haddocks could be got here with herring bait, when they could not have been got with any other bait.

52,240. Is there any trammel-net fishing practised here by nets fastened to the bottom, in which cod and other kinds of fish are caught?—They tried them last winter. There was a man who tried four or five nets, and they caught a few fish, but it was very trifling.

52,241. The fishermen here have not gone into that business?—No, it does not do here as well as in the Kyles of Bute.

52,242. Has it been tried?—Yes.

52,243. You did not try it?—I did not, but a neighbour of mine did.

52,244. And it was found that it did not answer?—Yes. A few saithe were caught, and a few cod and eels, but only very few.

52,245. (*Mr. Lefevre.*) Do they catch hake here?—Yes.

52,246. Did they try for hake with the trammel net?—They got a few hake, but nothing worth while. They got them from above Otter Spit up to Minard.

52,247. Did you get herring bait from the eastward?—Yes, we tried them from the eastward. I believe I was the first person who tried them. And I got sprats too, but unless it is hard frosty weather, they are of no use at all.

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52,248. Why is that?—They are too old.

52,249. Are they stale before they come here?—Yes, they are quite useless before they can get here, and it is very troublesome to obtain them too, because we have to engage the merchants in Glasgow to send them here in small quantities, and after they buy them and send them here, perhaps there comes on a coarse day, and we cannot go out to work with them. Then, of course, the price we have paid is lost, and the bait is often useless when it does come.

52,250. Before then, was there much fishing in the close time?—Yes. The best fishing I have seen here was in the month of January, except the fishing we had two years ago in Loch Fyne.

52,251. Then, putting aside January, was there much fishing in February, March, April, and May?—No, I never saw any of the fishermen go to fish in those months, except for bait.

52,252. Only for bait?—Yes. It would not pay us to go for herrings for other purposes.

52,253. Are not the fish there?—They might sell them, but they would not get enough to pay them.

52,254. Are they not there in sufficient quantity?—No.

52,255. They are not in the Loch in sufficient quantity?—No, and they would not be caught, unless we could take them with narrow trawls.

52,256. Were trawls used in those months?—A chance one would be tried, if the fishermen believed the fish were in the bay. In that case, they might put a small trawl out to take a few of them for bait.

52,257. What condition were those in that were caught?—In March?

52,258. In February, March, April, and May?—They were very poor.

52,259. Were they spent fish?—They were all spent fish we got in March. Perhaps a few straggling fish might be spawning, but they were generally spent herrings. They do very well for bait.

52,260. If the close time were done away with, and the fish could be caught at Ballantrae during the close time, would you approve of that?—That is the only time they could get herrings at Ballantrae, and as long as they are good for food I do not see why they should not be caught.

52,261. Was there formerly a good deal of fishing at Ballantrae during what is now the close time?—Yes.

59,262. You have not observed that the establishment of a close time has been of benefit to the fishery?—Not a single bit. For a great many years trawling was going on, and I have seen large shoals of herrings in here, all the way from Arran until you come up to this place. We were never out of herrings at the very time the trawling was carried on most, and the Ballantrae fishing was going on too. It is quite easy, however, to conceive that all the fish taken out of the sea by man is but a mere trifle compared with what is killed otherwise.

52,263. But you have had one exceedingly good year in 1862, since trawling was done away with?—That is quite easily accounted for, because if there is a shoal of herrings coming in from the sea and it gets into the Loch, it is sure to kill well. I have seen them come in after this time of year. I have seen them coming in from the sea. They will probably come up as far as this length. Then they will stop for a month, and go away again.

52,264. You do not think that that extraordinary take of fish in 1862 was due to the prohibition of trawling or the observance of a close time?—Neither the one nor the other had any affect at all upon it. It was merely a shoal of herrings that came in from the sea.

52,265. While the observance of the close time has done you no good in regard to herrings, you think it may have done you injury as regards the catch of white fish?—Yes. It has been a great disadvantage to us, by preventing us from getting bait, and then in addition to that the herrings are very good for curing in January. We have got the best fish in January for curing purposes. A great many prefer the October herring, but I prefer those we used to get in January.

52,266. Are the white fish sent fresh to market in Glasgow?—The fish I work I generally send to Liverpool and London.

52,267. Are they sent away fresh?—Yes.

The witness withdrew, and the inquiry was adjourned until the 23rd of September, at Inverary.

Inverary, Argyleshire, Friday, 23rd September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

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PATRICK FORBES called and examined.

52,268. (*Mr. Caird.*) You are a proprietor in this district, Mr. Forbes?—Yes, and a commissioner of supply and a justice of the peace for the county.

52,269. Have you been long acquainted with the state of the fishing in Loch Fyne?—I am now 65 years of age and I have been backwards and forwards among the fisheries all my life.

52,270. Can you give us any information in regard to the fisheries in Loch Fyne other than the herring fishery?—I am a little acquainted with the white-fishing here and the salmon-fishing, but I cannot say that I can give you any information upon them. I have never had my attention much directed to the matter. I did not know that your Inquiry would have anything to do with it.

52,271. This is an Inquiry which is not specially directed to the herring-fishing either in Loch Fyne or elsewhere. It is an Inquiry into the sea fisheries of the United Kingdom, and it includes all fish except salmon; so that our Inquiry has a much greater character and scope than is generally imagined?—Do you exclude salmon from your Inquiry?

52,272. Yes, salmon is not within the scope of our Inquiry at all. Can you tell us anything about the white-fishing?—With regard to the white-fishing I know that it has decreased of late years very considerably.

52,273. Can you tell us what kinds of white fish are caught in Loch Fyne?—There are haddock, cod, and whiting.

52,274. Are there any flat-fish caught in Loch Fyne?—Yes, lythe and turbot, halibut and flounders.

52,275. Any soles?—Yes, occasionally soles.

52,276. Do you say that the supply of white fish in the loch has of late years been on the decrease?—It has been of late years; I may say that within the last 20 years, or from 15 to 20 years, it has been greatly on the decrease.

52,277. The decrease has been considerable?—Yes.

52,278. Is there any one of those kinds of fish which you have named to us which has shown a more marked decrease than the others?—I cannot say that there is. I do not think, as far as my experience

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goes, that there is. Perhaps the flat-fish have decreased less than the other kinds.

52,279. Are they caught chiefly by the hook and line?—Yes, they are caught chiefly by the hook and line.

52,280. Is there any beam-trawling for white-fish carried on here?—No, not in the part of the loch I am acquainted with.

52,281. What part of the loch are you acquainted with?—From this place down to Otter Ferry.

52,282. What you are stating to us now refers to the upper end of Loch Fyne to the north of Otter Ferry?—Yes, to the upper end of the loch.

52,283. To the narrower waters of the loch?—Yes, for a distance of about 25 miles.

52,284. Have you heard any reason given by any experienced fisherman for the falling off which you have mentioned in regard to any of the different kinds of white fish?—Yes, I have heard trawling given as a reason.

52,285. You mean herring-trawling?—Yes.

52,286. Not beam-trawling?—No.

52,287. Did you ever hear the fishermen mention in what way the herring-trawling is injurious to the white fish?—It is carried on across the spawning beds and it destroys the fish there.

52,288. Do you mean that it destroys the spawning beds of the other white fish?—Yes.

52,289. Have you any personal knowledge upon that point?—No, except to this extent, that we cannot get white fish.

52,290. I understood you to tell us that you have paid a good deal of attention to the subject of herring-fishing in Loch Fyne?—Yes.

52,291. Can you give us any information as to the gradual progress of herring-fishing here, and the introduction of trawl-fishing and its effects?—Yes.

52,292. Will you be good enough to do so?—For a great many years before trawling commenced we used to have sometimes a year or so in which there would be a failure in the fishing for herrings; but, generally speaking, we had a very good fishing in Loch Fyne.

52,293. Was that altogether previous to the introduction of the trawl-fishing for herrings?—Yes, it was previous to trawling.

52,294. Do you remember when the trawl-net was first introduced as a mode of fishing for herrings?—It was introduced in the lower part of the loch I believe. It has been very little practised here.

52,295. Has it been very little practised here at any time?—Yes, at any time. There were only two or three years during which it was practised up here.

52,296. By whom was it practised?—By the men from the lower loch.

52,297. Did the fishermen from the lower loch come up here?—Yes.

52,298. Are there no fishermen who practised trawling in the upper part of the loch?—No, and trawl-fishing is a mode of fishing which is not now sanctioned.

52,299. But when trawl-fishing was permitted in the loch, was it practised in the upper part of the loch?—I believe there were none in the upper part of the loch who practised trawl-fishing for herrings.

52,300. You say that at no time has trawl-fishing been prevalent in the upper part of the loch?—It has not been very prevalent, but for two or three years the trawlers from the lower loch did find their way up here when the herrings came up. They followed the herrings up here.

52,301. The trawlers from the lower part of the loch followed the herrings into the upper part of the loch?—Yes.

52,302. Did that practice continue for several years in succession?—It continued for a few years.

52,303. For how many years?—I think for three or four years they came in from the lower part of the loch to trawl in the upper part of the loch.

52,304. Can you refer to any particular year in which that was the case?—I think it would be from about four years backward, or from about three years ago backward.

52,305. (*Mr. Lefevre.*) That would be from 1857 to 1860?—It would be from about 1857 to 1861 I think.

52,306. (*Mr. Caird.*) Were they trawling in the upper part of the loch in 1861?—I may mention that such a difference arose between the upper loch fishermen here and the fishermen from the lower loch, that at last it became dangerous for the lower loch fishermen to come up here for the purpose of trawling. In the year 1861 I think there was very likely (if the gentlemen of the country had not interfered and got the magistrates to interfere) to have been a fight between the fishermen in the lower boats and the fishermen in the boats belonging to the upper loch. They met at Otter Ferry. They were within a few 100 yards of each other, and there were, perhaps, 100 boats on each side.

52,307. Do you remember when it was that trawling first began in the lower part of Loch Fyne?—No, I am not so well acquainted with the fishing in the lower part of Loch Fyne; but I believe that it came on gradually.

52,308. Can you trace any falling off in the take of herrings here to the introduction of the system of trawling in the upper part of Loch Fyne?—It is very difficult to trace. I think it is the increase of fishing both in the lower waters and in the upper part of the loch that has been the cause of the increase in the take of herrings.

52,309. You are aware of course that there was a very good fishing in 1862?—I am quite aware of that.

52,310. That was after trawling had been put a stop to by Act of Parliament?—Yes.

52,311. And that Act had been very rigidly observed?—Yes.

52,312. Was it considered that it was in any way in consequence of that enactment on the part of Parliament and of its being rigidly enforced that the fishing improved in 1862?—That is the opinion of every person who is connected with the fishing in the upper part of the waters of Loch Fyne.

52,313. I believe that the year 1862 was an unusually productive year?—It was a very productive year.

52,314. But since then, in 1863, and in the present year, that great increase of productiveness has not been continued; is that so?—I may mention that it was in September 1862 before the real fishing commenced in Loch Fyne. In the upper part of the loch the great fishing was in the month of September. It was about this month when it commenced last year, and the fishing was not so good as it was in 1862, but taking it altogether it was a good year.

52,315. Was the fishing in the upper part of the loch better last year than it was in some of the years prior to 1862 in which trawl-fishing was permitted?—Yes, it was a very great deal better.

52,316. In the upper part of the loch?—Yes.

52,317. According to the Fishery returns which I have here the total yield does not appear to have been greater for the whole of the loch than it was before 1862?—Those returns are for the whole of the year?

52,318. Yes.—I cannot speak of the quantity of herrings taken in the lower part of the loch. I believe that by trawling they have killed an immense quantity of herrings, and perhaps that may account for the returns being favourable for the whole of the loch during the trawling years.

52,319. What are the specific objections you entertain to the system of trawling for herrings as showing that it is injurious to the fishing?—That is a difficult question to answer.

52,320. Are there no specific objections which you can state to us?—Well, there is one.

52,321. What is it?—It is the pollution of the water by the dead fish.

52,322. In what way does that arise?—The men who are trawling for herrings take such an immense quantity of fish in their trawls and such a great body of fish that the weight becomes so excessive that it

breaks the trawls; the result of that is that immense quantities of the fish are left dead in the water. I have heard the fishermen say that frequently as many fish as are taken ashore are left dead in the water in consequence of the enormous quantity taken being too much for the strength of the net.

52,323. Have you ever heard of that occurring in the upper waters of Loch Fyne?—Trawling was never as extensively practised here as in the lower waters of Loch Fyne. When it was practised here it was done more by stealth than anything else because the objections entertained to it here were so very strong.

52,324. I quite understand that, but you say that one of your principal objections to fishing for herrings by the mode called trawling is that the water is polluted by the dead fish?—Yes, that is so.

52,325. Then I ask you if you are aware of any instance of that having occurred in the upper waters of Loch Fyne to which your attention has been directed?—The place I have referred to at Otter Ferry is there carried to so narrow a point that that part of Loch Fyne is reduced to a quarter of a mile or thereabouts. I have been told by the fishermen that when the trawling was carried on in the lower waters of the loch the shoals of herrings scarcely ever came up here at all. They seem to have been stopped down there by some means or other and they did not come up as they have done in other years. Of course I can understand that if the waters were polluted by the presence in it of a large body of dead herrings the shoals of fish would not come up, and I believe that Otter Point was always a favourite place for the trawlers. They would carry their nets right across the loch there. It is a long point formed of stone and gravel which stretches across Loch Fyne, and they carried their nets on shore easily with large loads of herrings in them, but of course a large quantity of dead herrings would be left on the shores alongside. I have a strong opinion that the fish when they came up there and smelt their own dead found the stench of their own dead sufficient to frighten them away and prevent them from going further up.

52,326. That seems more a matter of opinion than a matter of fact which you have yourself observed?—Yes, that is so.

52,327. Can you give us an instance of the waters of the upper part of the loch having been polluted by dead fish in the way you have mentioned so as to injure the fishing?—My objection is to trawling in any part of Loch Fyne, because if they trawl at Otter Ferry and leave the dead fish in the water to be encountered by the shoals of herrings coming up the loch it would frighten them and prevent them from coming up.

52,328. What is your next objection?—If you will allow me I should like to make a further statement in reference to the dead fish left in the loch.

52,329. What is it?—We all know that there are some people who have an idea that smell cannot be conveyed through the water; now that in my opinion is an entire mistake, and for this reason: if you throw a piece of carrion into the water at the end of the quay or anywhere else five minutes will not elapse before you will have hundreds of eels, dog-fish, and crabs after it. That, I think, is a proof that water has the power of conveying a smell.

52,330. May it not be an attraction of some other kind?—It seems to be a very great attraction.

52,331. What is your next objection?—My next objection is that the system of trawling has a tendency to break the shoal of fish.

52,332. In what way do you think the system of trawling operates in breaking the shoal of fish?—The trawlers go with half a dozen trawl-nets into the body of the fish and they take them bodily.

52,333. That objection would apply chiefly to the trawlers who fished in the open waters of the loch and not in bays on the margin of the loch?—I think that part of the body of the fish may be on the side of the loch as well as in the centre of the loch.

52,334. Have you ever observed how the shoal of fish enter the loch?—No, but I think that would be a matter well worthy of inquiry, as a question of natural history. I think they must be under some government or other in the same way as the bees who have their queen and drones.

52,335. What do the more observant of the fishermen think as to the progress of the shoals of herring coming in from the deep sea into this loch? Is it generally supposed that the greater proportion of the herrings which are found in Loch Fyne come in from the outer sea?—It is generally supposed, and I think there is very little doubt of the truth of it, that the herrings we get in the loch are the herrings which have been spawned up here.

52,336. You think they return again?—They come back just the same as salmon which go down to the sea and come back again to their own rivers. I believe that the herrings which are spawned in Loch Fyne will find their way back again.

52,337. Is it the opinion of the fishermen that all the full-grown herrings fit for the market do come in from the open sea?—I believe it is the opinion of the fishermen that they do come in from the open sea; that they go away and come back again.

52,338. Your argument is that they are met by the trawl fishermen at the entrance to the lower part of the loch, and that the shoals of fish are dispersed by their operations?—Yes.

52,339. Can that be clearly proved in any way?—I may mention that our larger herrings are not caught by the drift-net. The very large herrings which have been taken here have been taken in the trawl-net.

52,340. There is no harm in catching large herrings is there?—The fishermen here have an idea that those large herrings are the leaders of the fish, like the queen bee in a hive of bees. They say that they are the directors of the herrings, and they say that if you take away the large herrings you will deprive the shoal of their guides.

52,341. I understand you to say that the large herrings are not caught by the drift-nets?—No, they are too large for the drift-nets. The mesh of the drift-nets does not catch them.

52,342. Does the use of the drift-nets not operate in dispersing the shoal?—No, only in a limited degree. They do operate in a certain degree in frightening the herrings a little. When there is a fleet of 600 vessels fishing up here of course it is only natural for them to find that they disturb the herrings, and that the herrings should move down for a certain time. They do move down for a few days perhaps, but the fishermen follow them and they come back again.

52,343. That is the case when they are fishing with the drift-nets?—Yes.

52,344. Then you do not ascribe solely to the trawl-net the power of disturbing or breaking the shoal; you say that the drift-net also has that effect?—I say that it disturbs the herrings a little, but the trawl destroys the shoal.

52,345. Do you know what was the relative number of drift-net boats and trawl-boats fishing in Loch Fyne at the time trawling was permitted in the loch?—I never had my attention drawn particularly to that, but the trawl-boats were from a very limited quarter. They were chiefly from the property of Mr. Campbell, of Stonefield, who is the great supporter of trawling in the county.

52,346. That is in the neighbourhood of Tarbert?—Yes.

52,347. What other objection have you to trawling; you have now stated two?—I will give another immediately. You asked me just now about drift-net fishing having the same effect as trawling. Now I may mention that in drift-net fishing the nets are lying on the water, and it is only down to a certain depth that a shoal of herrings comes against them. A certain number get their gills in the meshes and are caught; others strike against the cord, and if they don't go into the holes they escape. There are others

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above and below; so that in drift-net fishing they are not taken in a body, but it is only comparatively a few that are caught. The drift-nets do not break the body of the shoal of fish in the same way as trawling.

52,348. What is the depth of a drift-net?—From nine to 12 fathoms I think.

52,349. As deep as that?—I am told by one of the fishermen that they are from eight to ten fathoms.

52,350. That is the depth of the net from the top of the rope to the bottom?—Yes, ten fathoms.

52,351. What is the depth of the trawl-net?—Somewhere about the same. I have not been a fisherman myself, and I do not know the precise depth.

52,352. What other objections have you to urge against trawl-fishing?—I have another objection.

52,353. What is it?—That the herrings caught in the trawl-net will not cure.

52,354. Do you speak from any personal knowledge on that point?—I speak so far from personal knowledge that at a time when we could not get drift-net herrings up here we were obliged to take them from the lower loch, where they were trawl-killed herrings, and they were uneatable.

52,355. Are you aware that the curers were in the habit of buying them for the purpose of curing?—I got the herrings I am speaking of from the curers. I will explain how I think this arises.

52,356. How does it arise?—I think it arises from compressing an immense body of fish together. When they are compressed together in the first instance they are living, but they crush one another to death by their weight. The blood is thus driven back to the bone, to the centre of the fish.

52,357. Did you ever look at the fish caught by the two methods in order to ascertain if that objection is well founded?—I have never seen fresh trawled herrings. I have only seen them brought up from the lower waters of Loch Fyne salted. For the last 40 years I have been in the habit of sending small casks of herrings to Edinburgh and the country. Until trawling commenced I always got good herrings and I never heard a complaint, but after trawling did commence when I got trawled herrings my friends told me that they were rotten.

52,358. We shall probably be able to obtain evidence as to the curing better from some practical curer?—Certainly; but at the same time you ought to be aware that the fish buyers are curers sometimes also, and their great desire is to get fresh herrings at as cheap a rate as possible.

52,359. Can you state any other objection that is entertained by the fishermen here to the system of trawling?—There is another objection and it is this, that the fishermen have been in the habit ever since trawling commenced of getting their nets and buoys stolen. Great damage has been done among their property.

52,360. That must be when they went to the lower part of the loch, as the trawlers were not in the habit of coming up to the upper part?—For three or four years they were in the habit of coming here, and there was a great deal of damage done in that way up here.

52,361. Is there anything else?—There is the destruction of the spawn beds.

52,362. Of the spawn beds of the herring?—Yes.

52,363. Did you ever observe that yourself? Did you ever see a trawl-net employed which did actually drag up spawn or destroy spawn?—I have never seen it myself.

52,364. Has it ever been seen in this part of the loch?—I cannot tell. Some of the fishermen will be better able to speak upon that point than I can.

52,365. Is there any other point?—No, I think there is no other point. But with regard to the spawning of herrings up at the head of the loch I may say that there is a great deal of very shallow water there, and if trawl-nets were allowed to be used there they would necessarily be very destructive to the spawn.

52,366. Is it quite certain that it is a spawning ground at the head of the loch?—Yes, I think so.

52,367. It is well ascertained?—Yes, it is quite certain that they go up there to spawn, and I should just like to mention that if trawling is legalized in the upper part of Loch Fyne, or in any part of Loch Fyne, my opinion is that in three or four years there will not be a Loch Fyne herring to be got.

52,368. You think that the herrings will be destroyed if trawling is allowed in the upper part of Loch Fyne?—Yes, or in any other part.

52,369. Your reason for coming to that conclusion is that you think the ground in the upper part of Loch Fyne is a spawning bed, and that the spawn would be destroyed by trawling?—My reason for saying that is this; that if 600 boats are legalized, and can trawl all over the loch, they will commence trawling in the middle of the loch; they will then take their trawls from the middle to both sides of the loch, and it is impossible to see how a herring can escape them.

52,370. You think that the herrings in the loch would be more rapidly caught by the trawlers than by the drift-net fishermen?—In the course of one or two years I think you would see an end to the herrings altogether.

52,371. You have not stated to us what has been stated to us by others as an objection to trawling, namely, that the trawlers take immature and half-grown herrings; are you aware of that?—That I can easily understand. In all families there are both young and old, but the trawl-net takes everything while the drift-net only takes herrings of a certain size. Small herrings would pass through the mesh of the drift-net.

52,372. Are these all the objections which you entertain against trawling?—They are all the objections which occur to me at present.

52,373. Are there any other points which you desire to bring before us with regard to the state of the herring-fishing in Loch Fyne?—I think it would be a very hard thing upon a very industrious class here, who gain their livelihood by fishing, if they were to be deprived by any act of the Legislature of the fishing which has hitherto formed a great source of the income of these people. There are also many other ways by which people not personally connected with fishing itself gain a livelihood out of it. When there is anything like a tolerable fishing here there are perhaps from 20 to 40 boxes being carried away by means of carts to Loch Goil; they are handsomely paid for, and as they are only poor people who are engaged in carrying the boxes they make a very good thing out of it; but if trawling is permitted I think that in the course of two or three years the whole of that trade will be put an end to.

52,374. Are the drift-net fishermen exclusively fishermen or have they other occupations which they follow at those seasons of the year when the herring-fishing is not permitted?—With a few exceptions they are exclusively fishermen. There are a few who have little crofts; but with a very few exceptions their whole dependance is on the herrings.

52,375. Do they follow white-fishing other than the herrings?—Very few of them.

52,376. What do they do during the close season?—They have small houses with potato ground attached and they work that. They have their house and enough grass perhaps for a cow, and as much ground as will enable them to plant what the cow's manure will produce. They have each a little garden and they plant that, and that is what occupies them during the close season. I believe there is not much objection to a month being added to the open season.

52,377. With regard to the close-time, will you tell us what the general opinion of the fishermen in the upper part of Loch Fyne is as to the continuance of the close-time in the month of January?—My attention has only been drawn to the subject within the last few days, and the few fishermen I have spoken to on the matter seem to have little objection to it.

52,378. The question is not as to their having objec-

tion to it, but is there any anxiety to have the month of January as an open month?—There is not much anxiety about it because it seems that the herrings frequent the foot of the loch and the Kyles of Bute towards the mouth of January.

52,379. In December and the begining of January do they begin to leave the loch?—Yes, the upper part of the loch.

52,380. And work down towards the sea?—Yes.

52,381. Then in this part there is not very much anxiety with regard to making January an open month for the fishing?—I do not think there is.

52,382. Are the fish caught in January in good condition?—They are in good condition, but they are much smaller fish; they are not so fat; they are poor fish.

52,383. But are they good enough to be made an article of wholesome food?—Yes, quite. They are not foul at that time.

52,384. Are the numbers of that class of fishermen to whom you have just referred, and who occupy themselves during the close-time as you have described, on the increase or decrease in the upper part of Loch Fyne?—I think there has been very little change in the number during the last 20 or 30 years.

52,385. Do their sons follow the same business?—Yes, a great number of them.

52,386. In their personal circumstances are they improving or deteriorating?—They are improving, and I am glad to say that the price of the herrings is increasing. We find now that the easiness of access to Glasgow enables them to get much better prices for the herrings.

52,387. I suppose that the price depends in a very great measure on the supply?—No doubt it does.

52,388. In the year 1862, when there was so great a take in Loch Fyne, I suppose the price was much lower than it has been in other years, when there was a less favourable fishing?—There is no doubt of that. In 1862 also they ran out of salt; they were not prepared for such a fishing in the month of September. They wanted salt and the herrings necessarily came down in price.

52,389. Both the trawl and drift-net fishermen work at night?—They both work at night.

52,390. (*Mr. Lefevre.*) Do you know what the number of boats belonging to Inverary is?—No; I do not, but when you take in Inverary you may also take in the sides of the loch. Every small cottage you see is mostly a fisherman's house.

52,391. Has the number of boats increased during the last 20 years?—I don't think that the boats have decreased; I think they have rather increased in my neighbourhood; I know two or three families close to me where the father has a boat and the sons have got boats also.

52,392. Has there been an increase during the last three or four years?—I think there has been an increase within the last three or four years. I can myself speak of two families in which each has got an additional boat of late years.

52,393. Do you think there has been a general increase or not?—Judging from that I should think there would be. The fishing has been good since 1861.

52,394. Have they had a good season here so far this year?—I believe they have had a tolerable season. About 10 days ago I saw large hauls of fish got; I believe the average was thought to be 10 or 12 maze, and they were selling at 4*s.* a hundred.

52,395. Have they had a better fishing in the upper part of the loch than in the lower part this year?—I cannot speak for the lower part of the loch except that I understand they are fishing now at the bottom of the loch.

52,396. Have the boats from Tarbert been up at the top of the loch this year?—There are a good many Ardrishaig and Tarbert boats here this year.

52,397. Have you been out yourself trawling?—No.

52,398. Did you ever go down in order to observe the dead fish you have been speaking of as lying at Otter Point?—No.

52,399. Then you do not know how often it occurred, or what the number of dead fish left there was?—No, but I believe it is an admitted fact that there have been an immense number of dead fish left there.

52,400. But you never went there when you heard complaints made to ascertain from a personal inspection what the facts were?—No, it would be rather difficult to get at the bottom of Loch Fyne. I may mention it as a circumstance which I think is favourable to the fishermen of Loch Fyne that some of the fishermen of the lower loch, I have been told, have stated that they would fish with drift-nets if they had proper nets, and the fishermen of the upper loch have offered to subscribe money to buy them.

52,401. Are they not supplied with nets good enough or large enough?—The nets they have are not proper sized nets; they are not the legal net.

52,402. Do you mean the trawl-net?—Yes.

52,403. Are they not provided with the proper drift-nets?—Not the trawlers.

52,404. Then do they not fish at all?—The complaint is, that they have been deprived of fishing by the Act of Parliament, because they have not the nets which would enable them to fish, and the poor fishermen of the upper part of the loch say that they are ready to subscribe and buy them the proper nets.

52,405. I presume there are some of them who have drift-nets?—Yes.

52,406. Have those who have drift-nets been as successful as the people up here?—Yes, they have been equally as successful.

52,407. For the last four years the fishermen in the lower loch have not been able to fish with trawl-nets?—No.

52,408. Then they have been obliged to fish with the drift-net?—Yes.

52,409. Therefore they have provided themselves with drift-nets and have been fishing?—There are a good number who say they have not been able to provide themselves and that is the complaint.

52,410. Do you think that trawling in the lower part of the loch was as detrimental as trawling in the upper part?—I think that if you strew the bottom of the loch with dead fish you prevent the fish from coming up.

52,411. Do you think that trawling in the lower loch would be as detrimental to the people of Inverary as trawling in the upper part?—I don't think it would be as detrimental, because I think that if it were legalized all over the loch, you would see the end of the herring fishery here in two or three years.

52,412. If it were permitted only in the lower part of Loch Fyne how long would it then last?—That is a matter of doubt; if my theory is correct, that the dead fish lying at the bottom of the loch frighten away the living fish, the result would be almost the same; and it is my firm belief that if you legalize it for the whole of the loch, you will put an end to the fishing. I can hardly say whether you would put an end to the fishing sooner by that means than if you only allow the trawling to be carried on in a part of the loch.

52,413. You are aware that trawling did go on for many years?—Yes.

52,414. And particularly in the lower loch?—Yes, I am quite aware of that; it commenced gradually and increased; it was not very much thought of at first; it was only when it became detrimental that the thing was taken notice of.

52,415. By detrimental do you mean that less fish were caught in the whole of the loch?—The fishermen all alleged that the trawling practised by the lower loch fishermen was the cause of the shoals of fish not coming up Loch Fyne as they used to do.

52,416. They did not say that the fish were not caught, but that they were not caught by them?—The fish were not caught in the upper part of Loch Fyne.

52,417. Do the fishermen from Inverary fish more in the upper part than in the lower part of the loch; do they often go down to the lower loch?—They are

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obliged to go down in the early part of the season before the herrings come up, it is only then that they go down there.

52,418. What portion of the season do they spend in the lower part of the loch, and how much in the upper part?—They spend part of the first of the season and a good deal of the latter end of the season lower down.

52,419. Is one half of the season spent in the lower part?—I think not quite half.

52,420. A third?—Yes, fully a third of the season is spent in the lower part of the loch by the fishermen from the upper part.

52,421. During the remainder of the season do the fishermen from the lower part come up here?—Generally speaking they do, but I understand they are getting fish all down to the foot of the loch just now.

52,422. Have you observed any improvement in the fishing for other fish than herring during the last four years?—I cannot say that I have.

52,423. When did you observe the decrease first take place?—It has been decreasing gradually I may say for 20 years; we first attributed it to the immense quantities of long-lines that were set down at the foot of the loch by the Greenock and Rothesay fishermen; we attributed it first to that cause, but whether that was right or wrong I cannot say.

52,424. Did you observe the decrease of the haddock or whiting at any particular time more than other fish?—No, I cannot say that I did.

52,425. How many men are there fishing from here with lines during the close-season?—There is a mode of fishing they have here with a small net.

52,426. With trammel-nets?—No, it is a small kind of net in which the white-fish are entangled; the fishermen catch a good many in that way; I have seen them take up dozens of very nice haddocks.

52,427. Do they not fish with lines here?—There are line fishermen.

52,428. How many?—I do not know.

52,429. Do you recollect how many there were 20 years ago?—No, but I do not think there has been much decrease.

52,430. Before the close-time was observed here, were the fishermen in the habit of fishing during the months now set apart as close-months?—No, the fishermen here generally ceased fishing I think almost always before Christmas.

52,431. Even before a close-time was enacted by law?—Yes, before a close-time was enacted.

52,432. Then do you approve of the observance of close-time?—Certainly.

52,433. Upon the ground that it protects the fish during the spawning time?—Yes, and it gives the fish quietness and peace for a certain time.

52,434. Do you think the herrings mostly spawn during those months?—I cannot tell exactly whether they spawn or not during those months. I daresay that the herrings are in a great measure out at sea in those months.

52,435. They are not in the loch?—Not in the upper part of the loch.

52,436. Have you observed any spent fish taken during what is called the open-season?—I have not seen many spent fish at all this year. I never saw fewer foul fish than I have this year.

52,437. Have you in other years observed any number?—The close-time has only been established three or four years; but since it has been established we have seen very few foul fish in comparison with what we used to see.

52,438. When did you see plenty of foul fish?—Twenty or 30 years ago we saw immense quantities of foul fish.

52,439. During what month of the year?—During this month. From the middle of August up to the middle of September.

52,440. For the last 20 years you have not observed many spent fish?—I have not observed many for the last four years.

52,441. Twenty years ago you observed great numbers?—Yes; for a period of a dozen years we considered that our fishing was destroyed here by the trawling carried on down in the loch and we had very little fishing up here at all.

52,442. (*Mr. Caird.*) Has there been any change in the opinion of the fishermen generally in regard to the question of trawling within the last two or three years in this part of the loch?—The only thing that has taken place, so far as I understand, is that the fishermen in the lower loch have come round to our opinion, that drift-net fishing is the best mode of fishing.

52,443. Are you sure that that is the case?—I do not say that the whole of them have; but a great number of them, such as the Ardrishaig and Loch Gilp fishermen have come to that conclusion, that the drift-net fishing is the best mode.

52,444. There has been no change of opinion in the upper part of the loch as to the disadvantages of trawling?—There has been no change of opinion in that respect; on the contrary I believe it is more confirmed. The fishermen have become more confirmed in opinion with regard to the injury done by trawling.

The witness withdrew.

J. Munro.

JOHN MUNRO called and examined.

52,445. (*Mr. Caird.*) Have you been for some years a fisherman in Loch Fyne?—Yes.

52,446. And you are well acquainted with the state of the fishing interest here?—Yes.

52,447. Have you ever been a fisherman of any other kind of white fish except herrings?—No.

52,448. You have been exclusively a herring fisherman?—Yes.

52,449. And a drift-net herring fisherman?—Yes.

52,450. Have you ever seen the trawl at work?—Yes, often.

52,451. Are you in the habit of fishing below Otter Point?—Yes.

52,452. Do you fish in any part of the loch where you find the herrings are likely to be taken?—Yes.

52,453. Do you always fish in the upper part when there are fish there?—Yes; we fish in any part where we expect the fish to be.

52,454. The season commences in the beginning of June?—Yes.

52,455. Have you found any difference as to one locality of the loch in the different months of the fishing season being more favourable than another?—I cannot say anything as to that. We just go to whatever place we think the fish are, and where the body of them are likely to be found.

52,456. Where do you fish when the fishing begins in June?—We fish then outside.

52,457. In the lower part of the loch?—Yes, between Tarbert and Campbeltown for a month or two.

52,458. In June and July?—Yes.

52,459. As the season goes on do the fish enter the loch?—Yes, as the year comes round.

52,460. In what month of the year do you generally find the best fishing in Loch Fyne?—In August or September, sooner or later.

52,461. Are the fish in the best condition then?—Yes, that is the best time for finding the fish in a good condition.

52,462. In what part of the loch do you generally find the largest hauls at that time of the year?—We generally get the largest hauls at the head of the loch; but there is a pretty good fishing all down the loch when there is a good body of fish. The heaviest hauls are taken, however, at the head of the loch in the shallow water.

52,463. Do the fishermen from the lower part of

the loch congregate upon the same ground at that time ?—Yes.

52,464. So that you often have a large number of boats fishing together ?—Yes, sometimes from 500 to 600 boats.

52,465. All of them fishing in a very small range of water ?—Yes, within a distance of three miles, or less than that at times.

52,466. Will there be as many as between 500 and 600 boats ?—Yes.

52,467. We understand the usual length of the drift of nets of a fishing boat is about 1,400 yards ?—Some are longer and some are shorter. The large boats have them longer than that, and the small boats shorter.

52,468. Will 1,400 yards be about the average for the whole ?—Taking the whole of them they will not average that length.

52,469. The average length will be less than that ?—Yes.

52,470. Then there must be a vast quantity of lines and nets stretched backwards and forwards in a limited space in the place where you expect to get a good fishing ?—Yes, they are very thick together.

52,471. Is it deep water where you fish ?—It is not very deep at the head of the loch, but it is deep down along here.

52,472. How deep will it be at the head of the loch when you get in such close quarters as you have mentioned ?—We get them in water only the depth of our nets sometimes, and sometimes in deeper water. We can all shoot our nets in the shallow water ; and as many as can go as far in upon the shallow ground as possible, in order to get the best shots, for it is believed that in the shallow water the fish kill better.

52,473. Are there more fish got in the shallow water ?—Yes.

52,474. Are the fish supposed to be lying at the bottom when you go out to set your nets ?—Yes, they are often at the bottom and we find them at the bottom. In some months of the year they are at the very bottom and we put our nets down to the bottom in order to take them.

52,475. Do you sink your nets ?—Yes.

52,476. How do you ascertain that they are at the bottom ?—We know by the appearance, and when we do not find them above we expect to find them below.

52,477. (*Mr. Lefevre.*) In what month is that the case ?—Generally in August and September.

52,478. (*Mr. Caird.*) You sink your nets then ?—Yes, and often before then.

52,479. What depth is the top rope of the net from the bottom of the water ?—We generally put out from 60 to 65 fathoms here. The top rope may be that distance from the surface.

52,480. Then an immense shoal of fish might swim between the top of your net and the surface of the water ?—Yes, but at times the fish lie at the bottom of the water and will not kill anywhere else.

52,481. From your practical knowledge and experience you know the depth you shoot in one night after another ?—Yes.

52,482. What is the least depth from the surface in which you sometimes shoot your nets ?—Sometimes as low as a foot.

52,483. That depends on the shallowness of the water in which you are ?—Partly. Sometimes the fish swim very high on the surface and at other times they are on the bottom. We put the string out as we think the fish swim. The fishermen have generally about two fathoms of string which is about 12 feet.

52,484. Upon the average you put out two fathoms of string ?—Yes.

52,485. But sometimes you put out more and sometimes less ?—Yes, but upon the average we work with about two fathoms.

52,486. Do you observe any rule among yourselves or is there any regulation enforced here as to the time at which you shall shoot your nets ?—Yes, there is a set time for shooting our nets.

52,487. What is that time ?—Half an hour after sunset.

52,488. Is the rule strictly observed ?—Not very strictly here. It was once but that has not been the case for the last few years.

52,489. Is it not a legal regulation of any kind ?—I suppose it is. At the time the Fishery cutter was here waiting upon the fishing that was the rule. They went out every night and fired a shot before the fishermen shot their nets.

52,490. Was it the rule as it was then enforced that you should not shoot your nets until half an hour after sunset or half an hour before ?—I believe an hour after.

52,491. You say that no such rule has been lately enforced among you ?—No.

52,492. Has it been observed as a matter of convenience among yourselves ?—Yes ; some keep it as carefully as when the Fishery cutter was here, but others do not attend as well to it.

52,493. Is there any hardship felt by the general body of fishermen in consequence of the want of such a regulation ?—Yes ; I think it would be a great improvement to the fishing if that regulation was kept well enforced.

52,494. To prevent shooting till after sunset ?—Yes; where there are a body of fishermen some become unruly and that leads to much harm being done.

52,495. What harm have you ever seen result from shooting your nets before sunset ?—We consider that it scares the fish and puts it more deep into the water.

52,496. It prevents them from rising in the water ?—Yes.

52,497. Do the fish in general not rise high towards the surface ?—Sometimes they rise high but it is very seldom in the daylight. In the evening and in the morning they are more ready to rise to the surface.

52,498. And during the night?—Sometimes through the night they rise ; perhaps at the rise of the moon. If the moon rises in the night the fish rise and play on the water, and at other times the same thing will occur at the setting of the moon or at the turning of the tide.

52,499. Would you consider it injurious to the fishing in Loch Fyne if the fishermen were allowed to shoot their nets during the daytime ?—Yes, I consider that that would be very injurious to the fishing.

52,500. Is it at all likely that they would be successful if they did so ?—No, it is not likely that they would be.

52,501. Are they at all desirous of having a change of that kind or not ?—No.

52,502. Have you noticed the large fish to which reference was made by the previous witness which he said are seldom caught by the drift-nets, and which lead the shoals ?—Yes, they are what we fishermen call ground keepers.

52,503. Have you observed whether these large fish come in at any particular season or whether they come at all seasons during the whole time the fishing is going on ?—They come before any other body of fish come in. We consider that they are the leaders of the fish.

52,504. The leaders of the fish at the commencement of the season ?—Yes.

52,505. But after the commencement of the season do not the shoals of fish continue to come into the loch ?—After a certain season of the year there are no fish coming in.

52,506. You told us that at the beginning of the season of the year you fish out in the outer loch and as far as Campbeltown ?—Yes.

52,507. Have you observed the progress of the fish towards the loch as they come in from the open sea ?—Yes.

52,508. Do the shoals always come from the westward ?—Yes, but there are times when we consider that they come from the south as well as from the west.

52,509. Down the Irish Channel ?—We expect to

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meet them coming down from Campbeltown by Ailsa Craig.

52,510. You think they come that way?—I am sure some of them come that way.

52,511. And some from the north?—Yes.

52,512. Do you expect them principally from the north and south?—Yes.

52,513. When do they first make their appearance coming either from the north or south?—Some of them sooner, some of them later. They do not come at the same time every year.

52,514. You do not begin to fish until the month of June?—No, there is seldom anything before that.

52,515. Do you then begin to observe the fish?—Yes.

52,516. Then do they hold a pretty regular course for Loch Fyne?—No, sometimes they make rapidly for the loch, but at other times their movement is slower and takes more time.

52,517. Do they come in in repeated shoals or in one great shoal at one time?—They come in shoals, perhaps in three or four different shoals throughout the year.

52,518. Throughout the year?—Yes, through the season of the fishing.

52,519. With some interval of time between?—Yes.

52,520. How long is the interval?—Sometimes more and sometimes less; sometimes a month and sometimes less; sometimes there is only one shoal that comes at all.

52,521. Will that be an unfavourable fishing here?—Sometimes there will be so large a body of fish in one shoal that there will be plenty for the whole of the loch.

52,522. For the whole seven months of the fishery?—Yes.

52,523. Does it remain in the loch during the whole fishing season?—Yes, only it goes backward and forward; it takes its course up and down the loch.

52,524. But it does not leave it?—It very seldom leaves the loch until the month of September.

52,525. Then is it found to leave it?—It sometimes leaves it early in the season.

52,526. In what direction does it go out?—It goes out in the same direction as it came in, but it may stop for a month or two at Tarbert or Loch Gilp.

52,527. Where do the fish spawn?—We consider that a good many of them spawn on the banks at the head of the loch.

52,528. During the fishing season?—Yes.

52,529. When they are in the loch?—Yes; there are some bays and points where we consider they spawn especially at the head of the loch.

52,530. Do you consider that the larger portion of the fish spawns in Loch Fyne?—No.

52,531. Where do they spawn?—The larger portion spawns at Ballantrae.

52,532. Do you suppose that that is constant?—No, we think that it is done away with now.

52,533. Is that in consequence of the fish being much fished in those beds in the spawning season?—Yes.

52,534. That has been put a stop to by the present state of the law?—Yes, but we suppose that the fish do not frequent those grounds for the purpose of spawning as they were scared off before.

52,535. Do you suppose that they go out to the open sea?—Yes, but we do not know where.

52,536. With regard to the spawning beds at Ballantrae, we have been given to understand that there has been no fishing on those beds since the late law was passed establishing a close-time. There is none of the fishing continued now I suppose?—No, it has been destroyed.

52,537. But you have had one large fishing in Loch Fyne since then?—Yes.

52,538. Then it would appear that whatever destruction may have taken place by the previous fishing on that bed the effects of it had not continued, inasmuch as you have had a successful fishing since?—We considered that most of the young fish were reared here for two or three years before the herring-fishing commenced. There was a large body of small fish here and they grew up until the year in which the great fishing took place. Occasionally we used to catch a few of them but they were of no size. We thought that most of the body of fish that was caught here were reared here.

52,539. Caught in 1862?—Yes.

52,540. There has been no trawling since then?—No.

52,541. Then there has been nothing done which would have prevented that large body from increasing?—No.

52,542. But still, you have not had such a good fishing since?—No, but sometimes the fishing is on the decline while at other times it is increasing for different reasons.

52,543. Do you suppose that it depends more on the weight of the shoals that come in from the open sea than upon any other circumstance?—Yes, I think a good fishing does depend upon that.

52,544. Have you any doubt upon that point?—No, I have not.

52,545. With regard to the question of the size of the mesh of your nets, are you pretty uniform in your drift-nets as to the size of the mesh?—Yes; we have them always above an inch.

52,546. You never have them below an inch mesh?—No, they would not do for us if they were below an inch mesh.

52,547. Does anybody here look after the nets to see that that is observed?—No, there is no one here that looks after that.

52,548. Is there any officer here whose business it is to inspect the nets and to look after such matters?—I suppose it is the duty of the Fishery officer to look after matters of that sort, but there is no one here who comes to look after the nets very often.

52,549. Is that a matter which is left very much to the fishermen to regulate for themselves?—Yes, but it is of no benefit to the fishermen to have their nets under an inch mesh.

52,550. Does that enable them to get a better class of fish?—Yes, it does.

52,551. Then has it had the effect here of inducing the fishermen to have their nets rather over an inch mesh than under?—Yes; they consider that if the nets are smaller or less than an inch in the mesh they are not as profitable to them.

52,552. Do they change their nets in different parts of the season?—Yes.

52,553. Do they use nets of the full size in a certain part of the season and the older nets of a smaller size which have become shrunken from use in another part of the season?—They use the old nets in the latter part of the season.

52,554. Why is that done?—Partly to keep their new nets in better order and partly because the fish are smaller at the time and the old nets are better adapted for such fish.

52,555. The old nets are better adapted for such small fish?—Yes.

52,556. What is the size of the mesh of the old nets?—There are none of them less than an inch in the mesh and all of them being of an inch mesh the fish they catch cannot be very small.

52,557. Of course you have had your attention directed to the question of trawling, which so much interests the fishermen of Loch Fyne?—Yes, I have.

52,558. You heard the evidence of the previous witness?—Yes.

52,559. Do you agree with his statement, that there has been very little trawling to speak of in the upper and narrow parts of Loch Fyne?—There has been very little trawling done here and especially by the people of this place. There have been people from other places who have been trawling here, but there have been very few belonging to this part of the loch.

52,560. Is the upper part of Loch Fyne less adapted for trawling than the lower part?—I think it might do as well for trawling as any other part.

52,561. Would trawling be as easily carried on here as in any other part of Loch Fyne?—Yes, especially at the head of the loch, but down along the coast the shores are very bold and the ground is very coarse, so that if they did not trawl in the middle of the loch or at some distance from the sides they could not take their trawls close to the shore.

52,562. Are you speaking now of the narrow parts of the loch?—No, I am speaking of the middle of the loch. There is very coarse ground all over the loch, except in some spots.

52,563. But, on the whole, both the upper and lower parts of the loch are equally well adapted for the use of the trawl?—No, they are not so well adapted for it. At the very end of the upper part of the loch they could shoot the trawl-net because the shores are smooth and they could take the trawls on shore.

52,564. That is very limited ground, is it not?—Yes, there is not very much of it.

52,565. And that is also the ground upon which the fish go to spawn, is it not?—Yes, it is, but down along the coast the shore is very steep and bold and coarse, so that the trawl-net fishermen could not take their trawls close to the shore as they would wish to do.

52,566. They trawl in shallow water if they can?—Yes.

52,567. Then we may take it, that in the upper part of Loch Fyne except in one place, and that being of a very limited extent, the ground is naturally not so well adapted for the use of the trawl-net as the lower part of the loch?—No; there is more ground upon which they can trawl in the lower part of the loch than in the upper part.

52,568. Have any of the fishermen of the upper part thought it of advantage to use the trawl-net during some portion of the season and to fish with the drift-net when they considered that that would be more advantageous?—No, they do not use the trawl-net here at all.

52,569. They do not think it would be of advantage to themselves to use the trawl-net?—They consider that the trawl would not do at all for them. The trawl is a thing which is drawn through the water with violence, and if there were any person fishing with a drift-net at the time a trawl-net was being used the trawl-net would necessarily destroy the fishing.

52,570. There can be no necessity in the case; the trawl-nets would not destroy the drift-nets if they kept clear of them?—Any net that is drawn through the water must come in contact with a net lying still on the top of the water.

52,571. The drift-nets are all marked with buoys?—Yes, they are.

52,572. Would not a trawl fisherman in trawling a circle-net keep clear of the drift-net fisherman?—No, I think it is impossible that he could keep clear of the drift-nets.

52,573. Would it not be possible for the trawl fisherman to go to such a position as would enable him to make a circle and keep clear of the drift-nets?—The drift-nets are so close to one another that if I were fishing with a trawl-net before I could draw the net out of the way I should be foul of some of the trains.

52,574. In the lower part of the loch where there are waters that are shallow and not so confined would you be able to find room between the drift-nets and the shore to make a circle with the trawl?—At times that could be done but not always.

52,575. But in the upper part of the loch you say that that is not so practicable?—No, it is not.

52,576. Then in the whole of Loch Fyne there is no part except the upper part of it that could not be fished with the trawl-net thoroughly, missing no portion all the way along?—The trawl might do well in the upper part of the loch, but the place is so narrow that the drift-nets could not work at the same time the trawling was being carried on.

52,577. The whole of the upper part can be fished with drift-nets?—Yes.

52,578. The trawlers would not fish as well in the upper part as in the lower part of the loch?—No.

52,579. On account of the drift-net fishermen?—Yes.

52,580. There is more room for them in the lower part of the loch?—Yes; there is no room for them at all in the upper part of the loch when the drift-nets are there. The drift-nets will take the whole breadth of the loch.

52,581. Then the first objection you have stated to us is that in the upper part of the loch it would be impossible to use the circle-net without fouling the drift-nets?—Yes, that is my opinion.

52,582. But that objection would not hold good in the lower part of the loch?—No.

52,583. What is your next objection?—We consider that the trawl-net and the drift-net will not work together in any place on this coast; we have tried it often and have got our nets destroyed so frequently that we consider that it will not do at all to have both kinds of fishing going on at the same time. We must do away either with the drift-net or the trawl-net; they cannot work in the same waters, the drift-net and the trawl.

52,584. I thought you stated in answer to a previous question that in the lower part of the loch it may be done, in the shallower bays to which the drift-net fishing does not extend?—Yes, it may be done at times.

52,585. Why do you say "at times?"—Sometimes the drift-net fishermen shoot their nets so close in-shore that it is impossible for the trawlers to trawl inside.

52,586. You mean that the drift fishermen do not leave the trawlers sufficient room to trawl?—Yes.

52,587. You go close in-shore?—Yes.

52,588. How close in-shore do you go?—We go so close to the shore that we get in water which is only the depth of our nets, and it would be impossible for the trawlers to trawl inside of us without injuring their nets or ours.

52,589. Not unless it was in a very shallow bay?—The nets they use are fully as deep or deeper than ours and they could not work inside of us. We have to shift our ground at the time that trawling is going on and we leave the ground to those who are engaged in trawling.

52,590. Did you do that if there was a good fishing at the time?—Yes, we were obliged to do so, even supposing we knew that there were plenty of fish to be got there.

52,591. Why did you do so?—Because we have suffered so much in consequence of the trawlers coming in contact with our drift-nets.

52,592. (*Mr. Lefevre.*) What interval ought there to be between the drift-nets and the shore so that it would be possible to work without getting foul of the drift-nets; what space of room ought there to be left?—I cannot say that, but I know that as a general rule they have from 200 to 400 yards in connexion with their trawls. They draw their trawl-nets over that length and sometimes more, and that is a long space.

52,593. From 200 to 400 yards?—Yes.

52,594. (*Mr. Caird.*) Will you tell us what your next objection is against trawling?—My next objection to trawling is that we consider it would not do for the great body of fishermen in different ways. Suppose, for instance, that they did a little trawling in the way of smuggling.

52,595. Do not talk of smuggling, but take it for granted that trawling was rendered legal.—If there were only a few men working at it at a time they might probably get a little by it, but if the great body of the fishermen were to take to trawling it would be impossible for them to work in such narrow waters as those of Loch Fyne.

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52,596. You think there would not be room for all the fishermen if the whole of them took to trawling ?—Yes.

52,597. Do you think that if trawling were legalized the great body of the fishermen would take to trawling ?—No, I do not think they would.

52,598. Why would they not ?—If they did they would do away with the whole of the fishing in the loch in the course of a very few weeks.

52,599. I thought you said that if trawling were legalized here the great body of the fishermen would take to it and it would become hurtful to the fisheries?—Yes.

52,600. But would the great body of the fishermen be likely to take to it ?—If they did I believe they would destroy the fishing in a very short time.

52,601. Then why would the great body of the fishermen be likely to take to that sort of fishing ?—I think they would see very plainly that it would not do. Their occupation would be done away with altogether.

52,602. I understood you to say just now that if trawling was legalized in Loch Fyne the great body of the fishermen who would then take to trawling would soon extinguish the fish ?—Not at all. I did not mean to say that. I never thought of anything of the kind.

52,603. Then I misunderstood you ?—Certainly. I never meant to say that. What I meant to say was, that if trawling were allowed, and the great body of the fishermen were to take to it the whole of the fishing in the loch would be done away with in the course of a very few months.

52,604. You think that would be the result if the great body of the fishermen began trawling ?—Yes.

52,605. But why would they begin a system of fishing which you yourself say the fishermen do not think is a good system ?—They would only do it if they were forced to do it.

52,606. If they were forced to do it ?—Yes.

52,607. Why should they be forced to do it ?—That is another thing. I do not think they ought to be forced to do it.

52,608. If trawling were permitted by the law that would not force them to do it ?—Trawling is not permitted by the law now.

52,609. But if it were permitted by the law they would not be forced to change their present mode of fishing ?—At present their only occupation and means of obtaining a livelihood is fishing. They must follow something, and it is only natural to think that they would try this mode of fishing more than anything else.

52,610. Do you mean that those who have already tried trawling would go back to it if they were permitted to do so by the law ?—Yes.

52,611. There have been several specific objections made to the use of the trawl upon which we should be glad to hear your opinion ?—I shall be glad to tell you anything I can.

52,612. There was a petition presented from the fishermen of Inverary against trawling ?—Yes.

52,613. In that petition there are several distinct objections urged against trawling ?—Yes.

52,614. The first of those objections is that herrings which are immature and half grown, in great numbers, and altogether unfit for human food, are taken by the trawl-net ?—Yes.

52,615. You know that to be the case ?—Yes.

52,616. Very small fish unfit for consumption have been taken ?—Yes.

52,617. Had that fact any reference to the time when there was no close-season ; were the small fish you speak of taken in those months which are now close-months and in which no fishing is allowed ?—Yes ; that was the time when the trawl was wrought.

52,618. And it was at that time that immature fish were taken ?—Yes.

52,619. But there being now a close-time strictly observed and no fishing being permitted during those months, would the same objection, in your opinion, still apply to the use of the trawl-net ?—Yes, I think it would.

52,620. Do you tell us that during the present time of fishing if the trawl-net were used it would take a great quantity of small and immature fish ?—Yes.

52,621. Would it take a great quantity of small herrings ?—Yes, it would take every kind of fish that came across it.

52,622. Have you ever seen it used yourself ?—Yes, I have.

52,623. Would it not depend upon the size of the mesh of the trawl-net whether it took small fish or not ?—Not a great deal. It does not depend on the size of the mesh at all because the fish when they are surrounded by the trawl-net are packed close together as if they were in a bag. They draw it through the water with all that quantity of fish in it and they are as ready to go across the mesh as to go headlong into it ; of course if they do that they equally stop up the mesh and prevent any other fish from passing through. They shut up the mesh entirely and the net carries the whole body of the fish before it.

52,624. Do you mean that the meshes of the net are not shut, but that they are blocked up by the quantity of herrings in the net ?—They are blocked up and shut together by the quantity of fish which are being taken through the water.

52,625. Have you noticed when the circle-net has been drawn in that quantities of small fish do escape ?—I never saw them escaping.

52,626. Have you ever seen them getting out ?—No, but I have often seen them taken ashore.

52,627. Was there a large quantity of small fish ?—Yes.

52,628. That was during the open season ?—Yes.

52,629. The second objection contained in the petition from the fishermen of Inverary is that the trawl-net breaks up and separates the shoals of herring and drives them from their usual spawning grounds. What is your opinion upon that point ?—It is still my opinion that it does so.

52,630. Does the trawl-net do that more than the drift-net ?—Yes, it is only natural to suppose that it does.

52,631. If they were in equal numbers fishing would the trawl-nets break up and separate the shoals of herring more than the drift-nets ?—Yes ; one trawl-net would hurt a body of fish more than a hundred drift-nets.

52,632. Can you give us any reason for that ?—The trawl-net takes whatever wing of the fish it gets around ; it takes the whole wing with it. It breaks up the main body of the fish, takes an entire wing, and frightens and scares away the rest. The shoal does not continue in the same course which it was making before its progress was intercepted by the trawl-net.

52,633. The shoal of herrings, in your opinion, does not continue on the same course ?—No, I think not.

52,634. Where do they go ?—They turn back.

52,635. If you have your nets set in a certain part of the loch, and there is a space between the end of your nets and the shore in which it is possible to use a trawl-net, suppose that the trawl-net in coming round takes the end of the shoal in the way you have mentioned and frightens away the rest of the shoal, would not the herrings be driven against your drift-nets ?—That was sometimes the case. Sometimes the fishermen who were working with drift-nets got a very good fishing while they were near those who were trawling.

52,636. Was that of frequent occurrence ?—No, it was very seldom ; sometimes they would come into the drift-nets after they were scared away by the trawl.

52,637. Where could they go if they did not find their way into your nets ?—They were frightened away and would turn back.

52,638. But you say that the drift-net boats would be in a thick close body all around the place?—Yes.

52,639. Then if you were in that thick close body all around the fishing grounds, where could the herrings go after they were scared away, as you state, from the trawl-nets?—I do not know.

52,640. Suppose there were 500 or 600 boats upon the ground where the herrings were; that would frequently be the case, would it not?—Yes.

52,641. And they would cover an average space of three or four miles in breadth?—Yes.

52,642. Then suppose that there was a little space left between the shore and the end of your drift-nets that could be fished by the trawlers with their circle-nets, if those circle nets had the effect of disturbing and breaking the shoals of fish, would not the result be that the herrings would be driven against your drift-nets?—No.

52,643. Then where would they go; I want to understand what would become of them?—The trawl-net would break the shoal, frighten the fish, and they would go away.

52,644. But where would they go?—They would go to the bottom.

52,645. In that way would they get away altogether?—Yes.

52,646. How?—The bottom is deep and they could swim across, our nets being above them. They would have different ways to go.

52,647. But still they would be dispersed outwards, towards the drift-nets?—Yes, whatever was left of them would be.

52,648. A considerable portion of them would be taken by the trawl-nets?—Yes.

52,649. Where would the rest of the body go?—They would go away to different places, of course I cannot give an account of where they would go, but whenever such a thing has occurred when trawling was allowed in the loch, we have always felt that the fishing was greatly behind afterwards.

52,650. Did you ever get a good fishing after the shoal of fish had been disturbed by a portion of it being taken in the trawl-nets?—No.

52,651. The third objection which appears to be made by the Inverary fishermen in their petition is that the trawl-nets ruin and destroy the spawning beds of all the fish by dragging up the spawn?—Yes.

52,652. Do you agree with that statement?—Yes.

52,653. Have you seen the trawl-nets used upon the beds on which the herrings spawn in the loch?—No, because we are not certain where the spawning beds are lying.

52,654. Then how do you know that the trawl-nets ruin the spawning beds, and drag up all the spawn?—We know that the least thing will spoil a spawning bed.

52,655. Did you ever see any spawn in the circle-nets?—No.

52,656. Then in point of fact, in assenting to this objection, you are merely expressing an opinion?—Yes, that is all.

52,657. There is nothing which you have experienced which enables you to say positively that it is the fact?—We know by the weight at the bottom of the trawl-nets that when they are being dragged over the spawning beds they must injure them.

52,658. You think that it must injure the spawning beds if it passes over them?—Yes.

52,659. There is another objection also stated in this petition, namely, that the trawl-nets injure the herrings taken by them so materially as to render them unfit for curing for exportation; do you agree with that assertion?—Yes, I quite agree with it.

52,660. You have seen them cured and sent away, have you not?—Yes, I have.

52,661. In what respect do herrings caught by the trawl-net and cured differ from those which are cured after having been caught in the drift-net?—They do not cure as well.

52,662. In what way are they inferior?—They have not the same taste.

52,663. Is there any other difference; can a trawled herring be distinguished from a drift-net herring by its appearance as soon as it is seen?—Yes.

52,664. What is the difference?—The cured herrings which have been caught in the trawl-net are always black about the bone; they salt well enough but they have not the same taste as the drift-net herrings.

52,665. Do they not bring the same price?—No, they do not.

52,666. Are they not taken by the curers as readily for the purposes of cure?—Not if they can get net-caught herrings.

52,667. What, on the average, has been the difference between the price of the herrings caught in the trawl-nets, and the drift-net herrings?—Between 5*s.* and 10*s.*; it is sometimes higher and sometimes lower.

52,668. Is it between 5*s.* and 10*s.* a maze?—No, per barrel.

52,669. There is a difference in the price of between 5*s.* and 10*s.* per barrel?—Yes, there is that difference in the herrings caught in the trawls as compared with those taken in the drift-nets.

52,670. (*Mr. Lefevre.*) Was there that difference when fish were brought in by the drift-net fishermen and by the trawl fishermen at the same time?—The difference was not so great when they were sold fresh.

52,671. What was the difference when the two descriptions of fish were brought in at the same time, and sold fresh?—There was not much difference in that case.

52,672. What was the difference?—Perhaps about 6*d.* a hundred.

52,673. (*Mr. Caird.*) Then the difference in the price of the trawled herring as compared with that of the drift herring is not so great when they are sold fresh?—No.

52,674. It would appear from that that the trawled herrings are better adapted for the fresh market?—Yes.

52,675. This memorial states that a very great number of the herrings killed by the trawl are entirely lost and left in the sea to rot?—Yes.

52,676. Have you seen that occur frequently?—Yes.

52,677. At the time when trawling was permitted and not when it was done as it were by stealth?—I have seen the trawls break, and they had then to leave the fish, and it could be seen in a large body in the deep. It has been left there in a large body, dead, and lying on the ground; I have seen that often.

52,678. (*Mr. Lefevre.*) That was when the trawl broke?—Yes.

52,679. (*Mr. Caird.*) That is not a matter of frequent occurrence?—Yes, I have seen it often, and I should mention that when I have seen it the fishermen have taken some barrels of herrings from the bulk at the bottom.

52,680. Were the fish dead?—Yes.

52,681. Were they lying dead at the time?—Yes.

52,682. How long ago is that?—I daresay it is eight or nine years since I saw the last of it.

52,683. Is the last time you saw such a thing eight or nine years ago?—Yes, that was the last time I saw it.

52,683*a*. Has there been much or anything of the kind in more recent years than eight or nine years ago?—I suppose it has been the case all along, only I did not see it at all times. I have not seen it since eight or nine years ago but I often saw it before.

52,684. How many instances have you seen in which that has happened?—I could mention four or five at least.

52,685. In the course of your experience?—Yes, or more.

52,686. (*Mr. Lefevre.*) Was the take of fish so very great that it was too much for the men?—Yes.

52,687. Was it too great a weight of fish?—Yes, and if there was a small part of their net that was weaker than another part, it would give way; they would go out through a very small hole, just as if it was a hole in a riddle.

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52,688. Then that great body of fish would escape?—Yes.

52,689. Would the great body escape alive?—No; when they are once caught in a trawl they are so close together that the one kills the other, and they are quite dead in a short time; they are useless after they have been all together in a small space.

52,690. Are they dead before they come into the boat?—Yes.

52,691. They are generally dead?—Yes.

52,692. Have you always observed that?—Yes, they may come to the boat at times living, but if they were let go they would not swim; they would float on the surface or drop to the bottom.

52,693. (*Mr. Caird.*) Then this petition says that from the manner in which the trawl is wrought the drift-nets are torn and destroyed?—Yes.

52,694. That you say is when they have been fishing in too great proximity the one to the other?—Yes, in the same waters they do not work well together.

52,695. Are you aware that many of the fishermen of Ardrishaig have adopted the system of fishing with drift-nets when they thought it most advantageous, and have taken to trawling if the fish did not mesh well in their nets?—There was a certain number but I am not sure how many.

52,696. As a practical fisherman, can you say that there are certain times when, although you know there are fish in the loch, they will not mesh in your nets?—Yes.

52,697. That is the fact?—Yes.

52,698. Would they not be advantageously caught and a regular supply of fish sent to the market by using the trawl-net at such times as the fish will not mesh in the drift-nets?—I do not know there is any way we know of yet by which we could catch fish at our own will.

52,699. I thought you agreed that there are times, certain times I suppose, in which the fish do not seem inclined to mesh in the drift-nets?—Yes.

52,700. And you, although you know the fish are there, cannot catch them?—Yes.

52,701. Is it the case at such times that the trawl fishermen can catch them?—No, they cannot catch them either.

52,702. At the same time?—Yes, we have seen that often.

52,703. Do you know what the reason is?—I never tried trawling for herrings myself, but I have seen some of my neighbours try it, when they would not come into the drift-nets, and they were not able to get them any more than ourselves.

52,704. (*Mr. Lefevre.*) Have you ever known a time when the trawl fishermen would catch fish and you would not?—Yes.

52,705. What was the reason of that?—If they got a body of fish close to the shore they would bring both ends of the nets close to the shore and force them in. That is not our mode of fishing. We let our nets go with the tide; whereas, they haul them on shore.

52,706. Have you ever taken your own nets near to the shore, leaving room for a trawl-net to work; and have you seen the trawl-net then taking fish inside your nets when you have not been catching them yourself?—If we had set our nets as close to the shore as we wished they would not have had room to work inside of us.

52,707. But where there has been room for a trawl to work inside, have you ever known it to be the case that you have not caught fish and yet the trawlers have?—Yes.

52,708.—What reason do you give for that?—The fish were forced or drawn to the shore. The trawl was put round about them and they were forced to the shore so that they could not escape.

52,709. But there must have been fish all round near your nets, only that they would not mesh themselves?—Yes, but perhaps the body of the fish was lying close to the shore.

52,710. Then you admit the fact that by that mode of fishing fish may be taken by the trawl when you are not successful in catching them yourselves?—Yes, at certain times.

52,711. Then would it be of advantage to yourself, as a fisherman, that you should have the option of using that which you say at times is a more successful mode of fishing than you find the drift-net fishing to be?—No, I think it would do more injury to the fishing than good.

52,712. Explain how it would do so?—I consider that it would do injury in this way: if I had got liberty to use that net, it is most likely that others would have liberty to use it as well as me. Then the whole body of the fishermen must try at that mode of fishing, and we could not work together. It would be impossible for us to work together in the same waters. Our very neighbours could not agree with one another.

52,713. Would they come more in contact by the use of that net than by the use of the drift-net?—Yes, because the drift-net lies still in the water, while the other net is drawn through the water. If my neighbour and I were trawling in the same waters, he might trawl his net contrary to the way in which I was drawing mine; it would then be a question which of us should yield, and there must be a destruction on the one part or the other; one of us must suffer.

52,714. One of you would have to give way?—Yes.

52,715. Then you say that the two modes of fishing are so incompatible the one with the other that they ought not to be allowed to go on together?—Yes, so far as these narrow waters are concerned, I do not think they can go on together.

52,716. In the upper part of Loch Fyne you believe it would be quite impracticable?—Yes.

52,717. In the lower part of the loch there is more room?—Yes.

52,718. With regard to the close-time, have the fishermen of this loch any desire to see the month of January made an open season?—That does not affect this part of the loch; but we do not wish to be a hindrance to any other person. Supposing the open-season was allowed to go on until the latter end of January, we consider that it would not do any harm.

52,719. It would not do any harm to the brood of fish?—No.

52,720. Good marketable fish might be taken during the month of January?—Yes, in a middling state. They would not be very good.

52,721. But fish caught then would be readily taken as food?—They would take fish that might be used pretty well, but they would not be in as good order as they would be in the month before.

52,722. When trawling was carried on in the loch here, do you recollect how many trawl-nets there were belonging to Inverary?—Yes.

52,723. How many?—Only two, I believe.

52,724. Why was it that the Inverary men did not take to trawling as much as the other men?—They saw plainly that it was a practice that would not do and that it would not work. If all men were to take to it it would not work.

52,725. Did they think it was not as profitable as the other kind of fishing?—It might do for a few; but if the whole body turned to it it would do away with all the fish in the course of a few months.

52,726. They complained of the trawlers in other parts for taking large quantities of fish which they would otherwise have taken?—It is not that altogether, but the fishing would be shut up. There would be no fishing in the course of a few months, and that is the reason why we considered, as a body of fishermen, that it was needless to begin that mode of fishing.

52,727. With two exceptions, none of the fishermen here provided themselves with nets or boats for that purpose?—No, there were only two who owned nets and tried it. They took a good deal of fish.

52,728. When you went out to fish at these times did you generally find that the trawlers came to work after you had shot your nets?—Yes.

52,729. They were not on the ground before you?—No, they were seldom there before us. It was after the drift-net men were there that they came. That is the way in which they did us so much damage.

52,730. Did you ever set your nets near the shore and see the trawlers ready on shore to set theirs?—Yes.

52,731. What did you do then?—We left the place.

52,732. Did you go outside for two or three hundred yards?—Yes, and more; perhaps for miles.

52,733. Why was that?—Because we were not sure that they would not come just on our nets as they did often and destroy them. We kept plenty of distance away from them.

52,734. Did not the trawlers prefer trawling in-shore, as being of more benefit to them?—They fish in the deep as well.

52,735. Was it not generally the case that they took better hauls of fish in-shore?—Yes.

52,736. And they preferred fishing in-shore?—Yes.

52,737. Would it not have been sufficient for you to shoot your nets 300 yards from the shore, leaving the space in the inside for the trawlers?—We are as keen to be where the fish are as they are, and we would leave as little space as possible.

52,738. But you told me you often went miles away?—Yes, when we saw the trawlers on the ground.

52,739. Would it not have been sufficient to go 300 or 400 yards off the shore and shoot your nets there?—No; perhaps there would not have been any fishing there, and we should have had to go for miles before we saw the appearance of fish. We generally see the fish in the water at night.

52,740. Do you suppose they would be near the shore all the night?—Yes, sometimes they follow along the shore, and we see none but what are on the shore. At other times they go out in the deep, and there are none in-shore at all.

52,741. But there are a good many parts of the loch in which the trawlers cannot trawl in-shore?—Yes.

52,742. You would have an opportunity of setting your nets there?—Yes.

52,743. Do you think it would be a hardship if the drift-net men were not allowed to set their nets within 200 yards of the shore?—To be sure; it would be a disadvantage to them. Sometimes the body of fish is lying close to the shore, and if they were prevented from shooting their nets close to the shore they might as well keep on the shore altogether.

52,744. Do you think that setting drift-nets a quarter of a mile from the shore would prevent the fish from coming in shore?—No, we seldom consider that the drift-nets turn the fish in one direction or another. They take the same course notwithstanding the nets.

52,745. The nets do not frighten the fish?—No.

52,746. Does the luminous appearance in the water drive the fish away sometimes?—No, we do not consider that it does. They may keep some distance from the nets if the burning is strong in the water, but the fish do not take another course.

52,747. Would the fish rise or sink but still go in the same direction?—Yes, and at times they would go neither forward nor backward, but would stop in the same place without moving east or west. They would then just keep quiet.

52,748. They would neither move on nor go to the bottom?—No. We sink our nets in the deep here where we do not expect the fish spawn. The bottom of Loch Fyne is a muddy place, and we do not expect that the fish spawn there.

52,749. Have you ever sunk your nets on ground where you expect the fish are spawning?—No.

52,750. In what depth of water are the banks you fish upon?—Some of them will be 20 fathoms down to the bottom, and others will be as shallow as 10 fathoms.

52,751. Have you taken the fish there in August and September, just as the fish have been spawning?—It is very seldom that they have been taken at the head of the loch, and that is the only place we know of here where the fish spawn.

52,752. Did you take them by sinking the nets down to the ground?—No, it is not so deep there. They get them on the surface without sinking the nets.

52,753. Have you taken spawning fish there this year?—No, not for a number of years.

52,754. How long is it since they were taken there in great numbers?—I cannot say how many years, but I think it will be six or seven years since there were many full herrings taken here.

52,755. Then do you think that the fish you are taking now spawn outside of the loch altogether?—We cannot answer for that. We expect that the great body spawn outside, only there is a certain portion of the fish which we think spawn inside on banks here and along the coast.

52,756. Do you think it would be of any advantage to the fishermen to be allowed to take herrings for bait during the close-time?—I cannot say.

52,757. Is there not sufficient line-fishing here to make it a matter of importance?—No, there is very little fishing going on here. That sort of bait is not much required. Mussels are the only things which are used in general here.

52,758. Do you recollect before the close-time was enforced here whether the fishermen fished during the months that are now close-months?—They did not fish after January. They fished at times in the Kyles of Bute until the latter end of January.

52,759. Did they give it up then?—Yes, they generally gave it up at that time.

52,760. Did they have a good fishing at that time?—Some years they did pretty well.

52,761. In the Kyles of Bute?—Yes.

52,762. Were the fish in good order at that time?—They were not in very good order, but they were in a middling state.

52,763-4. In what condition were they?—They had declined a little. They were not so fat or so full.

52,765. Are the boats here mostly the property of the fishermen?—Yes.

52,766. Do the fish-curers make advances to them?—It is very seldom that they do, so far as I know.

52,767. (*Mr. Caird.*) Are there many dog-fish and other fish that prey upon the herrings in Loch Fyne?—At times there are a good number of fish that prey upon the herrings.

52,768. Are many of the herrings often eaten in the drift-nets?—No; there are a few of them at times, but at other times there are none at all.

52,769. I suppose that the season will vary taking one with another with regard to the prevalence of dog-fish?—Yes.

52,770. Has this been a bad year for dog-fish or otherwise?—I have heard very little complaint with regard to them this year.

52,771. (*Mr. Lefevre.*) Have you had a good season so far this year?—It has been in a middling way. It has not been very good, but I have seen worse years too.

52,772. Were you out last night?—Yes.

52,773. What did you take last night?—Nothing at all.

52,774. Would you call 18 maze a good take in a trawl?—Yes.

52,775. A large take?—Yes.

52,776. For a trawl?—Yes.

52,777. At one haul?—Yes.

52,778. Would it be a good take for any net?—Yes.

52,779. And it would be a good take for a trawl-net?—Yes.

52,780. Would you expect to find the fish come into the boat dead?—Part of them might come dead and the other part alive.

52,781. Is that a fair average take of fish by a trawl net?—18 maze?

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52,782. Yes.—It is a fair fishing but it would not be as heavy a fishing as I have seen. I have seen 200 or 300 maze which were quite sufficient to destroy the net and make the fishermen leave them behind.

52,783. That would be an extraordinary haul in a trawl?—Yes, they have got that. They got 1,100 maze once.

52,784. That would only be taken once in a way?—No, but there have been large hauls taken at times.

52,785. It will not be often that they take as many as a hundred maze?—No, it is very seldom that they take a hundred maze, but I have seen them take as much as 200 or 300 maze.

52,786. Was it the case last night that most of the boats out from Inverary made a poor fishing?—Yes, it was a poor fishing for most of them. There were a few that got a good fishing.

52,787. Were they fishing in the upper part of the loch?—Not near the very head.

52,788. How far off?—A mile or two from this.

52,789. Up the loch?—Yes, some of them; the rest of them were down the loch.

52,790. Was there any difference in the catch of those further up the loch and those further down?—Those further up the loch and those also further down got the best fishing.

52,791. Did the others not take much?—In the middle of the loch nothing was done.

52,792. What would be the best take a boat had last night?—I cannot say, but it was only a light fishing; very likely a couple or three maze.

52,793. To a boat?—Yes.

52,794. The fishing of 1862 was a very fine one?—Yes.

52,795. The fishing of 1863 was not nearly so good?—No.

52,796. And the fishing of 1864, so far, has not been any better I suppose?—No.

52,797. Have you formed any opinion as to the decline of the fishing?—We have different opinions about it, but what the real and right opinion is I cannot state exactly. I do think however that the herrings here have come to be larger and heavier than they were and that they do not swim as much as they did when they were lighter and of a less size as in 1862.

52,798. And therefore they do not mesh as easily?—No.

52,799. That would rather be an argument for another mode of fishing, would it not?—I do not think it matters with regard to that. We think there are plenty of fish in the water but we consider that the weather is not in favour of the fish. In the wet weather the tides are strong and the fish do not mesh so well.

52,800. Then it is not that there is any lack of fish in the loch?—There are more fish in the loch than there have been in Loch Fyne for a number of years.

52,801. But yet you do not catch them?—No.

52,802. Have the fish been in the loch all the season?—Not all the season.

52,803. When did they come in?—Perhaps there was a month in the season before there was anything to signify in the loch.

52,804. The month of August?—Yes.

52,805. They began to come then?—Yes.

52,806. Do you think the fish have gone out of the loch again without being taken?—No, I do not think many of them have gone away yet.

52,807. They are here yet?—Yes, we consider there are plenty of fish in Loch Fyne only we cannot work them well.

52,808. You said that the fish as the season goes on get smaller?—Yes.

52,809. That would indicate that a different class of fish will come in later in the season?—Yes.

52,810. Have they come in yet?—No.

52,811. Are the larger class still in the loch?—Yes.

The witness withdrew.

J. McNichol.

JOHN MCNICHOL called and examined.

52,812. (*Mr. Caird.*) Did you hear the evidence of the previous witness?—No, I did not.

52,813. Have you ever used the trawl in the upper part of Loch Fyne?—I have used it especially in Loch Long and on the south coast, but not at the head of Loch Fyne.

52,814. Have you never used it at the head of the loch?—Only on one occasion.

52,815. Then you cannot say much as to the advantage or disadvantage of it at the head of Loch Fyne?—I can say this much that I have seen the drift-nets hurt a great deal by the trawl-nets.

52,816. In Loch Fyne?—Yes, at the head of Loch Fyne.

52,817. Then it was some other trawl-net and not your own?—It was not my own. I dropped the trawling altogether 10 years ago.

52,818. Did you trawl for herrings?—Yes, and for all kinds of fish.

52,819. With a circle-net?—Yes.

52,820. You do not refer to the beam-trawl?—No, I never trawled with a beam-trawl.

52,821. Why did you give up the circle-net fishing?—The law was against it; it was an illegal mode of fishing, and it was always destructive.

52,822. It is obvious that any man who desired to be a good citizen would not continue to fish when the law was against him. But was there any good reason apart from that that caused you to give it up?—I did not wish to hurt my neighbours.

52,823. Did you find that you were hurting your neighbours?—Yes.

52,824. In what way?—Because I killed fish that were not of a proper size, and I killed fish of every description.

52,825. Are you referring now to herrings?—Yes; I have killed them from three inches long to the largest size.

52,826. When you killed those of three inches what month of the year was it?—It was at the latter end of the year, about October.

52,827. You killed small herrings in October?—Yes.

52,828. Did you find many of them in the month of October?—Yes, great quantities in Loch Long.

52,829. What was the size of the mesh of your net?—It was the common size of the herring-net.

52,830. An inch mesh?—Yes; but the mesh shuts up and closes at the time of drawing it up, and then it will take the smallest herrings.

52,831. Have you ever seen the smallest herrings escape out of the net?—Plenty of them, but they took quantities ashore.

52,832. Besides?—Yes.

52,833. Did you get large hauls of fish?—Tolerably large hauls.

52,834. Have you ever had such large hauls that you could not take them on shore, or make use of them at all?—We got the boat loaded, and left a few.

52,835. Have you left many behind that you could not make use of?—Yes, we did; we left a good many behind us.

52,836. Was that in the sea or on the shore?—We did not take them ashore at all.

52,837. Did that very often happen?—Not very often. There is a great deal of ground in Loch Long where you cannot take the net ashore.

52,838. And then you got so large a haul that your boat would not hold them all?—Yes.

52,839. That happened now and then?—Yes.

52,840. If you thought that was going to happen often you would have another boat?—Yes; but we did not know when it was going to happen.

The witness withdrew.

ALEXANDER MCARTHUR called and examined.

52,841. (*Mr. Caird.*) Have you often been engaged in herring-fishing?—Yes, in Loch Fyne.

52,842. Have you practised any other fishing except herring-fishing?—Yes; I was two seasons at trawling.

52,843. Herring-trawling?—Yes.

52,844. Have you ever fished for cod, whiting, haddock, and so on?—No.

52,845. You are only a herring fisherman and nothing else?—Just so.

52,846. You say you used the trawl for two seasons?—Yes.

52,847. Was it in the upper part of the loch?—I have tried the other too.

52,848. In every part where a trawl can be used?—Yes; on both sides from Skipness Point.

52,849. Was that at the time trawling was permitted to be done?—Yes, nine years ago.

52,850. Have you not trawled since?—No.

52,851. What was the size of the mesh of the net of the trawl?—It was a common drift-net and we made it into a trawl-net.

52,852. Was it the same depth?—No, it was a good deal deeper.

52,853. How deep was it?—It was 15 fathoms deep.

52,854. What length was it?—It was 200 yards long.

52,855. When you were fishing with the trawl-net were you occasionally fishing with the drift-net, or did you confine yourself to the trawl alone?—No; at one of the seasons I was engaged with the trawl-net entirely, and on the last occasion I worked with both.

52,856. Were you very successful when you were entirely engaged in trawling?—Yes; I made a good year's fishing out of it.

52,857. Did you make a better fishing on the average with the trawl-net than you did on the average in the season with the drift-net?—We were making more money, but when it was divided each man would have done better at the drift-nets.

52,858. How did that happen?—Because more men were employed.

52,859. There were more to divide it among?—Yes.

52,860. On the whole you were not paid better one way than another?—The drift-nets paid the best.

52,861. You found that to be so?—Yes.

52,862. Did you find that you could fish your trawl-nets without interfering with the drift-net fishermen?—Occasionally; sometimes there were no drift-nets near us, and at other times there were.

52,863. Were you able to make your circles and take in your nets, generally speaking, choosing your own ground, without coming into contact with the drift-net fishermen?—I never came into contact with them.

52,864. You found it practicable to keep clear of them?—Yes, but there were no drift-net men working near me.

52,865. Did you make large hauls with your trawl-net?—Yes.

52,866. Have you ever made such large hauls that you could not make use of your fish?—Yes.

52,867. Was that a common occurrence?—Only on one occasion.

52,868. During all your experience?—Yes.

52,869. In that one case what prevented you from making it?—I filled all the boats I had and I left the rest.

52,870. How many boats had you?—Four.

52,871. If you had had more boats could you have filled them?—Yes, I could have filled 20 of them.

52,872. Were the fish in good order?—Yes, they were very large herrings.

52,873. Did they sell readily?—I cured them myself.

52,874. How did they succeed in the cure?—Not as well as the drift-net herrings; they were black at the bone.

52,875. Did you sell them as cured herrings?—Yes, but I did not get a good price.

52,876. Was there much difference in the price?—10*s.* a barrel.

52,877. (*Mr. Lefevre.*) What did you get per barrel?—2*l.*

52,878. (*Mr. Caird.*) That is a good price?—Yes.

52,879. Then it was only on one occasion that you had such a large haul that you could not make use of them?—Yes.

52,880. Were many of the fish dead on that occasion?—They were all of them dead.

52,881. Did they sink to the bottom?—Yes, when I let them go.

52,882. (*Mr. Lefevre.*) Were you drawing up to the shore on that occasion?—We did not tow them inshore at all.

52,883. What depth of water were you in?—Five fathoms.

52,884. How many did you succeed in taking ashore?—Four boatloads; we succeeded in taking off 100 barrels.

52,885. (*Mr. Caird.*) Have you found when you have been fishing with the trawl that you destroyed many small fish unfit for the market?—Yes.

52,886. Large quantities?—Yes, I have caught herrings that would run about 3000 to the barrel.

52,887. They were as small as that?—Yes.

52,888. At what time of the year was it?—I got them in August, September, and October.

52,889. In what part of the loch?—Down below Ardrishaig.

52,890. Was that a common occurrence?—Yes, for a whole month I have been working for them.

52,891. What did you do with them?—I took them to Ardrishaig.

52,892. Did you sell them?—I sold them for a small price.

52,893. Were you getting other herrings with them?—Yes, I was getting good herrings with them.

52,894. You did not throw them back into the sea as useless?—No.

52,895. You always sold them?—Yes.

52,896. For food?—Yes; they would not be good, but I always sold them.

52,897. They were not thrown into the sea as useless?—No.

52,898. What proportion of the catch would be of that small size?—If I got seven or eight maze at a time one half of them would be small and the other half would be pretty good herrings; we sold them mixed together.

52,899. (*Mr. Lefevre.*) Do you take large and small in the same haul?—To be sure, we took everything that came before us.

52,900. (*Mr. Caird.*) Did you get any other kind of fish besides herrings in your trawl?—Yes, all sorts.

52,901. Did you ever notice that with the trawl-net you broke the shoal of the fish?—I think we should break it that night when we got the heavy haul.

52,902. You took the most of it I suppose?—No, there were plenty who got more than us; there were 12 or 14 trawlers where we were, and most of them left fish lying; they filled their boats and left the rest lying.

52,903. That was on some extraordinary occasion?—Yes, down at Ardlamont Point.

52,904. Have you ever observed that you did interrupt and break the shoals of the herrings with your circle-nets?—I think it would be the case.

52,905. Have you been most successful near the shore or out in the deep?—Near the shore.

52,906. That is the best place for trawling?—Yes.

52,907. If you were fishing near the shore would not the great body be further out at sea?—Sometimes there came plenty near the shore; I have seen them within two or three fathoms of water.

52,908. Did you ever knowingly pass over the

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spawning beds and tear up the spawn with your nets?—I never observed that.

52,909. You say you never came into contact with the drift-nets, or did them any harm?—No.

52,910. If you were allowed by law to fish with the trawl-net or drift-net just as you thought most advantageous, and when you thought the herrings were not meshing well in the drift-nets, you might take to trawling; if the law permitted you to do that, would you try the trawl and use it with great success?—I don't think so at the present time.

52,911. Why; can you give us a good reason for that?—I do not know, I think when the money is divided and all the expenses come to be paid the drift-net fishing is the best mode of fishing.

52,912. That is taking the average of all the year round?—Yes.

52,913. But if you had the privilege of fishing, either with the trawl-net or the drift-net, as circumstances rendered desirable, would you not do it?—I think trawling is very injurious to herring-fishing, that is why I dropped it.

52,914. What is the special injury that you think you did to the herring-fishing with the trawl?—By taking in the young herrings and killing them.

52,915. Was that the chief injury you think you did?—That was the most harm that ever I saw.

52,916. (*Mr. Lefevre.*) Before the close-season was enforced did you ever use your trawl in January, February, March, April, or May?—No.

52,917. Do you know if the trawl-nets were much used in the loch during those months?—Yes, they were used in January, February, and March.

52,918. You have seen them?—Yes, and they have taken small herrings.

52,919. Would they take a larger proportion of young herrings at that time than at other times of the year?—Yes, they would take a good number. I have seen them in the Kyles of Bute take herrings that would go 1,400 to a box.

52,920. What size would the herrings be?—About three or four inches.

52,921. Did you take fish as small as that during August, September, and October?—Yes.

52,922. Was there any part of the loch where you found more than another?—Yes, down below Ardrishaig. Below Ardrishaig and Tarbert.

52,923. Did you take them in upper Loch Fyne?—No, we were chiefly working down there.

52,924. What number of hauls could you make in the course of a night with a trawl?—Perhaps we might get plenty in the first haul, or perhaps we might trawl all night and not get one. We never tried unless we saw the herrings in the water.

52,925. You might be some time looking for them?—Yes, and never come across them.

52,926. Could you make as many as 10 or 12 hauls in the course of a night?—No, we could not do that.

52,927. How many?—Five or six perhaps.

52,928. What would be a fair average take of herrings in a trawl?—It is a good take when a person gets the full of his boat.

52,929. How much is that?—Thirty or 40 maze.

52,930. You would not expect to do that every night, would you?—No.

52,931. What kind of earnings would you make when you were trawling?—We were averaging sometimes 6*l.*, 7*l.*, or 10*l.* a month.

52,932. And since you have taken to the drift-net fishing what have you made?—Sometimes more than that and sometimes less.

52,933. On the average have you made more?—Yes, I am better off at the end of the year by using drift-nets.

52,934. Had you a share in a trawl-net yourself?—Yes, it was a share I had.

52,935. Did you sell it?—No, I brought it down into a drift-net again.

52,936. Do you think the same fishermen could carry on the two modes of fishing together; could they trawl and upon the same night use the drift-nets?—No, they could not work both.

52,937. Were there some nights when you could not use the trawl-net at all?—No, I do not think so; but it takes eight men to work a trawl-net. Two or three men will work a drift-net.

52,938. Was it not often the case that the weather was such that you could not work the trawl; for instance, on a bright moonlight night?—It would not be as successful.

52,939. Did you go out every night?—Yes.

52,940. Even on moonlight nights?—Yes.

52,941. Did you not work with the drift-nets at all when you were trawling?—In one season.

52,942. Did you in the other?—Yes, one season I worked at both. Two boats of us joined together.

52,943. Have you often known it to be the case that the trawlers would get a good haul of fish when the drift men would not?—Yes, often.

52,944. Has that occurred for any length of time—for several weeks together?—Yes, I have seen it for several weeks.

52,945. And then the drift fishermen had a turn of luck themselves?—They were always getting a little.

52,945*a*. Did you ever know it to be the case that the drift fishermen got large hauls of fish and the trawlers did not?—Yes, often.

52,946. Was that when the drift-nets were sunk deep in the water?—Yes, and sometimes when they were light on the water.

52,947. How do you account for that?—I cannot tell. I think it is eight or nine years since there was an eye of fish that came early in the season. We got a good fishing in the drift-nets and when we tried the trawl-nets we could not get the fish.

52,948. And yet were they close to the shore?—Yes, they were quite close to the shore; I could not understand it.

52,949. You have not fished with lines yourself?—No, I never was at the lines.

52,950. (*Mr. Caird.*) Have you any opinion with regard to the extension of the close-time; would you make January an open month?—I have no objection to another month.

52,951–60. Do you think it would be any advantage to the fishermen and the supply of fish to the market if January were made an open month?—It might be an advantage to some but the most of them would not follow it.

52,961–2. In the upper part of the loch?—No, we would never follow it after December.

52,963. But in the lower part of the loch might it suit them better?—Yes, they might follow it.

52,964. Have you found the fish in a fair condition in the month of January?—They are not so good then.

52,965. But still they are caught marketable?—Yes.

52,966. And wholesome?—Yes.

52,967. (*Mr. Lefevre.*) When all the boats were fishing in the upper loch you would hardly find room to shoot your trawl-net at all?—We could not without injuring the drift-nets.

52,968. Were the trawlers in the habit of shooting their nets there notwithstanding that?—There would not be room for us both to work properly.

52,969. But supposing the trawl fishermen came up to this part of the loch and found all the drift-nets about would they go lower down or try to shoot their nets between them?—Sometimes they would get room and at other times not, it would depend on the number of boats there.

52,970. Was it a disadvantage for the trawlers to shoot their nets so as to get them among the drift-nets?—Yes.

52,971. They looked if they could for a clear space?—Yes.

52,972. Could you generally see where the drift-nets were?—Yes.

52,973. Even on a dark night?—Yes.

52,974. You do not cover a large space with your trawl so that you could see where the herrings were?—We might get a large enough space where there were no herrings.

52,975. You looked for two things, first for a clear space and then for the fish?—Yes.

52,976. (*Mr. Caird.*) Have you any opinion at all as to the advantage of a close-time?—Yes, I think there is an advantage.

52,977. What is it?—There is an advantage in it especially in the month of February. I know that the herrings are spawning in that month and in the beginning of March.

52,978. You think it of advantage not to fish them at that time?—Yes.

52,979. (*Mr. Lefevre.*) Where are they spawning?—In the Kyles of Bute and in Loch Ridun. Loch Ridun is full of herrings all the winter. In January, February, and March they were there full of spawn and I think they spawned there.

52,980. Do they leave as spent fish in the middle of March?—Yes, and I know they were full of spawn at the time they were there.

52,981. Do you think they come up to the top of Loch Fyne to spawn here also?—I don't know whether any herrings are here at that time or not.

52,982. (*Mr. Caird.*) Have you ever observed, as you have been a fisherman in different parts of the coast, whether the fact of steamers passing up and down and agitating the water has had any effect on the herring fishery in that particular locality at that time?—I do not think that any steamers that come up here have any effect on the fishing.

52,983. Do you think that the navigation of the loch by steamers during the time the herrings are in it has no effect on the fish in one way or another?—I do not think so.

52,984. Not the slightest effect?—No, not the slightest.

The witness withdrew.

DONALD MCCALLUM called and examined.

52,985. *Mr. Caird.*) Are you a herring curer?—Yes.

52,986. At Inverary?—No, at Loch Gare, further down.

52,987. Where is that?—On the other side of Ardrishaig.

52,988. In Loch Fyne?—Yes.

52,989. Have you for several years been engaged as a herring curer?—Yes.

52,990. Have you cured the different kinds of fish caught in Loch Fyne both with drift-nets and trawl-nets?—Yes.

52,991. Have you found much difference in the character of the herrings?—Yes, there is a great deal of difference.

52,992. In herrings caught the same night?—Yes, and cured the same day.

52,993. What is the difference you have observed?—I have seen the trawled herrings picked out, namely, those which had the best scales, in order to cheat the Glasgow curers.

52,994. But you, as a curer on the spot, would detect the difference?—Yes. On the occasion I am referring to the two different kinds were put into a barrel with different marks, and although the marks were unknown to the buyers, they objected to the herrings because they saw a difference.

52,995. Who did?—The people in Glasgow.

52,996. The herrings went to the market?—Yes, as net-herrings, but there were trawled herrings with them.

52,997. The curers were able to distinguish the difference?—The cooper was.

52,998. Was that after they were cured?—Yes, about a month or a fortnight afterwards.

52,999. What have you observed with regard to them; in what way are they inferior?—I have seen the difference.

53,000. In what way?—They are smothered. There is a white thing between the skin and the scale of the herring. When they are in the brine that will float like something in a river. You will see the brine quite spotted with it; but that is not the case with the net caught herrings.

53,001. Does that interfere with the quality of the herrings?—Yes, they will not keep as long as the drift-net herrings.

53,002. Have you as a curer ever bought trawled herrings, knowing them to be trawled herrings, for the purpose of curing?—I have sent them to the market for smoking.

53,003. Does that answer well?—No.

53,004. What are they used for?—I do not think they are of use for anything but manure when they have long been cured.

53,005. Are they not taken readily at Glasgow and Greenock markets?—Yes.

53,006. During the time they were permitted to be trawled were they not sent regularly to the market?—Yes.

53,007. They were sent to the market?—Yes, they might be used for a short time, but not when they have been long kept.

53,008. Is any fish good when it has been long kept?—No.

53,009. You say that trawled herrings do not make good herrings to cure?—Yes.

53,010. Are they good enough to eat fresh?—They are good, but not as good as the net herrings.

53,011. Are they an inferior quality of fish even as fresh fish?—Yes, those you take by the trawls are inferior to those that are taken by the net.

53,012. What is the reason of that?—It is because they are smothered. Trawled herrings are like beef that has been smothered, or a bad sheep when it is bracksied.

53,013. Bracksied sheep are not smothered?—They are like those which are smothered, because they get their death very quick, and so do the herrings that are caught by the trawl.

53,014. (*Mr. Lefevre.*) I thought you said the trawl-nets took a different class of fish?—Yes, they do take a different class of fish, and they take all sorts of fish too.

53,015. What is the reason of that; are the fish of a different age?—Yes, and of different kinds.

53,016. Would not the drift-nets catch those fish at all?—The nets catch some of them but not altogether. There are fishes for every sort of net, but the trawl-net takes everything that comes in its way.

53,017. Are those fish a larger or a smaller class of fish?—Smaller and larger.

53,018. Do you think the trawlers catch a certain number of large fish and also of small fish which the drift-nets would not catch?—They catch larger herrings sometimes.

53,019. How long were you a curer?—Up to within the last five years I have been engaged curing herrings ever since I can recollect. I have been round the coast since and have seen the curing going on.

53,020. When you could not get fish from the drift-net fishermen did you buy them from the trawlers?—Yes, I bought them from any person I could get them from, but I always kept the trawled herrings separate from the drift-net herrings.

53,021. You kept them separate?—Yes.

53,022. Did you sell them as trawled herrings?—Yes, I had to do that.

53,023. What was the difference in the price?—From 5*s.* to 8*s.* and 10*s.*

53,024. Five shillings a barrel?—Yes; but it would depend upon how the market was going. If the herrings were going at 30*s.*, I got within 5*s.* of the price; and

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if it was 2*l.*, I got within 8*s.* or 10*s.* It depended on the price in the market altogether.

53,025. Do you think the people can tell upon looking at a barrel of herrings whether they were drift-net herrings or trawled herrings?—Yes, anyone that was well acquainted with them would do so.

53,026. (*Mr. Caird.*) Is there anything further you would like to tell us?—Nothing further.

The witness withdrew.

A. M'Nichol.

ARCHIBALD M'NICHOL called and examined.

53,027. (*Mr. Caird.*) Are you a fish-curer here?—I am not a fish-curer now, but I was curing for Mr. Munro eight years back down at Sand Hill.

53,028. Where is that?—The other side of Furness, about eight miles below this.

53,029. In the loch?—Yes.

53,030. Then you are acquainted with the quality of the different kinds of fish caught in Loch Fyne?—Yes.

53,031. Have you cured both trawl-caught and drift-caught herrings?—Yes.

53,032. Caught on the same day?—Yes.

53,033. Have you observed any great difference between the character of the two kinds of fish?—Yes.

53,034. In the quality?—Yes.

53,035. What is the difference?—It would not cure as well.

53,036. The trawled fish would not cure as well?—No.

53,037. In what respect did it not cure as well, or how did you discover that to be the case?—I cannot tell you, but they are very black at the bone after being salted.

53,038. Did the buyers readily take them after they were cured?—Yes.

53,039. Was there any difficulty in selling them?—Sometimes there was if there were plenty of net-herrings.

53,040. In that case the trawled herrings were not so readily sold?—No.

53,041. If there was a scarcity of drift-net herrings they would sell better?—Yes; anything will do so when there is a scarcity.

53,042. What difference have you noticed between the price of the drift-cured herrings and the trawl-cured herrings?—From 5*s.* to 10*s.*, and sometimes more or less.

53,043. Is it generally admitted that trawled herrings are better adapted for immediate consumption than for being cured?—They use more of them, any way.

53,044. For the fresh market?—Yes.

53,045. Does the blackness at the bone to which reference has been made show itself in fresh fish as well as when salted?—Yes.

53,046. Would you discover the blackness upon fish that were quite fresh caught?—Yes, it is always seen in a herring that has been caught by the trawl-net.

53,047. Is there a distinct difference between the two?—Yes, there is.

53,048. Where does it show itself?—In the blackness of the fish.

53,049. In the back bone?—Yes, and in the want of scales also.

53,050. Is it in the flesh of the fish?—Yes.

53,051. In what way does the flesh of the fish differ?—That is more than I can tell.

53,052. How does it appear; how do you see it?—When you open the herring or gut it you see it inside.

53,053. What do you see?—The flesh of the trawled herring is black, while that of the drift herring is quite white.

53,054. You have constantly witnessed that as a curer?—Yes.

53,055. And you could distinguish between them readily when they were presented to you?—Yes.

53,056. (*Mr. Lefevre*). Do they fetch the same price in the fresh market?—I do not know. I do not think they do, but I was never there with them.

53,057. You cannot say?—No, I believe they do not fetch as high a price, but I am not used to them.

53,058. You prefer drift-net herrings?—Yes, but I have been told there is a difference in the price.

53,059. When you have been eating them fresh have you noticed any difference in the taste between the two?—Yes.

53,060. What is the difference in the taste?—It is not at all as fresh compared with the taste of the net-fish.

53,061. When both have been brought in the same morning have you observed any difference?—Yes.

The witness withdrew, and the inquiry was adjourned until the 24th of September, at Tarbert.

Tarbert, Argyleshire, Saturday, 24th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

TARBERT.

N. Bannatyne.

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NINIAN BANNATYNE called and examined.

53,062. (*Mr. Caird.*) You are a fish-curer in Glasgow?—I am a fish-curer in Glasgow, and in Tarbert. I have been engaged in curing at Tarbert for 32 years. I have also cured in the Orkneys, at Pittenweem, Anstruther, and in every part of the islands.

53,063. At present you are extensively engaged in the business of a curer?—I was extensively engaged as a curer, but by the prohibitory restrictions which have been established I cannot get any herrings to cure in Loch Fyne. And instead of having at this season my four or five vessels lying in Tarbert Harbour, and 50 or 60 in Loch Fyne, I have the pleasure of looking at none at all. I believe it would not pay me to have a vessel here at the rate of 10*l.*, 15*l.*, or 30*l.* a month lying idle, and therefore there are none here because I could do nothing with them.

53,064. You have for some years been acquainted with the herring-fishing as followed in Loch Fyne and followed on the west coast of Scotland?—Perhaps I am the oldest fish-curer alive in Loch Fyne, Greenock, or Glasgow. I am contemporary with Mr. John McClean. In 1826 I was with John McClean: that is 38 years ago, when I was 14 years of age, and we were then curing, cutting, and packing in Scalpa, in Portree, in Loch Carron, and in other places.

53,065. We will take it that you are an extensive curer, and that you are well acquainted with the quality of the fish caught in Loch Fyne?—Yes, and on the other coast likewise—in the Orkneys, in Shetland, and anywhere you like to go in Scotland.

53,066. Have you been in the habit of making many purchases of herrings in Loch Fyne for the purpose of curing?—Yes.

53,067. Have you also been a buyer for the fresh market?—Yes.

53,068. Can you tell us whether there is anything in the quality of the different catch of herrings by the drift-net or by the trawl-net which particularly fits the one for the one kind of market more than for the other ?—Yes.

53,069. What is that quality ?—The first trawled herrings that we caught in Loch Fyne were caught in the year 1833, in December. Those herrings were then on the coast, and still are, and they lie dormant in 60 or 70 fathoms of water. Trawling previous to that time never had any existence.

53,070. That is not exactly an answer to the question I put to you ?—The take by two men was very heavy. I think they caught 6,700 barrels putting their nets across the mouth of the other bay ; and I purchased to the extent of 400*l.* or 500*l.* worth from them. The others went to the farmers and the other fish curers in the neighbourhood.

53,071. Was that the first occasion on which a trawl-net was used in Loch Fyne ?—Yes.

53,072. That was in the year 1833 ?—Yes. The quality of those herrings was very good. They were from 600 to 700 to the barrel, and they were superior to any herrings taken by the drift-nets in that season. They were sold in Glasgow by me at 5*s.* a barrel above the price of the regular drift-net herrings which any other curer had in Glasgow.

53,073. Has that continued to be your experience of the quality respectively of the drift-net and the trawl-net herrings ?—I have been living in Tarbert for several successive years during the fishing, and I have paid for trawled herrings in June and July 25*s.* when on the same morning and at the same time I have bought the drift-net herrings at 12*s.* 6*d.*

53,074. What was the difference ?—The difference was this : that from 400 to 500 of the trawled herrings would fill a barrel, whereas it would take 800 or 1,000 of the drift-net herrings. Therefore, notwithstanding that I paid 25*s.* for the trawled herrings, they were of a superior quality, and they were as cheap as the others at 12*s.* 6*d.*

53,075. Is there anything in the mode of catching that particularly fits the one description of herring for the fresh market more than the other ?—If the trawled herrings are taken out of the same loch, and the same place as the drift-net herrings, they are identically the same. The quality is equally good.

53,076. You say that in certain cases which you have mentioned the size of the trawled herrings was larger than the size of the drift-net herrings ; was that the case during the whole season ?—No, but the drift-nets could not take the herrings I refer to, and which I bought at 25*s.* They have no drift-nets in Tarbert that would catch them. The mesh of the net would not admit of their taking herrings running from 400 to 500 to the barrel.

53,077. Is it the fact that no large herrings of that class are ever caught by the drift-nets ?—Yes.

53,078. Do you never buy herrings of that size from the drift-net fishermen ?—I never got herrings as large as 500 to the barrel from the drift-net fishermen.

53,079. Did you often cure herrings of that size bought from the trawl fishermen ?—Yes.

53,080. Was there any large proportion of the cure of that quality ?—That would depend altogether on the quantity caught ; that is to say, if the trawlers came in in the morning with more than was sufficient to supply the fresh herring market, as they have frequently done, then they must be cured.

53,081. Then the fresh herring market takes the first supply ?—Yes.

53,082. Does it pay the best price for the herrings ?—Yes ; because the herrings go to market fresh at a much cheaper rate. We cannot send a barrel of herrings from Tarbert to Glasgow under 10*s.* a barrel expense, whereas a box of herrings goes for 1*s.* 6*d.* freight.

53,083. Do a box and a barrel hold the same quantity ?—About the same quantity. A large box of 12 inches will fill a barrel of herrings packed.

53,084. Then taking the regular course of business here, when the herrings are brought in here in the morning the first demand is for fresh herrings to be sent off to the fresh market ?—Yes.

53,085. Is it only those which remain over that are taken for curing purposes ?—We cannot afford to give the same price for curing, because we are put to 10*s.* of expense. Salt herrings are now getting so abundant in the country that people will not take salt food at all.

53,086. Then are we to understand that when the herrings are not extremely plentiful the larger portion goes to the fresh market ?—Yes, altogether.

53,087. There is no curing at all then ?—No.

53,088. Then it is only when the supply exceeds the demand for the fresh market that you cure the herrings ?—Yes, it is only when the supply is very large. For instance, if 60 or 70 maze of fish come in, perhaps 20 or 30 maze will go by the steamboats to the fresh market, then the curers will say, "We will "not give you 12*s.* for the rest, but we will only "give you 3*s.* 6*d.* for those which we want to cure."

53,089. Is it a great matter to the fishermen to have their herrings in in time for that morning boat ?—Yes, certainly.

53,090. Is there any difference in that respect in their being enabled to be in time for the morning boat as between the drift-net fishermen and the trawl fishermen ?—Yes. The trawl fishermen are always ready. They sometimes come in at 12 o'clock. They have not to shake their nets, and they could put in 200 barrels before the drift-net men could shake out 20 boxes.

53,091. From that fact do they find it more convenient to supply the fresh market ?—Certainly.

53,092. Now, as a curer, and having cured both drift-net fish and trawl-net fish, can you tell us whether you have found any difference in the quality of the two when they are cured ?—I should not know the difference between a drift-net fish and a trawl-net fish if they were taken in what we call the first lift, and then brought to the shore. Those that are first taken from the boat have the scales on them much better than those that are below. I should not be able to tell those trawled herrings from the drift-net herrings.

53,093. Is there a difference in those which may be taken at a different time ; you say those which are taken first ?—Yes, if they come in to the shore, and are taken by the trawl, those on the top are generally the largest fish, and are in the best condition with regard to scales. The boat is filled with the first that are taken.

53,094. You are referring now to the trawl-boat ?—Yes. That boat is sent in, and for the fish in that first boat I would give a shilling per cwt. more than for those which are brought in afterwards.

53,095. At the bottom of the same boat ?—At the bottom of the same take, because they get more tossed and handled about, and the scales come off them more.

53,096. How does that correspond with a boat full of drift-net fish ?—It corresponds exactly. About 50 or 60 maze of drift-net fish may be brought in by perhaps 16 or 18 barrels of nets, sometimes 24 barrels. Those herrings have all they can do to get to the market if there is not much wind. They would not have them shaken out of their nets, therefore, and if it was a warm day the heat of the sun and the pressure of a ton weight of herrings upon those at the bottom would make them as soft as mud, and one half of them would not be worth within 2*s.* or 3*s.* per cwt., the same price as the fish caught in the trawl.

53,097. Without going into the causes that may produce that difference, will you tell us practically whether you find that the trawled fish and the drift-net fish you buy for the purpose of cure you can make into a good cure, so that the one will bring as good a price in the market as the other ?—Yes, I can.

53,098. Practically, do you find that herrings caught by the trawl-net when they are cured sell as well as those caught by the drift-net ?—Yes.

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53,099. Cannot skilled men, curers or fish buyers, discern the difference between the one and the other?—They can discern between well cured drift herrings and those badly cured. There is a difference of 5*s.* a barrel in those which are not shaken out of the nets until 2 or 3 o'clock in the afternoon compared with those which will be made up by 12 o'clock in the day.

53,100. Of course there is a difference between good and bad cured drift-net fish, and good and bad cured trawled fish also?—Yes.

53,101. But if there are fish caught on the same night, and one lot be drift-net fish and another lot trawled fish, and both are put into your hands with the same skill and attention to cure, would you observe any difference arising from the mode in which the herrings are captured?—No, I could not observe any difference. I don't think there would be any difference in the quality.

53,102. Are we to take it from you that neither in the fish supplied to the fresh market, nor in the fish supplied to the cured market, there is anything in the mode of capture which can affect the quality of the herrings?—No, they are got from the same places, and are the same description of herring, only that the drift-nets are not able to take herrings of such large size as the trawl-nets.

53,103. Then, as a curer, you hold them to be of better quality?—They are of better quality.

53,104. Is it a fact that a barrel of herrings equally well cured is valued according to the smallness of the number which fills the barrel?—No, small herrings may be much superior to large ones, but I speak of the herrings caught here in the month of June and July. Those were the principal months in which large trawled herrings were caught.

53,105. Were they only got in the months of June and July?—Yes, they proceed up the loch, I suspect; but they make their exit from the loch soon after, and go down to Ballintrae, where they spawn. Then, when they are coming out of the loch, the fishermen know the time, and go in company with their boats and take a large supply of provisions with them to last for a fortnight. They live in their smacks, and wait with patient expectation until the herrings come down, and then they are amply paid for all their labour and their patience. The herrings they take then are the large herrings I mentioned.

53,106. Then you say the quality of the herrings is not affected by the number in the barrel?—No, it is not.

53,107. It is the condition of the fish itself?—Yes, and the quality. The large herrings in Orkney and on the east coast are not equal to the herrings caught in the Kyles of Bute in January—1,200 to the barrel. One barrel will be worth perhaps 50*s.*, and perhaps the others will never exceed 30*s.*

53,108. How many will there be in a barrel of east country herrings?—They run from 600 and 700 to 800.

53,109. As tested by the price in the public market is there not among buyers and sellers of cured herring a general rule that they are not to give as much for trawled herrings as for drift-net herrings?—I am not aware of it.

53,110. Have you yourself ever met with such a distinction as that?—My eye is my merchant. I look at the herrings.

53,111. You do not care whether they are trawled or not?—No. I look at them. I look at the trawled herrings and the drift-net herrings, and if there are drift herrings that are not properly cured I will not buy them, except at a very low price. Then there are trawled herrings which have not been made up at the proper time. Perhaps they may have been delayed in coming in.

53,112. I am to understand it is not the question of their being trawled or drift-net herring that in any way regulates the price you offer for them?—Not at all.

53,113. I understand quite clearly from you, as an extensive curer, that that is not the case as far as your own experience goes?—Yes.

53,114. Have you ever bought any herrings in the month of January?—Thousands and thousands of barrels in the Kyles of Bute and the Firth of Forth.

53,115. Have you cured those herrings in the west country?—I have cured in one week in the Kyles of Bute 1,000 barrels of fine herring not exceeding 1,100 to a barrel.

53,116. In one week?—Yes.

53,117. In the month of January?—Yes. Those herrings would be caught here in the month of January, and 50*l.* would be paid to poor widows and orphans who get 6*d.* for gutting them and 6*d.* for packing them. I have done that hundreds of times.

53,118. From your own experience as a curer do you consider that herrings in good condition for the market, and wholesome as an article of food, may be taken in the month of January?—They have been taken in the month of January during my time for 38 years.

53,119. Has it been in your opinion a loss in the supply of fish to the public to shut up the month of January?—It is just depriving poor fishermen in this neighbourhood of their livelihood.

53,120. Has it been a loss in the supply to the public market?—Yes, most assuredly.

53,121. To some considerable extent?—Yes, to a great extent.

53,122. Would you go beyond the month of January as to herrings; are they useful as food when caught in February and March?—I should say that it would be as well that there should be a close-time from the 1st of February until the 1st of June.

53,123. That is to say that as a curer you consider the herrings caught in the month of January are of good quality for the market, but not in the other close-months now observed?—From the 1st of February to the 1st of June I would make a close-time. I have been curing in the Firth of Forth, and also in the Kyles of Bute, in January, and the herrings caught in the Kyles of Bute have brought 10*s.* more a barrel than those taken in the Firth of Forth.

53,124. (*Mr. Lefevre.*) Have you not cured any fish this year?—Not this season. In 1862, and for many years previous, I have cured thousands of barrels, but there have not been 10 or 15 barrels cured in Tarbert this year.

53,125. Has the fresh market taken the whole of the supply?—I do not suppose that the fresh market has got one-tenth of the supply that it could have taken, nor has Glasgow been properly supplied.

53,126. But all the herrings that have been taken have been taken to the fresh market?—Yes.

53,127. Did the trawl-boats as a rule come in before the drift-boats?—I have seen them in at 12 o'clock at night.

53,128. Would they come in before the drift-boats?—They were always in before the drift-boats in my experience, except there might be an exceptional case, one out of a thousand.

53,129. I suppose that they supplied the fresh market because they came in sooner than the drift-net boats; was that so?—They are always first at the quay for the purchasers, and the people would all buy their herrings, and so would anyone else.

53,130. Suppose a large boatload of trawled herrings came in would a purchaser for the fresh market take the best quality from the top of the herrings and leave the remainder for the curers?—No, the fishermen, the trawlers, would sell their herrings in no such way. If purchasers buy the herrings at all they buy the whole boatload.

53,131. They must empty the boat?—Yes. The fishermen would not allow any one to pick.

53,132. Is there a price beyond which the curers cannot go; is there a limited price beyond which it would not pay the curers to buy at all?—The present price is between 3*s.* 6*d.* and 5*s.*, according to what comes in. They may be 5*s.* to-day and to-morrow, if they are in abundance, they may be down to 3*s.*, and

if they are very scarce the price may get up to 7*s*. The herrings that were caught yesterday by the drift-net fishermen would run 1,200 to the barrel, and they would cost 60*s*. a barrel.

53,133. Is there a limited price beyond which it does not pay the curers to buy ?—There is.

53,134. What is that limit as a rule ?—The limit is according to the demand. The supply brings the market up and down like any other commodity. When there is a large supply of herrings brought in by the trawl-nets, I have bought trawled herrings at 6*d*. per 100, and drift-net herrings at 8*d*. per 100.

53,135. What is the limit ?—The limit is the supply. We cannot sell the herrings in June and July in Glasgow at more than 50*s*. a barrel.

53,135*a*. What would you pay for the herrings in the boats to enable you to sell them at that price ?—We should require to have herrings of not less than 800 to the barrel at 3*s*. 6*d*. or 4*s*. per 100. That would only be 32*s*. for the fish, but then there would be 10*s*. for each barrel, which it would cost us before we could send them into Glasgow. For curing them and sending them out to the shop there would be something additional, and we should require at least 50*s*. a barrel.

53,136. You could not therefore give more than 3*s*. 6*d*. for herrings for curing because you could not sell them at a price to pay ?—There cannot be a general rate because the demand makes the price. The price of herrings varies according to the quantity. I have known herrings selling one day in Glasgow market for 40*s*., and I have bought them on the evening of the same day at 18*s*.

53,137. Is it possible to tell by examination of the herrings the difference between trawled herrings and drift-net herrings ?—I don't think it is possible to distinguish between them.

53,138. Have you examined the inside of the herrings to see if you could tell the difference ?—There is not the slightest difference between trawled and drift-net herrings in the inside, or in the head, or in the tail.

53,139. Have you examined them yourself ?—Yes, there is no difference.

53,140. Have you cut them open and examined them ?—I have eaten them both at the same time.

53,141. Have you examined and cut them open and looked at them ?—We judge that when we eat them.

53,142. But you have not done that with the view of making any observation ?—I have gutted them both.

53,143. Have you cut them open when they were fresh and before they were cured ?—I have seen them cut open before my eyes.

53,144. Do you think there is any difference ?—No, they are identically the same.

53,145. You have not observed the presence of blood at the back bone ?—That cannot be for they are gutted immediately after they are caught.

53,146. How soon after they are caught are they generally gutted ?—They cannot be gutted too soon. I have heard it said that the herrings bleed from the neck in the drift-nets, but that is not so.

53,147. You do not agree with the statement that the meshing of the herring causes it to bleed and causes a difference in its appearance ?—I say that the meshing of the herring prevents it from bleeding for it is held as stiff as if it were held in a gibbet.

53,148. Is there any difference in the mode of death that would cause any difference in the appearance of the herring ?—No.

53,149. Have you bought herrings at Inverary as well as here ?—Yes.

53,150. Do you find as a rule that the fish there are as good in quality as they are here ?—The fish at Inverary are generally of a larger size than those caught here. The great body of herrings coming down this loch make their way up to the upper loch. There they lie as they are lying at present dormant in 60 or 70 fathoms of water. They do not move, and when a body of herrings take a scud up there you must make them rise and swim before you can get a few herrings.

53,151. The larger class of herrings you have spoken of are taken by the trawlers only in the early part of the year ?—Yes.

53,152. In what condition are they then ?—In very fine condition.

53,153. Are they full fish ?—They have no roe or milt in them, or it is so very small that it is scarcely perceptible.

53,154. Are they caught in the upper part of the loch or in the lower part ?—What herrings do you mean ?

53,155. That larger class you spoke of ?—They come up and pass this place into Loch Fyne and subsequently come down here to spawn.

53,156. Were they caught by the trawlers in the upper part of the loch or in the lower part ?—They are caught here and would be caught in any part of the loch if the trawlers were permitted to trawl for them.

53,157. Where used they to take them ?—They have taken them here at the harbour and down the shore in every part of the loch.

53,158. Have you not bought at Inverary from the drift-net fishermen fish of that quality and size ?—I never bought 500 as large as I have got from the trawlers.

53,159. Can you say what proportion they formed of the whole take of the trawlers in the course of a year ?—I consider that in many seasons the trawlers caught more than the drift-net men.

53,160. But I am speaking of the larger class of herrings; what proportion did it form of the whole take of the trawlers; would it form a large proportion of their take in a whole year ?—Taking the two ends of the season, taking the latter end and the early part it would form a very considerable proportion. They are only caught coming up and going down, and they are rarely in much finer condition than they are when they are coming up the loch.

53,161. I thought you said they were caught only in the early part of the season ?—It is only in the early part of the season.

53,162. They are not caught all through the season in other parts of the loch ?—They go up the loch, but I never saw them trawling up the loch.

53,163. Was it only in the early part of the season that the trawlers used to catch those larger herrings here ?—Yes.

53,164. Had you any interest in the trawl-boats ?—No, none.

53,165. Have you any drift-boats belonging to you ?—No.

53,166. Whereabouts does the gutting take place; does it take place close to the shore ?—It should take place as soon as ever the herrings are taken.

53,167. Upon the beach ?—Yes; but they are much better if they are cured and gutted on board the vessel. The soil does not get at them; they are much cleaner and the gut is thrown away. They are much cleaner and are made up in a superior way.

53,168. Do you mean gutted before they come on shore ?—Yes, gutted when they are laid on the vessel's deck.

53,169. In the curer's vessel ?—Yes; there is only a small proportion of herrings cured here. I never cured herrings on the quay here. I always had a vessel and cured them on board. Once or twice I may have had the vessel's deck quite full so that they could not take any more and then we had to take them on shore.

53,170. Where were your vessels lying then ?—In the harbour.

53,171. Did they throw the gut overboard ?—Yes.

53,172. (*Mr. Caird.*) You seem to be rather an exception among curers as to your opinion in favour of the trawled-net herrings ?—Yes, I am very glad to be an exception in the view that I take because I find that few of those people have had any experience whatever.

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53,173. But I am correct in saying that you are rather an exception among curers as to your opinion of trawled-net herrings; is that not so?—Yes.

53,174. Can you give us any good reason why if the trawled herrings are as good as the drift-net herrings a large body of the curers should be so adverse to that system of fishing?—They object to it because it throws a large quantity of fresh herrings which are obtained by trawling into the market. They are carried away by the railway and sent to all parts of the country, and one consequence is that there is no demand for salt herrings. Of course the people will not buy salt herrings when they can get fresh herrings so much cheaper. There is an additional expense of 10*s.* attending cured herrings, and the curers of course expect to get a profit on every barrel that goes to Glasgow. It is easy to understand that when fresh herrings can be taken to the market 10*s.* cheaper per barrel than cured, that they can be sold at a cheaper rate to the public. Instead of herrings being sold for a penny or three farthings or a halfpenny each they would be sold at two for a halfpenny.

53,175. I understand from the previous evidence you have given that you only become a purchaser at a profit either of trawled or drift-net herrings when the price is low?—Yes.

53,176. Would not that be an advantage to the curers as well as to you?—Yes.

53,177. It cannot be to the advantage of the curers, who can only make a profitable trade when the herrings are at a low price, to advocate a system which makes herrings very dear, and therefore, unsuitable for their purposes?—That is why I think they are acting very blindfold in the matter, and why they were wrong in petitioning for trawling to be given up. I believe that now with a few exceptions they say they are sorry that the Bill passed, and I believe they are all unanimous in wanting the month of January to be an open month.

53,178. With regard to the close-time there seems to be a change of opinion?—Yes.

53,179. But not so much with regard to trawling?—I am quite convinced that they will change their opinion relative to that also.

53,180. (*Mr. Lefevre.*) Since trawling was put a stop to, do you think the proportion of fish taken and brought into Tarbert is the same, compared with the whole take, that it used to be?—Not one-tenth.

53,181. Do you think that a larger proportion of fish is brought into Inverary and other ports of the loch than there used to be?—I don't think that the proportion is any greater with the drift-nets in Inverary than it used to be.

53,182. Then where is the loss of the Tarbert men made up?—The herrings come and go. I perfectly agree with a remark of the Commissioners who inquired here two years ago when they say that of "all the herrings that come in there are only two per cent. taken."

53,183. You say that the Tarbert men do not get one-tenth of what they used to take?—Yes.

53,184. What places have gained by that?—I don't think there has been any gain at all.

53,185. But take the year 1862 when there was a very large take of herrings here; was not the take larger than you ever had here before?—Yes.

53,186. Did not the Tarbert men get their full proportion of that take?—Well I suppose so; they are never very lazy.

53,187. You think they did?—Yes.

53,188. And they caught the herrings by the drift-net instead of by the trawl?—Yes; they caught them by the drift-net, but if they had had the trawl-net they would have got ten times as many fish.

53,189–90. Even in that year?—Yes; they talk of the herrings not having made up, but there have been herrings at Minard if they could have caught them.

The witness withdrew.

J. Macmillan.

JOHN MACMILLAN called and examined.

53,191. (*Mr. Caird.*) You are a fisherman here?—Yes.

53,192. Have you long been a fisherman here?—Yes, 24 years.

53,193. Have you practised both drift-net fishing and trawl-net fishing?—Yes.

53,194. At present you are a drift-net fisherman?—Yes, and I was formerly too.

53,195. Was it the case when trawling was permitted here that you practised both just as you found the one suit better than the other?—Before there was any prohibition I did so.

53,196. You did not confine yourself solely to trawl-net fishing?—Not at all.

53,197. You always had drift-nets if you found that the fish took better to the drift-nets?—Just so.

53,198. Did you find that a better plan than to confine yourself to the trawl-nets alone?—Yes, we used them according to circumstances.

53,199. Then I suppose you sometimes found that the drift-nets did better than the trawl-nets?—Yes.

53,200. What kind of circumstance was it that led to the use of the drift-nets; was it the state of the atmosphere that made them answer better than the trawl-net?—On moonlight nights there is nothing to be got by trawling.

53,201. Is that because you cannot see the fish?—It is generally because we don't know where we can shoot upon them. Perhaps we may come accidentally upon them and perhaps not.

53,202. But you could not see them moving below the water?—Not if it was moonlight, but the two works can be carried on in a manner simultaneously.

53,203. When the herring-fishing begins in June where do you first begin to fish; on what part of the coast of the loch do you go to meet the shoals coming in?—The matter stands in this way. Perhaps to-night there would be nothing to be felt here, nothing at the head of Loch Fyne, and nothing at Campbeltown; yet the very same night they would get plenty between the head of Loch Fyne and Campbeltown.

53,204. Where do you suppose they come from then?—We are obliged to think, as a general rule, that they have been lying off. There is a great deal of mystery attending the fish. Sometimes they are lying in the deep, and they only go to the shore as the weather permits them.

53,205. We should like to trace the progress of the fish into Loch Fyne. At the commencement of June where do you mostly expect to find them?—We can find them sometimes as soon up opposite Otter Point as we can find them at Campbeltown. That is according to the way in which they strike the shore, but we generally think they come from the southwards up here. We do not go to meet them, however.

53,206. Are you sure that they have come from deep water into the loch?—I am certain of that.

53,207. You do not believe that they are in the loch and that they rise from the bottom?—No, they come from the southward. They do not go like a flock of sheep. They take their time, and they strike the shore just as occasion suits them, according as the tide, the sun, and the moon answer, and also the weather.

53,208. Do you consider there are no herrings all the year round in Loch Fyne?—I consider that there are.

53,209. Do you consider that they spawn in Loch Fyne?—I do not.

53,210. Not anywhere in Loch Fyne?—They used to do it, but not now.

53,211. What is the reason that they have ceased to spawn in Loch Fyne?—That is hard to tell.

53,212. Is it attributed to the use of the trawl; do you think that that would be the cause?—The trawl was never used there except in one season.

53,213. In what part of the loch was that?—From

Inverary downwards. Trawling has been very little practised up in the narrow parts of Loch Fyne.

53,214. Is that the best spawning ground?—I do not consider that Loch Fyne is the best spawning ground at all.

53,215. Then have you never observed them coming in great shoals and approaching from the outer sea into the lower loch and then going on to the upper loch?—We take it as a general rule that they do make their exit up there, and we consider that as a general rule Loch Fyne is a regular place for them to fatten and lie dormant in.

53,216. You were a trawl fisherman?—Yes.

53,217. It is alleged against the trawlers that being mostly down the loch they meet the shoals of fish as they are advancing from the sea and break them up so as to prevent them entering Loch Fyne in as large quantities as they would otherwise?—That is altogether an absurdity.

53,218. If it were the case that the herrings came from the outer sea, and that you encountered the face of the shoal, would you disturb them; do you ever encounter the face of the shoal?—No, only those which strike the shore.

53,219. Where do you get your most successful fishing?—In any part from the mouth of Campbeltown Bay to the head of Loch Fyne. I have been working from Campbeltown to Otter Ferry.

53,220. Generally speaking was the bulk of the fish caught by the trawl, during the time that trawling was permitted, caught close in-shore or in deep water?—Always in-shore at the commencement of the season.

53,221. (*Mr. Lefevre.*) Until what part of the season?—Until the month of August. From the 1st of June until the beginning of August.

53,222. Then do you take them in deep water?—Yes, as far as we go. We take them anywhere we can get them.

53,223. Would you oftener find them in deep than in shoal water after that time?—There is nothing you can perceive them by at the beginning of the season except only as they jump and play about, but after the month of August there is a kind of burning and you can see the fish when they move.

53,224. (*Mr. Caird.*) At night?—Yes; but not until the middle of July or the beginning of August.

53,225. When that light begins to be seen in deep water do you find it more profitable and convenient to go and look after the fish in deep water?—We must take them where we can get them.

53,226. Do they themselves in any way as a matter of rule come in less numbers into shoal water near the shore after the month of August?—Not at all; there is no difference in that respect. They come more abundantly if anything.

53,227. Then is it often or very seldom that you desire to go out into deep water to fish with the trawl?—If we could find the fish inside it would benefit us most to take them there.

53,228. Would it be a great hardship upon the trawl fishermen to be prohibited altogether from trawling at a certain distance from the shore in a certain depth of water outside?—Yes, I consider it would.

53,229. Suppose the law would permit trawling to be followed in shoal water and along the shore, but not out in the deep waters of the bay, would that be a fair compromise of the question?—I should consider it no hardship at all. It is only when we find nothing along the shore that we go into deep water.

53,230. Do you think it would be a hardship upon the trawl fishermen to be limited to the use of the trawl along the shore?—I consider that it would be no hardship.

53,231. It would be no hardship to be prevented using the trawl above Otter Point?—With regard to my own experience I have never done that. I never saw trawlers working there except in one year, as far as I am aware of.

53,232. Then you would not consider it a great hardship?—No, I would not.

53,233. Are there certain states of the weather in which the fish are found in great quantities in-shore in the bays?—Yes.

53,234. In what weather and in what month?—In the finest weather. It depends upon the wind and the weather, and the tides too. There are times when we get lots of fish near the shore, but if a heavy gale comes on, such as has been blowing for some time past, the herrings rise and go to the deep water; and we will not see them either in deep or shoal water.

53,235. If a heavy gale and sea set on this shore, you do not find the herrings in the bays where that heavy sea is running?—No.

53,236. Then you would not look after them?—No.

53,237. What distance from the shore would be the limit within which you could work your trawl with advantage without interfering with the drift-net fishermen?—We never see the drift-net fishermen at all when we are working with our trawls. The drift-net fishermen do not come within the points at all, because they dare not do so. They cannot fish there.

53,238. Why not?—Because they would lose their nets. There is a man here whom I can point out who lost 10*l.* worth of nets in consequence of shooting too close in-shore.

53,239. Were his nets caught by the tide and driven on the rocks and torn?—Yes, he lost 10*l.* worth.

53,240. Do you mean to say, therefore, that the drift-net fishermen, if they knew it, would not set their nets where the bottom of the net would touch the ground?—Not within miles of it where there are headlands that could catch them.

53,241. He must set his nets so that they would drift clear of the headlands?—Yes.

53,242. Within such limits would you think it of advantage to use the trawl-net?—Yes; there is not a drift-net fisherman who dare set his nets inside the Black or Yellow islands. He must run clear of the shallows.

53,243–4. (*Mr. Lefevre.*) Do they sometimes anchor their nets?—We do, but they do not.

53,245. (*Mr. Caird.*) Would that prevent any damage being done?—Yes.

53,246. Then the drift-nets may go into the bays?—Strangers could not; they have not the tackle for it.

53,247. But you can use them?—Yes.

53,248. You can use your drift-nets in-shore?—Yes.

53,249. Then it can be done?—Yes, in small quantities and with small pieces of net. If we had a large train of nets the anchor would not hold.

53,250. (*Mr. Lefevre.*) But what you do the other drift-net fishermen could do if they had the same tackle?—They have not the boats nor the means of doing so. They will not do it because they have three times as many nets as we have. It is only a small piece of net that you can shoot between the nets, because otherwise the anchors would not hold.

53,251. Are the nets of the drift-net fishermen deeper nets?—I don't say anything about the depth, our nets are just as deep; what I refer to is the length.

53,252. (*Mr. Caird.*) What distance from the shore would be sufficient to enable you to make a good sweep with your trawl-nets?—That would just be according to where we should see the fish and whether we saw them in the water or whether we saw them playing and jumping about. Then we could form a proper idea, but as a general rule we never draw them at the beginning of the season. We used to draw the bay without seeing anything at all, and we have got some of the large herrings. In the years 1846 and 1847 and from that up to 1852 or so we used to draw in the beginning of the season without seeing any appearance of the herrings at all. I have seen the time when we have been taking half the full of this room without seeing anything either jumping or playing about. That was just trying our chance,

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53,253. (*Mr. Lefevre.*) What distance from the shore was that?—About 60 fathoms.

53,254. (*Mr. Caird.*) Are we to understand that the luminous appearance in the sea does not show itself until the month of August?—About the 22nd of July. It depends upon the water, but it is generally about the 22nd of July that we begin to look out for the herrings in the water.

53,255. It is alleged against the trawlers that they take herrings which are half grown or immature, and a great number which are unfit for food. Can you from your experience tell us whether that is the case in the fishing during the present open months of the year since the close-time was established in the spring months?—It is not, but previously it was.

53,256. Do you not catch those small fish during the open fishing months?—No, nothing of the kind.

53,257. Is there any large proportion of the fish which you do catch that are very small occasionally?—No, none. We may get perhaps one or two which have become rolled into the nets but they are not caught properly. They have merely become a kind of fixture in the net.

53,258. Have you observed when you were hauling the trawl that many small fish escaped through the meshes and got away?—None that I am aware of. They did not get away. I have never seen them. In fact they were almost always just of the same size. I never saw any small ones jump through.

53,259. But you have seen small herrings amongst the large ones in your trawl-nets?—Yes, but not many according to the quantity taken. I never saw with a proper mesh—I mean a mesh of the proper size—anything run through in that way. I should consider them very useless if they were able to get through.

53,260-1. You admit that sometimes in a shoal of herrings there are large and small fish?—In general they are about of a size. If there is a right shoal of fish coming in they are about of a size.

53,262. They are all of about an equal size?—Yes, there is very little difference.

53,263. You do not mean to tell us that there are not sometimes smaller herrings caught along with the larger herrings?—There are exceptions, but there are no fish so far different from the others that they would run through the mesh.

53,264. Do they vary much from month to month; from June until December is there any decided change in the size of the herrings you catch?—When we were working at trawling as a trade here, in the months of June and July, I would defy any man taking five boatloads to get a small herring among the whole five loads.

53,265. Would it depend at all upon the size of the mesh of the net that you use?—No, I think not.

53,266. Do you not consider it to be important that a certain standard mesh, below which you should not be permitted to fish, should be established?—Yes, I do.

53,267. What should that standard be?—A square inch.

53,268. An inch mesh?—Yes.

53,269. The same as the drift-nets?—Yes, exactly so.

53,270. If that regulation were established among you and enforced, would it prevent you from catching to any extent small herrings?—Most decidedly it would, but I do not consider where there is a body of fish that there is any quantity of small herrings with it. As experienced men we know the size mostly of the herrings when we look at them in the water or see them playing. We know exactly what the kind is, and we do not shoot at all among them if they are only small herrings; we know at once whether they are sile or good herrings.

53,271. If you did get among the sile would your nets catch them?—No, they would go away.

53,272. Would not the net catch them if you had a large haul, and they got mingled with the other fish?—No, we should take none of them at all in the trawl-net. The mesh expands; it does not diminish at all.

53,273. Is it the fact that in the month of December, and towards the close of the season, the herrings get smaller?—No, it is not.

53,274. Are there not some months when they get smaller?—There are particular species of them that are small; they are not all large, every one of them.

53,275. If it is said that in the month of December in a certain year boatloads of herrings, barely the size of sprats, had been taken and sold at 9*d.* per 1,000, can you say whether it is true or not; have you ever seen that done?—No, I never saw anything of that kind.

53,276. Have you ever seen boatloads of these very small fish taken by the trawl-net at all?—Yes, but they were taken by cuddie-nets; those nets we use for fishing cuddies.

53,277. What time of the year was that?—I do not know.

53,278. Was it during the herring-fishing?—It would be about the month of May.

53,279. Since the close-time was established has anything of that kind been carried on in the open season?—No, it could not be done. There is not a trawl in Tarbert now; there is nothing of the kind.

53,280. Have you ever with your trawl-net disturbed the spawn of fish?—Never. I never saw the spawn of herring taken up.

53,281. Then if you never saw it, you do not admit that there is any truth in that assertion?—I have never seen it. Any man may take up a full fish and see spawn in it, but I never saw the spawn taken up off the ground where the fish had been spawning.

53,282. Have you observed whether the herrings which have been taken by the trawl were more injured than those taken by the drift-nets, and were thus less suitable for the market?—When trawling was allowed I have seen the most beautiful herrings I ever saw in the trawl-nets. I have never seen anything equal to them.

53,283. Has there been any change in that?—Well, since trawling has been prohibited, there is no doubt that the herrings sometimes do not look as well. When you require to do a thing quickly and abruptly they would necessarily not look as well.

53,284. Is there anything in the fact of the herrings meshing themselves and being kept separate from the other herrings to a certain degree that would keep them in a better condition than when they are drawn in in a lump and thrown to the bottom of the boat in a large mass?—No, in point of fact the one is better than the other.

53,285. Then is there nothing in the allegation that those which mesh themselves bleed themselves?—No, that is an absurdity, and it is impossible for any man of common sense to think so. I never saw a drop of blood on the gills of a fish in my life.

53,286. Have you seen it on the net?—I have seen it among whitings. I have seen lumps of blood on taking the hooks out of their mouths, but in net-fishing I never saw anything like blood.

53,287. Is it not the fact that they are thrown in large heaps at the bottom of the boat mixed up with water and dirt, and that they are apt to be injured when they are caught in the trawl-net?—Not if any care is taken of them. You must always take care of the fish.

53,288. It is possible to do that?—Yes.

53,289. If you were allowed time you think it would be possible to adopt such regulations as would enable you to preserve the fish in good order?—Yes, they would all be in good order if every man had time allowed him to take care of his fish. The better a fisherman does his work the more he gets for his fish. If he does not take care of them he must suffer the consequence.

53,290. You said just now that you have had large hauls of fish that would half fill this room?—Yes.

53,291. Have you frequently had such large hauls

that you were unable to take the fish away, and that vast quantities were spoiled and left to rot in the sea?—I have been present on some occasions when we could not take them away ourselves, but we have got other boats to take them away. We were not very fond of leaving them in the sea if we could avoid it.

53,292. (*Mr. Lefevre.*) Did you find that the drift-boats came and helped you?—Any sort of boats would do so. We did not care what they were. I have often seen one boat get more than she could take when there might be perhaps 20 other boats that got nothing. In that case those who had a large quantity would call to the others and offer them 5*l.* to take the full of their boat up to the quay or half the value of what they take.

53,293. Would the drift-boats come away from their own fishing and do that?—The drift-boats do not come near us. We do not see the drift-boats at all. We have not seen them for months. If our nets were right across the channel we should not come across a drift-net boat at all.

53,294. (*Mr. Caird.*) Does it frequently happen that large quantities of fish are lost from the impossibility of your either getting the means of conveying them or taking them out of your net?—No, it is not true. I never saw that but once, and that was at the mouth of Loch Gare when the cutter came in. Trawling was scarcely prohibited at the time, but it was not altogether allowed. When the cutter came the fishermen went away, and they were obliged to leave their net and all that was in it.

53,295. What happened then?—The men in the cutter raised the net, and in doing so they tore it, not knowing how to lift it.

53,296. Was there a large quantity of fish left there?—Yes.

53,297. Is that the only occasion you remember on which the fish were left by there being too heavy a haul for you to make use of?—That is the only time. We take very good care that we do not go too close at any time in-shore, because if we do we are sure to catch stones, and then our nets would be torn. We take care when we get in a shoal of fish to get a sufficiency of them, and then we secure what we have got.

53,298. What is the largest haul you have ever had at one time?—About 250 maze.

53,299. Of good herrings?—We got 1*s.* 9*d.* a hundred for them.

53,300. (*Mr. Lefevre.*) Would that be about the same number of barrels as maze?—There are 500 to the maze.

53,301. How many to the barrel?—About 800 to the barrel.

52,302. Have you ever known of 1,100 barrels being taken in one haul?—Yes, there was one particular haul which was enormously large. I cannot state the number of barrels, but I know there was an immense quantity. There are some fishermen present now who were there at the time that take was made.

53,303. That perhaps occurs only once in a lifetime?—It is the only one I ever knew of.

53,304. (*Mr. Caird.*) It is not a matter of frequent occurrence that there is a large quantity of herrings taken and lost from the want of your being able to get them in?—No, it is not.

53,305. Have the most of the men who were in the habit of following trawl-net fishing become drift-net fishermen here?—Yes, but in what situation are they?

53,306. Have they done so?—Yes.

53,307. If permission were given to you under certain restrictions to use the trawl-net what would you do, if you had that permission; you as a fisherman have been in the habit of using drift-nets and occasionally of using trawl-nets, how would you proceed so as to work to the greatest advantage to yourself?—I should most decidedly take to the trawl-nets.

53,308. Would you not do both as occasion offered?—I have seen the herrings in the west loch here, as, for instance, in 1847 and 1848, when there was nothing to be done here. There was, however, a fishing begun in the west loch, and we could kill plenty of herrings at 1*s.* 3*d.* a hundred If I had not had a drift-net at that time I should just have been a poor man.

53,309. You could at that time do nothing with the trawl?—Not here. Nothing was done here in the autumn then.

53,310. Speaking of the fishing in Loch Fyne and within Ardlamont Point and Skipness Point, including the lower and the upper lochs, would you follow both as you found occasion, or would you confine yourself to trawling?—On moonlight nights only we should take to the drift-nets. If I had gear I might go, but it would take the whole time to get our nets in order during the time of the full moon, and they might get torn and so forth. We should only be two, or three, or four days idle together. It would be a bother or an incumbrance upon us to be shooting drift-nets and trying them, and then taking them home again. For my part, I consider that we should only follow the one occupation.

53,311. Would that be the case with most of the Tarbert fishermen?—I think so. That is my opinion.

53,312. You would expect of course to make much larger hauls with the trawl-nets than with the drift-nets on the whole?—Yes, most undoubtedly.

53,313. You would expect greatly to increase the catch of fish, would you not?—Yes.

53,314. Would the effect of that being followed by a great body of fishermen be that you would take such large quantities of fish that you would very soon clear the loch of fish altogether?—Not at all. We should only increase the supply without diminishing the stock.

53,315. You think so?—Yes, and I am certain of it.

53,316. Do you think that every year a vast quantity of fish leave the loch that you never catch at all?—They never return.

53,317. Do they leave the loch?—They are a migratory fish, no doubt.

53,318. Have you observed, as a practical fisherman, that sometimes the fish do not mesh well in the drift-nets, and that you could then catch them in the trawl?—Yes, particularly at certain seasons. I do not believe that there has been any scarcity of herrings. I have been for 24 years working at the fishing, and I have never seen more herrings in my life than there are now. They strike our nets and we see them in mountains. They are in enormous lumps together.

53,319. And yet they do not mesh in your nets?—If we shoot our nets we might perhaps get three.

53,320. If you were permitted to use the trawl would you be able to secure good hauls?—Yes, either in the deep or shallow water. We could get them anywhere we tried, and yet now we cannot get one; very often this season we have been obliged to come back without having got fish. In point of fact, there is no use in trying our nets, as it is quite certain that after we have shot them we will only get two or three, and perhaps none at all.

53,321. Do you remember after trawling was put a stop to that the next year, namely, 1862, was one of the most productive fishings known in Loch Fyne?—Yes, in the upper loch it was.

35,322. Was there not a good fishing in the lower loch also?—No, the good fishing was up in the upper loch, but they were an inferior quality of fish.

53,323. Where they large fish?—Yes; but they were an inferior quality of fish. They were the worst I ever saw.

53,324. There was a very large quantity taken from the loch by the fishermen altogether?—Yes, there was.

53,325. The next year, namely, 1863, was a very inferior fishing?—Yes, it was a very poor one.

53,326. Do you think that the great take of the preceding year had anything to do with that?—Nothing of the kind; the two were quite distinct.

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I do not consider that a shoal of fish coming to Loch Fyne this season is a shoal that comes always. We are under the belief at times that they come three years successively, that is our idea, but it may be erroneous.

53,327. You think they come three years successively ?—Yes.

53,328. Do you mean the same shoals ?—Yes, that used to be our opinion.

53,329. It is alleged that it was in consequence of the total prohibition of trawling that there was such an excellent fishing in 1862 ?—Nothing of the kind.

53,330. Do you admit that that is the case ?—I do not. How has it proved since; where have they gone to for the last two years ?

53,331. You do not admit that trawling has anything to do with the strength of the shoals as they come into Loch Fyne or the general take of fish in one season or another ?—No, and I do not consider it prejudicial in any manner. I believe that it always made the supply greater.

53,332. (*Mr. Lefevre.*) Do you think the fish were in abundance in the loch last year and that they were not caught by the drift-nets ?—Yes, they were here.

53,333. Would you have had a good take of fish last year if trawling had been permitted ?—Yes, we should.

53,334. Did you give evidence before the Commissioners about this time of year in 1862 ?—Yes.

53,335. Up to that time there had only been a very small take of herrings ?—Yes, it was very small up to that time.

53,336. But later on in the season you had a very great take indeed ?—Yes.

53,337. Do you think it is possible that there may still be a great take of herrings in the loch here this year ?—There are more herrings to be seen this season than ever I have seen during my experience; and that has now extended over 24 years.

53,338. Is it not possible that the drift-boats may take them in the latter part of the season ?—No, they will not.

53,339. Why is that ?—I cannot tell, but if they get a few of them it is only by placing the drift-nets so close to the shore, in point of fact right on the rocks, that there is no possibility of their escaping.

53,340. But the drift-nets in 1862 caught them in the latter part of the season. Could they not do the same this year ?—They have not gone into Loch Fyne; they are in the roadstead here. There are plenty of herrings here, but those herrings that are here are not the same as the larger sized herrings which go to Loch Fyne.

53,341. Do you think as a rule that the fish in the loch in the earlier part of the season leave it, and are replaced by another class of fish ?—No; the shoals go there, and if there is not another shoal going in among them to make them work, they will not work.

53,342. Do you mean that the fish that go there in the early part of the season stay in the loch during the whole of the season ?—Yes, I think that is the case until the month of December or so.

53,343. When they begin to migrate ?—Yes.

53,344. Did you begin trawling in the year 1846 or 1848 ?—I was trawling in 1846.

53,345. What number of men were there at work trawling at that time; can you recollect ?—No. In 1846 there would not be more than 30 boats.

53,346. Did they greatly increase in number ?—Yes; there was a great increase.

53,347. Were nearly all the men at Tarbert trawlers at one time ?—They were nearly all trawlers here. There may have been one or two drift-boats.

53,348. Are you able to say what was the greatest number of trawl-boats in Tarbert ?—I should say that there were at one time about 60 or 65 boats.

53,349. At the same time was there a considerable number of drift-boats worked by the trawlers ?—No, there were very few drift-boats worked by the trawlers. When trawling was going on I should say that there were not for some years more than 15 boats.

53,350. The fishermen here occupied themselves solely in trawling ?—Yes, always in trawling when trawling was allowed.

53,351. When trawling was prohibited did they continue to use the same boats for drift-net fishing which they had used for trawling, or had they to buy other boats ?—Those who could afford to buy other boats did so.

53,352. Were the boats not well adapted for drift-fishing ?—Yes, they would do very well at home, but they were not adapted for going from home.

53,353. You are not able to take them any distance from home ?—No.

53,354. Have most of the trawl fishermen here provided themselves with boats and nets ?—They have generally the old boats, but some of them have bought new boats.

53,355. Have a great number of them bought new boats ?—Yes.

53,356. And they have provided themselves with nets ?—Yes; but I am sorry to say that they have to be paid for yet.

53,357. Have they borrowed money to pay for them ?—No, they have not got the money to pay for them. Perhaps one or two young men may get a few pounds worth of nets from some of the merchants here, but a married man with a family will not, or dare not go to look after them in that way. It would be expected that he could not pay for them, and they would not let him have them.

53,358. Have many of the fishermen left this place in consequence ?—Yes, a great many.

53,359. Are they mostly the younger men ?—They are the younger men in general. Those who could do it have gone; of course, if a man is in debt he dare not go away.

53,360. Is the trawling a business at which only the younger men could work ?—All persons could work at it, and it is the most productive mode of fishing in existence; and further than that it does less harm than any drift-net fishing. The way in which we work now with the drift-nets in order to enable us to get a few hundred of fish leads to more destruction among the herrings than all the trawling I ever saw carried on. The first boat that comes gets a small shoal of herrings right in-shore; as fast as she can she shoots three pieces of net. She has her net perhaps in three pieces.

53,361. That is the drift-net fishing ?—Yes; she goes in close upon the heel of the shoal, I follow, and I am as active as my predecessor. He goes in and hammers away as fast as ever he can, trying to put a few of the fish into his own nets, but that mode of fishing in my opinion would spoil all the shoals on earth.

53,362. You think that the drift-net fishermen if they are so minded can spoil the shoals of fish more than the trawlers ?—Yes, most distinctly. If I was trawling I should go to the fish cautiously, and work the thing easily and cannily without making much noise, because the less noise I made the better it would be for myself.

53,363. Are there any trawlers in Tarbert now ?—Not one.

53,364. Did they sell their trawls at a great loss ?—No, they had them shut up in other ways. In point of fact the Government has most of them now.

53,365. Was there much trawl-fishing above Otter Point ?—Not more than one year, that was all.

53,366. What made you go up that year ?—I did not make a pound by it.

53,367. What made you go up ?—There was nothing to be got here at that time. The herrings had all gone there. There are years when, do as we will, it is not always when we like that we can catch them.

53,368. But if you went into the upper loch you must fish close to the drift fishermen ?—Not at all. A trawl-net has nothing to do with drift-net fishermen at all. It does not come into contact with them at all.

53,369. But in that year all the drift-net fishermen

were at work in the upper part of the loch?—Yes, but a great many of them had dropped it. The fleet was not very heavy then.

53,370. But where the water is very narrow, would you not come close to one another?—A drift-net fisherman must not go close in-shore, because if he does he will get his nets torn. They go running along with the tide, but if they go too close in-shore and come across the least foul ground they will catch the bottom and have their nets destroyed. They are often crawling along and perhaps sleeping all night.

53,371. Are the drift-nets not often set within 100 fathoms of the shore?—No; but there are only Tarbert men between this and Campbeltown.

53,372. I am talking now of the Upper Loch Fyne?—There are some of them who shoot what they call trammels or pieces of nets.

53,373. They are anchored, are they not?—Yes, when we call them trammels they are anchored.

53,374. But I mean drift-nets. Are not the drift-nets often set within 100 fathoms of the shore?—Yes, in Loch Fyne, because the water is bold and deep.

53,375. Is it possible for trawl-nets to be shot there without interfering with the drift-nets?—Yes, there would be more room than I should require by a great deal. If the herrings in Loch Fyne are in-shore you could not shoot your nets as close in as they are, for the shores are bold and deep and the bolder the water the closer in they go.

53,376. Would the trawlers go closer in?—No, the herrings themselves. The drift-nets cannot be shot there. You could not shoot in a small place with them. You must have a regular distance in order to shoot drift-nets.

53,377. Do you mean that they could not shoot in the small bays?—No, they must take their proper length and keep a certain distance from all the jutting points, or otherwise their nets would be destroyed.

53,378. Was it a great disadvantage to the trawl fishermen to be prohibited from trawling in Upper Loch Fyne, say within Otter Point?—We should like to get the work carried on anywhere, and I consider that it is not right to prohibit it anywhere. The fishermen of the upper loch fish with us simultaneously, and the two works could be carried on simultaneously quite well.

53,379. Even in the upper waters of the loch?—Yes.

53,380. And in the Kyles of Bute?—Yes, anywhere.

53,381. Did the Tarbert men trawl much in the Kyles of Bute?—Yes, at the latter end of the season, We trawled wherever we could find fish.

53,382. Did you trawl at all during what is now the close-season, namely, during January, February, March, April, and May?—Yes, we did.

53,383. Did you trawl in the Kyles of Bute at that time?—No. There was one year that the trawlers were working there.

53,384. Was the take of fish very small?—They were rather inferior I understand. I was not there, but I believe they were rather inferior at that season.

53,385. How far to the south would the trawlers go down towards Campbeltown?—We have been to a place called Carradale. We could work anywhere if the wind and weather permitted. We could work on any shore if there was clear ground, but in general we never pass what they call Carradale Point. It is too far for us.

53,386. Do you think the trawl fishermen made more by trawling than by drift-net fishing on the whole?—Yes.

53,387. What would you make in comparison?—Since trawling has been given up we have not got five per cent. of what we got formerly.

53,388. Have you not got more than that this year?—No.

53,389. Take 1862. What did you get then?—I should consider that we only got 15 per cent. of what we got in 1849 and 1850.

53,390. Even in 1862?—Yes, in 1862 I consider that we did not get more than 15 per cent. of what the Tarbert men made in 1849, 1850, and 1851.

53,391. In 1862, when you were examined, you gave the proportion that the drift-net fishermen would make at 50*l.* a year and with the trawl-net 80*l.* a year; is that a fair comparison?—Yes, it is; but the expenditure of the one is not to be compared with that of the other.

53,392. You have to pay much more for your nets and boats for drift-net fishing than for trawl fishing?—Yes.

53,393. Then you have not taken that expenditure into your calculation when you made that comparison?—It would be a very successful man at a third share who would make 50*l.* He might have made that in 1862.

53,394. Do you recollect what you made in 1862?—No.

53,395. Were the Tarbert men not as successful as the Inverary men?—The Tarbert men would get more fish with six barrels than the Inverary men would do with a hundred.

53,396. Can you explain why it was that the Inverary men have not taken to trawling?—It was because they were not qualified for the work. They cannot do it; they are too lazy.

53,397. Are they not as successful as you with the drift-nets?—No, they cannot do it; they are a sleepy set of men and they cannot catch as much.

53,398. Do you fish all the year round?—Yes.

53,399. Do you fish with the line during the close-season?—Yes, I can work with any sort of fishing gear, of whatever description.

53,400. Have you found the supply of white-fish falling off, and the supply of haddock, cod, and whiting?—Yes.

53,401. When did whiting and haddock begin to fall off?—I cannot tell you. At one time we used to go out in the west loch and we sometimes got 80, 100, and 120 stone of whiting and haddock in the Sound of Jura.

53,402. Did you fish mainly on the other side?—We fished in all places, but I allude now to that particular spot.

53,403. Speaking generally, when did they begin to fall off?—About five years ago.

53,404. Have you been taking small quantities of them lately?—There were boats from here that went last year and all they got was two small whitings.

53,405. Was it the same with the haddock?—Yes, there was nothing at all. Two were all they got, and I saw them floating in the water.

53,406. With regard to the hake how was it?—That was better last year.

53,407. Have you sustained any loss through not being able to get herring bait during the close-time?—No doubt there is a loss in that way.

53,408. What bait have you used?—Generally herring bait. We have got herrings either by hook or by crook; that is the fact of the matter.

53,409. Then you have not sustained any loss from that?—Yes, the bait was inferior.

53,410. Did you buy it from the east coast?—Yes. If we pilfer them we must do it in a stealthy way.

53,411. Cannot you get it as fresh as if you were allowed to fish for it?—No; if you take any fish and send them any considerable distance, herrings in particular, you will find all the scales rubbed off them, and bait, particularly herring bait, must be well scaled or the fish will not have it. Eels are a very particular fish in that respect.

53,412. Then do you think it would be desirable that you should not be allowed to catch herrings for the purpose of bait in the close-time?—I am not an advocate for a close-time, but I consider, and I believe that is the opinion of most of us, that from the 1st of February to the 1st of June, together with permission for us to trawl, would be sufficient for us.

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53,413. You would have a close-time from the 1st of February until the 1st of June?—Yes.

53,414. In the meantime you would allow herrings to be taken for bait?—Yes, but not for the market.

53,415. Would it be possible to allow the one without also practically allowing the other?—Quite, and I am fully convinced that for our part here, speaking now of the Tarbert men, there would be nothing of the kind seen in any shape or form.

53,416. You think they would not catch the herrings for the purpose of sending them to the market?—No, they would not.

53,417. If you were allowed to take them for the purpose of bait and took more than was required for that purpose what would become of the rest of the fish?—They would be thrown overboard.

53,418. Would the fishermen have sufficient strength of mind to throw them away?—They would because they would be compelled to do so.

53,419. Would they not try to dispose of them in the market?—No, there would be no market.

53,420. You are opposed to the close-time as it is at present enforced?—I approve of it in a manner, but I think the open season might be extended.

53,421. What would be the proper time for a close-time?—In the months of April and May on the west coast the fish are inferior, because there are small shoals of young herring which come upon our coast and feed there. They are a very voracious fish at times and they feed on the animalculæ or small stuff they find in the water.

53,422. What sized herrings are they; are they quite small?—Yes, and they go close in-shore and get so stupified that they might be caught with anything. They are of no use for food.

53,423. They are of an inferior kind, and are of no use for food?—The large ones feed upon them. There is a kind of substance in their bellies which seems to eat up the fish. If you allow them to lie for a day they go quite bad.

53,424. Are they small herrings?—Yes, and large ones too.

53,425. Are not the large herrings in a fit condition to eat at that time?—They are very seldom caught on this coast at that time.

53,426. Do you think the herring spawns in Loch Fyne during the close-season?—No, I do not, and I do not consider that there are any herrings at all that spawn in Loch Fyne.

53,427. Do you think the herrings are in Loch Fyne at all in the close-season?—The regular good herrings leave Loch Fyne every season when it comes round.

53,428. What herrings are there in Loch Fyne during the close-time?—They are of an inferior quality.

53,429. In bad condition?—They are spent fish. There are no good fish in any part about this coast during the close-season.

53,430. If they are spent fish where do they spawn?—There is not a large quantity of them; there are very few.

53,431. Then would it be worth while to go out and catch them?—You would not get them if you did.

53,432. Neither in the trawl-net nor in the drift-net?—By any meshes you like to invent you would not get them at that time.

53,433. Have you found cod with herrings inside them at that time?—Yes.

53,434. Have you often observed that?—Yes.

53,435. In February, March, and April?—Yes.

53,436. How high up in the loch do you catch the cod?—We never made it a practice to go there. In the spring of the year we always fished outside here or on the west coast.

53,437. Whereabouts do you fish on this side?—Between this and Arran and the back of what we call the Inch.

53,438. Do you fish immediately off Tarbert for cod?—Yes.

53,439. How many fishermen are there here occupied in line-fishing for cod during the close-time?—About 20 boats.

53,440. Are they large boats?—There are about 20 large ones. There may be a few small ones, but it does not pay them.

53,441. Then it does not occupy all the fishermen who fish for herrings?—No.

53,442. What becomes of the rest?—They do as they can.

53,443. Do they work as labourers?—They are not accustomed to work as labourers, but they can do it.

53,444. Do they do nothing?—Every man has to shift for himself when it comes to that.

53,445. (*Mr. Caird.*) You talked of the herrings at certain times "working." Will you explain what you mean by that?—What we call working is when they go into the nets. There are times when they work better than others, and it is according to the state of the moon and the state of the tides that the herring comes up to the surface.

53,446. They lie dormant at times?—Yes. We neither see nor feel them during the turn of the tide.

53,447. They then begin to move?—Yes.

53,448. And you call that working?—Yes. If the moon begins to rise about 7 or 9 o'clock at night you would not think that there was a herring in the water or a living fish at all. When the moon begins to peep they come up and generally the tide and the moon go together. The reflux of the tide is according to the rising of the moon. In general they begin to play, and then if you have a chance at all you will get a few of them at that time.

53,449. That is what you call working?—Yes.

53,450. You said that a fresh shoal of herrings comes in and mixes with the herrings causing them to work?—Yes.

53,451. Does anything that agitates the mass make them work?—Yes.

53,452. (*Mr. Lefevre.*) When you were working in the deep water, and taking a large quantity of fish, have you observed many drop from the trawl dead in consequence of being jammed and squeezed together?—No, never. There might be a hole in the bag of the net that would allow them to go through, but they would not go through in any other circumstance.

53,453. Would those fish be alive or dead?—They would be alive, but they cannot get out as long as the net is whole. It forms a bag.

53,454. When you use it in deep water cannot they get away until you get the net close to the boat?—Yes, until you get them just into the boat.

53,455. Would they drop from that dead in consequence of being squeezed up and jammed together?—No, they are all living, and they could easily make a descent if they liked even when they are in close.

53,456. (*Mr. Caird.*) Do you catch any other kind of fish except herrings in your trawl-nets?—Yes.

53,457. What other kinds of fish do you catch?—Dog-fish.

53,458. Do you catch many dog-fish?—Great quantities of them.

53,459. Are the dog-fish ever caught in the drift-nets?—Yes.

53,460–3. Do they mesh themselves?—Yes, they do. Some strangers went out this night fortnight, and they got an immense quantity. They were Ballantrae men. There are no Tarbert men who go out on Saturday night. I believe these men I am speaking of got such an immense quantity of dog-fish into their nets that their nets were quite spoiled. Two crews had to go out and fetch the nets in.

53,464. With regard to salmon, do you ever get any salmon in your trawl-nets?—No.

53,465. Or salmon trout?—No, nothing of the kind.

53,466. Were there a great number of trawl-nets used here with the mesh less than the legal size?—Yes.

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53,467. Was that at the beginning of trawl-fishing?—Yes, at the time it was a legal business; they were always 36 to the yard. It would be of no benefit to the fishermen themselves to have a small mesh. The larger the mesh the better fish they get.

53,468. What made them alter it?—They altered it when there was a prohibition made, because then the sooner they could get off with their work the better. They tried to put a couple of nets into the middle of the net so that there should be no fish meshed in them. When they drew the nets they went away with them as hard as possible.

53,469. The herrings do not mesh in the trawl-nets?—No, not as a general rule.

53,470. Then, in that case, you may have caught a large number of small fish?—Yes, that may have been the case; but we have more trouble in taking out those which mesh than anything else.

53,471. What was the smallest class of fish you caught when you used the legal mesh; did you catch them of seven inches in length?—Yes, I think so. The 7-inch herring is not a small herring provided it is in good order.

53,472. Do you take them less than that when you use a legal mesh?—Not commonly.

53,473. But when you adopted the smaller mesh, what was the size of the herrings you took then?—We could take any sort of fish at that time.

53,474. Quite small fish?—Yes, but not extremely small. The smallest thing ever I saw that you would try to take to market would run about 1,500 to the barrel or box.

53,475. Were there a certain number so small that you would not send them to market?—No, I never saw that.

53,476. Did you ever try to work the trawl-net in the daytime?—Yes.

53,477. With success?—Yes, but in general in the daytime it is an inferior quality of fish that we get.

53,478. How, in point of size or in condition?—Both in point of size and condition. I have known one year when we could not get anything if we did not get them in the evening.

53,479. Could you ever see the shoals of fish from the high lands about; could you see them in the water and then go out with your trawl-nets?—No, but we can stand on the shore and see them. We go ashore and then look at the bays, and every man would mark out for himself the place he wished to fish in. We could see the fish playing and jumping about in the water.

53,480. Apart from the jumping could you see any appearance in the water that would indicate a shoal of fish?—I have often seen herrings in lumps below me.

53,481. When you have been on the bow of the boat looking over?—Yes.

53,482. But not from the high lands on shore?—No.

53,483. Are you able to detect a shoal of fish coming in?—Not that I am aware of.

53,484. You never saw anything of that kind?—No, they do not make the water swell, but I have seen lots of them jumping and playing about.

53,485. Have you ever thought when the drift-nets have been set in great quantities that they prevented the shoals of fish from coming in-shore?—I have no hesitation in saying that it would be very injurious to shoot nets of any description during the daytime.

53,486. But how is it during the night-time?—During the night-time the fish will go in-shore or keep out as they like.

53,487. You do not think the drift-nets hinder the fish from going in any direction they like?—Not at all, if they are set there at the proper time, but I consider that the proper hour for shooting drift-nets is in the evening about the time of sundown. It would be very injurious to shoot them before.

53,488. On what ground?—On various grounds.

53,489. What are your reasons?—It makes them go down and they escape.

53,490. Are the men who do that not so likely to catch fish?—On the whole we consider it is prejudicial to the fishing to begin to shoot the nets in broad daylight. There may be herrings there. You may see them playing in the water, but whenever they see the nets they take to the bottom, and they have plenty of means of their own to escape.

53,491. Would that frighten the fish out of the loch, and would they go away?—They would not be a bit the better for it. In narrow places it would have that effect.

53,492. Are the fish frightened by the luminous appearance of the drift-nets?—Yes, no doubt they are.

53,493. Do they leave the loch on that account?—I do not say they leave the loch, but I have seen them crossing in the loch. On a stormy night you may see a train of nets and the fish all in a body on one side; the burning appearance in the water makes them go like a drove of sheep on each side of the net, but not one of them would touch it.

53,494. Are they often frightened by the trawl-net?—The trawl-net does not allow them to get much time for consideration.

53,495. Does it take all it frightens; do you mean that?—They may be frightened enough, but they do not get time to consider what they are to do.

The witness withdrew.

JOHN MACLEAN called and examined.

J. Maclean.

53,496. (*Mr. Caird.*) You have heard the evidence which has been given by the previous witnesses?—Yes.

53,497. You are a drift-net fisherman now and you were a trawl-net fisherman at the time trawling was permitted?—Yes.

53,498. You have had considerable experience of the fishing in Loch Fyne?—I have had experience of it during the last nine years.

53,499. Do you think the state of the law as it exists at present has been injurious to the general supply of herrings in Loch Fyne?—Yes, I do. I consider that it is very injurious to the fishing in general, and also to the interests of the consumers.

53,500. Has it prevented a quantity of fish from being taken that would otherwise have been taken if trawling, as a mode of fishing, had been permitted?—It has.

53,501. Are you aware that a very large fishing was got in Loch Fyne in the year 1862, when there was no trawl-fishing?—Yes.

53,502. Do you imagine that if the trawl-net fishing had been permitted that large take would have been considerably increased?—I consider that there would have been ten times more fish taken.

53,503. Were the shoals of herring that came into Loch Fyne that year unusually large?—Yes, they were very large, but very inferior in quality that year.

53,504. Did they vary very much one month with another that year?—The fishing was not as good in the lower part of the loch but it was very good in the upper part. The water is very narrow and contracted there.

53,505. Were you in the habit of fishing when you were allowed to trawl occasionally with the trawl-net and occasionally with the drift-net?—It was very seldom that I used the drift-net until I was compelled to do so.

53,506. You did not use the drift-net until trawling was prohibited?—No.

53,507. You found that the trawl-net was more

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productive and that it paid you better?—Yes, I did, decidedly.

53,508. Do you admit in any way that the system of trawl-net fishing has a tendency to break the shoals of fish when they are entering the loch?—No, I do not. I do not concur in that statement at all.

53,509. You are aware that such a statement has frequently been made?—Yes; that has been alleged several times.

53,510. But you have never seen anything of that sort yourself?—No. I can prove that the drift-nets do more damage than trawling.

53,511. In what way?—If the herrings are coming into Kilbrennan Sound there may be 200 boats going out with 20 or 30 pieces of net in each boat, and they shoot these trains early in the evening and break the shoals in such a manner that they return to the open sea. I believe the drift-net is the chief instrument that ever breaks the shoal and not the trawl-net; the trawl never did any injury in that way.

53,512. Did you find, as a trawl-net fisherman, that your best takes were got close to the shore?—Yes, always.

53,513. It was only an exceptional case when you went into the deeper waters to fish?—Just so. Occasionally when the fish were surrounding the shore we got very good takes but we did not find much if we were obliged to go into the middle of the Channel.

53,514. When you went out into the deep water you got among the drift-net fishermen?—No, generally for our own interest we kept clear of the drift-net fishermen.

53,515. But did you not frequently fish among them?—No, very seldom, because we always wanted an open berth for ourselves.

53,516. Is it not the fact that when the fish are observed they are generally found within a comparatively narrow boundary,and that the whole fleet of fishing boats resort to that spot?—The drift-net fishermen do not wait to see if there are herrings or not; it is just chance work with them. They put out their nets and let them drift.

53,517. Do they not go where they think there are herrings to be caught?—They generally scatter about in all directions. One person will go to one place and another to another.

53,518. In trawling will a trawl-net fisherman not fish unless he has a strong assurance that he will find the fish?—In the early part of the season they might make an occasional sweep, but unless they saw the fish in the loch they would not go out. They generally made sure work of it before they ever cast out a net.

53,519. Sometimes if they did not see the fish would they fish at all during that evening?—I have seen times repeatedly when they would not. One night the fish might be seen in the water and then they would be all out fishing, but it was repeatedly the case that if they did not see the fish they did not cast their nets.

53,520. There would be no fish caught then if there was nothing but the trawl-net used?—No, there would be no fish.

53,521. Would they be caught by the drift-nets?—There might be a few caught.

53,522. Is it a fact that if the trawl-net system were generally resorted to the supply of fish would be more irregular and that there would be vast quantities at one time and none at all at another?—There would always be a general supply. Of course there would be a heavier fishery sometimes than at others, but there would always be a general supply going to the market.

53,523. If trawling were permitted would most of the fishermen of Tarbert take to that mode of fishing in preference to drift-net fishing and not use the two modes of fishing together?—Yes, they would take to trawling; but it might be for their own interest to try for a few nights in the moonlight to get their trawl-boats and nets put in repair and fish with drift-nets, but I don't think myself that it would be worth their while to be bothered with drift-nets.

53,524. Then at such a time the supply to the markets would be furnished chiefly by the drift-net fishermen?—Yes, chiefly; occasionally the trawl-net fishermen might go and get a few if it was calm.

53,525. Can you state, as a practical fisherman, that there are certain nights in which the fish do not mesh in the drift-nets when you could catch them successfully with the trawl-net?—Yes, this season is an illustration of the matter.

53,526. What is the peculiarity of this season?—I cannot account for it. The herrings are lying dormant and yet they are not meshing. I do not expect that we shall see much fishing this season at all.

53,527. If trawling were permitted could you catch herrings here?—If trawling were permitted there is not a fisherman in Tarbert that would not take from 80*l.* to 120*l.* worth of fish from June to January.

53,528. At such a time as the drift-net fishermen are not taking fish would all that could be taken by the trawl be so much additional to the market that is otherwise lost to the market?—Yes, altogether.

53,529. Would those fish that you would not catch remain to be caught by the drift-net fishermen?—That is hard to say. They may be here to-night, but we cannot tell where they may be to-morrow night. They may get them at other places.

53,530. Have you observed that the shoals come in succession month after month or that the largest shoal comes at the commencement of the season and that you get your supply from that?—I cannot rightly account for that; they may be along the coast from Campbeltown to Inverary yet we may get none, whereas, at another time, they are all over the coast, and we may get plenty. I think they will be dormant at times in the deep, and only occasionally come up to the surface.

53,531. Have you ever observed any spawn in your trawl-nets?—Never, during my existence.

53,532. You do not admit that your system of trawl-fishing is destructive of the spawn of the herring?—No, the herrings deposit their spawn on the foul ground and it is impossible that the trawl could take it on the foul ground; we don't work on the foul ground at all.

53,533. You could not work there?—No, it is impossible that the trawl can sweep on the foul ground.

53,534. Do you kill many of the small immature herrings during the legal fishing season?—I never saw many small herrings captured, unless by a net made purposely for catching them.

53,535. If there was a legal sized mesh of one inch enforced would that obviate to a great extent the objection against trawling that it catches immature fish?—Decidedly it would; it is possible that there may occasionally be a few small herrings among the large ones, but for our own advantage we never interfere with the small herrings if we can avoid it; we only get very little for them, and all practical fishermen ought to know the distinction they make in the water.

53,536. What do you mean by that?—We know the distinction between large and small fish; the one is a solid light fish, and the other is a simple flash.

53,537. Do they not swim together?—Not often, they are a different species, and unless they are compelled to mix with the others in going up the loch they generally keep separate.

53,538. Do you catch a larger or smaller quantity of immature fish by the drift-net fishing or by the trawl-net fishing?—I have seen small fish in the mesh of the drift-net.

53,539. Do they mesh themselves?—No, but they get entangled in the net.

53,540. Does that happen in the case of the drift-net as often as it generally does in the case of the trawl-nets?—I don't suppose there is any great destruction of small herrings at all in trawling, unless there is a net purposely made for them.

53,541. With a mesh of an inch do you not catch

at any time herrings unfit for the market or for consumption ?—No, it would be impossible.

53,542. Are they all marketable herrings which you bring ashore ?—Yes.

53,543. In a net of an inch mesh ?—Yes.

53,544. If that sized mesh were enforced you could not with such a net catch the brood of herrings too small to be useful for food ?—No.

53,545. Would you catch nothing that would be unsaleable in the market ?—No, we should take herrings fit for human food with a legal sized mesh.

53,546. With such a legal sized mesh, and a close-time strictly observed during the spring months, you say that the system of fishing by trawl-nets cannot be injurious to the brood or spawn of fish?—No, it cannot be, but I don't think the close-time is of any benefit at all to the fishing ; I don't see that it is requisite because I believe there are more herrings destroyed by vermin in the spring months than by all the engines which man could invent to catch them.

53,547. Is that in the open season ?—All the year round.

53,548. All the year round ?—Yes ; I think we ought to be allowed to catch them for bait.

53,549. But except for bait, is there a great demand for the fish you could catch in March and April ?—I would not advocate April or May for an open season, but January, February and March might be left open. I have seen good herrings caught in those months which would sell very well in the English market and bring 5*s.* a hundred ; they were spent herrings.

53,550. (*Mr. Lefevre.*) In what month ?—March.

53,551. (*Mr. Caird.*) And they sold readily in the English market ?—Yes.

53,552. Do you think taking them at that time is not at all injurious to the fishing when the fish are in better season ?—It could not be injurious ; there was no spawn in the fish ; they were only spent fish.

53,553. Would not those fish have got into better condition if they had been left ?—Decidedly they would.

53,554. Then to that extent there was a disadvantage in taking them at that time ?—There was no disadvantage, because there was plenty of them.

53,555. Have you ever come into collision with the drift-net fishermen when you have been trawling? —No ; except once at Otter Point when they came to put us out of the loch.

53,556. What part of the loch ?—At Otter Spit.

53,557. Above the Spit ?—No, just at the Spit itself.

53,558. Were you the aggressors ?—No ; we were lying at anchor when they came down, 13 in a boat, and wanted to take our property from us, but we would not allow them.

53,559. You say as a practical fisherman that the two systems of fishing, trawling and drift-net fishing, could be allowed to go on without any obstruction the one to the other ?—Yes ; both could be wrought simultaneously if the parties were agreeable, but they do not want us to go up Loch Fyne.

53,560. Do you want to go up ?—It does not matter much, but I might be compelled to go if I could get nothing here. In such a case as that we might like to go up.

53,561. Would it be serious hindrance to your industry as fishermen if you were prohibited from going up Loch Fyne as a trawler, and were permitted to trawl in the wider waters ?—That would depend on an early season. If we realized a certain sum of money and made good wages by it we should not notice it ; but I don't think there would be any injury in allowing us to go up Loch Fyne, because I think both systems of fishing may be allowed to go on easily.

53,562. Could your mode of fishing and the drift-net fishing go on together if you were allowed to fish in the middle of them ?—We do not require to fish in the middle of their drift-nets.

53,563. Did you not sometimes make your circles in the middle of their trains of drift-nets ?—I never saw it done.

53,564. Have you never seen trawl fishermen fishing among the trains of drift-nets ?—I have never done so. It would be to our disadvantage to do so.

53,565. (*Mr. Lefevre.*) It would be to your own disadvantage ?—Yes; we should get entangled with them and get nothing.

53,566. (*Mr. Caird.*) If you were excluded by law from doing so it would be no hardship upon you ?—No.

53,567. That would be a reasonable thing to do ?—Yes ; because it is for our own advantage to keep clear of the drift-nets It is impossible that you can drag the trawl right over the drift-nets, and in such a case we should get nothing at all.

53,568. You agree with the previous witnesses, that going out to trawl in deep water would be an exceptional thing ?—Yes ; it is for our advantage to keep near the shore, and when we can get herrings there we always capture more than we could get by going out into the Channel.

53,569. Have you found in coming to market with trawl-net fish that you can get as good a price for them as the drift-net fishermen can for theirs ?—Yes. I have seen trawled herrings get a great deal more. I have known trawled herrings realize 1*l.* 7*s.* 6*d.* when the drift-net herrings have only been realizing from 5*s.* to 8*s.*

53,570. Was that because you got a fine quality of herring upon that occasion ?—Yes.

53,571. That was an exceptional thing?—No, it was the general rule ; we regularly realized 25*s.*, 26*s.*, and 27*s.*

53,572. But taking the average of the whole season, and not when you were catching very fine large fish, was it the case that you could realize as good a price from the fish buyers as the drift-net fishermen ?—We always realized more, that is the reason the drift-net fishermen were against us ; they would go to sleep at the head of their trains of nets, and command a great price for the few hundreds of herrings they got. At present they are enabled to get a good price for the few fish they come in with, but if they found the market glutted with fine trawled herrings, then the price of their fish would be materially reduced. That is the real cause of the feeling they have against the trawlers.

53,573. Is it not correct to say that the trawl-net herrings bring a lower price than drift-net herrings ? —They never did.

53,574. You are referring now to the fresh market ? —Yes.

53,575. But for the purpose of curing would there be a distinction ?—I have seen the chief curers in Glasgow, and the agents from Leith, purchasing and buying our fish at 6*s.* and 7*s.* a 100 where they would not give 5*s.* for drift-net herrings for curing.

53,576. Then the drift herrings do not as a rule bring a larger price than trawled fish ?—No.

53,577. Would not the buyers ask you the question whether they were trawled or drift-net herrings ?—No, because they would know they were trawled herrings ; they know the distinction between the two. We have only a small boat with four men ; in fact they would see the net and know the mode in which we had caught them.

53,578. Knowing the fact that they were trawled fish they did not say that they were not worth as much as drift-net fish ?—No.

53,579. They bought the one as readily as the other? —Yes, and more so.

53,580. (*Mr. Lefevre.*) Did the drift-net fishermen and the trawl fishermen sell to different curers ?—No, they generally sold the fish to the same parties.

53,581. When the Inverary fishermen are fishing down here do they bring the fish in here for sale ?—Yes.

53,582. Do the curers come down here ?—Yes, sometimes ; but if the fishermen can get a better price at the quay they sell them there ; they often get a better price from the fresh buyers than from the curers.

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53,583. Have you known cases in which the curers refused to buy from the trawlers ?—No, but I have known persons in Glasgow who have been giving evidence against trawling to be sending down their vessels clandestinely in order to obtain trawled fish; and yet they have been petitioning against trawling.

53,584. Have you known the boats of the curers lying here refusing to buy trawled fish?—Not when the trawling was legal; that never happened to my knowledge; they never refused to purchase trawled herrings until it was rendered illegal to trawl.

53,585. Up to what year, because it has been illegal since 1851, although it was not enforced ?—I mean until 1861; unless they were caught in the act the herrings were not seizable.

53,586. Have you been fishing this year ?—No, I have not.

53,587. Has the take of the Tarbert men been very bad ?—Yes, it has been very bad this year, they have had little or nothing at all; in fact they are almost in a state of poverty compared with the position in which they used to be.

53,588. Where has the fishing been mostly ?—Chiefly about the mouth of the harbour, and on the east shore.

53,589. Where would trawling take place if it was allowed ?—Much about the same ground; but now, unless the herrings are compelled to go into the train of nets, they will not go of their own accord. The fishermen have small pieces of net to compel them to mesh in it.

53,590. When the herrings were in abundance in the upper part of Loch Fyne and the Kyles of Bute did the trawlers go there ?—Yes, I have myself trawled both in Loch Fyne and the Kyles of Bute.

53,591. Did the great body of the trawlers go up there ?—One year they did in particular.

53,592. Was it confined to one year ?—Yes.

53,593. What year was that ?—It was in August 1859 or 1860.

53,594. Why did they not go in previous years ?—They had no occasion to go up, the herrings were always frequenting their own coast; but the one year I mention in particular they all went up. There was a larger quantity of herrings in the loch and the Kyles of Bute and there was nothing to be got thereabouts, and we therefore went to trawl up Loch Fyne.

53,595. Did any confusion take place in Loch Fyne in consequence ?—No, there was a small squabble that happened at Inverary Quay, but they were the agressors.

53,596. Who ?—The Inverary people. I was an eye witness, and they chased a person down the quay with a hay fork.

53,597. Was the whole fleet of drift-boats fishing in Loch Fyne at the same time ?—Yes, from all parts and from the Kyles of Bute.

53,598. How many boats ?—800 or 900.

53,599. How many would be trawl-boats ?—60 or 70.

53,600. Do you think the two kinds of fishing can be carried on in such narrow water as that without confusion ?—Yes, they could easily carry on both kinds between them.

53,601. Have you ever known full fish taken here in August or September ?—I have seen full herrings in August.

53,602. Is it some time since you have seen them ?—They do not often get full fish in August now.

53,603. Used they to get them in great abundance?—They are not as abundant as they used to be. In some seasons we used to have immense quantities of them.

53,604. Have they diminished of late years ?—I do not think they are the same shoals of herrings that frequent the loch as they were formerly.

53,605–9. Were they large herrings formerly ?—Yes, they would run from 800 to 900 to the barrel.

53,610. Did you catch other fish in the trawl besides the herring; did you catch any haddocks or any other description of fish ?—No, I never saw haddocks or any other description of fish in the trawl-net, in fact I never trawled for them.

53,611. Did any of the other fishermen ever trawl for other fish except herrings ?—Yes, mackerel.

53,612. Has that been put a stop to ?—Yes.

53,613. What time do the mackerel come here ?—At present this is the season for it.

53,614. Have there been any number of mackerel in the loch of late years ?—Yes, there have been great shoals but we have not been allowed to catch them.

53,615. How is that ?—The mackerel themselves are not seizable but the trawl is. We are not allowed to use the trawl, and there is no other mode of catching them but by the trawl.

53,616–7. Did that form a large proportion of the catch of the fishermen here ?—Yes, we realized a good income from the catch of mackerel some years.

53,618. There was no take of any other kind of fish?—We had here a sort of fish which they call saithe.

53,619. They are coal-fish, are they not ?—Yes.

53,620. Did you fish regularly for coal-fish ?—No, we caught them accidentally among the shoal of herrings.

53,621. Have you ever seen the fishermen take large quantities of the small fry of other fish, such as haddock or cod ?—No, I never saw any small fry in the herring-nets, except it was small herring fry that were properly fished for bait.

53,622. Are they fished for with a smaller net ?—Yes.

53,623. What was the size of the mesh of that net?—The mesh would run about 50 rows to the yard.

53,624. (*Mr. Caird.*) Have you ever had any of those large hauls which have been mentioned in which vast quantities of herrings have been left to rot in the sea ?—No; and I believe I have got about the largest haul of herrings that was ever made here. I brought at one time 1,500 maze of herrings to the market.

53,625. Were they caught in one haul ?—Yes.

53,626. Fifteen hundred maze ?—Yes.

53,627. When was that ?—That was in 1859.

53,628. How many boatloads were there ?—There were 12 large smacks besides our own small one.

53,629. You caught all that immense quantity of fish in one haul ?—Yes.

53,630. What was the length of your net ?—About 60 fathoms.

53,631. How long did it take you to get the fish in?—We were working for about five or six hours until the "Jackal" came and scared us away. We had to leave with our trawl as trawling was illegal at that time.

53,632. But you got 1,500 maze before the "Jackal" came ?—Yes, and we could have got as much more if we had not been scared away.

53,633. Then if there was any lost on that occasion it was no fault of your own ?—No.

53,634–5. Nor from any incapacity to get them in ?—We had lots of vessels to take the herrings from us and they were all ready when the "Jackal" hove in sight, and we had to leave them.

53,636. Can you tell us what you realized by the fish ?—I forget the sum of money. I was not present when the whole of them were sold. I had to go away.

53,637. Were they sold fresh ?—All of them were sold fresh.

53,638. Were none of them cured ?—I think not.

The witness withdrew.

DUNCAN MACDONALD called and examined.

53,639. (*Mr. Caird.*) You were present, I believe, when the large haul spoken of by the last witness was secured?—Yes.

53,640. Are you able to say what proportion of that large haul was cured?—Yes, about 200 maze.

53,641. How many barrels would that be?—About 100 barrels.

53,642. Do you know whether they were successful as cured herrings; did they keep well?—Yes, I think they did.

53,643. Who cured them?—Mr. Gallagher cured them.

53,644. How were they sold?—They realized a good price; they sold for 2*s.* 2*d.* and 2*s.* 6*d.*

The witness withdrew.

JOHN MACLEAN recalled and examined.

53,645. (*Mr. Caird.*) Were they not knocked about?—No, they were remarkably good.

53,646. You say that some were lost on account of the interruption of the "Jackal"?—Yes.

53,647. On any other occasion have you had a large haul which you have been unable to use or to bring to land?—No, unless it was in consequence of the interruption of the "Jackal." We then felt ourselves compelled to escape from the rigour of the law.

53,648. Then if it is alleged that great quantities were often lost when you had these large hauls, from its being impossible to bring them to land, you would not admit that to be true?—No.

53,649. It has not occurred within your knowledge?—It has not occurred within my knowledge, and I believe it never did occur; that statement is quite wrong altogether. It is for our advantage to bring the fish to land, and the more we get the more money we realize.

53,650. Have the fishermen here generally been able to supply themselves with drift-nets since trawling has been put a stop to?—Some of them have and others have not.

53,651. Have you ever heard it stated that the Inverary men made an offer to provide you with nets if you would accept them?—I don't suppose the fishermen here would accept them if they did; they would rather starve than that.

53,652. But has that offer ever been made?—If they made it they never made it public in this quarter.

53,653. (*Mr. Lefevre.*) How many hauls could you make with the trawl in the night-time?—Do you mean how many sweeps?

53,654. Yes?—Perhaps we should only require to make one.

53,655. What would be the average number?—It would depend upon the quantity of fish we were getting.

53,656. Would you often make eight or 10 hauls?—Yes.

53,657-9. Catching fish each time?—Yes, but one trawl at one time is quite sufficient to get a large quantity of fish.

53,660. (*Mr. Caird.*) In what depth of water and at what distance from the shore did you catch that large haul to which reference has been made?—The depth of water would be from 15 feet down to 2 feet.

53,661. Then it was close in-shore?—Yes, quite on the sand on the beach.

53,662. Was the net hauled on shore?—No.

53,663. Was it dragged into the boat?—Yes, it was dragged alongside the boat.

53,664. And the boats were filled from it?—Yes; it went very steep where the boats were moored outside.

53,665. In the course of the six hours which were occupied in securing the quantity which you did get time to secure was there a large quantity dead by the time you had finished?—We had several large smacks full before they were all dead.

53,666. Were they alive as you lifted them from the water?—They were dead at the hinder end; there were such a bulk of them on the top of each other.

53,667. How long were you engaged in filling the boats?—About six hours from the time we hauled the net until we were interrupted by the "Jackal."

53,668. (*Mr. Lefevre.*) Have you often caught as many as from 100 to 200 maze in a night?—Repeatedly.

53,669. Would that be a fair average?—It is common to take from 80 to 100 or 120 and from that to 150, 200, and 250.

53,670. (*Mr. Caird.*) Which would make most money in the course of a season the trawlers or the drift-net fishermen?—The trawlers, decidedly.

53,671. What would you consider the average rate of earnings for trawl-net fishermen during the seven months of the season?—They would realize from 80*l.* to 120*l.* in the course of the season.

53,672. Each man?—Yes.

53,673. Not a boat's crew?—No.

53,674. But each man?—Yes.

53,675. From 80*l.* to 120*l.*?—Yes.

53,676. Is it not usual for two boats' crews to fish together?—Yes.

53,677. Eight or nine men?—Eight men.

53,678. Eight men in the two boats?—Yes.

53,679. What would be the average earnings per man in the same season for the drift-net fishermen?—If the drift-net man could realize 40*l.* during the same season he would be a very fortunate man.

53,680. Then the trawlers would get nearly three times as much?—They would in general, and their expenses would be much less.

53,681. Can they make three times the amount of money at less cost of capital and labour?—Yes.

53,682. Were you yourself fishing in 1862?—Yes.

53,683. Do you know what you made that year?—I have a good idea of it.

53,684. How much was it?—The average that year would be about 55*l.* and from that up to 60*l.*

53,685. How do you account for the fact that the Inverary men have never taken to trawling?—My opinion is that they are too lazy to take to it.

53,686. Do you not think the great profit which, as you have described, they would make would be a considerable inducement to them to take to trawling?—They cannot work at it. They know nothing about it.

53,687. (*Mr. Lefevre.*) Was there much trawling from other villages, such as Ardrishaig and other places?—Yes, from Campbeltown, Ardrishaig, and Carradale.

53,688. How many have you seen trawling?—20 or 30 strange boats.

53,689. Were they from Ardrishaig?—No, I don't refer to the Ardrishaig boats or those from Tarbert.

53,690. You exclude those two places?—Yes.

53,691. You have seen 20 or 30 boats excluding the boats of Ardrishaig and Tarbert?—Yes.

53,692. (*Mr. Caird.*) Are the fishermen here, as a rule, strictly fishermen, or have they any other occupation?—They have no other occupation, they are strictly fishermen.

53,693. Is there a distinction between them and those of the upper part of the loch in that respect?—Yes, because they are not fishermen at all in the upper part of the loch.

53,694. They do not follow fishing the whole year round?—No.

53,695. Only during the herring-fishing?—Yes.

53,696. But you do follow fishing the whole year?—Yes.

53,697. Even when the season for herrings is not on?—Yes.

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53,698. What do you do in the close-season?—In the close-season we generally take to long-lines and small lines, but as they cannot support all of our fishermen the youngsters and able-bodied young men take to the sea and go away.

53,699. (*Mr. Lefevre.*) Was there ever much trawling here in January?—Yes, in fact the best of the takes have been captured in January.

53,700. Later than that?—Yes, in February.

53,701. Have you known many fish to be taken in March, April, and May?—I have seen good takes in March, but very little in April or May.

53,702. Did you generally set your trawls inside in those months?—Yes.

53,703. Are the Tarbert men as well provided with drift-nets as the Inverary men?—Some of them, but they have only small pieces of net.

53,704. Are their nets as deep?—Yes, they are equally deep, but they are not of the same length.

53,705. What is the depth?—About six or seven fathoms.

53,706. I mean drift-nets?—Yes.

53,707. They are no more than that?—No.

53,708. Was there much variation in the size of the trawl-nets?—Yes, some of them will draw as high as nine fathoms.

53,709. Nine fathoms deep?—Yes.

53,710. What are they in length?—About 60, 70, and 80 fathoms.

53,711. (*Mr. Caird.*) Have the fishermen here small crofts or farms as a rule?—There may be one in a hundred who has.

53,712. How is it in the upper part of the loch?—The larger number of them have small crofts.

The witness withdrew.

A. Brown.

ANGUS BROWN called and examined.

53,713. (*Mr. Caird.*) Can you give us any information as to whether when the drift-nets have been set and have not been catching fish you have been able to catch large quantities of herring by hauling hooks up through the shoals?—I have set the drift-nets among the fish and there have been very thick shoals and I have not been able to catch more than three of them in the meshes, whereas we could catch on the hooks 600 herrings.

53,714. How do you do it; in what manner do you catch them?—We fix a hand line with a sinker upon it about a pound weight, and a wire about 15 inches in length to it with a hook attached to each end of the wire. We have about eight hooks on the line, and putting it down among the fish we can take up eight herrings at every haul. We let it down in from four to 10 or 15 fathoms of water.

53,715. Did it go down among the shoal of fish?—Yes.

53,716. And you pulled the fish up?—Yes.

53,717. They do not catch by the mouth as if they were taking bait?—A great many of them were caught by the mouth.

53,718. But not as if they were regularly fished with a baited hook?—They would be caught by the hook.

53,719. But the hook had not bait upon it?—Not a single particle of bait; it was only a white bare hook.

53,720. Did they take the hook because it was very bright?—Yes.

53,721. Did the hook take them?—They took the hook because it was bright; they mistook the hook for small fry.

53,722. If you were allowed to trawl could you have caught plenty at that time when you were not catching them in your drift-nets?—Yes, we could have caught thousands of pounds worth, but trawling was prohibited.

53,723. Was that the first time you thought of that plan of catching them by the line?—We have caught herrings with the line in that way for the last 20 years.

53,724. In the same manner?—Yes.

53,725. When you have found great shoals of them?—Yes; they come in about the 20th of May in general and continue for two or three months until July.

The witness withdrew.

D. Macmillan.

DUNCAN MACMILLAN called and examined.

53,726. (*Mr. Caird.*) You were a trawl fisherman here when the fishermen were permitted to use that mode of fishing?—Yes.

53,727. Do you think it has been a great loss to the place that that system has been put a stop to?—It has been a great loss to the country.

53,728. You have heard what the previous witnesses have stated on the whole subject?—Yes.

53,729. Is there any point which you think has not been fully stated?—I think they have given full evidence and that what they have stated is quite correct. We catch different species of fish besides herring. We catch mackerel and whiting also.

53,730. With the trawl-net?—Yes.

53,731. What do you catch with the trawl?—Mackerel, saithe, and whiting.

53,732. As well as herring?—Yes.

53,733. Do you catch them along with the herring?—Not very often along with the herring.

53,734. Do you fish specially for those fish as well as for the herring?—Yes, we did for mackerel; they do not swim among the herring.

53,735. Were they caught at the same time the fishing for the herring was going on?—Yes.

53,736. When you saw a shoal of mackerel would you take to them in preference to the herring?—In general we did.

53,737. Was there any large quantity of mackerel caught in that manner in August?—Yes, a great quantity, and we were getting a good price for them.

53,738. Has that fishing been stopped in consequence of the prohibition of trawling?—Yes, decidedly.

53,739. Have any mackerel been caught here since?—Very few since we gave up trawling.

53,740. Have mackerel been seen in the loch?—Yes, they have been very plentiful in the loch.

53,741. If you were permitted you could have supplied the market with mackerel?—We used a small cuddie-net last year and we got 40*l.* worth of mackerel in one night.

53,742. Was that a legal net?—It was quite legal; the size of the net was large.

53,743. Was it not wrought like a trawl-net?—Yes, and fishing in that way was illegal.

53,744. Having caught the mackerel by that mode of fishing, as it was not legally caught, did you take the mackerel you caught to the market and sell them?—Yes.

53,745. But if you had been seen using that net for the purpose of catching mackerel you would have been stopped?—Yes, and we should have been sent to Campbeltown or Inverary Gaol.

53,746. You think large quantities of mackerel could be caught in that way if you had permission to use the net?—Yes, without doubt.

53,747. Is that the only mode of catching them?—There is no other mode of catching them.

53,748. (*Mr. Lefevre.*) Cannot you catch them with the drift-net?—No, we might get one or two or a dozen, but we could not send them to the market. We

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could not get as many as would be worth while to take to the market.

53,749. (*Mr. Caird.*) You are more successful in catching mackerel with the trawl than with the drift-net?—They will not mesh in the drift-net; they are like the large herrings we used to get in the trawl.

53,750. What other fish besides mackerel have you been in the habit of catching?—At different times years ago we have got a good take of whiting on this shore.

53,751. With the trawl?—Yes, and saithe.

53,752. Was that during the time the herring-fishing was going on?—It was at the latter end of the fishing. December is the best month.

53,753. You are unable to catch them now?—Yes, we are unable to keep up our trawl-nets. Perhaps there may be one or two about, but they are out of order now. We are prevented from taking those fish as well as the herrings.

53,754. The stopping of trawling has been injurious to the supply of other fish as well as herrings?—Yes, but trawling for herrings was the only way of living we had. In my opinion trawling is the best mode of catching them. We could have supplied the market both this year and last year with a large quantity of herrings if we had been allowed to trawl. The supply would have been double what it has been with the drift-net fishing.

53,755. Is there any other point you would like to remark upon?—The witnesses you have already heard have given a good deal of facts that are quite correct. I do not know that there is anything else I have to add.

53,756. Are there any oysters caught in this neighbourhood?—We have caught them, but not with the trawl-nets.

53,757. Are there any lobsters?—Not many; we do not make a living by that; it was the herrings that we fished. I think they have as much right to fish at Ballantrae as in the loch. There is no necessity at all for a close-time. Every fisherman requires to work every day in the year if he can.

53,758. Would not a close-time be beneficial to the fish themselves?—There is such a body of fish that it is not required. It is not the fishermen who keep the fish down; the vermin who prey upon them do a great deal more in that way than the fishermen.

53,759. (*Mr. Lefevre.*) Have you fished on the Ballantrae banks yourself?—No, but I have seen the people come round here and they have been quite destitute since they have been prevented from fishing. They would get 3*s.* 6*d.* a hundred for the fish they caught. I think they have as much right to fish when Providence sends the fish to their very doors as the people of Loch Fyne.

53,760. Was there much fishing for herrings during what is now the close-time?—Yes, we were getting a great quantity of fish. We were catching fish in March for which we could get 4*s.* 6*d.* a hundred from vessels going to Liverpool.

53,761. For herrings?—Yes, and often our own market consumed a great deal.

53,762. Were they caught mainly with trawl-nets?—Yes, but they used to shoot drift-nets for them if they could get any at all. They could make a living out of them.

53,763. How many trawl-nets were at work here in what is now the close-season?—There were 80 boats working here with trawl-nets.

53,764. Not working here the whole year round?—Yes, they were.

53,765. Even in March and April?—Yes.

53,766. Were the fish they took in those months spent fish?—No person can take unwholesome fish out of the sea. All we get take the market very well.

53,767. Were they spent fish?—Yes, in the month of March they are spent.

53,768. Did you take the fish up with the spawn coming from them?—I never saw spawn.

53,769. Do you ever take fish full of spawn in February or March, or ready to spawn?—No; at one time we got them in the month of December and we got 5*s.* a hundred for them.

53,770. Were they full fish?—Yes, good large herrings. We think they come from Loch Fyne, but it is not properly known where they come from.

53,771. You think there is no necessity for a close-time?—No, there is no necessity for it. We fishermen think we have as much right to fish in the winter season as we have to fish in the summer season.

53,772. But you think that in this place there is no necessity for a close-time?—There is no necessity for a close-time at all. The market requires a fresh stock of fish every day.

53,773. Have you ever had any sprat-fishing in this loch?—No; if they kept their trawl-nets with the meshes an inch from knot to knot it would be impossible to catch small herrings.

53,774. Have you ever tried for mackerel with drift-nets of a larger mesh than you use for herrings?—No, that would not pay.

53,775-6. Are mackerel not here in sufficient quantities to make it pay?—It would not pay for us to keep mackerel-nets.

The witness withdrew.

COLIN G. CAMPBELL, Esq., called and examined.

C. G. Campbell.

53,777. (*Mr. Caird.*) You have had occasion, Mr. Campbell, to make a trial of the quality of the trawled herrings when cured?—Yes.

53,778. Can you give us any statement as to the result of that trial?—I got a cask of trawled herrings taken here by a man named Colin Campbell in this village and I had them cured to be sent to Brussels. That was either in 1858 or 1859, at the end of October or the beginning of November, and I can state that those herrings were still good 18 months afterwards.

53,779. Had you any opportunity of comparing them with cured herrings caught by the drift-net in the same season?—I got no others out the same year. I merely tried them to see if they kept well. It was a longer time than I ever saw any others kept.

53,780. Were they of good quality all the time?—Yes.

53,781. Then you have proved by that experiment that it is perfectly practicable to cure and keep trawled herrings?—Yes; that experiment showed me that they were perfectly good at the end of 18 months. I may also mention another fact. I am aware that great prejudice exists against trawling on the part of a number of the most influential people of the country from an idea that the salmon-fishing is injured by it. Now I have used the seine-net, which is a trawl-net, for catching salmon and sea trout in the West Loch for many years and I know that it is almost impossible to do it in Loch Fyne except in a few spots. If you raise the rope in the least degree to lift the net over a stone the fish escape and you cannot take them in any number.

53,782. Either salmon or salmon-trout?—Yes.

53,783. You are aware that the trawl fishermen when fishing with the trawl did not catch salmon or salmon-trout?—I have made inquiry into that matter and I believe they did not.

53,784. There was no destruction of salmon or salmon fry by that means of fishing?—None whatever.

53,785. Can you tell us anything as to the condition of the fishermen here, whether it has been seriously prejudiced by the prohibition of trawl-net fishing?—It has made all the difference to them between affluence and extreme poverty; I know several men who were formerly engaged in the fishing who have left it altogether, and are now engaged as able seamen in the traffic between this country and America; they have left the fishing business whenever they could. I received a return from the chief of the police, showing that 60 men had been condemned to a considerable length of imprisonment for infringing the law, when it was

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suddenly re-enforced after the fishermen had been permitted by the Board of Fishery to practise trawling. 60 men were condemned who had been actually forced by starvation into using illegal nets.

53,786. In consequence of the destitution of their circumstances?—Yes, they had no other means of support, and to a great extent their property was suddenly seized and confiscated.

53,787. During the last two years there has practically been no infringement of the law, but the people have submitted?—Yes, for the last two years or so; trawling is now nearly entirely given up.

53,788. (*Mr. Lefevre.*) Did not the successful season of 1862 better the condition of the men?—No, they were not nearly as well off as usual; I cannot state to what extent they were benefited that year because I was not in the country then.

The witness withdrew.

W. Campbell, Esq.

WILLIAM CAMPBELL, Esq., called and examined.

53,789-90. (*Mr. Lefevre.*) You put in a statement in reference to the trawling question to the Commissioners of 1862; have you anything to add to that statement?—I have very little to add to it; I think I can abide in every respect by that statement.

53,791. (*Mr. Caird.*) Are you in favour of a close-time being established?—Yes, because I think it is generally desired, and although upon abstract principles I think that a close-time is not necessary, still I think as there is such a general feeling in its favour it is not desirable to oppose it.

53,792. Are we to understand from you that you represent the general feeling of the fishermen of this part of the loch, when you say you are desirous that there should be a certain amount of close-time?—At the time I made that statement such was their desire, but it arose more from a conciliatory principle than from any acknowledgment of its necessity; they seem now rather to think that there is no necessity for a close-time at all, but I was not aware that such a feeling had grown up as much as it appears to have done.

53,793. There is a general feeling we find in favour of opening the month of January, but we have found at other parts of Loch Fyne that the feeling is against opening the months of February, March, and April?—Such is precisely the view I take of it.

53,794. Is that view pretty much shared by the fishermen in this quarter?—I think they would be pretty much satisfied with such an arrangement.

53,795. (*Mr. Lefevre.*) Is the condition of the fishermen here generally as bad as it was immediately after putting a stop to trawling?—I am not sure that it is quite as bad but I think it is not at all the satisfactory position it would be if they were permitted to trawl during the season. You have had laid before you I think very conclusive evidence that trawling is a much more profitable and much less expensive mode of capturing fish.

53,796. Did not the fishermen here share in the prosperity of the fishing season of 1862?—I think they did, but not to the same extent; not having the means of purchasing large drift-nets and boats to correspond they were obliged to work with their own inferior machines.

53,797. Are they still imperfectly provided with drift-nets and boats?—I think they are. The expense of drift-nets along with the boats and everything else is much greater than that of a trawl-boat and nets.

53,798. (*Mr. Caird.*) Would it be quite possible without any serious danger of collision to permit the two kinds of fishing to be carried on in the lower waters of Loch Fyne?—I believe so, but I have no practical knowledge of the fishing. I merely give now an opinion founded upon a pretty extensive inquiry into the subject.

53,799. As a resident magistrate do you think there would be any difficulty in keeping the peace among the different classes of fishermen?—That I can answer very decidedly as a resident magistrate. I do not think there would be the slightest difficulty.

53,800. (*Mr. Lefevre.*) Was it your observation that the men employed in trawling were as a rule younger and more active men than those engaged in drift-net fishing, or was it otherwise?—I think they were decidedly. I think it requires a good deal of strength and energy to engage in trawling. It is not a matter for which an old man is able and competent. It requires a great deal of pulling. They have to pull a heavy boat, and when they sweep their nets it is very hard work, much harder than that which attends drift-net fishing, where after shooting their nets they frequently go to sleep.

53,801. Could the trawlers work their nets when the drift-net fishermen cannot go out in consequence of bad weather?—I am not able to speak to that.

The witness withdrew.

J. McLean.

JOHN MCLEAN recalled and examined.

53,802. (*Mr. Lefevre*). Have you ever observed that the trawlers could work their nets when the drift-net fishermen cannot go out?—Yes, often when the drift-net fishing could not go on.

53,803. Was that frequently the case?—Yes; we have often pulled our small boats out in a heavy sea. I have seen very large takes of herring got in a stormy night when none of the drift-net fishermen would venture out.

53,804. Your boats are not larger than theirs but smaller?—They are a great deal smaller; they are not one-tenth part as large as some of the drift-boats.

The witness withdrew.

B. Hardy.

BERNARD HARDY called and examined.

53,805. (*Mr. Caird.*) You are a buyer of fresh fish?—Yes, and have been so for 40 years.

53,806. At Tarbert?—Yes, and up and down the loch between Campbeltown and Inverary.

53,807. Are you a buyer just now?—Yes.

53,808. Do you get nothing but drift-net fish at present?—Nothing but drift-net fish.

53,809. When you were able to purchase trawl-net fish did you find them as good for the fresh market as the drift-net fish?—I was 12 or 14 years buying herrings before the trawled fish came in. I believe I got the second shot of trawled fish that was ever fished in this country, and those herrings were about 400 to the barrel; that would be about the count of them. I got about 100 maze, and I had never seen, previous to trawling coming in, such herrings as they were, I have occasionally purchased similar herrings since. Sometimes I would buy the trawl-caught herrings and sometimes herrings caught in the drift-net on the same day. For 20 years of my time I was the principal fish buyer sending fish to the Glasgow market; but I never put money into drift-net fish of such a quality as the fish I have purchased from the trawlers.

53,810. Trawled herrings?—Yes.

53,811. Have you not observed that the scales of the trawled fish were sometimes injured?—So little have I remarked that, that when I have seen the trawled and drift-net herrings together I have put marks inside the lids of the baskets that the different kinds of fish might be known when they opened the basket. They would sometimes bother themselves to

find out which was which when they had them sent in, there was so little difference.

53,812. Could they not tell which was which ?—No, unless they put their hands down among them and then they would know them by the difference in the size.

53,813. The trawled herrings were generally the largest ?—Yes.

53,814. On the average of the whole season, were you as a buyer ready to give quite as good a price for the trawl-caught fish as you were for those caught in the drift-nets ?—When I looked in a trawl-boat and saw there were fish there of a good size, I would take the trawled herrings and put my money into them as freely as I would into the drift-net herrings because I got a market for them quite as good, and my opinion was that the fish were as good.

53,815. As a buyer you have not made any distinction of price against the trawled fish as compared with the drift-net fish ?—No, I am beholden to both kinds of fishers, to the drift-net fishermen as well as to the trawlers when they were allowed to trawl. They are all drift-net fishermen just now, but still as a body of people they are quite separate. There are two separate bodies, one wanting trawling to be allowed again, and the other wishing to maintain the prohibition which now exists. I have been indebted to both of them, and I therefore refrain from having anything to do with their disagreements ; but I still consider that the prohibition of trawling was unfair, unreasonable, and unjust.

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53,816. That is not the question ; we are asking you as to a fact, do you consider that the fish caught in the trawl-nets, on the average of the whole season, were quite as good in quality as the fish caught in the drift-nets ?—Yes.

53,817. Do you mean also to say that there is nothing in that mode of capture or the way in which they are put into the boat that injures them for the market ?—I never supposed that there was. If the mesh of the net is of the same size as the regular stated size I am of opinion that the trawl-caught fish are quite as good as those caught in the drift-nets.

53,818. (*Mr. Lefevre.*) But only in the case of the nets being of the legal size ?—It is against the law to put down a small mesh ; a smaller mesh than one inch. That has always been the size long before the trawling began ; therefore those who fish with a small mesh would be breaking the law. If they fished with a drift-net having a mesh less than that size that would be quite as unlawful as fishing with a trawl-net with less than the legal mesh.

53,819. You are aware that the trawlers did fish with a net less than that size ?—Yes ; they made a bag in the net and in that bag there were small meshes which shut in the small fish.

53,820. Then you allow that there were a certain number of small fish caught ?—Yes, there were.

The witness withdrew, and the inquiry was adjourned until the 26th of September, at Ballantrae.

Ballantrae, Ayrshire, Monday, 26th September 1864.

PRESENT :

JAMES CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

BALLANTRAE.

W. Coulter.

26 Sept. 1864.

WILLIAM COULTER called and examined.

I have been a fisherman here for 40 years. There are 50 fishermen here, and 12 boats of about 21 feet on the keel. They are fishing all the year round. The fishing for the spawning herring began about 25 years ago. I fished many years before it began. We could not catch the herrings with the ordinary drift-net because the fish were deep in the water on the ground spawning. The water on the banks is from 10 to 15 fathoms deep. The nets were 75 meshes deep, and 32 meshes to the yard ; they were of all lengths divided as we liked, and were sunk to the bottom by heavy stones. The nets were often covered with spawn, as were the stones attached to them. This was fresh spawn just shed, and not what had been adhering to the bottom. I think the proportion of roe and milt herrings was nearly half and half. I have seen a boat take as much as 45 maze in one night. After prosecuting the fishing for some time we fished all day and all night, and took up the nets several times.

I have seen 22 boats belonging to Ballantrae engaged in the fishing, but there were about 100 boats fishing in this way at once. The banks are about three miles long. Some boats cleared 80*l.* to 100*l.* in the few weeks fishing, which lasted eight to ten years.

The fishing ceased altogether in 1856. I produce my books for the years 1848 to 1856 inclusive ; from which it appears that I made in

		£	s.	d.
1848.	February 13th to March 3d -	52	16	0
1849.	„ 14th to „ 3d -	30	7	9
1850.	Bad weather. Nothing done.			
1851.	February 21st to March 8th - -	38	4	0
1852.	„ „ 1st - -	37	14	0
1853.	Owing to bad weather the fishing took place only on the 2d, 3d, and 7th March, nevertheless it yielded - - - - -	35	10	0
1854.	February 14th to March - -	35	8	0
1855.	February 24th, only (1,200 fish obtained) - - - -	3	6	0
1856.	Nil.			

After this we tried no more fishing, and the gannets never told us that the fish were there. I have lost my earlier books ; but am sure that from 1830 to 1848 the fishing was quite as good, for in one of those years my boat made 115*l.* The first year that there was close-time the herrings came back at the usual time, that is, in February 1862. In that winter we had quantities of cod. When porpoises appear there are always cod. Cod and herrings are always abundant together. If herrings are not there neither will there be any cod. We always blamed trawling for the fish not coming to these banks, as the trawling was carried on all along the shore from the Kyles to Girvan. About from 1841 to 1843 I myself trawled, but I used the legal mesh. We fished with one boat, and four men anchoring one end of the net ; this trawling was at Troon, Ayr, and Irvine. It was in the month of December, and we continued it for eight or nine years. Others trawled after that, but none of us went from here. The fish were then coming to the banks. Herring are not here all the year round. We considered that the herring came from the Kyles. Eight or nine boats went from this to Troon to trawl, and there might have been 30 boats altogether. The fishing was very uncertain ; but when we did get a haul by the trawl it was a big one. At that time, and during the time in which I was engaged, no one interfered with us.

We caught very fine fish, the best ever caught here, what they call Yarmouth bloaters. At other times I have seen numbers taken three inches long with a net having meshes 50 squares to the yard. It is impossible to get any number of these small fish with the legal mesh net. I think when the fish are numerous in the trawl they lose the scales and are what we call drowned fish. Trawling breaks the eye of the fish for the time, but I cannot tell when they unite again. Porpoises frighten the fish into a mass and go round them like a shepherd's dog. I think trawling injures the fishing when small fish are taken, and that it

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always does injury by breaking the eye of the fish, even when the legal mesh is used. I have sometimes caught fish with the trawl many nights running in the same bay, there was always another eye coming up. I do not think this is against my opinion, because I fancy the shoals were always new ones.

The Ballantrae banks are shingley and in some places with sea weed, but the herring prefer the shingle for spawning. The fish come to the banks to spawn in autumn as well as in spring. The largest take I ever saw was 42 years ago. There has been no summer fishing here for 10 or 14 years till two years ago. In January the fishermen suffer for want of bait for a month or five weeks ; herring being then wanted for the cod, which will not look at a buckie when they are after the herring. I think it would answer for a boat to be licensed to catch herring for bait ; but it is so open a coast that one boat would hardly catch enough in winter. I would let each boat catch bait for itself, giving caution only to catch for bait and not to sell. I have known 22 boats here, there are now only 12.

I used to trawl off Troon in December with a view to catching the herring on their way from Loch Fyne, the Kyles, to their spawning beds off Ballantrae. There were a great many trawls used there. The Tarbert men used to come down there. I think that the trawlers headed the shoals of fish on their way to the banks, and so having banished the herrings there were no turbot nor cod on the banks. I hope that trawling for herring in this way will not be permitted. The net-fishing on the banks may also have done harm; when we took the herring in the daytime off the banks they were mostly full; when we took them in the night, they were already spent. We have no desire to return to that mode of fishing. There were often great losses of herring nets during the spawning season, in consequence of the rough weather ; taking that into consideration the cod and turbot fishery during that season is more profitable than the herring fishery. There is no part of the ground where the herrings spawn fit for beam-trawling. I have often taken 15 to 16 herrings from the belly of a turbot. Stenlock are caught in great abundance with the cod-nets, they are four times more numerous than the cod ; we get 6*s.* a cwt. for stenlock ; when cod are 10*s.* per cwt. There are often great numbers of dog-fish, particularly two or three years ago, when they were in great quantity in February and March on the spawning beds. They would often take the cod out of the nets and eat nets and all ; we used to get a good price for the herrings taken on the spawning grounds, often 5*s.* per hundred; they went to Manchester as Yarmouth bloaters. The Girvan and Manx boats used to buy many for bait.

A. Allan.

ANDREW ALLAN.

I am over 50 years of age, and have been a fish agent here for 35 years, and am connected with the fishery and much interested in them. At the earliest period of my recollection cod-fishing was carried on by hand-line with herring bait, five men in a boat ; about the beginning of January small quantities of herrings were taken with set-nets close in-shore, and the quantity of cod taken would range from 200 down to a few fish each day. About 40 years ago nets were introduced and large quantities of cod, ling, and skate were caught ; a few years previous to which some fishermen from Ayr commenced fishing for turbot, brill, and plaice, and being successful net-fishing became general and remunerative, in consequence new boats and greater additional material were yearly added.

About 1832 or 1833 a system of herring-fishing was introduced on the fishing bank three or four miles off shore, during March, by set-nets put down in the evening and lifted in the morning ; large quantities were caught in proportion to the materials ; latterly they began to decrease, until 1856, when they wholly disappeared, and has not since been fished. This I attribute to extensive trawling in Argyleshire and the North of Ayrshire previous to the late Herring-Fishing Amendment Act, since which herring have again appeared and of course shoals of cod, ling, skate, and turbot followed them, and the take of these fish since 1862 has largely increased.

1858	By 14 boats	- -	584 barrels.
1859	By do.	- -	330 „
1860	By 12 do.	- -	250 „
1861	By do.	- -	200 „
1862	By do.	- -	570 „
1863	By do.	- -	460 „
1864	By do.	- -	500 „

From 1858 to 1862 very few fish were caught with nets owing to the herring not having come to the banks during January and February as formerly, and those taken were by the long-line and buckie bait. During March, April, and May 1862-3-4 were successful fishings with nets, while the line-fishing was decreasing for want of buckies, which were rapidly diminishing ; and in this open coast the weather has much to do with the successful fishing in open boats. The fishing ground for nets is three to four miles off the shore, while the lines are set eight or ten miles off. The bottom of the inner bank, which may be about eight to ten miles long and from three to five miles broad, is rocks, shingle, and sand, and the chief food for the fish is the herring. The bottom of the outer bank where lines are set, is mud or clay, and the food mostly small starfish and shell-fish.

The turbot taken in January, February, and March were as follows :—

1862	By 12 boats	- -	4 tons 4 cwt.
1863	By do.	- -	1 „ 10 „
1864	Do.	- -	3 „ 15 „

Turbot taken in June and July :—

1862	By 3 boats	- -	3 „ 10 „
1863	Do.	- -	3 „ 5 „
1864	Do.	- -	3 „ 0 „

Herring taken :—

1858	From June 8 to Aug. 7	-	41 barrels.
1859	„ June 7 to July 16	-	30 „
1860	„ June 12 to June 31	-	15 „
1861	„ June 3 to July 1	-	18 „
1862	„ June 2 to August 27		100 „
1863	„ June 2 to June 30	-	58 „
1864	„ June 2 to August 13		74 „

The herrings we took for bait were found about 200 yards from low water and not on the spawning beds. Each boat ought to have liberty to fish bait for itself under penalty of a forfeiture of boat and nets or fine if proved to have sold herrings so taken.

The nets used for turbot fishing are seven inches from knot to knot, 42 inches deep, and 50 fathoms long. They are set at the bottom on soft ground in 25 fathoms of water. The fish entangle in the net and do not mesh themselves. There were a few beam-trawlers here from Whitehaven 20 years ago, but not since. The ground the herrings spawn over is rough with large stones, boulders, and gravel, and no trawl could be used over it. We used to have haddock off this coast, but they disappeared 12 years ago.

Herring-fishing should be allowed in January ; the herrings are not on the spawning beds till February. If herrings could be taken during January they would be used as bait for the cod. When they go to spawn in February nets are used for the cod, and are most effective, and then herring bait is not required. In April and May the herrings are not to be found off the coast. The buckie then takes a better quality of cod than herrings. The cod are then found from 10 to 25 miles off and we find very few herrings in them at that time ; but we find plenty of herrings in the cod when they are on the spawning beds. I have found from 30 to 35 herrings inside one codfish. When fishing for cod on these spawning beds we use nets of $3\frac{1}{4}$ inch from knot to knot, four feet deep, and 40 fathoms long. They are sunk to the bottom.

DAVID ALLAN.

There is no herring-fishing now on the spawning grounds; there is no desire to return to it, we find the cod and turbot-fishing more profitable. We desire to be allowed to fish for herrings during January; the herring is very important to us for bait during that month. During April and May the buckie is better bait than the herring, it takes a primer and better fish; the older and softer fish take the herring. We used to fish with the hand-line, but we have long given it up.

I think the trawling in December off Troon did harm as it broke the head of the shoals on their way to the spawning grounds. The trawling off Troon was from 1850 to 1860.

We could not catch more herrings in January than would be enough for bait. Our boats that go to Loch Fyne return about the new year; they would not remain there during January if the herring fishery were permitted.

(*William Richmond.*) Turbot spawn in summer, and the summer turbot are therefore caught while spawning.

(*Serj. Kelly.*) The number of boats and fishermen on the Ayrshire coast is as follows:

	Boats.	Men.
Ardrossan, Saltcoats, and Artincross	40	77
Troon and Irvine - - -	42	87
Ayr and Dumure - - -	46	82
Maiden and Girvan - -	41	69
Carlton and Ballantrae - -	32	60
Stranraer - - - -	49	104

The inquiry was adjourned until the 29th September, at Dumfries.

Dumfries, Dumfriesshire, Thursday, 29th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

JOHN PATTERSON called and examined.

53,821. (*Mr. Caird.*) You are a fish dealer at Dumfries?—Yes.

53,822. Are you well acquainted with the different kinds of fish and the mode of fishing carried on in the waters of the Solway on the coast of this county?—I have been acquainted with them for the last 10 years. When I first started the fish trade I used to get about 100 stone a day of flounders, codling, and cod.

53,823. What do you receive now?—I cannot receive three.

53,824. Have you never had any other kind of fish?—I have had flounders, codling, and herrings out of the Solway.

53,825. What do you get now; what description of fish?—About two or three stone of flounders a day, and there may be some months when I do not get a flounder at all.

53,826. When did the decline begin to show itself very evidently?—Four or five years ago, but the greatest decline was last year. It was a total decline then.

53,827. How does it appear to be this year?—I cannot say there has been much difference yet.

53,828. As compared with last year?—Yes, compared with last year, we have had very little more this year; only very few.

53,829. Have you been doing better this year?—Perhaps a little better.

53,830. What kind of fish are you getting now?—Flounders, out of the Solway.

53,831. No cod or codling?—No.

53,832. Any whiting or haddock?—No.

53,833. Did you never get those kind of fish?—Yes, I have had them both, but not for the last seven or eight years.

53,834. (*Mr. Lefevre.*) Has there been a total disappearance of the haddock?—Yes, a total disappearance of the haddock for the last seven or eight years.

53,835. (*Mr. Caird.*) There never were a great many haddock here, were there?—No; there never was a good fishing in the Solway for haddock.

53,836. At what time of the year was it carried on?—Between this time and Christmas.

53,837. How long during the whole season do you usually get a supply of the description of fish you refer to as being taken now?—This is the best flounder-fishing season; it goes on from August until the latter end of November.

53,838. What have you after November?—The fishing always falls off then. We get haddock and other stuff from Edinburgh.

53,839. But tell us what you get out of the Solway?—Flounders all the season through from the Solway. They are the principal fish we get in this town from the Solway.

53,840. Do you get very little fish besides flounders?—We get cod through the winter, or rather we did; we do not now.

53,841. Do you get any turbot?—No.

53,842. You never had any, I suppose?—I have seen three or four come out of it, that is all.

53,843. And soles?—Yes, but they are very small. They are very little soles that come out of the Solway.

53,844. You say the decline began seven or eight years ago?—Yes.

53,845. And what do you attribute that decline to; was there any particular kind of fishing introduced for the first time that had not been before followed, or was there anything which you can assign as the probable cause of the decline?—There are some boats which come in here to fish for shrimps in the Solway, and that is the cause to which we assign the falling off. They kill a terrible heap of the small brood; they kill flounders only as long as the nail of your finger, or a little longer.

53,846. Did those shrimp boats come for the first time between seven and eight years ago, when the decline in the flat-fish began?—It is about 10 or 11 years since they first came.

53,847. Did they fish for some years without causing any injury to the supply?—We did not notice it till seven or eight years ago; we noticed it most then.

53,848. Have those boats increased in number?—Yes, a great deal.

53,849. Are they increasing now?—I cannot say at present whether they are increasing, but there are about 25 or 30 of them, as far as I can tell at present.

53,850. Do they fish during the whole of the year?—Yes.

53,851. Do they spread themselves over a large portion of the upper waters of the Solway?—Yes, through the whole Channel.

53,852. Have they continued to fish very much on the same ground during all the time you mention?—As near as I can tell they fish about 10 or 11 miles up and down the water.

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53,853. And their object is to trawl for shrimps?—For shrimps entirely.

53,854. Have you yourself ever seen them at work?—Yes, but I was never in their boats. I have only seen them off the shore.

53,855. Have you seen them fishing?—Yes.

53,856. Have you seen what their nets had caught when they came on shore?—I have seen small flounders taken out of them.

53,857. Have you seen small flounders in their boats?—No; among the shrimps when they brought them on shore.

53,858. Was there a large proportion of small flounders?—Yes, a great deal.

53,859. What did they do with them?—They threw them in the water.

53,860. Were they of no use for food?—None at all.

53,861. How many baskets of small flounders, or how many pounds weight or stones weight at one haul have you seen thrown into the water as useless?—I am a fish dealer at Dumfries; I am not always down at the fishing. I cannot say what they may have done in that way. I was never there only once or twice.

53,862–5. Then have you not observed it personally?—No, only once or twice.

53,866. Have you any other observation to make to us in reference to the supply of flat-fish?—I can say nothing, except that I think that it is the shrimp-boats which are causing the destruction.

53,867. Has the price of fish altered much within your experience here?—When I first started I got them for 6*d.* and 8*d.* a stone, and now I give 1*s.* 2*d.* and 1*s.* 4*d.* and 1*s.* 6*d.* a stone. I have sold them at 1*d.* a pound, but I cannot sell them now under 2*d.* and 3*d.* if I am to make a profit.

53,868. When did the considerable rise in price begin?—It has been rising for four or five or half a dozen years.

53,869. Has it been rising gradually?—Yes, regularly; a penny one year and a penny another year.

53,870. Do you get the greater proportion of the flat-fish caught in this part of the Solway near Dumfries?—I consider that I get one half of them.

53,871. Half of what come to Dumfries?—Yes.

53,872. But are all that come to Dumfries a large proportion of what are caught in the upper part of the Solway?—Yes, we get here three parts of what are caught in the Solway.

53,873. Has there been any change in consequence of other places coming into competition with you in the demand for those flat-fish?—No, we have the best demand here, and we give the highest price for the flat-fish of any market I know of.

53,874. Are none of them taken at Whitehaven, or at any of the ports on the English side of the Solway?—A few go to Carlisle.

53,875. Does not Carlisle take as much as Dumfries?—No, it does not.

53,876. From your knowledge of the trade in fish here would you say that the proportion of flat-fish taken to Carlisle now is not larger than it was eight or nine years ago, when you had the principal supply for Dumfries?—I consider that there is very little more going to Carlisle now than did, not of that kind of fish. I consider that we get the greatest portion of the fish caught in the nets in the Solway, the same as we did nine or 10 years ago. We get nearly all the net fish.

53,877. Are flounders caught in nets?—Yes.

53,878. Are they all caught by nets?—Yes.

53,879. How are those nets set?—They are set with stakes.

53,880. They are stake-nets?—Yes.

53,881. Do they go down to the bottom?—Yes; they are set on end. They go down to the bottom, and are pinned down to the bottom.

53,882. Are the fish taken at low water?—Yes.

53,883. When the tide goes out?—Yes.

53,884. Do the fishermen ever get anything in the nets except flounders and flat-fish?—I never saw anything except flounders and cod.

53,885. Did you ever see any salmon?—I never knew salmon taken in them.

53,886. Are those nets permitted now?—Yes.

53,887. Is no objection made to them?—No.

53,888. (*Mr. Lefevre.*) Do you know what is the size of the mesh of the net?—No.

53,889. Do you know what number of men were formerly employed in fishing for flounders in this way, say 10 years ago?—There were a great number of men employed then, but they have fallen off because they could not make wages at it.

53,890. Did the same men go out fishing with the line in boats?—No, not that I know of. They fish the cod with lines out on the sand. They have caught a heap of cod with lines on the sands.

53,891. They are not regular fishermen, are they?—They are regular fishermen; they do nothing else.

53,892. What is the size of the boats they have?—They have no boats; they fish at low water.

53,893–4. They do not use boats, and do not go out into the deep water at all?—No.

53,895. Then is the shrimping quite a recent trade here?—It is a recent trade with the boats.

53,896. Have the fishermen here taken to shrimping themselves?—No; they come out of Lancashire when they come here.

53,897. Where do they send their shrimps to?—Into Lancashire and all up and down.

53,898. Do they send them to Dumfries?—Yes, a few, and a few to Glasgow.

53,899. How many men go in a boat?—Either one or two.

53,900. Is there any trawling in the Solway Firth?—Do you mean beam trawling?

53,901. Yes.—There is a little beam-trawling for flounders for two or three months in the year.

53,902. How many boats engage in it?—The shrimping boats, when the shrimping falls off, try it.

53,903. What is the season for shrimping?—I cannot tell. They shrimp in the summer time and not in the winter, that I know of; if they do it is very little.

53,904. Do you know what bait they use for the cod?—Small flounders.

53,905. Do you think it would be possible to carry on shrimping without causing this destruction of small fish?—Not to my knowledge.

53,906. Then would you propose that shrimping should be done away with so as to increase the supply of flounders?—I cannot tell that, but if those boats are to continue shrimping there will be no flounders at all. That is my belief in the matter.

53,907. What number of men are there employed in catching flounders in the way you speak of?—I cannot say; they have a great deal fallen off on the coast. There is such a scarcity of fish that they cannot get a living by it.

53,908. Can you say how many men used to be engaged in the fishing?—At one time there were I daresay 50 or 60, but there is not one-third of that number now.

53,909. Are they reduced to 14 or 15?—Yes, they have been reduced to all that.

53,910. Are there any shrimpers here to-day?—Yes, I believe so.

The witness withdrew.

JOSEPH BURNIE called and examined.

53,911. (*Mr. Caird.*) Are you a fisherman at Powfoot, near Dumfries?—Yes.

53,912. In the Solway?—Yes.

53,913. Have you been for some years a fisherman there?—I have fished since I have been a boy backward and forward. I have been at work for 24 or 25 years.

53,914. Have you been fishing chiefly for flounders?—For flounders, codling, and large cod in the season.

53,915. Always with a net?—With lines for the large cod, but with stake-nets for the flounders and codling.

53,916. Have those stake-nets been long in use?—Yes, long before my remembrance, or that of the oldest man I ever heard speak of the matter.

53,917. Give us a description of the mode in which you set your net, and what the size of the mesh of the net is, and its length and depth?—The size of the mesh is three inches and three-quarters.

53,918. Is that from knot to knot?—It will be seven inches round. As to the size and length of the net, I can hardly give that; it depends on the ground. Some of them will not be 10 yards long, and some will be from 15 to 18 yards, and some more than that. The flatter the ground the larger net we consider it takes.

53,919. What is the depth of the net?—Between five and six feet.

53,920. Is it set perpendicularly up and down on the stakes?—Yes.

53,921. And with a foot-rope on the sand?—Not on the sand, on the scar.

53,922. You set them up on a scar?—Yes, if we can get it; if not, we set them on the sand in the same way.

53,923. Is there a bag in the net?—No, there is a bit of a head where the fish go into.

53,924. Cannot they get out of the head?—They do sometimes with the tide.

53,925. Is there nothing to prevent them from swimming out?—No; they can come out the same way they went in.

53,926. Are they caught with the rising or the falling tide?—Some are caught with the falling tide only, and some with both the rising and the falling tide.

53,927. Is not the net so placed that you can catch fish with both tides?—Some of them are caught in both ways, but most are taken with the falling tide.

53,928. You do not bait the net in any way?—No, and it is only the flounders feeding on the scars that come into it.

53,929. Do you get small flounders in the net?—Yes.

53,930. In what state are they when you get them as the tide comes down?—They are quite alive.

53,931. Do you never get any that are too small to be used for food?—For the market?

53,932. Yes?—There are some too small for the market, but we give them to the poor people for food.

53,933. They are of no use for the market?—We have got them when they have not been of any use for the market.

53,934. When you get them in that state cannot you throw them into the sea again?—There is nothing to hinder us.

53,935. Has not the tide left you?—No; there is water close at hand.

53,936. Do you throw them into the sea again?—We do generally.

53,937. (*Mr. Lefevre.*) Are they left bare on the ground by the tide?—Yes, some of them, and some of them close in at low water.

53,938. (*Mr. Caird.*) Have you even seen any large proportion of the fish caught in your nets that were small, and unfit for the market?—I have seen a good quantity.

53,939. Half of them?—No, not half of them; I never saw half of them.

53,940. What would you consider a good take with your nets?—Since I commenced to fish I have sent upwards of 40 stone out of my net in one day.

53,941. When you got 40 stone of marketable fish, how many stone would there be not fit for the market?—I cannot give any certain answer to that question.

53,942. Can you give us no idea?—There would be from five to six stone.

53,943. Which would be lost?—Yes, sometimes; but frequently the flounders are in that way that there are very few small ones among them.

53,944. Has the number of men engaged in that mode of fishing increased of late years?—No.

53,945. Have the number of nets employed in it?—No; since I can remember there were more nets than there are at the present time.

53,946. Then the fishing has diminished rather than increased?—Yes.

53,947. Have you lately taken such good takes as those you just mentioned to us?—No.

53,948. How long is it since you took that quantity?—I have taken it within 10 years, but I cannot mention the year.

53,949. What have been the best takes you have had this year?—Another neighbour has been fishing with myself, and our best takes have been three stone and three and a half stone.

53,950. In a day?—Yes.

53,951. What would the average be in former times?—From 10 to 15 and 17 stone, and from that to 20 and 30 stone a day.

53,952. Then it has diminished?—At the present time three and three and a half stone are all the quantity we can get.

53,953. Do you never in an exceptional case get a good haul?—We have not done so of late years.

53,954. Have you never had any good haul at all within the last year?—Not at all. I have not sent in more than six or eight stone at a time.

53,955. When did you begin to notice that the fishing was decidedly falling off?—It is now some eight or 10 years since we first saw the falling off.

53,956. You fish on the Scotch side of the Solway?—Yes.

53,957. Is the same mode of fishing practised on the English side?—No.

53,958. Is there no flounder-fishing in the same way in England?—No, there is a law for our side and not for theirs.

53,959. Is there a law on the English side to prevent that mode of fishing from being adopted there?—I cannot say that.

53,960. Is there any ground for fishing there?—Not as much as there is on our side.

53,961. Has that been the case since you have been fishing?—Yes, I have seen the Channel miles from us and now it is closer to us.

53,962. You do not remember to have seen the English fishermen fishing in the same way?—I do not remember to have seen them.

53,963. Have they any mode of catching flounders on the English side?—Yes, they have what they call poke-nets.

53,964. Then they have a mode of catching flounders with a net, but it differs from yours?—Yes.

53,965. Do you know if it is a more deadly mode of catching fish, or why do you adopt a different system from them; is there anything in the character of your shore which causes the difference?—I think use and habit are the only difference. We have been used to nothing else than peedle-nets and they have been used to theirs. Nothing else besides peedle-nets are used on the Scotch side of the Firth.

53,966. Have those poke-nets been used for a long time on the English side?—Yes.

53,967. Are they increasing in number?—I cannot say that.

53,968. Do the men who fish those poke-nets on the English side complain of a scarcity of flounders

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now?—I cannot say. One individual I know has a boat and fishes for shrimps.

53,969. What is the nature of the poke-net?—It is set on the sands. Each net goes between two sticks set in the ground with a large pocket hanging down.

53,970. Is it a swimming net fastened at both ends?—It is fastened at each side to a stick.

53,971. And the bag of it swims with the tide?—Yes, it hangs down.

53,972. (*Mr. Lefevre.*) Is it dragged along with boats?—No, it is fixed on sticks.

53,973. (*Mr. Caird.*) I suppose the net is fixed to those sticks at low water when the tide is out?—Some of them are a good way off from low water.

53,974. Those nets are not set by means of boats, are they?—No.

53,975. People work at them when the tide is out?—Yes, they were never used with boats. Boat-fishing was never practised in our quarter at all until the shrimp-fishing commenced for no sort of fish.

53,976. Then are we to understand that the poke-nets used on the English shore and the Scotch stake-nets have both been employed in fishing for a long time for flounders in the Solway?—Yes, since the memory of man and from time immemorial we have had stake-fishing nets on our side.

53,977. Then when did you begin to find your flounder-fishing falling off?—Within the last 10 years.

53,978. Did you sometimes catch cod in those nets?—Small cod, and occasionally large cod. We have sometimes got a good quantity of small cod.

53,979. At that time shrimp-fishing became a matter of some importance?—It commenced in operation then.

53,980–2. Do the shrimp fishers come near to your nets?—They go anywhere the ground will permit. They cannot trawl shrimps on the scars, but if it be sand they can come quite near. It is all on the sand they trawl.

53,983. Have you observed them trawling?—Yes.

53,984. Have the shrimp men increased in number?—I think they have increased a little for the last two years.

53,985. Do you know what number of them are employed in catching shrimps?—Between 20 and 30 at present, but I have seen more than 30.

53,986. What is the size of their nets?—I do not know exactly, but take them on the average they will have a 20 feet or 30 feet beam. Some have a beam larger than that. They have two beams and each net will be 40 feet at the very least.

53,987. Each boat has two beam-nets?—Yes.

53,988. One on each side?—One at the stern and another at the bow. They go on each side with the stream.

53,989. You say you have seen them taking the shrimps?—Yes, I have.

53,990. Did you ever notice anything besides shrimps in their nets?—Yes, a good deal of white-fish fry.

53,991. What kind of white-fish?—Both flounders and codlings.

53,992. The young of those fish?—Yes, not the size of my thumb nail or very little more.

53,993. Was there any large quantity of that?—Yes, a large quantity. I have seen a good deal in the nets.

53,994. Did they draw their nets on board in the boats?—Yes.

53,995. What did they do with the fry?—They riddled the shrimps out of it and threw the rest overboard.

53,996. Was it alive when it was thrown overboard?—I do not consider that it would live at all.

53,997. Would it have as good a chance of living as the fry you catch?—No.

53,998. Why not?—They draw the trawl round with great pressure upon the fish and being so young they cannot live.

53,999. Are they smaller fish than yours?—Yes, ten times smaller than ours.

54,000. Is there any large quantity of those small flounders in their nets?—I suppose they do catch a good quantity.

54,001. You think that that has really caused a great destruction to your fishing?—Yes, since it has been practised the fish have become very scarce compared with what they used to be.

54,002. Are the shrimpers themselves beginning to destroy their own fishing by taking it up so much?—Yes, I think so. When they commenced to trawl for flounders they got from 20 to 40 and 60 and 80 stone in a tide. They have been trying it this season and four or five stone was all they could get.

54,003. Do the shrimpers trawl for flounders?—Yes.

54,004. Do they use the same net?—It is a larger mesh, but still it is a very straight net.

54,005. Do you know the size of it?—I saw one only yesterday.

54,006. Have they as shrimp fishermen begun to find that the shrimps have fallen off?—That I cannot say. I cannot answer that question.

54,007. (*Mr. Lefevre.*) Do you know what number of these stake-nets there are set along this side of the Solway?—No, I cannot tell the number.

54,008. How many men does it take to look after these stake-nets; does it take more than one man?—Some may have two or three small stake-nets.

54,009. May they set their stake-nets anywhere along the shore they like?—Yes, wherever they think the best position is for catching the fish.

54,010. Are they set permanently there or do they move them about?—They move them if they think they can get a better place.

54,011. How long are they allowed to remain in the same place?—I have known a net which has been in the same place for 30 years since we first occupied it.

54,012. Then you cannot say what number of men are employed in this way?—No; but there are a large number.

54,013. There used to be more?—Yes.

54,014. Are they men living at Annan?—No, all along the coast; the whole of the shore. They fish all the way.

54,015. Are these nets set all the year round?—Yes.

54,016. Do they catch flounders in them all the year round?—Yes, all the year round.

54,017. Do you think there could be any mode of regulating the shrimping so as to prevent the shrimp-nets from catching the small flounders?—That was considered when a petition was presented on the subject. It was left to the board to consider it.

54,018. Have you no suggestion to offer upon the matter yourself?—No.

54,019. Is there no suggestion you could make yourself to regulate the fishing and to prevent the catching of small fish?—I cannot say. There might perhaps be a time specified for the fry, but who can tell when the white-fish spawn. If we knew when they spawn there might be something done to preserve the spawn and the brood also.

54,020. Do you know when they spawn?—I think they spawn at different times of the season.

54,021. Not at one time of the year particularly?—The most part of them may spawn at a particular time, but I have known them spawn at all times.

54,022. Is there any time of the year when you catch more small flounders than another?—There is no time more particularly than another.

54,023. You catch the same proportion all the year round?—The same proportion of flounders; neither large nor small is got all the year round now.

54,024–5. There are no months in the year when you catch more small fish than in other months?—In the spring of the year we catch the most.

54,026. Do you catch many other small fish besides flounders?—I have seen young codlings caught.

54,027. Of what size ?—They cannot be large because the mesh is small that they have to get through.

54,028. What size are they ?—The size of a child's finger.

54,029. Do you catch a great number of them ?—I cannot say that.

54,030. Have you seen them yourself ?—Yes.

54,031. And any other kind of fish ?—I have seen some chance young herrings.

54,032. Do the herrings come up the Solway ?—We used to have a good fishing of herrings.

54,033. How long is it since you had any ?—Ten years since.

54,034. Were there herring-boats regularly employed ?—No ; when we caught them we got them in the stake-nets.

54,035. You never had any boats ?—No.

54,036. You always caught them in the stake-nets ?—Yes.

54,037. Did they come regularly ?—Yes.

54,038. Every year ?—Yes, for many years before that we had a very good fishing although it was not always regular.

54,039. Did the herrings form any considerable portion of your earnings in the year ?—Yes.

54,040. The fishing has fallen off ?—Yes, the last year we had them was in 1855 ; we had them then for about a month or five weeks, and there were three or four of us who got between 30*l.* and 40*l.* worth.

54,041. What is the season for shrimping now ?—Just whenever they can get them.

54,042. When does it begin ?—There is no particular time.

54,043. Do they fish all the year round ?—Yes.

54,044. I thought you said that during some portion of the year they fished for flounders ?—Yes, part of the time, but not all.

54,045. What time of the year is that ?—They commence generally at this season of the year.

54,046. For how long do they trawl ?—Perhaps until a storm comes on, if there be a storm.

54,047. (*Mr. Caird.*) Have you, the net fishers for flounders, come to any agreement among yourselves as to using a larger meshed net for the future ?—Yes.

54,048. What is the agreement ?—We are to have the net of a 4-inch coil.

54,049. Do you think you have been using nets with too small a mesh ?—We thought that we would try to make an improvement as well as other people, and see if we could get the thing mended in that way.

54,050. Have you done so in the belief that you yourselves were to some degree injuring the brood of the fish by killing small fish ?—Yes, we considered that some that we took were not fit for the market, and that it would improve the brood to increase the size of the mesh.

54,051. You came voluntarily among yourselves, the whole of the fishermen on the Scotch side of the Solway, to an agreement to use a larger mesh ?—Yes, in all our district ; we held regular meetings about it, and all agreed upon that system.

54,052. (*Mr. Lefevre.*) When was that regulation made ?—It was not a regulation but an agreement among ourselves.

54,053. When was it made ?—In November or December last year.

54,054. Then sufficient time has not elapsed to enable you to say whether it has been of any use to your fishing ?—No.

54,055. Are you using the large mesh now ?—A good many are.

54,056. You have not all altered your nets ?—Not all.

54,057. If something was done to enforce a regulation among other people, you would be willing to adopt that plan ?—Yes, we would take it upon ourselves as well as put it upon others.

54,058. Do you yourselves consider that a sufficient mode of preventing the destruction of the fry of the fish ; if a regulation to that effect were imposed upon all the other fishers for flounders would that secure your object ?—We considered that the mesh ought to be increased, and that it would lead to an improvement in the white-fish.

54,059. Of course it would be impossible in the Solway Firth to catch shrimps with nets like that ?—Yes.

54,060. Then there is nothing for it but that the shrimping should cease entirely ?—Yes, unless something could be adopted to ascertain the spawning and breeding time, and then we might have a time allowed for it.

54,061. If it could be ascertained at what time the greatest destruction takes place to the fry of the fish, and if fishing were prevented during that time, might it be followed at other times of the year without any serious injury to your fishing ?—Yes, when the flounders get into more strength.

54,062. What would be the months when the flounders would be in such strength that they would not be likely to be injured in this part by the mode of fishing for shrimps ?—I cannot say ; I do not know ; you had better ask some one who knows more about the brood of fish than I do.

54,063. You are constantly engaged in the fishing?—Yes.

54,064. And have been so for many years back ?—Yes.

54,065. Have you not observed the time when the fish are in the greatest strength?—Yes.

54,066. What months of the year is it ?—They begin to lose strength sometimes in November, I think about the hinder end of November.

54,067. From November until when ? — The flounders are a great deal worse until May in this country.

54,068. From November until May ?—Yes.

54,069. Would you propose on the part of the flounder fishermen that the shrimp-fishing should be discontinued from November until May ?—I have not come here to propose anything of that sort.

54,070. Would you suggest it ; we wish to get at what you think, as a practical fisherman, would be likely to benefit your fishing ?—It would be a great improvement, because from the unusual multitude of boats trawling, and the length of their beams, the whole of the ground is swept clean, so that there is no place for the white fish to lie.

54,071. Does anybody trawl for the fish except the shrimpers ?—No.

54,072. When do the shrimpers lay aside their shrimp-nets and begin to trawl ?—Some of them do not lay them aside at all.

54,073. Is there one season for the flounders and another for the shrimps ?—There is none for the flounders.

54,074. Did you not say that some of the men who used the shrimp-net also used the beam-trawl for flounders ?—Yes, some of them do.

54,075. Then do those who use the beam-trawl discontinue shrimping ?—Yes.

54,076. When ?—They commence generally about this time of the year ; some of them have commenced now.

54,077. From the beginning of October up till when ?—As long as they can get them.

54,078. As long as they can get the flounders ?—Yes.

54,079. During what months are the best flounders got ?—Generally the largest quantity is got from now till New-year's day.

54,080. The largest quantity is got from this time until the beginning of January ?—Yes.

54,081. You say they begin to lose their strength in November ?—Yes. We have got a large quantity in the spring of the year ; sometimes we have caught more in the spring of the year than in the back end after they have begun to lose their strength. We

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have had a large quantity of flounders in our nets in February and March.

54,082. Is the number of fishermen who trawl for flounders increasing?—No, not to my knowledge.

54,083. You said something about there being such a number of boats trawling in the Solway that they were cleaning up the whole of the ground?—That is for shrimps, not for flounders.

54,084. They are not more numerous than they were?—No, they are fewer.

54,085. Still they are so numerous that they take up all the ground?—Yes.

54,086. Have you ever trawled for flounders yourself?—I have.

54,087. What success have you met with in that mode of fishing?—Sometimes very fair.

54,088. Can you make more of it in that way than by your stake nets?—No, I never could.

54,089. Do you think that half the shrimpers take to trawling for flounders at this time of the year?—I cannot say; I never saw half of them do it.

54,090. But a considerable number of them do?—Yes.

54,091. Have you altered your own nets yourself by enlarging the mesh?—My nets have been altered, but they were altered before we commenced this petition.

54,092. Have you caught fewer small flounders since then?—I have.

54,093. What is the smallest you catch now?—We get very few that we do not send to the market.

54,094. Almost all you get are fit for the market?—Yes.

54,095. What do you mean by the fish losing their strength?—They begin to spawn then, and they do not keep in such good order.

54,096. I thought you told us that some of them were spawning all the year round?—There are fish of different kinds that spawn all the year round.

54,097. But the flounders?—That was my meaning.

54,098. Do you think a great number of them spawn at the beginning of the year?—Yes.

54,099. But still that some of them are spawning all the year round?—Yes.

54,100. (*Mr. Caird.*) You said that you had been a line fisherman for cod?—Yes, for large cod.

54,101. Have you within recent years been so engaged?—I tried it last year.

54,102. And with what success?—I got nothing.

54,103. How long is it since you had any success?—It is a good many years.

54,104. Was there much line-fishing carried on then for cod?—Yes, a good deal.

54,105. In what particular part of the Solway?—On our own banks.

54,106. Are there not cod to be found there now?—There has not been for several years.

54,107. (*Mr. Lefevre.*) Did you take a good number of codling in your nets?—Yes.

54,108. At what time of the year?—About Martinmas time.

54,109. Do you take large sized cod also in your nets?—Very rarely, but we do sometimes.

54,110. Did the codling form a considerable portion of your take in the year?—Yes, at that season.

54,111. Do you think the taking of the codling did any injury to the taking of the larger cod outside?—I do not know. There is no doubt that taking the codling would keep them from growing larger.

54,112. Is there any fishing further out in the bay by a larger class of boats coming from Liverpool or other places?—Other boats?

54,113. Yes, the larger line-boats?—The fishing is always confined to within low-water mark, or nearly so. The Channel is not above three quarters of a mile broad at the most.

54,114. Further out in the bay are there no line fishermen with larger boats?—No, there is nothing of that sort.

54,115. (*Mr. Caird.*) Do you remember any time when there was a good sole-fishing here?—No.

54,116. Or a good turbot-fishing?—No.

54,117. Has there never been a good sole or turbot fishing here?—No; they have got soles, but they have been very small.

54,118. Is it chiefly the flounders that have shewn a marked decrease?—Yes, chiefly flounders.

54,119. Are there any shell-fish caught here; any oysters?—There are no oysters in our Firth.

54,120. Are there no oyster beds?—No; there are mussels.

54,121. Are there lobsters?—I have seen an odd one.

54,122. Do they form any part of the fisherman's business?—No, none follow that occupation.

54,123. You say there are mussels?—Yes.

54,124. Are there good mussel beds?—Yes, and cockles.

54,125. Are there good mussel and cockle beds?—The mussels are but small at present, but there are good cockle beds.

54,126. Were the mussel beds ever very extensive?—I have seen them very good.

54,127. Were they taken for bait?—No.

54,128. For the market?—Yes.

54,129. For food?—Yes, they were sent to Carlisle market.

54,130. Are the beds not as good now as they were?—No, they are not so large.

54,131. Have you ever fished them?—No, they have shifted backward and forward. The stream is strong, and they never have time to grow.

54,132. Is that because you take too many mussels away?—No, we have not sent them away for many years.

54,133. Where are the cockle beds?—On the sand banks further down.

54,134. Do they yield large quantities of cockles?—Yes.

54,135. Are they regularly fished?—Not now.

54,136. Are they gathered when the tide goes out?—Yes.

54,137. Why are they not gathered now; is there no market for them?—No, the market is not so easily got at.

54,138. There is no want of cockles?—No.

54,139. Does anybody come here to get bait; do any fishermen come from other quarters?—No. We have sold bait at the Dumfries market to go to the west for large cod, but none come to us for bait.

54,140. (*Mr. Lefevre.*) Did you take haddocks in the stake-net?—At the time we had them we did.

54,141. Did they disappear about seven years ago?—Yes.

54,142. Then now you have lost both the haddock, the herring, and the codling?—Yes, we have had none of those kinds of fish for some years.

54,143. Did the herrings come every year, or did they come at intervals after the lapse of a few years?—They came at intervals.

54,144. Ten years ago is the last time you recollect the herrings here?—Yes.

54,145. Previous to that, how long was it?—Four, or five, or six years. They fished them regularly before that.

54,146. Regularly every year?—Yes.

54,147. You are quite sure of that?—Yes.

54,148. (*Mr. Caird.*) Is there any large herring-fishing here at any time?—The boats often come up and fish along this place.

54,149. Were they taken to the fresh market or cured?—They were taken to the fresh market.

54,150. Has there been any marked change in regard to the herring-fishing here?—The herring-fishing is not a regular fishing in our Firth.

54,151. It never has been at any time?—Never in my time, except a few in the winter and summer. In the summer season we get them in May and June.

54,152. (*Mr. Lefevre.*) The shrimping began then?

—Yes, but at that time it was only carried on on a very small scale.

54,153. (*Mr. Caird.*) What is the smallest sized mesh you at present use for flounder-fishing in the stake-nets you have described?—What I told you is the smallest I ever knew to be used.

54,154. By any of the fishermen?—Yes. There are none less than three and three quarters of an inch coil.

54,155. Then, as far as your knowledge extends, there are no smaller meshes used?—Not that I know of, but I have not examined all the nets.

54,156. You are not aware of any less?—No, but I am aware that there are many of them fishing with a 4-inch coil, and have been doing so for some years back.

54,157. (*Mr. Lefevre.*) What is the cost of a stake-net?—It depends on the size.

54,158. Take an ordinary average-sized one?—I cannot give you an estimate.

54,159. (*Mr. Caird.*) Some years ago did you use a smaller mesh than you do now?—I never did.

54,160. Did any of the fishermen in the same way of fishing?—I am quite aware that they did. Some were taken up for it, but it was only an exceptional case or two. It was not the general rule.

54,161. It was not common?—No, it was only some old nets that had been condemned by the salmon-fishing system.

54,162. (*Mr. Lefevre.*) Are the meshes of the net in the trap smaller than in the other part?—Yes, smaller than the rest of the net.

54,163. (*Mr. Caird.*) Your smallest mesh is three and three quarters?—Yes.

54,164. That is the smallest mesh you have in the net?—Yes.

54,165–6. Do you know what the flounders feed upon?—Yes, I think they feed upon mussels a good deal, and upon shell-fish they call fritters. They are small fish which grow the same as a cockle, but they are not ribbed on the shell.

54,167. I suppose that as food for flounders the mussels have increased?—There are plenty of mussels for the flounders. There are so many of them that we have carried hundreds of cartloads to manure the land. We can do that at the present day.

54,168. Are there plenty of mussels left now for any purpose?—Yes.

54,169. And are there plenty of that other description of shell-fish you mentioned—fritters?—Yes, there are plenty.

54,170. Do you not imagine that there may be some reason in the notion that the decline in the flounders may have arisen from the food on which they live having ceased to be plentiful?—I believe it is plentiful; but my opinion is that the decline in the flounders is in consequence of killing the young ones off altogether.

54,171. (*Mr. Lefevre.*) Have the mussels not grown to any size of late years?—Not to any size for the market.

54,172. Is that quite within the last two or three years, or has it been the case for some years?—It is many years since I sent any to the market.

54,173. Notwithstanding that, has there been a great supply of small mussels?—Yes, they have come and gone every year.

54,174. How is it that they have had such a number of small ones, and have never increased?—If they get covered over with the sand they die. When they strike the scar, you see it covered all over with them like gunpowder.

54,175. Does it take some months for them to grow up again?—In two or three months they are fit for the flounder. There has not been more scar at our place than there is at present for many years back, and where the scar is the mussels will grow.

54,176. There is more scar now than formerly in your remembrance?—Yes.

54,177. And, therefore, there is a greater supply of mussels?—Yes.

The witness withdrew.

GEORGE GRAHAME called and examined.

G. Grahame.

54,178. (*Mr. Caird.*) Are you a fisherman?—I have fished.

54,179. In the same manner as the last witness?—Yes.

54,180. You have heard his evidence?—Yes.

54,181. Do you generally agree with what he has stated?—He has stated my opinion.

54,182. Have you found that the supply of flounders is very much on the decline?—Yes, it is very much on the decline.

54,183. And you attribute that to the extensive shrimp-fishing practised in the Solway?—That is my opinion.

54,184. Can you give us any information in regard to the size of the mesh of the net used in the stake-fishing?—There is nothing I can say beyond what the last witness said.

54,185. Do you agree entirely with him as to the size he mentioned?—Yes.

54,186. You have not seen a smaller size used generally?—Not a smaller size for stake-nets.

54,187. Have you seen a smaller size used for any other purpose?—Well, I cannot say.

54,188. Have you ever fished for shrimps yourself?—I have seen them fished.

54,189. Do you ever fish for them yourself?—No.

54,190. Have you seen small fry taken in the shrimp-net?—A good deal.

54,191. What became of it?—It was thrown away because it was of no use.

54,192. Was it chiefly alive or dead?—Dead.

54,193. And was it entirely lost?—Yes, entirely lost.

54,194. (*Mr. Lefevre.*) Was it brought to the shore?—Yes.

54,195. It was not thrown overboard at once after taking the net up?—No.

54,196. Supposing it was thrown overboard as soon as the net was taken up, would not the small fish be then alive?—I cannot say, but I think not.

54,197. (*Mr. Caird.*) Is there any mode of catching shrimps that could be adopted other than the present mode that would obviate the destruction of the flounder-fishing?—I have known them caught with a net shoved before the fishers.

54,198. With hand-nets?—Yes.

54,199. Was that a less destructive mode of fishing as regards flat-fish?—I never saw them caught in that way.

54,200. Did they catch as many shrimps in that way?—No.

54,201. It is not such an expensive mode of fishing?—It is not as expensive.

54,202. But I suppose it is more expensive if you consider the quantity of shrimps taken?—No.

54,203. Can two men manage a shrimp-boat?—Yes.

54,204. Then it must have been a more expensive mode of fishing?—Yes, but the tackle was not as expensive.

54,205. But the produce of the fishery was very different for the same amount of labour?—Yes.

54,206. Are you sufficiently acquainted with the shrimp-fishing to tell us how it is carried on?—No.

54,207. (*Mr. Lefevre.*) Do the shrimp fishermen live at Annan?—Yes, many of them.

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54,208. Do the stake fishermen mostly live there too?—No.

54,209. Where do they live?—Along the shore.

54,210. Are they stake fishermen all the year round?—Yes.

54,211. Do they do nothing else?—Nothing else when they can get fish.

54,212. Do they cultivate any land—any potato ground, or anything like that?—There are people who fish who cultivate land likewise.

54,213. Do you know what number there is of them?—I could not say exactly.

54,214. Have you anything more to tell us beyond what the last witness told us?—No, nothing.

The witness withdrew.

J. Scott.

JOHN SCOTT called and examined.

54,215. (*Mr. Caird.*) Have you been a stake fisherman?—Yes, I have.

54,216. Have you heard the evidence of the two previous witnesses?—Yes.

54,217. Do you agree with them generally?—Yes.

54,218. Is there any suggestion you could make to us by which in your opinion the flounder-fishing could be benefited?—Yes. I remember in the year 1859 I was employed to repair the embankment of the river at Annan, and when I went out to assist in working on the west side these boats came in at high water, and they threw a large quantity of fish over the side of the boat that was not fit for the market.

54,219. What kind of fish?—They were flounders. They were destroyed for the market altogether and were thrown over the side.

54,220. Are you speaking now of the shrimpers?—Yes.

54,221. Were they in the habit of coming into the mouth of the river Annan in order to send their shrimps to market?—Yes.

54,222. Do they do so still?—Yes.

54,223. Was there a large quantity sent to the market then?—Yes.

54,224. Is there so still?—No, it has declined since.

54,225. What suggestion can you make to us; you said you could offer one by which the flounder-fishing could be improved?—I think that if the mode of fishing by shrimp-nets were altered and another mode of casting up the nets were adopted it would do good.

54,226. Do you know any other mode by which shrimps could be caught?—No, I cannot say that.

54,227. Did you ever hear of them being caught in any other way that would not be destructive of small fish to the same extent?—No.

54,228. Then the only remedy would be putting a stop to that other fishing?—Yes.

54,229. Which of the two is the most valuable?—I think the white-fishing.

54,230. Which bring the most money to the men occupied in fishing in the Solway?—I cannot say as to that—which of them makes most money, but I think the flounder-fishing is the most valuable to the poor man.

54,231. Do you mean in getting food within his power to pay for?—Yes.

54,232. The shrimps go, I suppose, to the wealthier classes of the people?—Yes.

54,233. But then as to the advantage of the fishermen; is it not to the interest of the fishermen to get an article that brings the highest price?—I can say nothing with regard to that.

54,234. Do you not know which does bring the highest price, or which leaves the largest remuneration for the labour employed?—I do not know what they receive for the shrimps.

54,235. (*Mr. Lefevre.*) Do the stake fishermen send all their fish to Dumfries?—They mostly send them to Dumfries.

54,236. Were you a party to the suggestion among the fishermen that the mesh should be increased?—No.

54,237. What is the size of the mesh you use?—Three and three quarters.

54,238. Do you think it would be advisable that the stake fishermen should increase their mesh to four inches?—Yes, I do; but at the same time I think the shrimp-nets are more injurious than the others.

54,239. I presume from that that you yourself do catch a considerable number of small flounders?—Yes, there has been a considerable number caught, but what we have caught we put in the sea again alive.

54,240. But they are left bare at low water in the trap?—Yes, all dry. We take them out when they are dry.

54,241. But they remain for two or three hours if the tide goes down at night until it is light?—We always know when the tide is out, and we go down then.

54,242. Would they be alive when they are thrown into the water?—Yes, they are generally all alive.

54,243. Would that not be the case with the shrimpers?—No, because what they catch in the shrimp-net are all dead before they come to land.

54,244. When they take up their nets are they all dead?—They are not dead then, but they are put down in the boat and kept there until they come into the harbour.

54,245. If they were thrown over when the net was taken up would they be dead?—I cannot say anything as to that.

54,246. Have you observed the fish taken up in the shrimp-nets?—I have seen them in the harbour.

54,247. But not on board the vessel?—No.

54,248. Then you cannot say if they were alive or dead when they came on board in the net?—No.

54,249. Can you tell us anything as to the number of fishermen employed with the stake-nets?—I cannot say.

54,250. (*Mr. Caird.*) Have you any idea of the probable annual value of the whole flounder-fishing on the Scotch side of the Solway?—No, I have not.

54,251. Have you any notion of the number of men engaged in it?—No, I have not.

54,252. Are there a great many?—There have been a great many; but they have been obliged to go to other employments since the flounders have fallen off.

54,253. You do not know what number there is or what there has ever been?—No, I do not.

54,254. (*Mr. Lefevre.*) What can you make yourself by it; what have you been making the last three or four years?—Sometimes more, and sometimes less.

54,255. Can you give us an estimate of what you have been making by it?—I am not a regular fisherman. I have tried it, but not regularly.

54,256. What do you do at other times?—I labour.

54,257. How many weeks in the year are you engaged in fishing?—I cannot tell you.

The witness withdrew.

JOSEPH BURNIE recalled and examined.

54,258. (*Mr. Lefevre.*) Have you been fishing all the year round with the stake-net ?—I have for some seasons.

54,259. What have you been making during the last two or three years ?—Very little during the last two or three seasons.

54,260. How much has it amounted to ?—I ought to have my books with me to tell you that ; but it is not very much. I have had to take to other work in the spring of the year in order to keep myself and family.

54,261. Have you been making as much as 1*l.* a week during the last two or three years ?—No, I have not. I should be very contented to have that.

54,262. What used you to make seven or eight years ago ?—I cannot say.

54,263. Have your earnings fallen off very much ?—They have fallen off very much. I could give you a statement of how much I am sending off to the market now and what I sent before.

54,264. Part of the falling off in your earnings is due to the fact that the haddock, the cod, and the herrings have disappeared ?—We do not count those extra white fish among the flounder-fishing at all.

54,265. Do you only reckon your profits in the flounder-fishing ?—Yes ; it is only the flounder-fishing that we generally calculate upon.

The witness withdrew.

JOHN PATTERSON recalled and examined.

54,266. (*Mr. Lefevre.*) What is the annual amount you pay for flatfish caught by these stake-net fishermen ?—For the last three or four years back I have paid very little.

54,267. Can you not be more precise ?—I can fetch a book and tell you as near as possible.

54,268. Can you do so comparatively for eight years or so ?—Yes.

54,269. We do not want to pry into your business transactions, but only wish to have something like an idea of the value of the fishing ?—I will bring my book.

The witness withdrew.

RICHARD WOODHOUSE called and examined.

54,270. (*Mr. Caird.*) You are a shrimp fisherman ?—Yes.

54,271. Have you been long engaged in the shrimp-fishing ?—Yes.

54,272. Have you been engaged in it since it first began in the Solway ?—Yes, since it first began. I was the first.

54,273. Are you an Englishman or a Scotchman ?—I came from England.

54,274. How long ago is it since you came here ?—10 years last March.

54,275. Has the shrimping gone on increasing ?—I do not think it has increased for the last six years.

54,276. How many boats is the largest number engaged in it that you remember ?—We have had 30, and now we have about 25.

54,277. Does that include all the boats on the Scotch and the English side ?—There are none who follow it from the English side now ; they engage in the salmon-fishing, and they think they can make a better job of it.

54,278. In your fishing has the catch of shrimps increased, or is it stationary, or is it diminishing ?—It is just as good at this present time as it was the first season we came.

54,279. Are the shrimps bringing a better price ?—No ; our price is always one. We never get more than threepence a quart. We have what we call a stated price the year round.

54,280. Is that the same every season ?—Yes.

54,281. When do you fish ?—We never give over unless the frost stops us.

54,282. Except for the frost you fish the whole year round ?—Yes, and fish for flounders also.

54,283. Over what extent of ground does your fishing extend ?—It extends over 20 miles.

54,284. But it is always within that part of the Solway from which the tide runs out and leaves a great deal of sand ?—We are always in the Channel.

54,285. But never in deep water ?—No ; there is no deep water in the Firth here, not for 40 miles.

54,286. Can you trawl all over the bottom ?—Yes, all over the sandy bottom unless we come upon the scars about Preeside ; but we keep off that as much as we can.

54,287. We have asked the flounder fishermen to tell us the value of their fishing and the quantity they catch. I presume you have a pretty good knowledge of the quantity you have taken, and the price having remained stationary you will be able to tell us the value. Has your catch remained pretty much the same ?—Yes.

54,288–9. What would be an average catch for two men in a boat for a day's work ?—One man and a boy would get from 80 to 100 quarts in a tide, and more than that at the present time.

54,290. Is the catch showing any signs of falling off ?—It has been better this week than it has been for 12 months.

54,291. Have you trawled over the same ground constantly ?—I was over the same ground a week ago.

54,292. Would you not pass over the same ground every day ?—Yes, sometimes.

54,293. And you always find shrimps ?—Yes, and they are every day getting better.

54,294. Does the trawling improve them ?—The trawling is improving because the season is improving. We had a bit of fine weather this back end. It was very well a short time ago, but we had some heavy freshes and they worsened then. Since then it has come fine weather and the shrimps are increasing.

54,295. Do you find the shrimps increasing ?—Yes, they are increasing now ; but fresh water in the back end and the spring of the year is sadly against us.

54,296. At the other seasons of the year how is it ?—In the summer time it does us good.

54,297. (*Mr. Lefevre.*) I suppose that you always find them in the brackish water ?—We always get them in the Channel.

54,298. But where the fresh water is mixed with the salt water ?—Yes.

54,299. (*Mr. Caird.*) You call the Channel where the tide always runs ?—Yes ; we go into five fathoms of water sometimes.

54,300. Do you trawl for shrimps in five fathoms of water ?—Yes, and in two or three fathoms sometimes.

54,301. How many hours in a tide can you trawl ?—About down to low water time.

54,302. What else do you catch in your shrimp-nets besides shrimps ?—We get small flounders sometimes.

54,303. Do you get any large quantity ?—Sometimes a large quantity.

54,304. Are they used for food ?—No, they are of no use at all.

54,305. What do you do with them ?—We throw them overboard.

54,306. Are they dead ?—They are as wick as ever they were.

54,307. You never see them turning up when they get in the water ?—We cannot help it if they do. Of course we must waste odd ones ; but it would be as

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much to our benefit as that of anybody else not to get them.

54,308. You throw them overboard?—Yes, as soon as we can get the shrimps sorted from them.

54,309. What proportion of your whole trawl will sometimes be flounders?—I have seen sometimes when we have not had one, and other times we have had the bulk of a quart of flounders.

54,310. And how many quarts of shrimps at the same time?—Perhaps 20, 30, or 40 sometimes.

54,311. Have you not seen a larger proportion of flounders at times?—Yes; I have seen the trawl sometimes with so many flounders in it that I have emptied the tail of the trawl and shot them overboard as soon as I lifted the trawl.

54,312. Have you ever fished with a beam-trawl for flounders?—Yes.

54,313. With the same boat?—Yes.

54,314. Do you do that at a different season or at the same season?—That generally begins when it becomes hard weather. As soon as the frost begins we take to flounder-trawling.

54,315. Is the shrimping a more profitable business than flounder-trawling?—Yes.

54,316. You only take to flounders when the season or the weather does not permit you to fish for shrimps?—Yes; when the weather does not permit.

54,317. Is that the case with all the shrimpers?—Yes; unless it be some persons who have no market to send stuff of that sort to at a regular price. One of our parties started this trade. We had 18 stone on Monday, and if we had had a breeze of wind we might have doubled them.

54,318. Eighteen stone of flounders?—Yes.

54,319. Good flounders?—Yes.

54,320. Were they caught with the regular sized mesh?—Yes.

54,321. What is the size?—One and half inches.

54,322. Is that smaller than the other men use?—It is what we call the regular sole trawl.

54,323. Their mesh here is three and three quarters in the coil?—Yes.

54,324. What is yours?—An inch and a half from knot to knot.

54,325. And theirs is what?—They say they are fishing with a four-inch coil now.

54,326. They are beginning to do so?—Yes.

54,327. But three and three quarters is what they have used?—Yes.

54,328. Yours is an inch and a half from knot to knot?—Yes.

54,329. Theirs would be two inches between knot and knot?—Yes; ours would be half an inch less; but I measured four peedle-nets on Tuesday last, and they were only an inch and a quarter.

54,330. Are they stake-nets?—Yes, I measured four of them and they were only an inch and a quarter.

54,331. Is there no regulation among yourselves as to the size of your mesh?—No, there is not, but we ought to have a regulation.

54,332. Does every man use what he pleases?—Yes.

54,333. Does anybody come to see what the size of your mesh is?—Nobody; nobody ever comes to interfere.

54,334. Would you like to have some interference?—Yes, for flounder-trawls I should like to have a fresh mesh put in.

54,335. What mesh do you think would be a proper one?—Two-inch coil; that would be better for everyone.

54,336. You desire to have that for the beam-trawls too?—Yes.

54,337. (*Mr. Lefevre.*) Two inches from knot to knot?—Yes, that would be four inches round the coil.

54,338. (*Mr. Caird.*) That would be the same size as the mesh which the stake-net fishermen are desirous of adopting?—They say so.

54,339. Do you know whether the men who trawl for flounders make a good business of it on the whole?—It all depends on the season of the year. There is a very good prospect for flounders this season, because BrewingScar is all covered over with young mussels, which has not been the case for six years before.

54,340. Have you found any other banks on which to trawl for flounders where you could make a good catch this year?—We got 18 stone on Monday, and with a good breeze of wind we might have doubled it.

54,341. What is that compared with last year and the year before?—The catches were very thin then, on account of the scars being sandy.

54,342. Has flounder-fishing fallen off?—Yes.

54,343. On account of the scars not being well covered with mussels?—Yes.

54,344. Has anything been done to the scars to render them less productive of mussels?—No; but the sand gets on them and chokes the mussels, and the fry of the young mussels cannot get there.

54,345. Then that is according to the weather and tides?—If the scars are bare and keep clean they will get covered with "freer" directly.

54,346. Is that the spat of the mussels?—Yes; if there be plenty of that "freer" there will be plenty of flukes.

54,347. Does that vary in different seasons?—Yes, it depends on how the channels work and run up.

54,348. (*Mr. Lefevre.*) What is the nature of the soil of the scar?—It is stone. It is about 30 years ago since we came into this country and from Preeside then they could not get a fluke. And what was the cause of that? It was because the scars were sanded up and they were obliged to go over to Cardornock to fish there. The sanding up of the scars was the cause of it.

54,349. Is it within your knowledge that 30 years ago there was as bad a flounder fishery as there is now?—Yes, and I have been told that the Preeside men went across to fish.

54,350. Is there any witness here whose experience goes as far back as that?—The man from whom I had that is not here, but he told us that he was for some time going from Preeside to Cardornock to fish for flounders, and that was all on account of the scars being bare.

54,351. You say that the scars this year present an appearance favourable to good flounder-fishing?—Yes, they do, and it will be a good flounder-fishing.

54,352. Then in your opinion it is not the mode of fishing that has injured the flounder-fishing, but the want of food for flounders?—Yes, just the want of food.

54,353. You heard the suggestions made by the previous witnesses as to putting a stop during certain months,—during the spawning months if they could be ascertained,—to shrimping altogether?—Yes.

54,354. Have you anything to offer with regard to that?—No.

54,355. Do you think it would be a proper thing to do?—They might make a close-time, but the frost makes a close-time itself, and that is the best time for the flukes.

54,356. Does the flounder-fishing improve during the frost?—That is the time when we get the most little flounders. The frost drives all the small flounders into the Channel, and then that is the time they come to us. We get them by trawling.

54,357. What would your close-time be then?—I should say three months in the winter.

54,358. You should not be allowed to shrimp at all during three months?—We could do with that.

54,359. What would you do then?—Fish for flounders.

54,360. Let me hear the three months?—From the last of October until the beginning of February.

54,361. At that time are the shrimps not as plentiful?—Yes. I have seen them as good in the winter as ever they were in the summer. I have seen them very good after Christmas.

54,362. But you would be willing to forego fishing for shrimps during that time?—Yes.

54,363. You would give over shrimping during those three months with a view to improving the flounder-fishing?—Yes.

54,364. Do you think that would be generally agreed to on the part of the shrimpers?—Yes.

54,365. Is there any particular season of the year when the shrimp market is better than at other seasons?—No.

54,366. Is there a demand in large towns for shrimps all the year round?—Yes.

54,367. If that system were adopted generally through the country what would happen to the people who eat shrimps?—They would like them better when they began to eat them again.

54,368. How many shrimpers take to flounder-fishing in the winter months?—Perhaps there may be six or eight boats going to it.

54,369. Not more than that?—It may happen that sometimes all of them will be going if it be a hard frost. In that case they have all to take to that job.

54,370. How do they do if the winter is moderate?—Some are shrimp-trawling, and some will be flounder-trawling.

54,371. Have you taken to flounder-fishing already this year?—No, not myself, but a friend of mine has.

54,372. How will it be supposing the weather keeps moderate?—If the weather is mild all the winter we should still stick to shrimp-trawling.

54,373. In the mild winters do you catch as many flounders as in the cold ones?—It all depends on the food. If there is no food we may as well do nothing.

54,374. Are all the boats provided with beam-trawls for flounders?—Yes.

54,375. What is the length of the beam?—The largest are 24 feet.

54,376. What is the length of the net?—It is put upon a 24-feet beam, and it may go 30 feet long in the tail.

54,377. Is it not more than that from the beam to the tail of the net?—No.

54,378. Is the mesh smaller towards the end?—No, it is all of a size.

54,379. There is a bag I suppose?—Yes.

54,380. Is not the mesh there smaller?—No, there is no difference in a flounder-trawl.

54,381. Do you use the trawl-nets for shrimps?—Yes.

54,382. What is the length of the beam?—From 22 to 23 feet.

54,383. Is there one at each side?—Yes, one at each side. When we go broadside end down with the tide and wind we use both of them.

54,384. Do you take any small fish beside flounders?—No.

54,385. Do you take any young cod?—No. I have followed this business for 30 years, and I have not seen 30 small cod in the trawl since I started.

54,386. Or herrings?—Catching herrings and shrimps and trawling for flounders are what I have done.

54,387. Do you take small herrings?—I may light on an odd one sometimes, but there are very few herrings that breed here.

54,388. Do you take haddock?—I never saw a haddock in my life, only in a trawl-net out in deep water.

54,389. You take no small fish except flounders?—There are a good deal of small fish that are never used for food, such as crab-fish, toad-fish, and those things which no man dare touch, let alone eat.

54,390. But with the exception of those fish you take nothing but flounders?—Only flounders.

54,391. Do you ever take the small flounders ashore?—There may be some go ashore, but what these men are speaking about is some flounders which we used to send to Liverpool. If it came on bad weather we used to put them on board a vessel that was accustomed to run from Annan Foot to Silloth to meet the Liverpool boat. If they could not go in that way they were thrown overboard and wasted.

54,392. Were you in the habit occasionally of selling small flounders?—No. What we sent away was what we got with the flounder-trawl.

54,393. But what do you do with the small flounders you take up in the shrimp-trawl?—We throw them overboard.

54,394. Do you not take them ashore?—We might take an odd one or two, but our shrimps are generally clean and fit for the market when we take them ashore.

54,395. Are the small flounders alive when you throw them overboard?—There may be a few odd ones dead, but we waste as little as possible.

54,396. Do you send the flounders you take to Liverpool or to Dumfries?—We have sent to Dumfries, but the most part of them go to Liverpool and Carlisle.

54,397. Along with the shrimps?—No; we get them at the time we are not getting shrimps.

54,398. Do you send shrimps to Liverpool also?—No, very little to Liverpool. We send them to Birmingham, Manchester, and London.

54,399. Do they go through Liverpool?—No.

54,400. Where do you send them from?—Right through.

54,401. From what station?—Annan.

54,402-3. I suppose, if you were restricted to using the hand trawl for shrimps, you could not trawl in deep water?—I do not suppose there ever was one used in this country.

54,404. Is there any fishing with the hand trawl here?—Not here. They use both hand-trawling and boat-trawling with us in our country, but there is none on this side.

54,405. Is it possible to carry out hand-trawling here?—We might get some sometimes, but very few.

54,406. Do you trawl in deep water?—Right in the Channel. We are never in less than from eight to 10 and 12 feet of water.

54,407. Then it would not be possible to fish upon the same ground with a hand-trawl?—It would be impossible for a man to wade through the water.

54,408. What is the value of a boat and its gear?—From 80*l.* to 90*l.*

54,409. Do most of the fishermen own boats?—The biggest part of them do.

54,410. (*Mr. Caird.*) Have you ever observed the flounder stake-net fishing?—Yes.

54,411. Have you noticed the take of fish in it?—Yes. I was in Brewing on Tuesday.

54,412. Did you see small flounders in it?—Yes, I saw all sorts.

54,413. Were there any so small as not to be fit for the market?—I do not know if they were fit for the market or not. There were big flounders lying dead, about a pound weight. They had never been to look at the nets for four or five days, and the fish were fairly rotten. The net I speak of was placed on a little island, and they could not get at the fish in it without boats, and they have no boats, so that they cannot get at these nets except in the spring tides. There was one net at Brewing which had fish in it for eight or ten days. There were eight or ten stone of flounders in it; I saw it myself.

54,414. Were they all lost?—Yes, they were all wasted.

54,415. Do their nets go dry at low water—most of them?—Those had been dry twice every day.

54,416. Do most of the nets go dry at low water?—Not at neap tides. At neap tides they cannot get at them, but they put them there at spring tides.

54,417. Having observed that fishing by stake-nets, do you think that beam-trawling for flounders catches the most fish?—We can catch as many again as they can.

54,418. Have you noticed both fishing at the same time in the same piece of water; have you noticed that you can make a larger fishing by the beam-trawl than they can by their stake-nets?—We can if the

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fish are in the Channel. If the scars are all clear and covered with mussels so that the flounders can get on them to feed at low water we can get more by one-half than they can.

54,419. By which of the two modes of fishing are the most flounders sent to the general market?—Out of 20 boats we could find two that would send more than all they send altogether.

54,420. Who does send most?—We do when we are at work.

54,421. For the year round do you send more flounders to the market than the stake-net fishermen?—Yes, in three months of the winter we send more than they send all the year round.

54,422. And you have the shrimps besides?—Yes, for eight or nine months.

54,423. Do you ever get spawn in your nets?—No.

54,424. No spawn of any description?—No, not in the Channel. It is impossible for fish to spawn in the Channel with the tide running eight and ten knots an hour.

54,425. Did you never see spawn here?—No.

54,426. Then you do not think the fish spawn here?—No, I never saw spawn nearer than Bahama Bank.

54,427. Where is that?—Nine miles on this side of the Isle of Man; and I have had my trawls fast in it there.

54,428. What kind of spawn?—Herring spawn.

54,429. Did you know it to be herring spawn?—Yes.

54,430. Did you bring it up?—No; but the ground was full of it.

54,431. Did you bring it up?—We had to shake it off; we could not bring it up.

54,432. Are you quite sure it was herring spawn?—They said it was herring spawn.

54,433. You yourself did not know it to be herring spawn?—No.

54,434. (*Mr. Lefevre.*) What time of the year do you think the flounders spawn?—I cannot tell, but I think they spawn in the summer.

54,435. Do you agree with Burnie, who told us that the flounders lose strength in November and December, and are not so good then?—I do not know.

54,436. November, December, and January are the months in which you take to flounder-fishing?—In those months, or rather in next month and the month after, the flounders are about at their best.

54,437. About the strongest?—Yes, and frosty weather takes them off again. There is no fear of their spawning in winter.

54,438. Then you do not agree with Burnie that the flounders are not so good in November and December?—They are good now.

54,439. And in November and December?—Yes; the hard weather in the winter time makes the flounders go into the Channel. They do not spawn there. I think they spawn in the summer, and after Whitsuntide they get themselves up again.

54,440. What time do you find the shrimps spawning?—At all times.

54,441. Is there any time of the year when you observe them not spawning?—No; we cannot tell when shrimps spawn, and no man can. I have followed them for 30 years, and I do not know.

54,442. (*Mr. Caird.*) Does the frost affect the mussel beds at all?—No.

54,443. It does no injury to the mussels?—No.

54,444. Are the mussel banks generally dry at low water?—Yes, some of them; but they set in the Channel as well as they do, high and dry.

54,445. Does not the frost kill the mussels?—It will kill cockles, but not mussels.

54,446. (*Mr. Lefevre.*) Have you observed the supply of shrimps to be the same year after year, or does it vary?—It varies. It all depends on the season. If there comes a dry season it rather hurts us, but if the weather suits the supply is good. They are as good now as they were the first year we came.

54,447. When you first came what was the number of trawlers?—The first year we came there were only about five of us, I think; the year after there were 21 or 22.

54,448. You told us there are 25 now?—They increased until they got as far as 30, and there are 25 now.

54,449. The second year there were 21?—Yes, or 22.

54,450. Then they increased gradually until they got to 30?—Yes.

54,451. And then they fell off to 25?—Yes; there are 25 now.

54,452-3. And on the whole do you make as good earnings now as you did then?—Yes.

54,454. (*Mr. Caird.*) Which of the two kinds of fish yield on the whole the largest amount of money to the fishermen, the flounders or the shrimps?—You could not get a quantity of flounders that would make as much money as the shrimps in all Scotland.

54,455. Do you make as much money by the shrimps as you could possibly get if you could supply all Scotland with flounders?—Yes.

54,456. I mean in the flounder-fishing in the Solway within the bounds in which you fish?—Yes.

54,457. Is the shrimp-fishing so very much more productive than the flounder-fishing?—Yes.

54,458. Then it would be a greater hardship to you to be deprived of the shrimp-fishing than the flounder-fishing?—Yes, I think it would be a great deal.

54,459. Can you give us an idea of the amount of money got by shrimp-fishing in a season?—I could make a bit of a guess.

54,460. What is it?—The tackle that we use is very expensive. I think we may distribute about 2,000*l.* a year in Annan.

54,461. From shrimps?—Yes.

54,462. (*Mr. Lefevre.*) How much do you make by the flounders?—Not one-tenth part of it.

54,463. (*Mr. Caird.*) You are quite accurate in your statement, and are making it with a full consideration of what you are saying?—Yes; I have paid as much as 150*l.* a month for carriage upon the railway.

54,464. Do you know what you have paid for the carriage of flounders?—We never paid much for the carriage of flounders. When we followed it we had a boat running from Annan Water Foot to Liverpool.

54,465. Then there is no test by railway carriage by which the two can be compared?—No.

54,466. (*Mr. Lefevre.*) If the weather remains mild throughout the winter could you continue shrimp-fishing?—Yes.

54,467. Or take to flounders?—If the weather continues mild, and no frost, we still follow shrimping.

54,468. Do you find the shrimps plentiful all through the winter?—Yes, all the year round.

54,469. If there is mild weather, are they as plentiful as in the summer?—Yes.

54,470. (*Mr. Caird.*) Are the shrimpers mostly Englishmen?—All of us except those we engage at Annan.

54,471. Are the shrimpers generally strangers in the district?—Yes, all are strangers who come from Lancashire. We fished in Morecambe Bay before we came here.

54,472. Are there no native shrimpers here?—There are a few whom we have taught.

54,473. Are they in the same fleet with you?—Yes.

54,474. Are they Scotchmen?—Yes.

54,475. Do they find it pay as well as you?—No, they have not the same idea of it, and they do not get as many fish; we cannot learn some of them; it is not in them as it is in us, that is the long and the short of it.

54,476. (*Mr. Lefevre.*) How many men are there in a boat?—Some have only one man; some one man and a boy, and some two men.

The witness withdrew.

THOMAS HOUGHTON called and examined.

54,477. (*Mr. Caird.*) You are a Lancashire man?—Yes.

54,478. You are a shrimp fisher?—Yes.

54,479. And also a flounder fisher with the beam-trawl?—Yes.

54,480. You have lately taken to flounder-fishing?—I commenced flounder-fishing on Monday.

54,481. Do you find it as profitable as shrimping?—I started on Monday, and we had very little wind, but I caught 18 stones of fish before the tide was over.

54,482. What do you sell the flounders at per stone?—1*s.* a stone.

54,483. How many men are there in a boat?—Two for flounder catching.

54,484. So that you made 18*s.* of flounders in one tide?—Yes.

54,485. Is that a common thing for you to do?—It depends upon the wind. If there is a fine breeze we can make as much in a tide as we can make in a week without any wind.

54,486. Have you been fishing flounders in successive years for some time past?—I have been for eight years.

54,487. Is the catch of flounders increasing or diminishing?—It depends in a great measure upon the tide.

54,488. Have you found the catch increasing or diminishing within the last eight years?—The last year's fishing was a poor fishing, but this year we have had a very good year.

54,489. Then the fishing this year looks as well as it has ever been?—It has been better than for many years.

54,490. You expect to make a better fishing this year than you have been in the habit of making for some time back?—Yes.

54,491. You do not agree with the statement made to us that the flounder-fishing has been destroyed?—No; they blame us for destroying it, but we can get as many as ever we did. We catch shrimps and flounders, and when we are catching both shrimps and flounders it is very seldom that we see them at work.

54,492. Do you not fish in such shallow water?—We are sometimes in deep water and sometimes by the side in more shallow water, but they are further up the bay.

54,493. Do you fish for flounders in the same part of the bay as the stake-nets are set for catching them?—We come as near to the stake-nets as we can sometimes. Occasionally we might jump into them from our boats as we pass.

54,494. Is your mode of fishing a better mode of catching the fish than the stake-nets?—The stake-net fishermen set their nets at low water in spring tides, and they cannot get at them for three or four days, whereas with our mode of fishing what fish we catch we send right away to the market.

54,495. Are there many boats engaged in flounder catching?—There have only been 10 this season.

54,496. Where do you send your flounders to?—To Carlisle.

54,497. Do you send as many as the stake-net fishermen do to the market?—We send as many as the market will take, and we send the rest to Liverpool.

54,498. But do you catch and send as many to the market altogether as the stake-net men do?—Sometimes they take a good deal, and sometimes not many.

54,499. Do they catch small flounders?—I have seen a deal of small flounders for sale in Annan when they come in that way to sell them.

54,500. Do you catch many small flounders?—Sometimes we catch a good many, but we fish up what is marketable, and put the rest into the sea again if we cannot get them to Liverpool.

54,501. Are they alive when you throw them out?—Some of them are and some of them are not.

54,502. What is the size of the mesh of your net?—I cannot rightly say what the size of the mesh is.

54,503. Have you no regulation as to the size of the mesh?—No, none at all.

54,504. Do you make it as it suits you?—We make it about what we think the right size for catching.

54,505. You have no wish to catch small fish?—No, they are of no use.

54,506. You would rather avoid it if you could?—Yes, a good bit. A large mesh will catch a less quantity of small fish and will involve less work.

54,507. Less work?—Yes, there is no trouble in getting the fish into the boat, and you don't pull your nets to pieces with them.

54,508. Have you been shrimp-fishing this year?—I have been shrimp-fishing since I was 14 years of age, and I am now 43.

54,509. Do you use the same boat for shrimping as for flounder-fishing?—Yes.

54,510. What mode of fishing brings you most money for the same labour?—There is not as much expense in flounder-fishing as in shrimp-catching; we have 5*s.* per cwt. to pay for railway carriage, and there is a much nearer market than ours for shrimps in Morecambe Bay, which renders it difficult for us to compete with them.

54,511. The quality of the shrimps I suppose is much alike?—Yes.

54,512. But they have less railway carriage to pay at Morecambe?—Yes, we have our markets to find in England; our general markets are Birmingham and London, but if we send small shrimps they are of no use.

54,513. (*Mr. Lefevre.*) Do they send shrimps to London from Morecambe Bay?—Yes.

54,514. Do you also?—Yes.

54,515. You have the command of the same markets that the other men have who fish in the Solway?—Yes, some of them send in one way and some in another; some send to particular merchants and others on commission; sometimes we do very well, and sometimes very badly. When the shrimps come thick at this time of the year we get nothing for them after paying the railway carriage and the charge of the commission dealer, and we frequently have many returned, and then we get next to nothing.

54,516. (*Mr. Caird.*) When that time comes what do you do?—We turn to another trade.

54,517. And when you find the shrimps rising in price you go back?—Yes, sometimes we change twice a week if we can make more money by it. With regard to those stake-net men, although each of those men professes to be a fisherman he is only at it for three months in the year. The remainder of the year they spend some in farming and some in weaving, whereas we are fishermen all the year round; if we don't fish we do nothing.

54,517*a*. (*Mr. Lefevre.*) Did you come from Morecambe Bay?—Yes.

54,518. Did you come here because the fish had fallen off in Morecambe Bay?—We came here herring-fishing.

54,519. What made you stop here?—Some came to try for shrimps, and thinking it was a nice place stopped here. The shrimps were larger than those we had and it was thought they would take better in the market.

54,520. Was the supply falling off at Morecambe?—No, I don't suppose it was.

54,521. Are there as many boats fishing there now as there used to be?—There are a good many more than there were; on and off there will be 100 boats fishing there.

54,522. Do you agree with the last witness that the enforcement of a close-time for shrimps would be of no detriment to the fishermen here?—We could turn to another business altogether, fluke-fishing.

54,523. Would you object to be prohibited from fishing for three months?—I am willing to do the same as my neighbours.

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54,524. What effect would it have on the fishermen if you were not allowed to fish during the three winter months?—If there was hard frost it would have no effect at all, but if it was an open winter and we had mild weather we might get out perhaps for a tide and make a week's work, although sometimes we might not be out for a fortnight.

54,525. If there was an open winter and you were not allowed to fish for three months, namely, November, December, and January, would it tell hardly on the fishermen?—We could take our boats to Wigton Bay and Whitehaven and fish oysters. We could fish between here and Liverpool down to the Liverpool Channel foot, and wherever we could get the best earnings and find the best market.

54,526. Have you been in the habit of turning to other modes of fishing besides shrimping and flounder catching?—Yes, I have been herring-fishing two or three times in my life.

54,527. Where do you find herrings?—Off Maryport, Whitehaven, and off Preeside.

54,528. What is the season for that?—The winter season, but I have not fished for the last two winters. I last fished off Nelson's Bay and in Liverpool Channel.

54,529. Since you have been at Annan have you known herrings come up the Solway?—I have known them come up to the Solway before I came to Annan. It is now a dozen years since they reached Maryport, but they never came as far as this.

54,530. Do all the shrimpers go after them?—Yes, the great body of the fishermen will fish for herrings if they can catch them.

54,531. Do you fish for oysters?—Yes, we have occasionally fished for oysters in Wigton Bay and Whitehaven.

54,532. Are there a great many boats fishing for them there?—Yes, in the winter season.

54,533. (*Mr. Caird.*) Have you fished the oyster beds in Wigton Bay?—Not personally; but there were some boats from Fleetwood last year that did fish there. They did very well I believe.

54,534. Have the beds been fished out there?—No, they have not fished out the beds there; they always leave the young.

54,535. (*Mr. Lefevre.*) Do any of the large class of trawlers fish towards the entrance of the Solway?—They come in as far as Workington. They are heavy boats from Whitehaven, Fleetwood, and Liverpool.

54,536. Are there many boats at Whitehaven?—About half a dozen.

54,537. What size are they?—About 30 or 40 tons. There are larger boats at Fleetwood.

The witness withdrew.

R. Woodhouse.

RICHARD WOODHOUSE recalled and examined.

54,538. (*Mr. Caird.*) You are well acquainted with the shrimping in Morecambe Bay?—Yes.

54,539. Do you think the Morecambe Bay fishermen would agree to a close-time?—I think it is likely they would.

54,540. Have they any other kind of fishing which they could follow?—They mostly follow catching mussels in the winter season.

54,541. (*Mr. Lefevre.*) Do you think that a close-time during the months of November, December, and January would improve the flounder-fishing?—I cannot tell.

54,542. Do you think you take so many small flounders when you are shrimping that it affects the flounder-fishing?—At the time of the year when we take them we throw them overboard as quickly as possible. It is cold weather, and they would live if we kept them for three or four days. Anybody knows how long a flounder will live.

54,543. Then do I understand that you think a close-time for shrimps would be of no real benefit to the flounder-fishing?—I don't know; I cannot tell.

54,544. What you mean is that the enforcement of a close-time as regards shrimps during these months would do no harm?—It would do no harm to the shrimps.

54,544*a*. (*Mr. Caird.*) Where do the fry come from?—When it is fine open weather the young fry of the flukes are lying on the edges of the banks out of the tideway, close in by the sides of the sand banks. As soon as ever it comes on frosty weather, and we have two or three frosty nights, they are driven away into the deep water. They make for the deep water, and at the close of a week's frost we do not see any more of them.

The witness withdrew.

J. Holmes.

JOHN HOLMES called and examined.

54,545. (*Mr. Caird.*) You are a shrimp fisher on the Solway?—Yes.

54,546. You have been so for some years?—Yes, since I was 10 years old.

54,547. You desire to make a statement to us as to the possibility of destroying spawn where you fish?—Yes.

54,548. What is it?—I think that every mesh should be four inches. They should be knit on a coil of four inches, but at present they use any kind of mesh, large or small.

54,549. Would that mesh be two inches from knot to knot?—Yes, and it would prevent us from taking as many of the little flounders as we do.

54,550. How would it be with regard to the spawn?—We cannot get any of the spawn of the fish because our boats draw five or six feet of water, and we cannot go near the banks where the spawn is. There are plenty of boats at Annan Water Foot which draw five and six feet of water, but the ova are deposited on the banks.

54,551. (*Mr. Lefevre.*) Do you mean spawn or small fry?—Spawn.

54,552. As you always trawl in the tide you cannot disturb the spawn that is laid in the still water?—No, we cannot; it is simply the fry we can disturb.

54,553. (*Mr. Caird.*) Where have you seen spawn?—I have seen plenty of spawn on the bank.

54,554. On the scars?—No; on the Brashay bank and various other banks.

54,555. Is it the spawn of the flounder?—Yes.

54,556. Is there any spawn of the flounder in the upper part of the Solway?—Yes, on the banks.

54,557. How far down are the banks you mention?—Four or five miles down from Annan Water Foot.

54,558. Do you not trawl on those banks?—No, we cannot get near them.

54,559. Are there any nets set on the banks?—Not on the English side down as far as that.

54,560. Are none of those poke nets which have been described to us set on those banks?—No.

54,561. There are no nets that would destroy the spawn?—No.

54,562. Are there any spawning banks on this side?—Yes, plenty. The Brashay banks are on the Scotch side. I don't think there are any stake-nets on the English side.

54,563. Have you not seen any mode of fishing carried on on these spawning banks that would be destructive of the spawn?—No.

54,564. (*Mr. Lefevre.*) With regard to the mesh, you would recommend a 4-inch coil?—Yes, two inches from knot to knot.

54,565. Why have the fishermen not already adopted that if they think it would be of advantage?

—I cannot say. I think that one has been waiting for another.

54,566. Why do you not use it yourself?—Some think that they can get a greater bulk of stuff, and that they can take the little flukes they catch to the market. In that way one encroaches upon another until they all do the same thing. It would be of no use having any regulation unless we were all compelled to abide by it. There has been a great deal of uneasiness with regard to us fishermen since we came here, but we are willing to adopt any alteration in our mesh that may be considered desirable.

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54,567. Are you able to dispose of all the flounders you take in your net; have you always sold them?—Yes, we have sold them in England, but not in Scotland.

54,568. Have you taken any considerable number of small fish in your trawl?—Not many. We always sort them, and throw the little ones out. Those that are fit for the market we put in the boats and land ashore, and all the others are thrown away.

The witness withdrew, and the inquiry was adjourned until the 30th of September, at Morecambe.

Morecambe, Lancashire, Friday, 30th September 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

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JAMES BELL called and examined.

54,569. (*Mr. Caird.*) You have long been acquainted with the fishing in Morecambe bay?—Yes.

54,570. Has it altered its character at all within your recollection; have the same descriptions of fish been fished all the time you recollect the fishing?—Yes, the fishing has been the same as it always was, for anything I know.

54,571. What is the fishing?—There are all sorts of fishing. Trawling for shrimps, and trawling for flukes. There is not very much trawling for flukes, but it is carried on to a small extent; trawling for shrimps has greatly increased. There are 100 times as many got now as there were at one time in my recollection; I can recollect when there were only eight or nine boats following the trawling for shrimps.

54,572. What may be the number of boats now?—I should say there are 150 at least.

54,573. (*Mr. Lefevre.*) How long ago is it since there were only eight or nine boats?—Fifty years ago.

54,574. (*Mr. Caird.*) Have they gone on gradually increasing?—Yes, more have been got every year.

54,575. Are the boats of larger size than those you formerly used?—Yes, a deal larger.

54,576. Do they carry a larger description of nets?—Yes, larger in proportion in width.

54,577. Does one boat carry two nets?—Yes.

54,578. One on the bow and one on the stern?—Yes; but when I can first recollect they only carried one.

54,579. So that each boat carries double the number now?—Yes.

54,580. How many men are there in each boat; is there a man and a boy or two men?—One man sometimes, and sometimes two.

54,581. Can a man and a boy fish a boat with a mast and a sail?—Yes.

54,582. Is the boat sailing, while they are trawling?—Yes, if the wind suits. The sail would aid him in shifting up the bay.

54,583. What would you consider a fair catch of shrimps, for a man and a boy working all the day, 20 or 40 years ago?—Twenty years ago from 20 to 30 quarts were reckoned a good catch for a tide. Sometimes they would get more and sometimes less.

54,584. What do you consider a fair catch now?—I should say that 30 quarts are a good catch now.

54,585. Then there has no been much change in the quantity caught by each boat?—Not by each boat. There is sometimes more caught and sometimes less. Sometimes they catch as much as half a cart-load.

54,586. I presume that it varies according to the state of the weather?—Yes, according to the state of the weather and the tides.

54,587. But on the whole there has been a very large increase in the quantity of shrimps got, compared with what it was 20 years ago?—Yes, there are a great deal more got now.

54,588. Has that increase been going on year by year?—Yes.

54,589. Is it showing any sign of diminution now?—No, it regularly increases, because there are more people at it.

54,590. Have you always fished during the length of time you mention in the same channels, and upon the same grounds?—Yes, they follow the same channels.

54,591. The channels which have been so long fished do not show any sign of giving way in producing fish?—Sometimes the fish get thin in one particular channel, and then they go to another; perhaps they go a bit further off. They go as far as Ulverston Channel.

54,592. But by changing they always succeed in finding plenty of shrimps?—Yes.

54,593. Has the price of shrimps altered during the last 20 years?—It has never altered that I know of. It has always been 3*d.* or 4*d.* a quart.

54,594. Are the shrimps sold here?—They are sent away.

54,595. Do the merchants here buy them?—Some are sent to fish salesmen at Manchester and Liverpool.

54,596. Does the price always continue the same?—They do not get as much there sometimes, and they are sold sometimes for a little more; but the average price will be as near as can be 3*d.* a quart.

54,597. What are the circumstances that make the fishing sometimes vary; are they weather and tide?—Hot weather is sadly against the shrimps.

54,598. Hot summer weather?—Yes, I never saw many shrimps then.

54,599. Are the shrimps fished the whole year round?—Nearly so, without there comes a hard frost.

54,600. There is no particular season for shrimps?—No, but the best season is in the spring of the year. There are most caught for about three months in the spring.

54,601. The hot weather is bad for them?—Yes.

54,602. Is frost bad for them?—Yes, they go then into deeper water, and they work themselves overhead in the sands to save themselves.

54,603. Do you imagine it would be any advantage to have a close-time during which shrimps should not be fished?—Not a bit.

54,604. One reason you assign for that is that shrimps are constantly increasing in quantity?—I think the shrimps are mostly destroyed in the hot weather. There are little bits of sand edges left by the tide. The tide runs hard on those banks, and leaves ridges that will hold about a table-spoonful of water. The young brood of all kinds stop in these little bits of crevices, and when the weather comes very hot the water completely dries, and leaves them lying dead on the sand. There are a hundred thou-

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sand times more destroyed in that way than in any other way.

54,605. Nothing can prevent that?—I have seen them rolling up as far as the eye could follow them. I have seen a roll of the small fry going on the banks just as the tide took them; you would be surprised to see the quantity destroyed in that way.

54,606. There is a large quantity of dead fish left in that way?—Yes; there is an enormous quantity of small tiny things just shaped that are left dead.

54,607. They are left dry by the evaporation of the water?—Yes.

54,608. (*Mr. Lefevre.*) What are they?—There are all kinds of fish, but chiefly shrimps and little flukes.

54,609. Do you think there are any small soles?—Yes; there are small soles among them. There are small fish of every kind.

54,610. What other kinds?—They will be chiefly flukes and shrimps I think. The flukes leave their spawn in the water, and it floats about and stops in these little bits of crevices, and when they are left dry they are killed at once.

54,611. Do you ever see any young herrings or haddock or cod among them?—No.

54,612. (*Mr. Caird.*) Has frosty weather the same effect upon the young fry which are left on the sands when the tide goes out?—They go into deeper water as the weather becomes colder.

54,613. Do they not come as much into shallow water?—No.

54,614. Then there is not as much damage done by the frost as by the hot weather?—No.

54,615. In the process of dragging for shrimps, is there any large quantity of small fry destroyed?—Yes.

54,615*a*. What kind of fish is it?—It is principally little flukes. There are also what they call pile heads and toad-fish.

54,616. Are there any young soles?—At chance times there are; but not as often as flukes and such like.

54,617. Are such flukes and soles too small to be of any use for food?—Some of them are; but they do catch a few that are fit for food. There are very few, however, that are of use.

54,618. What do they do with them; do they bring them all ashore along with the shrimps?—They have a small basket. They empty the shrimps from the net into it, and while the boat is dragging the trawl they occupy themselves in dressing the shrimps with their hands. They throw overboard any dirt, and anything that is not fit for the market.

54,619.—Are the small fish thrown overboard alive?—Yes.

54,620. Do you think there is not much destruction of the brood of fish in that way?—There will be part destroyed; but the destruction done is nothing to be compared with the quantity of small fish destroyed in the hot weather.

54,621. (*Mr. Lefevre.*) Do they bring the small fish you speak of ashore?—They bring part of it ashore; they cannot avoid that.

54,622. But they throw a good deal overboard on the spot?—Yes.

54,623. (*Mr. Caird.*) You say you remember the state of the fishing many years back; do you remember the time when there was a much larger take of soles and flounders than at present?—Yes.

54,624. When was that?—The channel makes a deal of difference here. We had a channel up to the side here at one time, and it cleared all the loose ground, rough stones, and everything of that kind away, so that there is less hold now for the fish than when there were more stones. Here the stones used to be covered over with mussels, which formed food for those fish.

54,625. Food for flat-fish?—Yes.

54,626. Is it a fact that at any previous time there was a much better fishing for soles and flounders than there is now?—There never was a much better fishing for soles than there is now; but for flounders there were more here when the channel went up by the side. They follow the channel more.

54,627. There was a better fishing for flounders some years ago than there is now?—Yes, but it is a good many years since.

54,628. Are there many flounders caught here?—Not many.

54,629. Do the same fishermen who fish for shrimps catch flounders?—Not at the same time.

54,630. But do they take to flounder-fishing occasionally?—Yes.

54,631. They trawl for them also, do they not?—Yes, a few of them.

54,632. Which of the two modes of fishing pays best?—I do not know, but I should think shrimping.

54,633. You think that shrimping brings most money to the fishermen?—Yes; a hundred times more than anything else.

54,634. Has shrimping been always the most profitable fishing for the fishermen as long as you remember Morecambe Bay?—No; it was not so much followed many years ago. There were only 10 boats then.

54,635. Was the bay not as good for shrimps then?—There was no market. The railroad coming here, and opening a market, have made a great difference. Of course there could not be as many shrimps when there were only eight or ten boats.

54,636. Was there a larger proportion of flounders caught then than now?—Yes; I think there was.

54,637. The people went more into that fishing?—Yes; but then they fished at the side of the bay. They set stakes and hurdles.

54,638. Those stake-nets are set still to some extent for flounders?—Yes; but there are not so many of them now.

54,639. Did the stake-nets or the trawl-nets do best for catching flounders?—The stake-net would catch more than a hurdle.

54,640. Did they?—Yes; the net will catch more than a hurdle.

54,641. Do you mean trawl-nets?—No; a set net set on those stakes.

54,642. What are the hurdles you speak of?—They are set like an A, with a centre for a poke.

54,643. The question I put to you just now was this; do the stake-nets or the trawl-nets catch most; which of the two is the one in which the greatest number of flounders can be caught?—They can catch them very well with the trawl-net, if they happen to be among them.

54,644. Before we leave the shell-fishing, are there any oysters in the bay?—No.

54,645. Have there never been any oysters in the bay within your recollection?—No; never.

54,646. Are the mussel-beds very valuable?—Yes.

54,647. Are they very extensive?—Yes.

54,648. Do many of the fishermen follow the mussel-fishing?—Yes, in the winter time.

54,649. Is it in one particular season that the mussels are fished?—There is only a particular season. They are fished in every month that has an "r" in it.

54,650. The same as the oysters?—Yes.

54,651. Has that fishing long been practised here?—Ever since I can recollect.

54,652. Is it increasing?—There are more being caught now; but there were not as many people following it formerly.

54,653. Is it a fact that there are more being caught now?—Yes; there are now a hundred for one engaged in it with their boats.

54,654. Are they a different class of fishermen from the shrimp fishermen?—Some of them are the same. Perhaps they will do both jobs on the same day.

54,655. Just as they think they can pay themselves best?—Yes; they go up the channel with the flood tide after shrimps, and they come down at half ebb, and leave their shrimps and go out to take mussels. They fish in the last quarter ebb and the first quarter flood.

54,656. May we take it that the same people and the same boats that fish for shrimps fish for mussels?—Yes, the same follow both.

54,657. Do those who follow shrimp-fishing most make the best living out of it?—It is difficult to tell which does best.

54,658. You say that the quantity of mussels taken is much greater than it used to be?—Yes.

54,659. The mussel-beds are yielding more than ever they did?—Yes, more.

54,660. They have been showing no signs of falling off?—It appears the more they get the more there is.

54,661. Do they find that the clearing of the banks by taking the mussels has increased the quantity?—Yes; whenever the stones get cleared, they get covered all over again with young.

54,662. You have seen them come in that way?—Yes; hundreds and thousands of mussels are destroyed by the young ones. They get on the top and catch the mud and in that way choke the old ones.

54,663. Then is it found that by thinning them in the way you fish them, you increase the quantity of mussels?—There is not the least doubt of it.

54,664. If the men here were to cease fishing for a season, would it increase or diminish the quantity of mussels?—I do not think there would be half as many.

54,665. Has the market ever been so low, or have circumstances ever occurred which have led to a diminution of the fishing, and if so, what was the consequence?—Such a thing has never happened as their having ceased to fish.

53,666. They have always worked for them?—Yes; but they work more extensively sometimes than at other times. Sometimes there have been good mussels got upon the coast of Ireland, and they have been sent into our markets, and occasioned a panic among the mussels.

54,667. Are the mussels taken for any other purpose except for food?—Some of them are taken for till.

54,668. What is till?—Manure.

54,669. They are bought for that purpose?—The fishermen get them themselves, and use them for manure for their garden grounds.

54,670. The fishermen do that?—Yes.

54,671. Do the farmers ever use them?—Yes; but not as many as they did within my recollection. I have seen hundreds of cart loads "kecked" up for manure.

54,672. That is not done so much now?—Not to half the extent it was.

54,673. But there has been no diminution in the mussels however they have been taken?—No.

54,674. You formerly had some herring-fishing in this bay?—Yes.

54,675. Was it a pretty regular herring-fishing?—It was for a few years.

54,676-7. How long ago is it since you recollect the best fishing you had here?—There was a good year about five or six years ago. They came for three or four years together at a certain day in the month, about the 8th of September. They came as regular as clockwork for two or three years together, but have not done so latterly.

54,678. Do they stop long in the bay when they come?—Sometimes they do, and sometimes they do not.

54,679. Do all the boats go herring-fishing when they make their appearance?—Yes, every one that can muster nets.

54,680. Have there been any herrings here this season?—No, not for the last two years; there has been nothing worth while going after.

54,681. What is the largest fishing you have seen of herrings; can you remember what quantity there has been taken altogether?—No.

54,682. Were they sold fresh or cured?—They were sold fresh, but I have known some of them sold cured. They have taken 14 or 15 cartloads from one baulk in one tide.

54,683. What is a baulk?—It is one of the things they set here on the scars.

54,684. Are they caught in them as well as in drift-nets?—Yes.

54,685. Are they the same nets that are set for catching flounders?—Yes.

54,686. For the last two years there have not been any?—No.

54,687. Have there been none this year?—No.

54,688. But if the herrings came they would at once give up shrimp-fishing and all other kinds of fishing, and go after the herrings?—Yes, the most part of them who could raise herring tackle. The chief of them have nets which have been laid up; but if the herrings were to come, then nearly all the boats would be out after them.

54,689. Then they have all drift-nets?—Yes, nine out of ten have.

54,690. Do they ever use seine-nets, or circle-net fishing, for herring catching?—No, they have only the long nets.

54,691. Which drift with the tide?—Yes.

54,692. When you had a good herring-fishing here, how long did it continue?—Sometimes until Christmas.

54,693. Was the shrimp-fishing given up during that time?—No, there were always men who went shrimp-fishing.

54,694. Do you suppose that the herrings spawn in the bays?—Yes, there is no doubt of that. If they get well shaped, you will see the spawn in them.

54,695. Do they spawn where you trawl for shrimps?—Yes, no doubt.

54,696. Does your trawl injure the herring spawn?—The herring spawn will be here also.

54,697. Is it caught by your shrimp trawls?—No, we don't get one in a thousand of them. They go out of the way.

54,698. Do you think that the absence of the herrings for the last two or three years has been caused by the shrimping that goes on here?—Not in the least. They run up into the shallow water of the Lune which we have close here. I imagine that they come here to shoot their spawn.

54,699. Do the herrings caught here come from the deep water outside?—Yes.

54,700. They would not be affected by your mode of fishing inside?—No.

54,701. Do you fish for herrings by day or by night when they come?—Sometimes in both ways, but chiefly by night.

54,702. It is only when the water is very muddy that you can fish by day?—That is all.

54,703. Is there any other place where you have heard of their fishing herrings by day except this?—I don't know. When they used to go out line-fishing on a fine day like this, before they had the herring-nets, we could see the herrings as thick as motes in the sunbeam, and we have seen porpoises within half a mile and close to us. The herrings came down on one side of the ridge as regularly as clockwork every day, before the herring-nets were thought of.

54,704. (*Mr. Lefevre.*) How long ago was that?—Forty years ago.

54,705. (*Mr. Caird.*) Then if a regulation was passed, by which no fisherman would be allowed to shoot his nets for herrings until after sunset, would it be injurious to the herring fishery if the herrings were to come in again?—I don't know, perhaps it might do it good. I don't know how that would be, but perhaps it would do it good.

54,706. Have the fishermen here any wish upon the subject?—There are a good many herring fishers here; perhaps they will speak on the subject; I don't know myself.

54,707. (*Mr. Lefevre.*) Do the fishermen go outside the bay after the herrings?—Some have gone as far as the Isle of Man, and some have been to Maryport.

54,708. How many boats would go that distance?—Perhaps a score or 30 would go there every year.

54,709. I suppose the great body of the boats would only fish when the fish came into the bay?—No, they did not go to fish outside. They only go seven, eight, or ten miles off the bay here.

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54,710. Is that beyond the bay?—Yes, right down out at sea.

54,711–2. In what condition are the herrings when they came into the bay?—Some of them are very good, and some are not quite so good. They are rather shotten.

54,713. When they come into the bay they are full of spawn?—Yes.

54,714. And you think that occasionally they are shotten?—Yes.

54,715. Then some of them at that time are full of spawn?—Yes.

54,716. Do you know on what ground they spawn in the bay?—No.

54,717. You have never observed that?—No.

54,718. Is there any part of the bay where the fishermen sink their nets to the bottom of the ground, in order to take them where they are spawning?—They sink their nets to a certain depth, but they do not sink them to the bottom. If they do, they do mischief.

54,719. They tear their nets?—Yes.

54,720. Do they ever anchor their nets on the rough ground?—No, in the Lune they do not find the bottom. They do not sink their nets when they cannot find the bottom; but at times they are caught by the shift of the tide, and sometimes they catch the bottom and tear the nets sadly.

54,721. Is there much rough and rocky ground in the bay?—Yes, there is a good deal of rough ground off here.

54,722–3. Is that where you find the herrings?—It is close to it; they drift out to it from the Lune.

54,724. Is it on the rough ground that the fishermen sink their nets?—No, it is in the deep. Occasionally they drift on to the rough ground.

54,725–6. Do you say that you never take any young herrings in the trawl?—No. I never saw such a thing.

54,727. Are there any boats which are used exclusively for trawling for flounders?—No.

54,728. Is there any time of the year when a great number of the shrimpers give up shrimping and take to flounder-fishing?—No; they have no particular time. When they find they are not getting a trade by shrimping, and that they are not getting as many as they require, they will try trawling for flukes.

54,729. That is when they do not find many shrimps?—Yes.

54,730. Is that in the winter during a hard frost?—Yes.

54,731. Do you think there are as many flukes to be found then at that time or not?—They are chiefly in the holes in the deep then. When it is the spring time of the year and warmish water, they go on the banks.

54,732. You can trawl on the banks, I suppose?—Yes.

54,733. Would it be a great disadvantage to the shrimpers here, to be prevented from shrimping during the months of November, December, and Jauuary?—Yes, it would be a great disadvantage to them; there are a deal of shrimps caught then.

54,734. The Dumfries fishermen told us that it would be no disadvantage to have a close-time during November, December, and January, on the ground that they caught more small fish then than at other times of the year; what would be the effect upon the fishing here, if there were a close-time during those months?—They do not go generally then.

54,735. Is there not much shrimping carried on then?—No, very little during those months. If it be rather frosty it kills them as they are taken out of the water.

54,736. The frost kills the shrimps?—Yes.

54,737. Then the fishermen during those three months are not much engaged in shrimping?—No, they are mostly among the shell-fish.

54,738. They are not trawling for flounders?—They trawl for flounders as well.

54,739. What is the size of the mesh of the trawl-net for flounders?—I do not know. It is just sufficient for them to catch a sole of a quarter of a pound in weight.

54,740. Are all the boats provided with trawls for flounders?—No; there are not many of them. There are not above a score of trawls in the place. Indeed, I think there are not above five or six.

54,741. Where do they send their flounders to?—They are chiefly used here, and in Lancaster market.

54,742. Are there not many sent to Liverpool?—No, very few. They may send a few on a chance time, but they very rarely go away.

54,743. The whole supply is not a considerable one?—No.

54,744. You recollect this place 40 or 50 years ago, when you say there were only eight or nine boats shrimping, were there any boats then employed in trawling for flounders?—No.

54,745. When did trawling for flounders begin?—Not many years ago; I think about the time when the last herring-fishing came; perhaps it will be between 20 and 30 years. It was the Southport people who came here, and induced us to get trawls.

54,746. Has the number of boats employed in flounder-fishing fallen off since then?—I think it has. There are not as many trawls in the place as there were then. Very nearly all of the fishermen had them then.

54,747. How many were trawling then?—Half a score.

54,748. And now there are not more than five or six?—No.

54,749. What is the number of fishermen here altogether?—I do not know. I should say there are above 200.

54,750. And of those how many are there shrimping?—There are 150 of them at times. Nearly all shrimp in the spring of the year.

54,751. What is the size of the boats?—They are of all sizes.

54,752. What is the size of the larger class of boats?—They shrimp in big ones, and in others about 17 feet.

54,753. What is the size of the large class of boats?—Twenty-four feet keel.

54,754. And the smaller ones are about 17 feet keel?—Yes.

54,755. Do the larger class require more than one man?—No, they go with one man in a large boat as well as in a small one.

54,756. Do you know whether the flounders fall off and decrease with the supply of mussels in the bay?—Yes, I think the channel has rather hurt the flounders.

54,757–8. In what way?—In consequence of the channel leaving us and going to the other side.

54,759. When the mussels are not in great abundance, do the flounders fall off too?—Yes, they go more on the banks. They always follow their food.

54,760. Are the mussel beds extensive here?—Yes.

54,761. What is the area; can you form any idea?—No, I cannot. There are a great number of acres, however.

54,762. Do they vary much according to the shifting of the sands?—The young ones vary as much as anything.

54,763. Do they riddle the mussels on the banks?—No.

54,764. Do they bring them all to land and riddle them there, and send the large ones to the market?—No, I can recollect when we have brought the young ones, and thrown them out, all up and down, where we thought they would have a chance of growing into large mussels. We have all of us gone out and gathered and loaded our boats with them, and put them in holes up and down where we thought they would be safe; but sometimes not one has done any good, they have all been sanded up.

54,765. You have laid down the small ones in the

hope that they would increase?—Yes, we have thrown them into the deep.

54,766. And it has not done any good?—No.

54,767. When you riddle them on the shore, do you sell the refuse and the small ones for manure?—Yes, and we use them ourselves.

54,768. What number of men is employed during those months in taking mussels?—I cannot say, I think not many. The children can go out at times when there are good tides.

54,769. (*Mr. Caird.*) Do all the shrimps go by rail to the market?—Yes, chiefly. Part go to Lancaster.

54,770. I suppose a great quantity go by rail?—Yes.

54,771. What markets do they go to?—All over the country. Some of them go as far as Bristol.

54,772. Do they go to Birmingham and Manchester?—Yes.

54,773. And to Yorkshire?—Yes.

54,774. And London?—Yes; I daresay some go to London.

54,775. (*Mr. Lefevre.*) Is there any time of the year when you have observed more young fish taken in the trawls than another?—Sometimes I think they take more at the back end of the year.

54,776. In what months?—Just before they give over fishing.

54,777. In what month?—It is some time in November.

54,778. Are there more young fish caught in the months of November, December, and January?—No; sometimes in the spring there are quite as many caught, but at the back end they destroy the greatest quantity of shrimps with the push-net.

54,779. Is that the hand-net?—Yes.

54,780. They destroy more young fish in that way?—Yes.

54,781. Are there more young fish destroyed in that way in November, December, and January, than in the three following months?—I can hardly say.

54,782. Is there much difference?—No.

54,783. Would it be any advantage to the flounder-fishing if those three months were made close-months, so that no shrimps or young fish could be taken during those months?—I do not know whether it would or whether it would not. The fishing has been practised as long as I can recollect, and I do not see that there has been any falling off.

54,784. Then you do not think it would be of any advantage?—No, it never has been in my recollection.

The witness withdrew.

James Woodhouse called and examined.

54,785. (*Mr. Caird.*) Are you a shrimp fisherman here?—Sometimes in the spring.

54,786. What else do you do?—I follow long-line fishing, herring-fishing when there is any, and flounder-trawling sometimes.

54,787. Do you also fish for mussels?—Yes, just which I think I can make most by.

54,788. You take to anything you think you can make most money by?—Yes.

54,789. Which is the mode you find most profitable to you?—I think shrimp-trawling is as good as anything, barring the herrings; the herring-fishing is best when there are any to catch.

54,790. Do you follow shrimping in the spring?—Yes.

54,791. Does it yield most in the spring?—Yes.

54,792. Do you get more shrimps, or do you get a better price?—The price is always alike here.

54,793. Then you get a larger quantity of shrimps?—Yes.

54,794. When do you cease to fish for shrimps?—About Whitsuntide, just in the height of the summer.

54,795. What do you do after Whitsuntide?—I follow company-carrying.

54,796. What is that?—I go with pleasure boats and carry the people who come here to visit the place.

54,797. You find that that pays better than shrimping?—We always turn to that job which we think we can make most brass by.

54,798. What do you do after the company time?—We then go fishing with long-lines.

54,799. Do you go far to sea with long-lines?—In a regular way we go right out in the centre of the channel between Piel and Fleetwood.

54,800. Is there always deep water there?—Yes.

54,801. In what depth do you fish with your long-lines?—In five or six fathoms.

54,802. Is it a sandy bottom or a rough bottom?—We put them on a sandy bottom where we can find any.

54,803. What is the length of your lines?—They are three or four miles long.

54,804. How many hooks will there be on a whole set of long-lines?—About 120 lines.

54,805. How many hooks on each line?—Ten on each line.

54,806. That would be about 1,200 hooks?—Yes.

54,807. How do you bait them?—With little flukes, and any kind of small fish.

54,808. You do not bait them with mussels?—Mussels will not do, because there are so many vermin about that would take them off as soon as we put them down.

54,809. What kind of vermin do you refer to?—Whelks and cross-fish.

54,810. Do they eat the bait?—Yes.

54,811. Do they not eat the other kind of bait?—Yes; but it is a deal tougher, and more difficult to get off.

54,812. What kind of fish do you catch on the long-lines?—Ray and blewitt.

54,813. What is blewitt?—Skate.

54,814. What else do you catch?—Codfish and dog-fish.

54,815. Dog-fish?—Yes.

54,816. You do not want to catch them, do you?—Yes.

54,817. What do you do with them?—Sell them.

54,818. Who buys them?—We sell them at Blackburn. They call them Darwen salmon.

54,819. Do the people eat them?—Yes, and like them as well as anything we can get.

54,820. Is it the common dog-fish that is got in other parts of the sea?—Yes, the common dog-fish; but we never can sell any except about Preston and Blackburn.

54,821. Do you get a good price for them?—Yes; the same as we can get for skate.

54,822. Do you get many dog-fish?—Yes, sometimes a good deal; but there is a difference at times.

54,823. Do you catch anything else?—No, nothing else.

54,824. Do you not get any turbot?—No, we get codfish; but nothing else.

54,825. Have any of those different kinds of fish you mention increased of late years, or have they diminished in the quantity you can take?—I cannot tell that there is any difference.

54,826. Do you get as many ray and skate as you used to get?—Yes, we get as many skate, but not as many ray.

54,827. Do you get as many cod?—No, not as many.

54,828. Has there been any decided falling off?—There has been very little difference, but we do not get quite as many I think.

54,829. Do you get any haddock?—No.

54,830. Any whiting?—No.

54,831. Do the dog-fish increase in number?—No, I do not think there is any difference that I can tell of.

54,832. Is it a profitable fishing altogether, the long-line fishing?—Yes.

MORECAMBE.

J. Woodhouse.

30 Sept. 1864.

54,833. Does it yield you as good a return as the shrimps, for the same time spent upon it?—Yes, I think it does.

54,834. Are there many people who follow the long-line fishing?—No, nobody except my brother and myself.

54,835. Is there only one boat at it?—No, there are two.

54,836. Two boats are all that go from here to the long-line fishing?—Yes.

54,837. Were there ever any more?—Yes, there have been perhaps three or four more since I can recollect; but they have fallen off.

54,838. There were never more than from two to four boats following the long-line fishing?—No.

54,839. Then it is a matter of small importance here as a fishery?—Yes, very.

54,840. Then what do you do after your long-line fishing is over?—We go after two or three mussels, or we go catching a few shrimps, or anything we can do in that way.

54,841. Do you agree with the former witness that the mussel beds are increasing in their yield?—They are quite as good as ever I can remember.

54,842. Are there many more mussels taken off them than there used to be?—Yes.

54,843. There are a great many more people employed at it?—Yes.

54,844. And still there are more mussels when they go for them?—Yes.

54,845. They do not show any sign of falling off?—No.

54,846. With regard to the shrimps, is there any sign of their falling off?—No, there are more caught than ever there was.

54,847. There is no sign of their yielding or giving way?—No, not a bit.

54,848. You do not find that you are over-fishing them?—No.

54,849. (*Mr. Lefevre.*) Do you recollect whether there were ever haddock in the bay?—No. I can never recollect more than one or two being caught in the bay at all.

54,850. What time do you trawl for flounders?—I trawl very little. The most I trawl is when I have my lines down, and then I trawl in order to get bait.

54,851. You only trawl for the purpose of bait and not for sale?—Yes.

54,852. Is there much fishing for codlings here?—Very little.

54,853. Are there many in the bay?—Very few.

54,854. You never try with the line at other times of the year than the summer?—We try sometimes in summer, and sometimes in winter, if we think we can make anything by it.

54,855. Have you taken any cod in the winter?—We have taken a few cod, but not many.

54,856. Not enough to make it pay in the winter?—When there comes a hard frost it drives the skate and the ray fish away, and it would not pay to follow the few codfish.

54,857. Would it improve the general fishery here for flounders and other fish, if, during the months of November, December, and January, shrimping were not allowed?—No, I do not think it would.

54,858. You do not catch a sufficient number of small fish to make it a matter of importance?—I do not think so.

54,859. Are there more young fish caught in those months than in any other part of the year?—There may be a trifle more caught, but I do not think it makes very much difference. They clear away all they can when they get them.

54,860. Do you mean that they throw them overboard when they get them?—Yes.

54,861. Do you say that you do not bring them to land before you separate them?—No, we empty them, and put the nets out again; and then we clean them and throw all the refuse overboard.

54,862. Have you not to manage the boat at the same time?—Yes.

54,863. How do you do that when you have only one man in the boat?—Some have two men, but not many.

54,864. But when you have only one man, can he riddle his shrimps and manage his boat as well?—Yes, but he cannot do as much of it; but he can do the same work.

54,865. You are quite sure they throw away the greater portion of the small fish?—Yes.

54,866. Are they alive when they are thrown overboard?—Yes.

54,867. They are none the worse for having been caught?—I do not think they are any the worse for it at all.

54,868. (*Mr. Caird.*) Is there any large sum of money got by the fishermen for the mussels here; do all that are sold bring in a large sum to the fishermen?—Yes, they bring in a deal of money in the course of a season.

54,869. Do they bring in half as much as the shrimps during the same time?—Yes, I should think they would.

54,870. More than that?—I think so.

54,871. As much as the shrimps?—No, I do not think they bring in as much as the shrimps.

The witness withdrew.

J. Woodhouse.

JOHN WOODHOUSE called and examined.

54,872. (*Mr. Caird.*) You have heard the evidence of the previous witnesses?—Yes.

54,873. Do you agree with all they have stated?—Yes. I have no fault to find, except with regard to doing away with shrimp-trawling for three months in the year. I do not think we ought to be stopped, especially as we throw away all the small fish we catch. What we get then does a great deal of good to the poor classes of the people.

54,874. You do not see that any advantage would arise to the fishery, if you had a close-time during three months of the year?—No.

54,875. You think you would lose a great quantity of fish that would otherwise be useful to the people?—I do not think we could have lived without it here.

54,876. Do you think the shrimps yield you a larger return than anything else?—Yes.

54,877. And it is a fishing you can follow any day of the year, if the weather suits?—Yes, except there be a hard frost, and then there would be no use in trying to fish, because the shrimps go down into deep water.

54,878. There is a market for them every day in the year?—Yes; and the scarcer they are, the better market it is.

54,879. You do not see that it would be of any advantage to the shrimp fisheries themselves, putting aside the interest of the fishermen, to have a close-time for three months?—No, I think it would do a deal of hurt.

54,880. The shrimps have not fallen off in consequence of being so much fished?—No, there are plenty of shrimps. This last year we have had the fullest shrimping that was ever known. The worst thing for the shrimp-fishing is to have such weather as we have had this summer. The shrimps then go on the banks, and there are many of them destroyed by the heat of the sun, after the tide has gone down. I do not think we shall have a good fishing next season. I have been a fisherman since I was a boy, and I know something about it.

54,881. Have you also been a mussel fisherman?—Yes.

54,882. Is there a good deal of money made by that?—Yes, a good deal of money.

54,883. Is it a valuable thing?—Yes, it is very valuable for the country. I do not know what we should do without mussel and shrimp-fishing in this country.

54,884. Do you hold them of more importance than

flat-fish ?—Flat-fish would be nothing for the fishermen here to make a livelihood out of.

54,885. Do you remember the time when there were more flounders caught than there are now ?—Some years there were more, and some years less.

54,886. Do you remember when there used to be soles here ?—Yes ; I believe I was the first man who tried to catch them.

54,887. Have the soles fallen off since then ?—Some years they have been better, and some worse. There has been very little difference since we started catching them.

54,888. Do you catch them in the same trawl which you use for shrimps ?—No, we have a sole-trawl on purpose.

54,889. Do you ever catch them in the same trawl you use for flounders ?—Yes, sometimes.

54,890. Do any large beam-trawlers come in the bay here ?—No.

54,891. Do they not come on the ground on which the long-line fishermen go ?—No.

54,892. They never come in here at all ?—No ; there is nothing to hurt the long-line fishing. I have followed it ever since I could walk.

54,893. It has not been increasing at all ?—No, it has not been diminishing. Some years we have a good season of codfish, and some years we have none. I am older than a good many of the fishermen here, and I know exactly what the fishing has been for a good many years.

54,894. Some years there are plenty of codfish ?—Yes.

54,895. But if there are only two or three or four boats, it is a small matter at the best ?—I have known five or six boats out, and sometimes only two. There have only been my brother's boat and mine for the last few years following the fishing.

54,896. Do not other boats come from other places to fish ?—No, not in our bay.

54,897. How far does your bay extend ?—Until you get outside of Fleetwood on one side, and at Piel on the other, and then round this bay.

54,898. (*Mr. Lefevre.*) Do the larger class of trawlers from Fleetwood fish here ?—No.

54,899. Do they go outside ?—Yes ; I never saw them trawling in the bay.

54,900. You have no complaint to make against them for injuring your fishing at all ?—No, none at all.

54,901. What is the size of the mesh you use in the flounder-trawl ?—The size of the mesh in our sole-trawl is about an inch and a half.

54,902. From knot to knot ?—Yes, we have no nets here for flounders. It is a sole-net that we use for catching bait for our long-lines. Sometimes we catch flounders in it as well.

54,903. The mesh of your sole-net is one inch and a half from knot to knot ?—Yes, it is a sole dredge.

54,904. Are the boats here numbered and registered at all ?—They used to be formerly, but they are not now.

54,905. Is there no person in authority to look after the fishing-boats and gear ?—No.

54,906. There are no regulations enforced among you ?—No.

54,907. What is the size of the mesh of your herring-net ?—If we can get a shilling between the mesh, it is a right mesh. We can go to Ireland or Scotland with that mesh. I have been in all those places to fish, and to the east coast as well, with nets of that size, and there never could be any complaint laid against me, because it was always the right size for a mesh.

54,908. Do the fishermen here generally have nets with that size of mesh ?—Yes, they are all made at one place.

54,909. How many meshes to the yard do they run ?—About 35 rows to the yard.

54,910. They shrink to rather less than the inch mesh ?—Yes, rather less than the inch mesh. They are the nets that are always used. I have been into all countries fishing, and they have tried our meshes at many a place ; but they never said we were wrong.

54,911. Nobody inspects your nets here to see that you use the legal mesh ?—No, nobody here ; but they have inspected them in other places.

54,912. Have they inspected them in Scotland ?—Yes.

54,913. But they could not find fault with them ?—No.

54,914. Are the boats and gear mostly the property of the fishermen here ?—Yes, in general.

54,915. Have some few of the fishermen had money advanced to them by the shop-keepers ?—Some may have, but it will be very few ; nearly all belong to the fishermen.

54,916. Have you been making a good thing of the fishing lately, taking all things together ?—We have been making a nice fishing. I have followed the job for many years, and I can make a nice living myself.

54,917. Are there any regulations which you would wish to have enforced here ?—No ; there could be no regulations here, without hurting the poor fishermen. I believe any regulation would do great injury to this country. I cannot see in what way the fishing here could be mended. If we get any small fish we endeavour to get them overboard as soon as we can, so that we may have a chance of catching them again when they grow larger.

54,918. You do not bring them ashore ?—We do not want to bring them ashore ; the fewer we get ashore the better.

54,919. Do you riddle the small shrimps on board and throw them overboard, or do you bring them on shore ?—We riddle them when we have time, but sometimes we cannot do it.

54,920. Is there any sale for small shrimps here ?—No, very little.

54,921. Are not the small shrimps brought on shore, and sometimes potted ?—Yes, picked and potted.

54,922. Do the poor people make much money by them ?—It gives employment to children. I like potted shrimps myself.

54,923. Do you get anything for them ?—Yes.

54,924. Do you get as good a price for them as you do for the larger ones ?—After the fish are picked they get a better price ; but it takes a great deal of time to pick them.

54,925. Does that account for your not riddling the shrimps so much before you come to the shore ?—We do as well as we can, in order to make the most money.

54,926. Is it a fact that in order to bring the small shrimps ashore, you do not riddle them on the ground ?—No, it is not, because many a time we do riddle them ; but sometimes we have not the time to do so.

54,927. Do you agree with Mr. Bell, that there is not a large number of men shrimping in November, December, and January ?—No, I do not agree with him.

54,928. Do they shrimp then ?—They are obliged to shrimp. They are only a number of poor men, and it is a living for them. Shrimps are worth more money at that time of the year than at any other, because they are very scarce. A man may go out for four, five, or six quarts then, and sell them at 6*d.* a quart.

54,929. They go on shrimping if the weather is mild, and if frosty weather comes on they stop ?—There is very little caught in frosty weather. The fishermen do very little at all if it comes on hard weather.

54,930. But supposing it is mild weather in the winter, are there many boats employed in shrimping ?—Yes.

54,931. You think it would be disadvantageous if it were put a stop to ?—I should not like to see a stop put to it, because there are a great number of poor men who would be very much put out of the way by it.

54,932. And it would be of no benefit to the other fisheries ?—No, I do not really think it would be.

The witness withdrew.

MORECAMBE.

J. Edmondson.

30 Sept. 1864.

JAMES EDMONDSON called and examined.

54,933. (*Mr. Caird.*) You are a fisherman here?—Yes.

54,934. And you have long been acquainted with the fishing of Morecambe Bay?—Yes, ever since I have been born.

54,935. Have you heard the evidence given to us by the other witnesses?—Yes.

54,936. Do you agree with all they have stated?—Yes.

54,937. Is there anything in those statements which you would desire to add to or alter?—No, I do not think you can alter anything. If you were to make the net larger, it would be injurious to the catching of shrimps, and we would catch as many small fish as we do now.

54,938. What is the size of the mesh of the shrimp net?—Half an inch from knot to knot in the biggest part, and smaller in the smallest part; there are three rows to the inch at the small end.

54,939. Is the size of the shrimp-net pretty regular among all the fishermen?—Yes, as near as we can come.

54,940. Do you make the nets yourselves?—Yes, every man makes his own.

54,941. Do not some make them smaller than others?—No; if they were to make them smaller, they would not answer as well, and if they were made larger they would not answer as well.

54,942. Then do you use what you believe to be the best size of mesh for shrimp catching?—Yes.

54,943. And you stick to that?—Yes.

54,944. Is there no regulation that enforces a certain size?—No.

54,945. There is no regulation that makes it compulsory upon the fishermen to fish in a particular way?—None.

54,946. Every man does as he chooses?—Yes.

54,947. (*Mr. Lefevre.*) Have you herring-nets of your own?—Yes.

54,948. Have you always followed herring-fishing, when they came into the bay?—Yes.

54,949. Have they come in most years here with some regularity?—They did come very regular for 15 or 16 years, then for 10 years there were none at all, and then we had them for three or four years. After that they dropped off again, and then we had them for three years, and now they have dropped off for the last two years.

54,950. You cannot say that they have been constant in coming to the bay?—No.

54,951. Have they been frightened by the quantity of trawling that goes on in the bay?—Not in the least; the fish all come from the outside when they come here; they come from the Isle of Man or from between there and Wales.

54,952. In what month?—In the month of September, and sometimes as late as October.

54,953. In August are there a great number of shrimpers at work in the bay?—No, there are not so many then; most of them are going to it in February, March, and April.

54,954. But in August and September, there will be still a considerable number trawling in the bay?—Yes, in August, September, and October there will be a great number.

54,955. Then you do not think that trawling for shrimps frightens the herrings out of the bay?—Not in the least.

54,956. Then their not coming here in some years is not due to the amount of trawling that is carried on?—Not at all.

54,957. Do you trawl on the same ground that you set your drift-nets?—No, not within many miles of it.

54,958. You trawl exclusively in the channel?—We always trawl for shrimps in the channel.

54,959. Do the herrings come up the channel?—I have known them come up the channel a chance time or two.

54,960. Generally they are outside the ground where you trawl?—Yes, many miles outside.

54,961. Do you know what ground they spawn upon?—No; I never saw any spawn where it was spawned.

54,962. Have you ever sunk your nets in order to take fish in the act of spawning?—No, we cannot say what time they do spawn; but we fancy when they come in September, that some of them are full bellied, and that some have spawned; but we never could learn where they did spawn.

54,963. Do you agree with the statement which has been made to us, that the fishermen do occasionally sink their nets?—Yes, they sometimes sink them five or six fathoms when they are in deep water.

54,964. It is only because you are in deep water?—Yes; we will probably be in 20 fathoms of water at the time.

54,965-6. It is not for the purpose of taking fish in the act of spawning, and close to the ground, that you sink the nets?—No; when the water is clear the fish swim deeper. In moonlight they swim at the top, but in a dark moon they go deeper and sink.

54,967. Can you give us no idea of the ground upon which the herrings spawn here?—No, I never could find out where they do spawn. None of us have ever got any herring spawn after it was spawned.

54,968. Is there much hand-trawling here for shrimps?—Not as much as there used to be. In former times there was a great deal more.

54,969. What is the reason of that?—The men do not like to follow it.

54,970. Is it harder work?—It is more slavish work, and requires more wadeing.

54,971. If you were restricted to hand-trawling for shrimps would that destroy the fisheries here?—They would not get as many shrimps. If they were all following hand-trawling they could not make a livelihood out of it. They can only go by the edge of the banks, and there is not sufficient ground for every man to drive upon.

54,972. A great deal of the ground is in the deep water; too deep for hand trawls?—Yes.

54,973. Would a man trawling by hand make as much money as if he were trawling in a boat?—No, he would not make 1*l.* by hand-trawling, where he would make 3*l.* in a boat.

54,974. (*Mr. Caird.*) I suppose you cannot set any drift-nets at all in the same channels as those in which you trawl for shrimps?—No.

54,975. They go comparatively dry at low water?—Yes.

54,976. You never do put out your drift-nets on the same ground that you trawl for shrimps?—Not once in a thousand times.

54,977. (*Mr. Lefevre.*) What is the depth of your herring-nets?—About three fathoms deep.

54,978. What is the length?—Each boat carries about 30 nets.

54,979. What length is each net?—Each net will be about 27 yards long.

54,980. Have you ever seen any young herrings taken in the shrimp trawls?—Yes, an odd one by chance; but it is very rare that we can get one in the shrimp trawl. We might destroy a score or two in a year.

54,981. Not more than that?—No.

54,982. When the herrings have been plentiful in the bay, have you taken many young herrings in the following spring in the trawl?—No, you may see thousands swimming in the water; but they are not destroyed either by trawls or by any nets we use.

54,983. But you do see thousands in the bay?—Yes, every day when we are going out fishing, we see them swimming in the water.

54,984. Do you agree with Mr. Bell, who told us that there is a great destruction of young fish in consequence of their being left dry in warm weather?—Yes, there is a great destruction in that way.

54,985. Have you seen young herrings destroyed in that way?—Not many, but there may have been a few.

54,986. What fish are they generally that are so destroyed?—They are generally flounders.

The witness withdrew.

JAMES BELL re-called and examined. MORECAMBE.

J. Bell.

30 Sept. 1864.

54,987. (*Mr. Caird.*) Can you tell us what proportion of the fish caught here is sent away by rail?—I think that 99 parts of the fish got here go away by rail.

The witness withdrew, and the inquiry was adjourned until the 1st of October, at Fleetwood.

Fleetwood, Lancashire, Saturday, 1st October 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

FLEETWOOD.

J. Turner.

1 October 1864.

JAMES TURNER called and examined.

54,988. (*Mr. Caird.*) Are you a fisherman?—I have occasionally been a fisherman for about 10 years, and more especially for herrings.

54,989. Have you been acquainted with the fisheries here for the last 10 years?—Yes.

54,990. Can you describe to us what fisheries are carried on at Fleetwood?—There are all sorts of fish brought in here, the same as at all other places.

54,991. What particular kind is brought in in the largest quantity?—Flukes and quantities of soles.

54,992. Has the whole supply of fish that is brought to this place been increasing, stationary, or diminishing during the last 10 years?—I think it has been increasing, but that is on account of the number of boats.

54,993. The number of boats has increased?—Yes.

54,994. Do you know what number of boats there are at present?—There are 23 or 25 of the larger boats.

54,995. Are they decked trawl-vessels?—Yes.

54,996. What may be their average tonnage?—From 30 to 60 tons.

54,997. About 10 years ago how many of them were there?—Only two or three about 12 years ago, and about 20 years ago there was not one.

54,998. Twelve years ago there were two or three?—Yes.

54,999. Have they kept gradually increasing?—Yes, they have gradually increased every year, two or three a year.

55,000. Is there the largest number here now that you ever had?—There was 29 at one time; I think four have been sold away, and one or two have been wrecked.

55,001. Is there any other kind of fishing carried on here except by means of these trawl-vessels?—There is a herring fishery at certain seasons from September until January.

55,002. Is the herring-fishing a regular fishing here?—No, there are some seasons when they never come at all.

55,003. Have they made their appearance here during the last two seasons?—No.

55,004. You have had no herrings here for two years in the bay at all?—No, not for three years.

55,005. Is there no sign of them this year?—I was out one night this year and did not get one.

55,006. Do you fish for herrings in a different class of boat?—Yes, in boats built especially for that purpose of from eight to 12 tons register.

55,007. Are they half-decked boats?—Yes.

55,008. Do the same fishermen go to the herring fisheries as usually practice trawling?—Not generally; but if they find they can get more money by the herrings, they will leave the trawl-boats and go with the herring-boats.

55,009. When the herrings appear in the bay are there more fish for the trawl men?—Some of the boats do occasionally get more; one year there were a great many flukes in when the herrings were here; some got as many as 20 tons of flukes in a day just at the time the herrings came on the coast.

55,010. How long did that last?—For a fortnight or three weeks.

55,011. How many boats are there engaged in the herring fishery when there is a favourable season?—The Morecambe Bay, Whitehaven, Maryport, Southport, and Lytham boats come here.

55,012. They all gather in the bay?—Yes, there will be about 200 sometimes.

55,013. When the herrings are there do you find it a profitable fishing?—Yes, particularly profitable.

55,014. More so than any other description of fishing?—Yes.

55,015. Then has the want of the herrings been a considerable loss to the fishermen for the last two years?—Yes, certainly; I have got 60*l.* in a week myself by the herrings, and some of our boats have got upwards of 70*l.* worth of fish in a week.

55,016. Of herrings?—Yes.

55,017. How many men were there in a boat?—Three.

55,018. What is the length of your drift-nets?—They average from 20 to 30½ sheets, and they average 32 yards each; you may take it at 25 times 32, and they are about 3½ fathoms in depth, or about 22 feet. The nets are made on the same principle as those with which they fish on the Manx coast, but having so much shallower water we make shallower nets.

55,019. They are all drift-nets?—Yes, there are a few fixed nets on the flat sands between this and Morecambe, but they have gone out of fashion since drifting came up. Thirty years ago all the herrings in this district were caught by fixed nets, but since we began drifting the people do not take the trouble to set them as they used to do.

55,020. Do you adopt any regulations among yourselves as to the time of the evening when you shoot your drift-nets?—No, they shoot them in the daytime, or as it suits their own convenience.

55,021. There is no regulation?—No; the greatest catch that I ever got was in the daytime, at 12 o'clock at noon.

55,022. Was that when the water was in a muddy state?—Yes; we could not get them if the water was in a clear state. At night there is a good deal of phosphorus in the water and we cannot get the fish.

55,023. Then a muddy state of water is favourable for fishing?—Yes.

55,024. Is this the only place you ever heard of where they shoot their nets during the daytime?—No; I have fished at Whitehaven, and I have fished there in the daytime.

55,025. Was that in muddy water?—We never get so many there, but I have fished there several times in the daytime and only got very few; perhaps a few hundred.

55,026. Was it in clear water?—Yes.

55,027. Do you think that injures the fishing?—No; but it was scarcely worth the trouble. We let the nets go a little more to the bottom of the water.

55,028. If the water was clear here would you have your nets out in the daytime?—No.

55,029. As a matter of choice you would not?—No; experience shows that you would only get your trouble for your pains.

55,030. What other kind of fishing is there carried on here?—Shrimping, and the herring-boats go trawling occasionally.

55,031. Trawling for shrimps?—No, for flukes and soles in the channel, and in this bay as well. In the

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summer months they go trawling, and in the spring of the year.

55,032. Is there a shrimp fishery in the neighbourhood of Fleetwood?—Two or three boats make a practice of it, but nothing like they do at Morecambe.

55,033. It is not a matter of great importance here?—No, not at all.

55,034. Have you any mussel fishery of great importance?—There will perhaps be eight or nine, or may be a dozen, employed in it on both sides of the water.

55,035. Are you aware whether the mussels are diminishing at all?—I should think there are quite as many as ever there were.

55,036. Do the fishermen make a good livelihood by fishing mussels?—Not very.

55,037. Do they make any money by fishing for flukes?—No.

55,038. It is not a very paying business?—No; they take to it as a matter of necessity to keep them from starvation.

55,039. There are no other shell-fish, no oysters here?—No.

55,040. Or lobsters?—No; but a few oysters have been stored here for a month or two back. They were brought from Arklow and laid down as a private fishery.

55,041. Were they laid down to be sent to the fish market as they were required?—Yes.

55,042. Has that been continued for some time?—It is three months since the first cargo came, but none have gone to the market from it.

55,043. Do you know with what success it has been attended?—No, it has only been a trial, but I believe they have spent 1,000*l.* in the concern.

55,044. Have they formed a company?—Yes.

55,045. Is the ground upon which the oysters are laid dry at low-water?—Yes.

55,046. That will not be suitable in the winter time?—They will take care that they are slightly covered in the winter time on account of the frost.

55,047. To return to trawl-fishing, have the length of the beam and the size of the trawl increased in your experience?—Yes, considerably.

55,048. What is the length of the beam now?—They have only increased as the boats have increased in size. They carry a beam from 48 to 50 feet long now.

55,049. Forty-eight to 50 feet?—Yes; some of the beams will be 50 feet.

55,050. Can you tell us from your own knowledge whether the supply of soles brought in here is increasing or otherwise?—It is increasing, because the boats have got so much larger and there are so many more than there originally were.

55,051. And is there a larger supply coming to the market?—A great deal more goes off by the rail. I can see that by the carriages.

55,052. Has there ever been much cod caught here?—Not very much.

55,053. Is it increasing or diminishing?—I do not know.

55,054. Do you get any turbot?—Yes.

55,055. Are they increasing?—I cannot speak to that. There is a greater mass of young cod in the river than I ever saw before. Every bit of the water is full of them. There are millions of them, the size of minnows.

55,056. (*Mr. Lefevre.*) Have the herrings not been anywhere off the coast here?—No.

55,057. Not off the Cumberland coast or Whitehaven?—No, no nearer than the Isle of Man.

55,058. I suppose the herring-boats are not fit to go any distance to the Isle of Man fishery?—I have been to the island fishing from here.

55,059. Do many go?—No, and we only went that season. I have been in the habit of going to Whitehaven and Maryport for several years back.

55,060. Did not the trawlers come here regularly from Blackpool and Southport?—Yes.

55,061. There was a kind of colony from Southport?—Yes.

55,062. Do you know anything of the trawlers at Southport now?—Most of them who are now here are Southport men.

The witness withdrew.

P. Rimmer.

PETER RIMMER called and examined.

55,063. (*Mr. Caird.*) Are you a trawl fisherman?—Yes.

55,064. Have you been long engaged in that business?—For about 40 years.

55,065. As a trawler?—Yes, and cod fisher together.

55,066. What was the size of your trawl-vessel about 40 years ago?—About 18 tons.

55,067. What size is it now?—It is upwards of 50 tons. Fifty is the largest.

55,068. Do you agree with the previous witness that the principal increase in the number of vessels trawling has taken place within the last 10 or 12 years?—It has in some things.

55,069. In the number of vessels trawling?—Yes, they have increased within the last 12 years.

55,070. Very much?—I cannot say so much. In some places they have increased and in some others they have decreased. At Southport there are not as many as there were.

55,071. But how is it here?—There are more at Fleetwood, but they had not commenced much fishing here then.

55,072. Where have you been in the habit of fishing with your trawl vessels?—All the way from Liverpool to the Isle of Man.

55,073. Have you been north of the Isle of Man?—To Ayre point, but no further.

55,074. Do you not go up the Solway at all?—No.

55,075. Have you never been there?—I have never been there in my life.

55,076. Has that particular district between Liverpool and the Isle of Man been fished for 40 years within your knowledge by trawl-vessels?—Yes.

55,077. By an increasing number of vessels every year?—No, not now.

55,078. Are there not as many?—There have been as many, but there are not as many now as there were. They keep selling them off.

55,079. Then there are not as many now as there were some years back?—No, not as many as three or four years back.

55,080. What is the cause of that?—I don't know.

55,081. Have they been getting fewer fish?—No, there are plenty of fish.

55,082. Have the fish not been selling as well?—They have not been selling as well in these poor times. There is nobody to buy them.

55,083. What kind of fish do you catch with the trawl-vessels?—Soles, turbot, ray, brill, flukes, and conger eels.

55,084. Do you get a large quantity of soles?—Yes.

55,085. They go to the higher classes for consumption?—Yes.

55,086. Do you think that any injury has been done to the spawn by the trawl-boats?—No.

55,087. When did you go out last to fish with your trawl-vessel?—I was out last Monday.

55,088. When did you come in again?—Yesterday.

55,089. How often did you put your trawl down during the time you were fishing?—Every six hours.

55,090. Where did you go to fish?—Off Blackcombe.

55,091. What ground did you go over during that time?—Four or five miles during every six hours.

55,092. Backwards and forwards with the tide ?—Yes.

55,093. When did you get to the ground ?—On Monday night.

55,094. Did you let down your trawl at once ?—Yes.

55,095. Then you would probably have eight hauls of your trawl during that time ?—We had more than eight hauls.

55,096. What fish did you catch during all the time; what kind and what quantity were caught?—We caught soles, turbot, plaice, all sorts of flukes, gurnards, and conger eels.

55,097. Can you tell us the quantity?—Not exactly.

55,098. Near about ?—About 18 score weight of sole, turbot, and brill.

55,099. Was that the whole of your take ?—Eighteen score weight of that kind of fish.

55,100. What other kinds did you catch ?—Plaice, flukes, gurnard, and congers.

55,101. What weight would you have of them ?—I cannot exactly say.

55,102. Can you give us any idea ?—Perhaps 20 baskets averaging three score in each basket.

55,103. Was that the whole of your catch during the time you were out ?—Yes.

55,104. Which of these will bring the most money; the 18 score weight or the 20 baskets ?—I don't know how they have been selling, but I think the 18 score weight will bring the most money.

55,105. What would the 18 score weight produce to you as a fisherman ?—I shall not know until 4 o'clock to-night when I will get my returns, but they will average about 6*d.* a pound.

55,106. What will the baskets of the other kind of fish average ?—Five shillings or six shillings, taking one with another.

55,107. Six shillings a basket ?—Yes.

55,108. Are the soles you caught last week of as fine quality as those you caught 10 or 12 years ago ?—Some of them were; we caught more little ones then than we do now.

55,109. Are they about the same quality ?—Yes, about the same.

55,110. Are there as many of them caught now ?—Yes.

55,111. Taking the average, one week with another, do you get as good a fishing now as you did 10 or 12 years ago ?—Yes.

55,112. With regard to turbot did you have any this last week ?—Three I think.

55,113. Were they fine fish ?—Yes.

55,114. Would that be what you used to take in former years ?—Sometimes we might be a week or a fortnight and catch none ; that has been the case ever since.

55,115. There has been no marked difference in that respect ?—No.

55,116. In regard to other fish, is there any marked difference compared with what the fishery was 10 or 12 years ago ?—No, there have been no conger sometimes, and at other times they have been thick enough.

55,117. Do you ever catch haddocks ?—Yes, but they have left the coast for five or six years altogether.

55,118. Have they entirely left the coast ?—Yes.

55,119. Do you get any whiting ?—Some odd ones, but not at this time of the year.

55,120. Do you get them as numerously as ever you did ?—Yes, since I can remember.

55,121. Are haddocks the only kind of fish that have left you ?—Yes.

55,122. The only kind ?—Yes.

55,123. By trawling over the same ground, over and over again, do you find that you diminish the quantity of fish upon that ground ?—We shift about very much, sometimes we are on one part and sometimes on another, according to the time of the year.

55,124. You do not find that the fish are getting scarcer ?—No, they are as plentiful as ever they have been.

55,125. They are just as numerous as ever ?—Yes, just at this time.

55,126. Do you follow any other kind of fishing except trawling ?—Not of late years, but I have been cod-fishing in the winter season.

55,127. What is the length of the beam of your trawl ?—About 43 feet.

55,128. Is that about the largest here ?—No, there are some larger.

55,129. Can you work a larger beam than that successfully ?—A larger boat could wrok a larger one.

55,130. How many men have you in a boat ?—There are four of us; four men and a boy are in many of the boats.

55,131. (*Mr. Lefevre.*) Is that the crew that most of the vessels here carry ?—Yes.

55,132. What would you say with regard to a law prohibiting you from having a beam more than 38 feet in length ?—It would not do for us ; we should not catch any fish.

55,133. Would you catch no fish ?—No, we should catch nothing.

55,134. Then it would not be advantageous to the fishing if you were prohibited from having a beam more than 38 feet in length ?—No, our boats would run away with them, and we could catch no fish.

55,135. If the beams were shorter the boats would run away with them ?—To be sure they would.

55,136. Did you ever hear of a law that the beam should not be more than 38 feet?—I have heard tell of such a thing.

55,137. Has it ever been enforced here ?—No.

55,138. Are any of the beams longer than yours ?—There are some a little bit longer, but not much.

55,139. What is the longest ?—I cannot tell you.

55,140. But some are longer than yours ?—Yes.

55,141. Do they proportion the beam to the size of the vessel ?—Yes, that is about it.

55,142. What is the weight of your trawl-irons ?—I know the weight of them when they were new, but they are not as heavy now.

55,143. What should you say is the weight of them ?—About seven score and twelve pounds apiece.

55,144. What is the size of the mesh of your net ?—We have different sizes.

55,145. What is the size of yours ?—In some parts I can put my hand through it, and at other parts the mesh is less.

55,146. What is the size at the largest part ?—I can put my four fingers in it ; that is more than three inches.

55,147. What is the size of the mesh at the back of the net ?—Between three and a half and four inches.

55,148. Is it not as small as an inch and a half from knot to knot ?—No, we should catch nothing with a mesh of that size. It would fill with sand, and we should catch nothing.

55,150. Do you think the greater number of the trawl-nets have a mesh in the back of the net as large as that ?—Yes, they are all of a size.

55,151. What in general is the smallest class of fish you bring in ?—The smallest size would be sometimes half a pound.

55,152. Will they be seven or eight inches long ?—Yes, I daresay they will.

55,153. Do you bring in fish that are not fit for sale ?—No, it would be of no use bringing them in if they were not fit for sale.

55,154. Do you throw any overboard when you take the net up ?—Yes, but they are generally alive. We throw a great many dog-fish over that would do us no good if we kept them.

55,155. Do you trawl off the Isle of Man ?—Not very near to it.

55,156. What distance from it ?—I have been fishing 10 or 12 miles off it.

55,157. Do you ever fish on the ground where the coralines are to be found ?—It is a long time since I have done so. I had a few hauls, but it was 10 or 12 years ago.

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55,158. Have any of the boats from here fished on that ground ?—I think it is a long time since.

55,159. Do you generally fish in company ?—No, some fish in one place and some in another.

55,160. What do you do in the summer time ; do you send your fish to market every day by one of the boats ?—A boat comes in every day, and we carry for one another.

55,161. Then you are in company ?—Yes, in the summer time. We take it in turns to carry.

55,162. Do you in the winter keep the fish to the end of the week ?—No, sometimes we send them in.

The witness withdrew.

R. Leadbetter.

RICHARD LEADBETTER called and examined.

55,172. (*Mr. Caird.*) Have you long been a trawl fisherman ?—About 16 or 17 years.

55,173. Do you agree with the previous witnesses that there has been a large increase in the number of trawlers during that time?—There has been an increase here in the number of trawlers, but there has been a decrease in other places. I do not consider that there are any more trawlers here on the coast than when I began fishing.

55,174. You have been fishing on the coast between Liverpool and the Isle of Man ?—Yes.

55,175. Taking the whole of the vessels which go on that coast, you think there is no increase ?—No, there has not been for years.

55,176. Have the vessels increased in size during that time ?—Yes.

55,177. Then if there is the same number of vessels, there is a larger extent of net used now than then ?—Yes, there is. Of course we could not do with the same size of nets in the large boats as in the smaller ones.

55,178. Can you say from your own experience as a fisherman, that the quantity of fish you can take now has increased or has diminished compared with what it was 17 years ago ?—I believe they are as plentiful as they were when I first began.

55,179. What are the different kinds of fish that you catch ?—Soles, turbot, brill, flukes, conger eels, a few cod, and sometimes in the year ray fish.

55,180. Skate ?—Yes.

55,181. Have the soles in your opinion continued to be as plentiful and of as good quality as they were when you began the fishing ?—They have been more plentiful, and they have been so for the last eight or 10 years. There are a great many more of them than when I first began; I should think there are more than as many again.

55,182. Have you during all that time fished upon the same ground ?—Yes.

55,183. That is the ground between Liverpool and the Isle of Man ?—Yes ; I have been trawling there regularly at different places at different times of the year.

55,184. And double the quantity of soles are taken now compared with what there were when you first began fishing?—Yes ; but they trawl now more where the soles are than they used to do. They used to trawl about the foot of Liverpool Channel, and there are not as many soles as there are in deep water.

55,185. You find the soles further out at sea?—Yes.

55,186. What depth of water do you find best for soles ?—That depends upon the time of the year. In the summer time they come into shallow water of from 10 to 15 and 20 fathoms.

55,187. Are there any particular banks that yield soles more than others on the ground known to the fishermen ?—There are more in some places at different times of the year ; but they shift.

55,188. You find that in the summer time they come into shoal water ?—Yes.

55,189. Is that the case with all the fish you catch? —There may be plenty in the deep water ; but we are nearer home when we are in shoal water.

55,190. You find them then in shoal water ?—Yes.

55,191. Not in the winter ?—No ; we generally go where we can catch most.

55,192. Have the turbot increased or diminished, or are they about the same ?—They are about the same as they were when I first began.

55,193. And brill ?—They are about the same.

55,194. And conger also ?—Yes.

55,195. How are cod ?—They are the same.

55,196. Do you get any fine cod ?—There have been a great deal more cod got for a year or two back than when I first began.

55,197. In the trawl-nets ?—Yes.

55,198. Do you get any fine cod in the trawl-nets ? —Yes.

55,199. What weight will they be ?—From 15 to 30 pounds.

55,200. (*Mr. Lefevre.*) What time of the year do you get cod ?—We get odd ones from the latter end of March until the beginning of April.

55,201. (*Mr. Caird.*) Are skate as numerous as they were formerly ?—Yes.

55,202. Then all kinds of fish with the exception of the haddock are as plentiful as ever ?—Yes. There used to be a vast quantity of haddocks caught here ; but now there are none got on this coast.

55,203. They seem to have disappeared altogether? —Yes.

55,204. Have you any idea what has been the cause of that ?—No ; they had gone away before there was much trawling. Some old men a deal older than I am remember their being on this coast and going away, and they never knew the cause of it. That was a time when there was not much trawling.

55,205. They have been on the coast before, and have left and come back again, and left again ?—Yes.

55,206. No cause can be assigned for that in your opinion ?—Not that I can find out.

55,207. Then it is possible they may return again? —Yes ; in some men's days but not in mine.

55,208. Do you ever come into contact with the line fishermen on the ground on which you fish ?—Yes ; they sometimes come out where we are fishing.

55,209. Do you foul their lines ?—Not if we can help it ; sometimes in the night we may come across them.

55,210. Do they make any complaint against you for doing so ?—Not if we haul our nets and clear them.

55,211. Do they not say that you are destroying the fishing ground and preventing them from fishing as they used to do ?—They are the Manx lines ; we never come into contact with them from here.

55,212. Do not the long-line fishermen here come upon the same ground as you ?—No.

55,213. They do not go as far to sea ?—No; but the Manx fishermen come up here.

55,214. You do not interfere injuriously with each other ?—No. I have seen the Manx men out at Blackpool where we fish in the summer time. Their boats are as large as ours.

55,215. What kind of fish do they get ?—I have not been on board, but I think they get a deal at times.

55,216. Do they get the same kind of fish that you do ?—Yes ; they caught haddock at the time we did, but they don't get any now.

55,217. What kind of bottom is it you generally find between the Isle of Man and Liverpool ?—There are different sorts, mud, sand, shells, and stones.

55,218. You cannot trawl on the stones I suppose? —We do sometimes, but we haul our nets up.

55,219. You avoid it if you can ?—We are obliged to go there sometimes. The fish go there in the winter time. They leave the shallows and take to the rough ground.

55,220. You risk your nets then ?—Yes.

55,221. Do you suffer much injury from that ?—

Yes, it sometimes happens that we trawl for a week and lose more than we get.

55,222. But it answers you on the whole to run that risk?—Yes, we are obliged to go where the fish are to get a living.

55,223. On the whole, having been yourself a fisherman for a considerable time, has it been a prosperous business for you?—I have made a living by it.

55,224. Is that the case generally with those who follow the same business?—Yes, in general.

55,225. They are rather improved in their circumstances?—Not so very much I think; some of them may have improved a little, perhaps.

55,226. Do you in your trawl-vessels, frequenting a channel so much used by merchant vessels, give any assistance to them in times of storm?—Yes, often enough.

55,227. Do you act as pilot for them?—We engage with them to take them either into harbour or until we fall in with a pilot.

55,228. Is it frequently the case that you have been of use in saving vessels in that way?—Yes, and then they give us what they think fit.

55,229. Then you are often at sea in stormy weather?—There is scarcely a vessel that comes into port but what is seen by a fisherman somewhere.

55,230. Would you say from your experience that merchant vessels would often be lost in this channel if it were not for the assistance you afford them as fishermen?—Yes, our fishermen have saved a good many vessels in that way.

55,231. (*Mr. Lefevre.*) You said that the number of boats had not much increased during the last 17 years?—I don't think there are many more boats on the coast than there were 17 years ago.

55,232. How many are there fishing from Southport, Liverpool, Whitehaven, Blackpool, and along this coast altogether?—I cannot say; there were 70 out of Liverpool then.

55,233. What number used there to be, taking all the trawlers that fished over this ground?—There would be 70 out of Liverpool, but I don't think there are more than 50 now. Where there used to be four or five here there are now 20.

55,234. The number has increased here and diminished from Liverpool?—Yes, the number has also diminished from Southport. There used to be 15 or 16, and now there are only seven or eight.

55,235. They use a smaller class of vessel compared with those from here?—They are a great deal smaller than ours.

55,236. What is your season for going to the Isle of Man?—From November till April.

55,237. Do you trawl within an easy distance of the Isle of Man?—Eight or ten miles when we are nearest.

55,238. Do you take your fish in there sometimes?—Yes, when the wind is blowing hard from the land we keep near for shelter.

55,239. Do you fish in Ramsay Bay?—No.

55,240. Or in Douglas Bay?—No, there is no bay fishing there at all.

55,241-2. Do you fish on what the Manx men call the coralline grounds off the Isle of Man?—We fish nowhere but on what they call the trawl-ground, and that has been trawled ever since I can remember, about 10, 15, or 20 miles from the island.

55,243. Have you ever taken any herring spawn up?—I never caught any herring spawn there in my life.

55,244. Have you never taken up spawn in your trawl-net at all?—There has been some little got about Blackcombe for about a month, but never in any quantity.

55,245. When you are fishing off the Isle of Man do you fall in with the herring fleet?—We never dare to fish there when the herrings are there.

55,246. Do you avoid the ground when the herrings are there?—Yes.

55,247. You dare not fish there you say?—Well we dare fish if we were put to it; but our fish leave the coast when the herrings are there.

55,248-9. Why is it you do not dare to fish where the herrings are being fished?—Because they are in-shore on the rocky ground. We dare not go there or we should lose our gear.

55,250. When the herrings were on this coast did you leave trawling altogether and go after herrings?—Yes, sometimes.

55,251. Were you often trawling when the herrings were on the coast?—Yes.

55,252. Were you often fishing within three miles of the herring-boats?—No, we were always fishing at a greater distance than that; we never fished within that distance; generally we were further out.

55,253. Further off than three miles from them?—Yes.

55,254. Are you often fishing within the bays on the Lancashire coast, Morecambe Bay, and all the other bays on the coast?—No, not nearer than 15 or 20 miles from here.

55,255. Do you fish within three miles of the Cumberland coast off Whitehaven, Workington, and Maryport?—No, we are always 10 or 15 miles off there.

55,256. Then it would be no disadvantage to be prohibited from trawling within three miles of the shore?—No, I think not. It would not injure us I think.

55,257. It would not injure you?—I think not.

55,258. What is the length of your beam?—About 44 feet.

55,259. Would it be a disadvantage to be prohibited from using a beam more than 38 feet?—We could not catch as many fish.

55,260. Give me your reasons for that?—Well, you see that in the larger vessels they like to have larger beams. If we do not have gear according to the size of the vessels, they would swim the nets and run away with them, and we could not keep them at the bottom.

55,261. Could you not provide against that by using heavier trawl-irons?—If we had heavier irons we should require steam to get them up.

55,262. Then it would be a disadvantage to you not to be allowed to use a beam of greater length than 38 feet?—Yes, I think some of us would have to give the fishing up.

55,263. Did you ever hear of a law to the effect that you were not allowed to use a beam longer than 38 feet?—I have heard it spoken of.

55,264. Does anybody look after your trawl-nets, beams, and gear?—Yes.

55,265. Who does that?—The Coastguard.

55,266. Do they look at the mesh of your net?—Yes.

55,267. What is the size of the mesh of your net?—In some parts it is four inches I think.

55,268. Is that measuring the length?—Between the knots.

55,269. What is the smallest size?—The bag of the net is about $2\frac{1}{2}$ or 3 inches.

55,270. Not less than that?—No.

55,271. What is the weight of your trawl-irons?—Seven score and ten pounds and from that to eight score.

55,272. Do you weight the foot rope?—Yes, we put a weight on it. For the bigger boats we are obliged to have larger and thicker ropes.

55,273. And more weight upon them?—Yes, we like to have more weight upon the larger ropes, or they would swim the net.

55,274. What is the weight you put upon the foot rope?—It will be a hundredweight and a quarter, and about a hundredweight of rope is put on it afterwards; that will make it about two hundredweight altogether, and I should say it weighs more than that when it gets the wet and the slush on it.

55,275. (*Mr. Caird.*) Then there is the weight of the fish?—Yes, and the rubbish and the dirt.

55,276. What will sometimes be the weight of the trawl when you heave it up?—It will weigh a ton sometimes.

55,277. (*Mr. Lefevre.*) Do you think it would be a disadvantage to the fishermen if they were prohibited

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from weighting the rope with more than 110 pounds; what would you say if there was a regulation of that kind forbidding you to use more than 110 pounds weight?—I suppose we should be obliged to do so.

55,278. Would there be any advantage in having such a rule?—I think not.

55,279. Would it be a disadvantage to you?—Yes, I think it would be a disadvantage; it would stop us from getting our living.

55,280. Did you ever hear of such a law?—No.

55,281. Have you any share in a trawl yourself?—Yes.

55,282. Do you think that most of the fishermen have shares and own the boats here?—No, they have not all shares.

55,283. But are the boats mostly owned by fishermen?—Yes.

55,284. Have you made a good thing of it of late years; have they yielded a good return for your money?—We have just done in a middling way, but we have had some very rough winters lately. It has not been so very good, but it has been rather rougher than common.

55,285. Then you have not done so well for the last two or three years?—It has been rough enough in the summer time; but in the winter time we have had so much rough weather that we have not done quite so well.

55,286. Then it is not from any scarcity that you have not taken so much fish, but because the weather has not been favourable?—Yes; generally there has been plenty of fish when there has been weather for us to work.

55,287. Where do you catch the codfish that you spoke of?—We catch them half way between here and the Isle of Man, generally west out from Blackcombe, about 20 miles out.

55,288. Have they herrings in them?—I don't think they have.

55,289. Do they not feed on the herrings at that time?—I don't think they do.

55,290. Have you looked at their bellies to see?—I have caught hake with herrings in their bellies.

55,291. But not codfish?—No, but I have found them with whiting in their bellies.

55,292. (*Mr. Caird.*) How far north have you trawled?—Never further north than the Point of Ayre.

55,293. Do you trawl off Whitehaven?—Yes, about west-north-west from Whitehaven, and off as far as Workington.

55,294. Never up the Solway at all?—No.

55,295. Nor into Wigton or Luce Bay?—No. I have been in Whitehaven. I have been there for shelter.

55,296. Have you any means of keeping your fish alive in wells?—No.

55,297. Is that never done by the trawl-vessels here?—No.

55,298. They are all sent dead to the market?—Yes. Sometimes in the winter they are kept alive for three or four days.

55,299. Out of the water?—Yes; plaice, fluke, and conger.

55,300. (*Mr. Lefevre.*) Do you fish off the Welsh coast?—Never very near the Welsh coast. Liverpool boats go there; but I never go within 20 or 30 miles of the Welsh coast.

55,301. (*Mr. Caird.*) Do you know if anybody here has ever tried the plan of well-smacks for keeping the cod alive?—No, we never get that quantity of cod to make it worth while.

55,302. The cod are not got in sufficient quantity to make it an object?—Not with trawling.

55,303. Nor with the long-line fishing?—There is a great quantity caught by the long-line fishing by the Manx men.

55,304. Did they ever try that plan?—I don't think they ever did, but I cannot say.

55,305. (*Mr. Lefevre.*) Do you ever take ice on board your trawlers?—No.

55,306. What do you do in the summer?—We send the fish in every day.

55,307. In a vessel from the fleet?—Sometimes we have five or six in a fleet, and one will come home and bring the fish from the others; but we are hardly ever all fishing in one place.

55,308. You are generally fishing in the summer in companies?—Some may be 20 miles from the others; but if there be two lots of fishing boats, two boats will come home. We send one from each lot, and if there are three lots, then three boats will come home.

55,309. In the winter do you keep the fish until you come in?—Yes; we generally come in on the Friday. Sometimes we come in in the middle of the week, and go back again.

55,310. You do not require a carrier in the winter?—We do send sometimes if the weather is settled, but generally it is not fit for us to send our boats from one to another, so as to get the fish on board.

55,311. (*Mr. Caird.*) Do you generally get your fish sent fresh to the market?—Yes.

55,312. Do you lose any?—Not often; we may upon a chance time.

55,313. It does sometimes occur?—It may occur sometimes. You know that in fishing it may happen that the vessel may not get in, but I don't know that ever I have had any fish spoilt that was not fit for the market in my life.

55,314. Have you ever seen large quantities of small unsaleable fish brought in by the trawl-nets?—No; we never got any fish but what people are accustomed to eat, and that were not fit for meat.

55,315. You never throw any small ones overboard that are not fit for the market?—Our mesh does not take any that are not fit for the market.

55,316. All you catch are fit for the market?—Yes.

55,317. (*Mr. Lefevre.*) Has there been a bad market for the coarser kind of fish during the cotton famine?—Yes.

55,318. Has it told on the fishing interests here?—Yes; it has been a bad job for the trawl fishermen. The rough fish have sold very badly.

55,319. There has not been a good demand for it?—No.

55,320. Have you got a better price for the other fish, such as soles and turbot?—Yes, they have been as good as ever they were.

55,321. Are the men on board the trawlers paid by share?—Yes.

55,322. Would you say that a law prohibiting trawlers from going within three miles of the herring-boats, would be disadvantageous to you?—That would just depend upon where the herring-boats would go, and if they could go where we were fishing.

55,323. When you are fishing off the Isle of Man, do not the herring-boats fish a great distance from land?—Now they do, but we are not fishing on that ground now.

55,324. Are you fishing anywhere near the herring fleet off the Isle of Man?—No, I never was. I never saw the Manx fleet fishing.

55,325. Are you never so near the herring fleet as to interfere with their tackle, or they with yours?—No.

The witness withdrew.

JOHN GIBSON called and examined.

55,326. (*Mr. Caird.*) You are agent for Lloyd's and have been a shipbuilder here?—I am; I am a shipwright's surveyor for the Board of Trade for this district, and a shipbuilder.

55,327. Have you built many of the trawl-boats that are used on this coast?—I built five of them.

55,328. Have you been building them of a larger size than they used to be some years ago?—Yes, rather larger.

55,329. What may be the cost of one of those vessels of the best class ready fitted for sea?—About 1,000*l.*

55,330. Does that include the vessel, trawl-net, and everything?—Yes, everything; that is the cost of the largest.

55,331. Is it within your knowledge that the fishermen themselves are proprietors of vessels of that character?—Most of them are.

55,332. I suppose that the money with which they have bought those vessels has been made by fishing?—I do not know that; that I think is a question. I believe that there is a good deal of borrowed money among them.

55,333. Are the boats to some extent mortgaged?—I think they are obliged to their friends in a great measure.

55,334. Have their friends a share in the boat?—Yes.

55,335. So that they have other money invested in the boats?—Yes, and they work it off generally.

55,336. The fishermen pay it off by degrees?—Yes.

55,337. And accumulate capital to that amount?—Yes.

55,338. Purely by fishing?—Yes.

55,339. Then the fishing on the whole is a prosperous business here?—To fishermen only. I never knew anybody else make any money by it, except the fishermen.

55,340. (*Mr. Lefevre.*) Were there two companies established here?—Yes, one lost 3,500*l.*, and the other lost 2,000*l.*

55,341. How many trawlers had they?—Six or seven; I got most of the boats for them.

55,342. (*Mr. Caird.*) You say that when the fishermen themselves attend to the business, they can make money by it?—Yes, but nobody else can.

55,343. (*Mr. Lefevre.*) After the break up of those companies, the trawlers fell into the hands of the fishermen?—Yes, they sold them at a low price, and the fishermen got supplied with cheap boats.

55,344. (*Mr. Caird.*) Are the fishermen doing well with those boats which failed when they were owned by a company?—Yes.

55,345. It is a business that requires attention by a practical man?—Yes, and it requires a deal of hard work.

55,346. And men simply having money in it, would not bestow that care and attention that are necessary?—Yes, the main thing is to take care of the gear; it is a great expense to keep a vessel going.

55,347. On the whole is the supply of fish at this port increasing from the trawl business?—Yes.

55,348. It shows no sign of falling off?—No; there are a great number more boats and more fish coming to the harbour than did formerly.

55,349. Is there no sign of the trawling which has been carried on for so many years in the channel, and between the Isle of Man and Liverpool, declining in the yield of fish?—I think it is increasing, there are larger boats and they get more fish than the small boats used to get; I believe that more fish has been brought into the harbour on that account.

55,350. Except the haddock, all kinds of fish seem to retain their abundance?—Yes.

55,351. Soles are not declining in quantity?—No, I think they are increasing; but a haddock is like a bird of passage, it is the same as the herring.

55,352. Have you ever heard any complaint by the line fishermen, of injury done to their business by trawling?—Never.

55,353. Are there any line fishermen in this place?—No.

55,354. The whole of the fishing is done by trawling?—Yes, I think there are a few line fishermen at the Isle of Man, and a few off Blackpool; but there are not many now.

55,355. The shrimp-fishing is not a matter of much importance here?—Not at Fleetwood.

55,356. Nor the mussel-fishing?—There are a deal of mussels got in the channel.

55,357. The channel of the river?—Yes.

55,358. Does it bring in much money to the parties engaged in it?—There are a few poor people who pick them up in the channel, boys and women.

55,359. Do they make a good living by it?—I do not know that they do.

55,360. Do they pick them up in the water or upon the rocks?—In both ways.

55,361. They do not ever fish these banks?—No.

55,362. There are always plenty of mussels?—Yes.

55,363. There is no demand for mussels for bait here I believe?—No, there is so little line-fishing.

55,364. (*Mr. Lefevre.*) Have you yourself built some trawlers for the fishermen?—I have built five.

55,365. Have you advanced money to the trawlers, in the prospect of being repaid by the fishermen?—Yes, I have trusted them a good bit sometimes in that way.

55,366. Do you know why it is, that the trawlers seem to have left Southport for Fleetwood?—On account of the carriage of the fish, they had to cart all the fish to Manchester by horse and cart, and it got bad.

55,367. As soon as the railway was made here, they found it a more convenient port for sending from?—Yes, that was the reason.

55,368. Do you send all your fish to Liverpool?—No; to Manchester, Birmingham, and London, and Edinburgh.

55,369. Is there any officer, on the part of the Government, who looks after the trawlers to see that they are all numbered?—Yes, the Coastguard see that they are all numbered about here, but they are not as particular as they were at first when they came.

The witness withdrew.

GILBERT BALL called and examined.

G. Ball.

55,370. (*Mr. Caird.*) Are you a trawl fisherman?—Yes, I have been fishing on this coast.

55,371. Are you at present a trawl fisherman?—I have been mostly fishing about the river for the last 14 years.

55,372. What do you fish in the river?—I do not pretend to follow it the year round, sometimes I fish, sometimes I sail passengers; I do whatever I can make most by. I am mostly about the place, and I make now and then a trial.

55,373. What sort of fish do you catch?—Flukes, soles, and codlings.

55,374. With a net?—Yes; sometimes with a line, but very seldom.

55,375. Do you get many soles?—Only very few at the back end of the year, and only a few at any other time. Sometimes they are not to be got at all here.

55,376. Were they formerly plentiful here?—About 14 years ago I could hardly keep myself and my wife, now I have eight in a family and I do very well.

55,377. Then the business is improving?—I got more fish last year than I have got for 14 years.

55,378. Of every kind?—Of flukes generally; I have seldom anything else.

55,379. Were there no codlings?—Yes, a few.

55,380. Have you a small trawl-net?—Yes.

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55,381. Do you trawl it up and down in the shallow water?—Yes, in the river.

55,382. In what depth of water?—Sometimes 30 fathoms, and from that to 10.

55,383. In all seasons of the year?—Yes; now and then I have had spells of it, but it has fallen off sometimes, and then if there is anything else to do I take to that. In general I have done very well for the last four or five years.

55,384. Are there more men engaged in that business than you?—Nobody can make it pay but myself and I can just manage it. Some have tried it but were not able to manage it.

55,385. Then you have it all to yourself?—They cannot get enough to suit them, and then they knock off. Somehow or other they cannot get as much as I do.

The witness withdrew.

J. Bagot.

JOHN BAGOT called and examined.

55,386. (*Mr. Caird.*) You set nets in-shore I believe?—Yes.

55,387. What is the shape and size, and how are they set?—I set some, in which I catch fish, in what we call a bag net; in other places I run a lot of nets across a hollow, and the fish are left in the nets when the tide runs out; as soon as the tide has gone out I go down to the nets, and see if there are any fish in them.

55,388. What length will they be?—I have had them of all lengths, from 20 yards up to 200 yards in my time.

55,389. What is the length of which you usually set them now?—I have them 200 yards.

55,390. In one net?—Yes.

55,391. How do you fasten each end of the net?—To stakes.

55,392. At each end?—No, I have a post set up at every three or four yards.

55,393. What is the depth of the net?—Three feet six, or four feet.

55,394. What is the size of the mesh?—From $2\frac{1}{2}$ to three inches.

55,395. Is there a poke in it?—Yes, in some, like in a trawl-net; it is a particular place for the fish to run into.

55,396. Are the nets so placed as to catch the fish coming up or going down?—They catch them coming down, but I have nets which catch them either going up or down.

55,397. Which answers best?—It depends on how I set them.

55,398. Have you caught salmon in them?—Yes, I have caught salmon in all nets; I have caught them in shrimp nets.

55,399. What is the fish you generally get?—Fluke and codlings.

55,400. Do you get any sperlings?—No, I have only got one or two for these 25 years.

55,401. Is the quantity of fish you can catch in that kind of fishing increasing or falling off?—Two, three, or four years since I could get a hundred-weight where I cannot get above five pounds now, with the same quantity of tackle.

55,402. Then it is much falling off?—Yes.

55,403. Is that because there are more people fishing, or because there are fewer fish in the river?—There are fewer fish in the river, and there are not as many fishing; 24 years ago some people at Preesall got as many flukes and codling as they could carry, and now there is scarcely such a thing to be got. One old man, who has been a fisherman for 40 years, has two nets of 20 yards each, and he can only catch about eight flukes in them.

55,404. In the two nets?—Yes, and 20 years ago he would have had eight score weight in them.

55,405. Is it the same with yourself?—No.

55,406. You do not make as much by it?—No, but I turn myself in other ways, I pick mussels; I send away more mussels from this river than any other person.

55,407. Do you make a good living by it?—I have no occasion to grumble.

55,408. What do you sell mussels at per bag?—At different prices, according to the quality.

55,409. What are the different prices?—From 2*s.* to 5*s.*, and I have sold them as high as 6*s.*

55,410. Does it depend on the market?—No.

55,411. Does not the price increase as the season goes on?—We generally fix a price about Michaelmas, and we keep our word so that that price lasts the whole season; we charge so much for getting the mussels, and so much per bag when we send them off.

55,412. Where do you chiefly send them to?—Bolton, Bury, Manchester, Oldham, Sheffield, and other parts of Yorkshire.

55,413. Is there a large quantity of mussels sent away from here on the whole?—I have sent 100 bags off in a week with 80 quarts in each bag; I am now doing about 50 bags per week.

55,414. Are there many more people engaged in the business besides yourself?—There are not very many, only a few.

55,415. How many mussels are sent away altogether in a week?—I should say 70 bags at this time will be as many as are sent away altogether.

55,416. Will that continue throughout the whole season of the mussel-fishing?—There is every appearance of it, and as the winter sets in there will be more gatherers, and more will be sent off.

55,417. The mussel beds are not beginning to fall off at all?—They are in some places, but in the summer time we go down below where the mussels are not worth anything, and bring boatloads of them up, and store them, so as to make a provision for the winter; but the law will not protect us if other people come and take them away. If there was a law, people would go and take them, and bring them very largely up the river, where they would feed themselves full.

55,418. Do they feed well?—Yes, they are fine fish, fit to go to London or anywhere else, but we want a law to protect every man who lays them down and makes a provision for the winter.

55,419. Does anybody go and take fish which other people have laid on beds for the purpose of feeding?—Twenty-five years ago, when I came first, they said that after the tide had been over them, they belonged to anybody. I went to a gentleman named Bowling of Liverpool, who was the owner of property here, and he said that if I sent for a cargo of stones and dropped them over the side of the vessel, they would be anybody's after the tide had been over them; he said, lay them down and put them where there are none, and if any person molests them then write to me. I have practised that, and it has been one means by which I have got my living; some people occasionally go there for a quart or two, and I do not object to that so long as they do not take them in bags to the market.

55,420. Practically the people do not interfere with you?—No, but they say they could do so.

55,421. Do many other people practise the same system of carrying mussels from the lower part to a better feeding ground?—Yes, a few.

55,422. And do they find the same advantage from it?—Yes.

55,423. (*Mr. Lefevre.*) What kind of ground do you lay them upon?—There is a run of fresh water where they are laid down.

55,424. Is it clay?—It is marl underneath, and it is covered with gravel; they want stones to adhere to.

55,425-6. Have you marked out your own portion of ground, where you lay down your own pick?—No, but we all know our own.

55,427. You lay them down where there are no other mussels?—Yes.

55,428. You think you ought to have some property

in the soil?—Yes, it would be a great benefit to all poor people if we had.

55,429. We have been told that oysters have been laid down in the bay here; have they been laid down on the same kind of ground?—Yes, and I think they ought to be protected; when we lay the mussels down on our ground and protect them, they become the finest fish that ever went into the market; when they are in season they have filled themselves double over.

55,430. Do you think it would be of great advantage if some kind of power were given with regard to the laying down of oysters?—I do.

55,431. And to give a property in the oysters when they are laid down?—Yes, it would be an encouragement to those that are industrious, and it would be a great kindness to all the poor people here, to everyone who is engaged in the business.

55,432. Is there anybody who claims the soil of the bay for the purpose of laying down oysters?—There are gentlemen who claim the manorial rights, and who have objected.

55,433–4. Is the ground uncovered at every tide or only at spring-tides?—They are better where it is only uncovered at spring-tides; it ebbs further out, and the lower down we can get our mussels the better they are, because they are not much exposed to the sun.

55,435. Would oysters and mussels breed there, if you could lay them down for that purpose?—I have sent for them from Ireland and tried them; I think those oysters which the trawl-boats have thrown out are inclined to breed, because I have found hundreds of little ones adhering to the stones.

55,436. How do you account for the decrease in the quantity of the flounders or flukes?—I am afraid to speak what I think about it.

55,437. You may say what you like here.—One should be careful what one says. I believe that shrimping is the worst thing that ever was begun. They were never intended for food for man. Anybody can see that they were only intended for food for fish.

55,438. Are there many shrimpers from this place?—There are a few. I have followed it myself.

55,439. How many are there?—Not many.

55,440. Then it is not the shrimpers here who do harm to the fluke-fishing?—No, not in this bay; but they do harm wherever they are.

55,441. Are you referring to the shrimpers in Morecambe Bay?—Yes.

55,442. What harm do they do?—They kill all the young fry. When I was a boy my grandfather has told me about being able to get more fish than his boat could hold; but that is not the case now.

55,443. Do you suppose that more than eight or 10 make a livelihood out of the flounder-fishing here?—At one time there was no market nearer than Preston.

55,444. What is the greatest number of men you have seen employed in catching flounders here?—At the time it first set in, there were in the village of Preesall about 10 or 12 men; now there is not one.

55,445. What could be done in order to prevent shrimpers from destroying the young fish?—You should do the same with them as you have done by the Salmon Act with the salmon fishermen, namely, knock them off altogether, but not so suddenly. If you were to throw it over all at once, you would throw 100*l.* worth of nets on the hands of some of the fishermen that would not be worth a penny. I think there never was so an unjust a thing as that in England, and yet that has been done by the Salmon Act.

55,446. I do not want to go into the question of salmon; you would not deal as unjustly by the shrimpers, as you think has been done by other fishermen under the Salmon Act?—No; not without giving them compensation.

55,447-8. But you would stop their trade altogether?—Yes; because it is not a benefit to anyone. Shrimps were never intended for food. Anybody can see that. What man could fill his belly with shrimps? It is a ridiculous thing to suppose they were ever intended for food. Only look at them.

55,449. But what number of men would you be taking from this trade?—It is a weighty matter and a serious job I know.

55,450. Would it not do a great deal more harm to destroy the shrimp trade than the flounder trade?—Yes; but had you not better do a present harm, than wait until they are all killed.

55,451. Which brings in the most money, the shrimping or the flounder taking in Morecambe Bay?—I do not know; but only look at the ova destroyed. Thousands and thousands of the young fry of soles and turbot are entirely destroyed, and then make a calculation of what they would bring in, if they were allowed to grow up. It is not alone what the shrimps bring in; but when you have butcher's meat at 9*d.* and 10*d.* a pound, I think it is a great objection to destroy all this young fry.

55,452. You think they do damage not only to the flounder-fishing, but also to the sole and turbot?—They do damage to all the young fry that come upon the shore.

55,453. Do they not do any damage to the deep-sea fishery, do you think?—I have heard many tales about that, but I am not a witness upon that point. I am not condemning them at all.

55,454. Do you think that the decrease in the flounders has had any reference to the mussels which have been found on the banks?—Wherever there is a strike of mussels they will come from a long distance to that strike, that is when the mussels are about the size of coffee-beans. They crack them and eat them, and they are attracted there from places all round.

55,455. Then do you think the disappearance of the flounders is due to there not being so many mussels?—Yes; they feed upon any crustacea at the bottoms of the rivers. Trawling in four feet of water is a very bad thing I think.

55,456. Does it take the mussels away?—No; but it destroys all the food the fish feed upon.

55,457. Do you not think that the disappearance of the flounders may be due to that, rather than to shrimping?—No; it is shrimping that causes it. I have seen so much of it.

55,458. (*Mr. Caird.*) Do you mean that the shrimping causes the disappearance of those small fish upon which other fish feed?—No; it is the shrimping that kills the young fry, and prevents them from coming to maturity.

55,459. Do you mean trawling for shrimps?—Trawling on the edges of the banks and putting a net before them in shallow water only 10 inches deep.

55,460. You say that the crustacea are being destroyed by trawling?—Yes, trawling in the beds of rivers; but shrimping destroys most young fish on the edges of the banks in shallow water.

55,461. (*Mr. Lefevre.*) Have you, when the tide goes out in the summer, seen a large number of the fry of fish of all kinds destroyed by the sun and the heat?—I have seen it sometimes on the sands.

55,462. Do you not think that there is a great destruction of fish in that way?—The Almighty who made them has made an allowance for that; there would be plenty and to spare for food for all our families, if they were not unhappily destroyed.

55,463. There is a vast destruction in that way?—Yes, plenty; but I think there is an allowance for waste of that sort.

55,464. There is a vast destruction in that way?—Yes, there is.

The witness withdrew.

FLEETWOOD.

J. Carter.

1 October 1864.

JOHN CARTER called and examined.

55,465. (*Mr. Caird.*) You are the superintendent of the goods department of the railway at Fleetwood?—Yes.

55,466. You put in a statement now of the number of packages and the weight of the fish forwarded from Fleetwood from January 1863 until August 1864?—Yes, it is as follows:—

Months.	Packages.	Weight.			
		Tons.	cwt.	qrs.	lbs.
1863.					
January	1,376	47	9	3	4
February	2,190	75	3	2	0
March	2,258	76	12	1	7
April	2,252	75	0	0	26
May	2,958	88	13	2	18
June	1,884	56	11	2	27
July	2,073	56	17	3	14
August	2,060	59	12	3	10
September	2,380	101	4	3	14
October	2,525	101	3	0	20
November	1,716	65	19	0	24
December	818	32	13	2	1
Total for the Year	24,490	837	2	2	25
1864.					
January	814	33	18	0	20
February	1,379	54	5	1	18
March	1,973	70	19	0	8
April	1,860	69	12	3	11
May	2,555	81	19	2	26
June	2,282	77	10	2	1
July	2,280	79	13	0	12
August	1,459	61	6	3	10
Total for eight months	14,602	529	5	2	22

The witness withdrew.

J. Cumpstey.

JOHN CUMPSTEY called and examined.

55,467. (*Mr. Caird.*) You are a fish buyer here?—Yes.

55,468. Have you been long in that business?—Six or seven years.

55,469. Do you buy all kinds of fish that are caught, both by the trawlers and the river fishermen here?—No, only that caught by the trawlers, and the herrings when they come.

55,470. During that period of time, can you tell us if the fish brought to this market have been increasing or diminishing?—I think on the whole they have been increasing.

55,471. Is there any particular kind of fish which has increased more than another?—If anything it has been soles.

55,472. Are they both greater in quantity and finer in quality, or is the quality much about the same?—The quality is much about the same.

55,473. There is no deficiency in quantity?—No, none whatever.

55,474. Are there many codfish brought here?—There is a pretty fair supply in the spring of the year.

55,475. Does it continue to be quite as abundant as it formerly was?—Yes, it is quite as plentiful.

55,476. And turbot?—Turbot and brill as well, and red gurnard.

55,477. Has the supply of the coarser quality of fish increased or diminished of recent years?—I cannot see that there has been any difference in that respect.

55,478. Has there been a great difference since the commencement of the cotton famine in the relative prices of the coarser qualities, as compared with those on the finer?—They have not been worth half what they were before.

55,479. What are the fish you call the coarse fish?—Such as plaice, flukes, garvies, dabs, grey gurnards, ray, and skate.

55,480. They have fallen off more than half in consequence of the cotton famine?—Yes.

55,481. But all other kinds of fish have maintained their price?—Yes; prime fish has maintained its price.

55,482. Is the proportion of coarser and finer fish about equal?—The finer fish make the most money.

55,483. But how is it with regard to the quantity?—I think there are more of the coarser fish than the prime.

55,484. (*Mr. Lefevre*). But the finer quality of fish on the whole brings in more money to the fishermen?—Yes, I am sure it does.

55,485. Have you observed what time of the year the soles are spawning that are brought here?—No, I cannot say that I have. We have the largest quantity of soles in May.

55,486. What condition are they in then?—They are in good condition.

55,487. Are they full of spawn then?—Yes, they have spawn in them.

55,488. In June and July do you find that you get spent fish?—I have not noticed that.

55,489. You cannot say, then, what time the soles spawn?—No.

55,490. Have you sold haddocks since you have been selling for the trawlers?—No.

55,491. Have you sold herrings for the fishermen?—We buy them generally. There is no regular market. We buy them and send them away.

55,492. Did the trawlers generally give up trawling for the purpose of going to the herring-fishing?—Some few of them, but not many.

55,493. Some went on trawling notwithstanding?—Yes. There are generally plenty of trawl fishermen when there are herrings.

55,494. Do they fish near the ground where the herring fishermen are at work?—No, I do not think they do.

55,495. (*Mr. Caird.*) Were the herrings at any time a very large fishery here?—Yes, about three years ago there was a great quantity.

55,496. Have you any idea how many barrels of herrings would be taken here?—I have seen as many as 10 waggons go away from here that had been caught in one tide.

55,497. Railway waggons?—Yes.

55,498. How many tons would that be?—Each waggon would carry about four tons.

55,499. That would be about 40 tons of fish?—Yes.

55,500. Would that continue for some time?—No.

55,501. It was a very good fishing?—Yes.

55,502. There has been nothing of the kind for the last three years?—No.

The witness withdrew.

JOHN MAY JAMESON called and examined.

55,503. (*Mr. Lefevre.*) We understand that you have recently bought a cargo of oysters, and have laid them down in the bay here?—Yes, and I am expecting a third cargo.

55,504. Have you already brought two cargoes here and laid them down?—Yes, and I am expecting a third.

55,505. How long have they been laid down?—The first about a month, and the other yesterday.

55,506. Have they been laid far up the river or at the entrance of it?—They are laid down about a mile from the shore, towards the lighthouse.

55,507. On what kind of ground?—On clean shingley ground.

55,508. With marl underneath it?—Clay, I believe.

55,509. Is there fresh water over it?—It is brackish water out of the Wyre.

55,510. Are there any mussels there?—No, we avoid the mussel beds.

55,511. Is there much ground in the bay here fit for laying down oysters?—We should be able, I think, to lay down about 3,000 or 4,000 barrels.

55,512. On that piece of ground?—Yes, about that place.

55,513. Are there many other places of the same kind in the bay?—No, I have tried several places, and that is the only place where I find them keep from being covered with sand. I have tried several places and they all silt up with sand except this.

55,514. Have you obtained leave from the Crown or any person?—Yes, leave was obtained from the Board of Trade and from the lords of the manor.

55,515. You have reason to believe that you have acquired sufficient property in the land to enable you to lay them down with security?—Yes, we have a copy of the Act of Parliament given to us by the solicitors of the Board of Trade.

55,516. What Act of Parliament?—It is an Act protecting oyster fisheries three miles from the shore.

55,517. Is it within three miles of the shore?—Yes. We have acquired this bay from Fleetwood as far as the land mark from the shore.

55,518. (*Mr. Caird.*) Is it a local Act?—I have it in the office, but I will send for it if you wish.

55,519. (*Mr. Lefevre.*) Is the ground uncovered at ordinary tides?—Some of it is never uncovered.

55,520. Is it fit for the breeding of oysters?—I think so.

55,521. Do you intend to try the experiment?—We have been trying the experiment in several ways; we have tried it in a variety of ways, and not altogether I think without success.

55,522. Have you ascertained whether you would have property in the oysters bred there?—I think so, but we intend to import as many as we can of them.

55,523. What is the size of this piece of ground, is it some acres in extent?—About four or five acres.

55,524. But with that exception, you think there is not much ground in the bay fit for the same purpose?—There is not much that is ever dry. There may be some ground that I have never seen.

55,525. In other parts you find that the sand covers and would choke the oysters?—Yes, we have tried half a dozen places.

55,526. Would they not do where the mussels are found?—No, the mussels kill them.

55,527. Could you not clear away the mussels and lay down the oysters, the oysters being a more valuable crop than the mussels?—Yes, but mussels generally accumulate where it is too dry for the oysters. If we put oysters out on the dry ground a great deal exposed to the sun, they will not fatten and improve.

55,528. But a great many of the mussel-beds are in the same condition between high and low water?—Yes, but the mussels get up on the top of the high pinnacles in the sea or in the channel.

55,529–30. (*Mr. Caird.*) Have you any enclosure of any kind round your oyster bed?—We have buoys.

55,531. Do you expect to make a profit by feeding them there and making them better for the market?—We do expect to make a profit; but our great object in bringing them here is to try and make a business in Fleetwood. We are very dull at present, and we are trying to get up some work for the poor; if we are enabled to do that we shall not grumble about it whatever the profit may be.

55,532. Your object is to ascertain whether oysters will breed there and form a regular oyster-bed?—Yes, and if we can employ some of the poor men upon the ground we should be content with a very small dividend.

55,533. Taking the ordinary influence of profit on men who engage in trade of that kind—do you anticipate such a profit upon them by the improvement which the oysters themselves will undergo in these waters, as compared with their condition when they are brought here, as will pay for the expense of keeping the beds up?—Yes, we expect it will do that and well too.

55,534. They have been brought from Arklow, have they not?—Yes.

55,535. What do you pay for them at Arklow?—Six shillings a barrel.

55,536. How many in a barrel?—From 800 to 1,000.

55,537. Are they a large or small description of oyster?—They are the native oysters such as those which are sent to Whitstable.

55,538. The oysters that are eaten in London as natives?—Yes, they bring them from Arklow and lay them down in the Thames.

55,539. When they are brought here are they in a poor condition?—Yes.

55,540. Do you find that they fatten and become like the natives of the London market?—Yes, but we can never get them here with the same flavor, because we have not such a rich water as they have in the Thames.

55,541. But they become superior?—Yes.

55,542. What do you sell them for after they are laid upon the banks?—I have never sold them. They have only been six weeks laid down.

55,543. What would well-fed oysters such as those bring in the Lancashire markets?—I have been told that they will bring about eightpence a score.

55,544. That would be a very large profit?—Yes, but we do not calculate upon getting more than half of them alive.

55,545. (*Mr. Lefevre.*) What is the average size of the oyster?—From one and a half to two inches.

55,546. Are there a great many under two inches?—No, I should think that two inches is about the average. We would prefer them smaller if we could get them, because we should then have more in the barrel.

55,547. Are they all sorted and the larger ones taken out?—No, we get them as they are taken out of the dredges.

55,548. You would expect a larger profit on smaller oysters?—Yes, there would be more of them; but many of the smaller ones would die because they have not strength to bear the voyage. In the first cargo we had here they got some of the bilge water in among them, and that killed a great many.

55,549. That was an accident, I suppose?—No, there is always a great loss.

55,550. Particularly among the smaller oysters?—Yes.

55,551. What are the smallest oysters that would be profitable to lay down?—Oysters the size of a shilling; they would do for next year.

55,552. If you were prohibited from buying oysters at Arklow less than two inches, could you then buy them to lay down at a profit?—I do not think we could.

55,553. Would that do away with the trade?—It would do away with the trade at Arklow, because they would have to sort the oysters.

FLEETWOOD.

J. M. Jameson.

1 October 1864.

55,554. By the time they reach this place would they be of such a size that it would not be worth while to lay them down for the purpose of growing to a larger size ?—Yes.

55,555. Suppose you were not allowed to buy oysters less than 2½ inches across, would it be worth while to buy larger oysters for the purpose of laying them down ?—Yes.

The witness withdrew.

J. Turner.

JAMES TURNER re-called and examined.

55,556. (*Mr. Lefevre.*) Can you tell us what the average earnings of the herring-boats would be ?—The average earnings of the herring-boats for a season lasting for 10 weeks would be about 100*l.* for each boat.

55,557. You had two very successful seasons some time ago ?—Yes.

55,558. And since then you have had none ?—No.

55,559. (*Mr. Caird.*) Is there any reason you can discover for the fish having kept out of your bay since ?—No.

55,560. Has it been the case as far as you remember that they come occasionally, and then that they do not come ?—Yes, they have been away for 10 years sometimes.

55,561. (*Mr. Lefevre.*) Have you seen the trawlers trawling near you ?—Not very near.

55,562. They never did you any damage ?—No, except once.

55,563. Do you attribute the disappearance of the herrings to the trawling in any way ?—Not at all.

55,564. You do not think that the trawling has frightened away the fish ?—Not a bit. There have been successful seasons off the Isle of Man, but they have not come as far as here.

55,565. What distance do your boats go after the herrings ?—They go from here to the Isle of Man after them, but I never got any myself further than six miles from the coast.

55,566. Have you reason to believe that the herrings are off the coast somewhere, but not in sufficient numbers ?—I believe so from looking at the birds sometimes. There are a great quantity of them off here at the present time, and there may be a few herrings in the bay.

55,567. Have you known the herrings to be off the bay when the drift-net fishermen could not catch them ?—Yes, once or twice. I have known them to go to the bottom of the Lune ; but you would only run the risk of tearing your nets in going after them, although if you had your nets down, you would be certain to get them.

55,568. Have you known them on the surface when the drift-net men shot their nets and could not take any of them ?—No.

55,569. What is the depth of the river here ?—Twenty-two feet.

55,570. Do you sink the nets any depth ?—Yes, we weight them at the bottom and cork them at the top.

55,571. But do you sink them by ropes ?—Yes, according to the depth of the water. We put a net or two out to ascertain the depth, and then sink them in proportion.

55,572. But with the exception of the fish being at the bottom have you ever known the fish there when the fishermen have not been able to catch them ?—No.

55,573. Do you know where the herrings spawn ?—No, but I have seen the spawn in the nets sometimes.

55,574. Have you found spent fish here ?—In the first take after they make their appearance one half of them are full fish and one half spent fish.

55,575. Then are you not fishing on the ground where they are spawning in fact ?—I do not know.

55,576. What is the nature of the bottom ?—Both sand and stones. There is a large extent of sand in one place, and then down at the edge of the river there are stones.

55,577. When herrings first come into the bay are they spent fish ?—No, half of them are full fish.

55,578. As the season goes out, are there more spent fish ?—Yes.

The witness withdrew, and the inquiry was adjourned until the 3d of October, at Liverpool.

Liverpool, Lancashire, Monday, 3d October 1864.

PRESENT :

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

LIVERPOOL.

R. Isaac.

3 October 1864.

ROBERT ISAAC called and examined.

55,579. (*Mr. Caird.*) You are a fish dealer in Liverpool ?—Yes, and a smack owner.

55,580. And you have been for a number of years acquainted with the state of the supply of fish to this market ?—Yes, for upwards of 30 years.

55,581. What are the various kinds of fishing which are practised from Liverpool ?—Do you mean what do we trawl for ?

55,582. Yes.—Soles, turbot, brill, ray, flukes, gurnard, and everything that the trawlers catch on any other coast.

55,583. Have any of those varieties of fish shown signs of diminution within late years ?—The soles in the spring of the year have diminished, you may say, to a very great extent.

55,584. They have fallen off, have they ?—They have fallen off very much within the last ten years.

55,585. Is there any other kind of fish that has diminished, except soles, in the same marked manner ?—Haddocks have left the coast altogether. There are very few to be caught now ; but you may say that every kind of fish has diminished off this coast.

55,586. Every kind ?—Yes.

55,587. What do you attribute the falling off to ?—I attribute it to the shrimpers. They carry a trawl net along with them as well as a shrimp net, and they catch all kinds of fish. They catch stuff that is not fit to bring into the market, and then throw it away. Out of the whole quantity of soles that came to market last Saturday from these small boats, I should say that, out of a hundred pair, there would be 90 pair of small ones under a pound a pair.

55,588. Are they so small as to be unsaleable ?—Most of them are unsaleable,—at least, they sell them at some price or other ; but they are quite small fish, and bring very little money.

55,589. But they do go into consumption in the market ?—Yes ; but there are a great quantity thrown upon the beach, not fit to bring to market.

55,590. Have you yourself seen that ?—I have not seen them on the beach, but there are witnesses here who have done so. They commence about the middle of August, and are catching these small fry until the middle of October.

55,591. Is it at that time that the greatest injury

is done?—That is the only time when the injury is done; it is before the small fry can get into the deep water; they are feeding in the slush now.

55,592. From the middle of August until the middle of October?—Yes.

55,593. Do they go into deep water then?—Yes; and they grow rapidly into large soles, ready for the spring fishing.

55,594. Do you mean that we should understand that, if some stop is put to that system of fishing from the middle of August until the middle of October, it would result in the benefit of the fishing?—Yes, in the bays, but not in deep water. There they can fish and do no harm at all; they catch nothing but large soles there.

55,595. Are there no small soles caught in deep water?—Yes, sometimes; but we attribute it to our men having their mesh made so small.

55,596. What is the size of the mesh of the trawl net for deep water?—About $2\frac{1}{2}$ inches for the deep water.

55,597. Is that the smallest mesh in the net?—Yes, it is the smallest mesh in the net.

55,598. There is nothing smaller than that?—Our men are using smaller meshes, but I do not approve of it.

55,599. What is the size of the mesh they are using now?—About an inch and a half.

55,600. (*Mr. Lefevre.*) Is that from knot to knot, or pulled out?—From knot to knot.

55,601. (*Mr. Caird.*) Is that the smallest size that is used now?—Yes, by the large boats.

55,602. By the large boats, in deep water?—This (*producing a piece of net*) used to be the size of the old mesh, but now they have made it less than that.

55,603. (*Mr. Lefevre.*) Is that in the bag of the net?—That would let anything go through that would be unsalcable.

55,604. What size do you call that?—I think it is $2\frac{1}{2}$ inches.

55,605. That is, when it is pulled out?—Yes; but it has to be shrunk in by the water yet.

55,606. That would be $1\frac{1}{4}$ inches from knot to knot?—No; that is half a mesh.

55,607. The Act of Parliament says from knot to knot along the line?—Yes.

55,608. You say it is $2\frac{1}{2}$ inches when pulled out?—Yes.

55,609. That would be $1\frac{1}{4}$ from knot to knot?—Yes.

55,610. (*Mr. Caird.*) The Act says, $1\frac{3}{4}$ inches from knot to knot. That mesh you have there is below the legal size?—Yes, according to that measurement.

55,611. Is there no regulation fixed or enforced by anybody as to the size of the mesh of the net you use in trawling?—There is not round this coast.

55,612. Has nobody inspected the size of your mesh?—I never knew anyone do so.

55,613. Then any man is at liberty to use what mesh he pleases?—Yes.

55,614. And within late years they have begun to use smaller meshes?—Yes; for the last few years they have begun to make them smaller and smaller, in order to catch whitings in the spring, which is one of the worst things they can do.

55,615. Do you object to catching whiting?—No; but I object to catching them with small nets. They catch small fish and everything, without giving the fish a fair chance.

55,616. Have they reached a size now that enables them to catch a larger proportion of small fish than they did before?—Yes, exactly.

55,617. Do they bring them to the market?—Yes, in the spring of the year.

55,618. Are they saleable for food?—Yes, but they bring a low price; they are scarcely worth catching.

55,619. They go into consumption among the poorer classes?—Yes.

55,620. Is there a large proportion of the whole catch of that description?—Yes, of whiting in particular, and of small offal or rough fish.

55,621. Are the whiting that are caught now of a smaller size than used to be caught?—Yes, they are a good deal smaller; but they catch some of the large ones as well. The general run of the fish is a deal smaller owing to the size of the mesh, and I think the cause of that is the small boats from Southport and the shrimpers who engage in trawling, and in trawling too near the banks in shallow water.

55,622. Were you formerly in the habit of getting a supply of whiting from the trawl-boats?—We used to get very few. Thirty years ago we got a supply from Dublin Bay, when the old mail steamer came. I had a lot consigned to me by the mail boats from Kingstown.

55,623. Of whiting?—Yes, and they were the finest I ever had.

55,624. Where do you get them now?—Mostly from the east coast; but in the spring, off our own coast, we used to get an abundance of haddock; but we are catching very few now; they have left the coast, I think.

55,625. From whence does Liverpool derive its principal supply of fish?—From all parts. Now, since railways have been opened, fish are sent from Liverpool to all parts, and are received in Liverpool from all parts.

55,626. Do you get most by fishing boats, or most from the east coast by land?—We get a great deal from the east coast, but in the spring of the year we get most from our own boats. We get very few from other quarters when the fish are on our own coast.

55,627. Do your own boats afford you a sufficient supply to send inland, after supplying Liverpool?—Yes; we get a large quantity in certain months of the year.

55,628. Has that increased or diminished of late years,—I mean your power of sending away fish inland?—It has diminished for the last four or five years.

55,629. Is there a larger consumption of fish in Liverpool now than there used to be?—Yes.

55,630. Does it keep pace with the increase of population?—I think it does.

55,631. Would that account for the fact that you do not send as many inland?—Yes, because we have not got them to send, or else we should send away as many; but since the east coast fish can be procured so readily from Hull and other places near there, we find that they can meet us in Manchester and in the other markets.

55,632. You say that in certain months of the year you have a fair supply, and that you then supply the inland market. In what months is that the case?—Generally our best fishing is in April, May, and June. Those are the heaviest months of the fishing. Sometimes in March we have a very great fishing, if the weather is in any way favourable.

55,633. During those months, are you able to supply your own market, and spare some for the inland market?—Yes, tons weight go away in those months.

55,634. During those months, where do your fishing boats find their fish?—Some of them fish on the Cumberland coast, towards the Isle of Man, in deep water, and some go right to the other side of Carnarvon Bay. They spread themselves about; some go to the Scotch coast.

55,635. Has the supply of fish during those months in which you say you have the largest supply diminished of late years comparatively?—Yes, it has diminished a great deal.

55,636. But still you have more than you require for the market here?—Yes.

55,637. Have you ever been in the habit of getting large quantities of turbot?—Yes.

55,638. And cod?—We catch a few in the trawl now and then; but there are plenty of cod on the coast, towards Redwharf, but these boats do not go for them.

LIVERPOOL.

R. Isaac.

3 October 1864.

55,639. Is there no long-line fishing?—A little from Hoylake, Southport, Lytham, Blackpool, and round about the coast.

55,640. Where does the principal supply of cod come from?—We get the principal supply from this time until about the month of February from Dublin, and the east coast.

55,641. They are line-caught fish?—Yes; we get some also from the Isle of Man; they come on the banks there.

55,642. They are also line-caught fish?—Yes.

55,643. You get very few cod in the trawl, I suppose?—Very few; we may get half a dozen or so, but nothing of any consequence.

55,644. Do you yourself deal in shrimps?—No.

55,645. In shell-fish of any kind?—In oysters. We catch oysters in the trawl net. I do not deal in shell fish for retail purposes, but only for sauces.

55,646. Where do the shell-fish come from?—Considerable quantities come from Sligo.

55,647. Do they come direct from Sligo?—Yes, direct by steamer, twice a week.

55,648. Are there any oyster beds in the neighbourhood of Liverpool here, or round the coast?—Yes, there are at Beaumaris, where they lay down oysters in the spring of the year for consumption here.

55,649. For this market?—Yes.

55,650. Are there no oyster beds which produce oysters of themselves on this coast?—No; our trawlers catch a few now and then; they dredge for them in Carnarvon Bay.

55,651. Is there any large proportion of soles caught by the small boats which fish in the shallow water?—Yes, a great quantity at this time of the year.

55,652. Do those small boats or the large boats give the largest supply to Liverpool?—The small boats do not give any; it is only a small class of fish that they catch. The soles they get will only weigh about a pound a pair.

55,653. Is there a large supply of that fish just now?—In this month and September there has been a heavy fishing for them.

55,654. Has that been the case for many years?—Not many.

55,655. In September and October?—From the middle of August until the middle of October; but there is nothing but the spawn, except an odd sole left now.

55,656. Has the quantity of that description of small fish increased of late years?—There have been more caught this last month than were ever known before.

55,657. Has that mode of fishing been in existence for many years back?—Not for many years back, I think.

55,658. How long back, do you remember?—It is only of late years that these small soles have come to the market.

55,659. Has it not been practised for a long time by the fishermen of Hoylake, and about that quarter?—About 10, 12, or 15 years; but then they did it on a very small scale as compared with the scale upon which they are doing it now.

55,660. Have the boats employed in that fishing much increased lately?—Yes, and they have been made rather larger.

55,661. Have they increased in the length of their trawls?—Yes; they have a beam to their trawl now of 30 feet, where they formerly used short ones. They have a trawl for dredging, as well as for shrimping.

55,662. Do the same boats that trawl, also fish for shrimps?—Yes.

55,663. At a different time?—Yes.

55,664. (*Mr. Lefevre.*) How many of those boats are there?—Belonging to Liverpool and Hoylake?

55,665. Yes.—About 20 or 22, and there will be in Liverpool 40 of the small shrimping boats.

55,666. (*Mr. Caird.*) Which also use that description of trawl net?—Yes, but not so much in Liverpool as Hoylake.

55,667. (*Mr. Lefevre.*) Then there will be about 60 of those boats altogether?—Thereabouts.

55,668. (*Mr. Caird.*) What part of the coast do those boats fish?—All about the river, this side of the Bell Buoy.

55,669. To the entrance of the river?—Yes, where the fish get their food; that is where these young fry and the soles feed until they get strong enough to go into the deep water.

55,670. (*Mr. Lefevre.*) And up the estuary of the Dee, I suppose?—Yes, all round there.

55,671. And the Ribble?—Yes, right up the Ribble. The Southport men go there.

55,672. There are other vessels of the same class from Southport that fish up the Ribble?—Yes.

55,673. (*Mr. Caird.*) Do those boats that fish for sole turn their attention to shrimping?—Yes; they are shrimping regularly now, but they catch more prawns and shrimps in May than at any other time.

55,674. Do they fish on the same day for both shrimps and soles?—No, not generally.

55,675. You attribute the falling off, which you say has taken place in the supply of trawl-fish in deep water, chiefly to fishing in shallow water with a small mesh?—Yes.

55,676. And it is of a smaller mesh than it was the custom to fish with in deep water?—Yes.

55,677. Would it have any effect upon the supply to the market here, if a stop were put, during the three months you mention, to fishing with a small mesh in the shallow water?—Decidedly so. There would be double the quantity of fish next year, both in the summer months and in the spring of the year. A larger number of fish would have liberty to go to the deep water.

55,678. Then the fishermen who fish along the shore would not get any fish at all?—They would not catch any of those small fish.

55,679. They would have to turn their attention to something else?—They would always get plenty of employment. They could either go into the larger vessels, or use their boats as pleasure boats.

55,680. Would the market here suffer from the want of that supply which you say goes into consumption among the poorer classes?—No, it would be all the better for the poorer classes; the quantity in the course of 12 months would be doubled. Let them all have the same sized mesh and the fish would increase, I believe, year after year.

55,681. Then the remedy you would apply would be a regulation of the mesh and the stopping of this mode of fishing everywhere?—I would have a regulation with regard to the mesh, and I would stop all the smacks, both large and small, so as not to allow them to go within ten miles of the Bell Buoy.

55,682. Would it not be sufficient to make a regulation of the mesh, so that it should not be less than a prescribed size, and then allow the people to fish where they liked?—I think it would be better if there were a certain restriction, say ten miles from the Bell Buoy. You ought not to allow a net to be used within ten miles north of the Bell Buoy.

55,683. The effect of that would be to put a stop to the fishing by the poorer class of fishermen?—The small boats could go anywhere else.

55,684. The small boats could not go out in the deep water to trawl alongside your large vessels?—They could not go as far out. If they fish so near the banks they kill all the small fry on the banks. There will be no fish left soon for the deep-fishing, if these small boats increase.

55,685. But if the mesh is large enough, and the small fish can escape through it, and if a mesh of that kind was made compulsory, would not the evil you complain of be prevented?—Yes, most of it; but small fish are sometimes very weak, and upon a bank with shallow water, where there are only two or three fathoms of water, they catch such a quantity that the whole of them could not escape. It would be impos-

sible, because it is where they are feeding that the greatest quantity of fish is found.

55,686. Has the price of the fish altered much of late years?—No, I cannot say. Soles have been better of late years than they were before.

55,687. Has the cotton famine had any effect upon the price of what you call the rougher fish?—No, not any.

55,688. Have not fish of a coarser quality sold worse?—No; they have sold as well.

55,689. Have all kinds of fish?—Yes.

55,690. Do the poorer classes consume a large proportion of the fish brought to Liverpool?—Yes, a very large proportion indeed.

55,691. What sort of fish do they use?—The cheap fish, such as skate, small garvies, gurnards, and whiting. When we got such large quantities of whiting in the spring of the year, we sold them at reduced prices to the poor people. They gave so much a basket for them, and one or two poor women would buy a basket and divide them between them.

55,692. Have the whiting come in in greater quantities of recent years?—There have been very few this last year, but previously they were in greater quantity than was ever known in Liverpool; but that was owing to our own smacks having a smaller mesh than they ought to have.

55,693. But that was of advantage to the poorer people?—Yes, but they have had nothing for many years since.

55,694. You really think it has had the effect of stopping the supply?—Yes, I have no doubt of it.

55,695. That has shown itself, has it?—Yes, this year.

55,696. How many years did you have a good supply?—A good supply of whiting?

55,697. Yes.—For a good few years before last year.

55,698. Is this year the first year that the supply has been very bad?—Yes.

55,699. Is there no other circumstance to account for it?—No, except the small mesh of the net. If they kill the fry, they kill the large fish; we cannot expect them to grow, and it will be the same, in a few years, if these small boats go on the banks. We shall not have any large soles to catch.

55,700. (*Mr. Lefevre.*) How many of the large class of trawlers belong to Liverpool?—Between 50 and 60.

55,701. Does that include the boats at Hoylake?—Yes, we class them among ours.

55,702. How many have you?—Ten.

55,703. Fifteen years ago, how many were there?—Trawlers?

55,704. Yes, of the large class?—We had more then, because we had the Liverpool Fish Company 20 years ago; but they could not make it pay, and they sold their vessels at a great sacrifice.

55,705. There was a trawling company here 20 years ago?—Yes, there were two companies.

55,706-7. How many boats had they?—One company had 19 or 20, and then the other had Hewitt's smacks from London, but they only lasted one season.

55,708-9. Did their vessels fall into the hands of fishermen?—Yes, and fishmongers; but some went away from the country.

55,710. How many were there previous to the establishment of those companies?—We have never had less than 30 or 40 vessels, and there is very little difference now. There have been 40 for the last 25 or 30 years, but there have been occasionally some going and some coming.

55,711. On the whole, for 20 or 30 years the number has not been increasing or diminishing?—No, except a trifle, one or two or so.

55,712. Have you built any vessels within the last five or six years?—Yes.

55,713. How many?—I cannot say exactly how many we have built within the last seven or eight years; three or four, I believe. I think I have built four at Runcorn.

55,714. You did that, notwithstanding the diminution of the fish which has been going on for the last 10 years?—We built them to replace others. Some we sold. I sold two lately to go to Dublin.

55,715. Have the vessels been increasing in size of late years?—Yes, they are finer smacks now.

55,716. Have the nets and the size of the beam increased also?—I do not think the beam has increased much.

55,717. What is the size of the beam you use?—About 46 feet. We formerly had them, about 30 years ago, with a beam of about 42 feet to much smaller smacks.

55,718. Would you think it any impediment to the fishing here, if you were prohibited from using a beam of more than 38 feet long?—I think a beam of 45 or 46 feet is quite short enough for the fine large vessels we are using now.

55,719. What is the tonnage of those vessels?—From 30 to 40 tons, new measurement. Some will carry about 70 tons of cargo.

55,720. How many men do they carry?—Four men and a boy.

55,721. Do they carry more men than they did formerly?—Yes.

55,722. Have the vessels within the last 20 years years doubled in size?—No.

55,723. Have they increased from 20 to 30 tons?—Some vessels have increased to that extent, and some have not. Some of the old vessels were large vessels, because they used pilot vessels for fishing boats.

55,724. Do you think the whole amount of fish brought in by the boats is less than it was 20 years ago, taking the whole of the year round?—I should think it is less.

55,725. But yet you say the price has not much altered?—The price is rather higher, taking it on the average.

55,726. Has that small class of boats you spoke of been shrimping since you can recollect, or has shrimping only been known of late years?—They have always been shrimping since I can recollect; but they had not as fine boats as they have now.

55,727-8. Have they increased in numbers?—Yes, very much.

55,729. Do you think that the shrimping does any harm in destroying the fry of fish?—There is no doubt at all that it does, in certain months of the year, upon the banks.

55,730. I do not talk of the boats that trawl for small soles, but of the shrimping in the months of August, September, and October; do they do a great deal of harm?—Yes; they have got a trap inside the net, and they catch small soles with them.

55,731. Where they have no trap, do they do harm?—No, I think not. When they catch shrimps with a bow net they do not do any harm.

55,732. Do you think that they do not catch small fry at all with them?—No, not of any consequence.

55,733. Have you observed it?—No; but I have seen them bring them in with the bow net.

55,734. Has it been the fashion of late years for the shrimpers to have a pocket or trap in the net?—I cannot say. I do not understand much about them.

55,735. I want to gather whether it is your opinion that the shrimping should be put a stop to in these months?—Not if they have the legal beam to the shrimp net.

55,736. What should be the legal beam?—What they call the bow net. Then they could have it as large as they liked.

55,737-8. But the mesh of that must be small enough to catch shrimps?—Yes; they could have the mesh made as small as they liked, and would catch plenty.

55,739. That net could be used without disadvantage to the trawlers?—Yes.

55,740. Do your own vessels trawl much within an an easy distance from the shore?—They fish off Wales, and half away from here to the Isle of Man.

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55,741. Do they mostly fish between here and the Isle of Man, or do they go round to Carnarvon and Cardigan Bays ?—They go to both sometimes.

55,742. At what time of the year ?—I have seen them going in the back end in the winter season, in October, November, and about Christmas.

55,743. Do they fish much within three miles of the shore ?—I think not.

55,744. Would it be any injury to your business, if your own trawlers were prohibited from fishing within the bays ?—Yes, I think it would.

55,745. Would it cut off a good deal of their fishing ground ?—It would cut off a great supply of ray for the poor people. They catch a deal of that in the bays sometimes, and soles too. If they are out fishing for ray they get nothing else, and the poor people get all of it.

55,746. What bays are you speaking of ?—In Carnarvon and Cardigan Bays they catch a good deal of ray.

55,747. Do they fish within any of the bays off Great Ormes Head and on the Welsh coast ?—Yes, sometimes.

55,748. Do you think it would diminish the supply of fish, if your own boats were prohibited from fishing in the bays ?—Yes ; sometimes we would not get half the supply for the market. There are certain times of the year when they fish there ; they fish closer in for about two or three months.

55,749. Do your boats not fish over the same ground as the trawlers from Fleetwood ?—Very often ; they are all connected together.

55,750. Are you aware that they do not complain of the falling off of fish ?—They have been complaining of the falling off of fish, because a great many of their smacks went coasting last summer.

55,751. We heard no complaints from them. Is there a falling off in the soles alone, or is it in all fish ?—In all fish ; but it is more so in regard to soles and flukes. We used to get a beautiful fishing of flukes in the spring time ; but the Southport and Fleetwood boats, by fishing on the banks, have destroyed all the spawn of the flukes, as well as of the soles.

The witness withdrew.

R. Evans.

Robert Evans called and examined.

55,752. (*Mr. Caird.*) You are the master of a trawl-vessel ?—Yes.

55,753. Have you had many years' experience as a trawler off Liverpool ?—About 20 years.

55,754. What grounds do you chiefly frequent ?—Betwixt the light ship and the Isle of Man, Carnarvon, Redwharf Bay, and Cardigan Bay.

55,755. Over what part of the ground do you find that you have the most successful fishing ?—The best we have had this year was on a ground we only found out last year.

55,756. Where was it ?—In Cardigan Bay. The first time we started it was last May.

55,757. Had Cardigan Bay not been fished before ?—Not by our boats.

55,758. Not by trawl-boats ?—Not that we know of. The men belonging to Carnarvon told our boats of the ground. In winter weather we tried it, and we found plenty of fish.

55,759. When you are fishing in that bay, do you land your fish at Aberystwith ?—No, we bring them to Carnarvon.

55,760. Is this the first year you have been to Cardigan Bay ?—Yes.

55,761. Did many trawl-vessels go there for the first time also ?—No. Three of our vessels first started, and now there have been 12 or 13 boats there. They are all that have been there as yet.

55,762. Did it yield more fish than any other ground you have been in the habit of fishing upon ?—Yes ; when we first started there we made more than those who were fishing on this side.

55,763. You have continued during the season to fish on that ground ?—We were only there three weeks after first starting, when we came back, and went to the northward again.

55,764. Did the ground begin to give way ?—The soles were not as thick, and the summer was getting warmer.

55,765. Then you found it better to go to deeper water ?—Yes, between here and the Isle of Man.

55,766. On the ground you have continued to fish for many years ?—Yes.

55,767. Do you still find an abundance of fish on the ground you fish ?—Yes, just at that time, for about three months ; then they drop off.

55,768. Was there any particular fish more than another that became scarcer ?—All of it went scarce.

56,769. Did they shift their ground ?—They shifted off somewhere else.

55,770. Did you know where they had gone to ?—No.

55,771. You have not been able to find them ?—No.

55,772. When was that ?—In June.

55,773-4. Is it usual in June to find the fish become scarcer and shift their ground ?—They always go away from that ground after June.

55,775. It is a thing which has not happened exceptionally, but has been the case for many years ?—Yes, but they have not been near as thick for the last three or four years as they have been in other years.

55,776. On the ground between this and the Isle of Man ?—Yes.

55,777. Have any fish more particularly than another fallen off ?—Yes, skate, and soles, and plaice, and flukes, and haddocks and all those sorts of fish.

55,778. Haddocks, we understand, have entirely disappeared ?—Yes, they have gone altogether.

55,779. For a good while ?—Yes, and whiting.

55,780. The previous witness told us that you are now catching less whiting from having a smaller mesh in your nets.—The small mesh has caught them.

55,781. Are the fish very small ?—Some are big and some are very small.

55,782. Are they of a smaller class than you used to catch ?—Yes, they are a deal smaller. We could not catch the whiting we have caught with the mesh we used to have ; they would all have gone through.

55,783. What quantity of fish can you catch in one haul with your trawl net, taking it on the average of a good season ?—In one haul ?

55,784. Yes ?—It is very hard to tell.

55,785. Are you out for a week together, generally ?—We are out for three weeks sometimes.

55,786. Are you out for three weeks in the month of May ?—Yes.

55,787. And do you send home the fish daily by one of your fleet ?—Yes, every day. One boat takes it in turn, one boat one day and another another.

55,788. How much may you get in one boat for three weeks' fishing ?—Sometimes we may get 6*l.* a man, sometimes 7*l.* a man, sometimes 5*l.* a man. It is just according to what sort of luck we have when we are fishing.

55,789. 5*l.*, 6*l.*, or 7*l.* a man,—that will be the proportion which will fall to each man for three weeks' fishing ?—Yes.

55,790. Has it diminished much in recent years as compared with what it used to be ?—The fishing has gone a good deal worse ; for the last two or three years it has gone a great deal worse.

55,791. Is it only within the last two or three years that this great falling off has taken place ?—It began about three years ago, and it has been going worse every year.

55,792. What do you think is the cause of that ?—

We used to say it was the small boats with the small mesh and the small whiting mesh.

55,793. When did you introduce your small whiting mesh ?—We began with it about seven or eight years ago.

55,794. And it did not begin to show any injurious effect until two or three years ago ?—No.

55,795. Do you know how long the small boats have been fishing in the shallow water with the small mesh ?—About 20 years back.

55,796. As long as you can recollect ?—Yes.

55,797. Has this diminution only begun to show itself within the last two or three years?—They have not caught as much lately as they used to do.

55,798. Are the boats increasing rapidly ?—Every year.

55,799. Then they must find it a better business ?—Yes, it has been a good business for them this year. Some boats have had in a day 140 lbs. of small soles, about the length of my finger.

55,800. (*Mr. Lefevre.*) What would they sell for in the market ?—They would give 4*d.* a pound for them, and 8*d.* for the big ones.

55,801. Do you catch soles of that size ?—Not quite as small as they catch. We cannot do it. Our mesh is a deal bigger than theirs.

55,802. (*Mr. Caird.*) Within your recollection, has the number of boats with the deep-sea trawl very much increased ?—Yes, there are a great many more. There is a fleet now at Fleetwood, and I can recollect when there was only one there.

55,803. How many are there there now ?—There are now 30 or 40 there.

55,804. Are there more out of Liverpool and the neighbourhood than there used to be ?—I do not think that there are. I think not. I do not think there are more, or more out of Hoylake. There are 17 or 18 boats out of Hoylake.

55,805. I suppose you use a smaller mesh in the deep-sea trawl than you used to do ?—Yes, at the whiting time of the year. From now until the latter end of March.

55,806. What proportion of the whole catch of your fish is of that small size, the taking of which you think is injurious to the fishing ?—I do not know.

55,807. Suppose you had a haul in your net of 10 baskets of fish, how many baskets would be small fish, which you think ought not to be taken in that way ?—Five or six baskets out of the whole.

55,808. One half of the whole quantity ?—Yes.

55,809. And five years ago would you have taken almost none of that description of fish ?—We would have taken none of the small fish. They would have all gone through the mesh.

55,810. Do you bring everything you take on board to the market for sale ?—Yes, all that comes to the net.

55,811. Are there none so small that you throw them back again into the sea ?—Very few.

55,812. Do you find a market for all you can get and bring ashore ?—Yes, very near; we do not throw many away.

55,813. Do you ever come in contact with the line fishermen ?—No; I have been a good many years with the Isle of Man boats when they have been codfishing.

55,814. They do not complain that you interfere with them ?—No, I never heard them say anything.

55,815. (*Mr. Lefevre.*) Was there formerly any line-fishing from Liverpool ?—No; there is a little from Hoylake for a couple of months, but it is all going off now.

55,816. Twenty years ago, was there any line-fishing from Liverpool ?—There used to be more then than now. They got a good many codfish at Hoylake with lines, but now they are doing nothing at all with lines.

55,817. But, 20 years ago, from the port of Liverpool, was there any line-fishing ?—I do not recollect that there was.

55,818. Have you yourself seen these small trawlers at work ?—Yes.

55,819. Have you seen them haul up their trawls ?—Yes, and I have been with some of them.

55,820. Do they take any quantity of small fish, so small that they are unfit for the market ?—I have seen them come ashore in a day, and bring three or four hundredweight of small fish, so small that you might blow them away. They throw them on the beach when they are cleaning the stuff out.

55,821. Were they mostly small soles ?—Small soles, small flukes, and all sorts of fish.

55,822. What other sorts ?—They have said that they have had as much as would come to 20 baskets of soles if they had been big.

55,823. What other kinds ?—Small ray, just so large that you could see them.

55,824. What else ?—I do not know.

55,825. Did you ever see small herrings ?—No.

55,826. They are mostly flat-fish ?—Yes, they are the only fish that came ashore.

55,827. Do they throw any overboard ?—They throw it all overboard.

55,828. You mean the small ?—Yes.

55,829. Is it alive when it is thrown overboard ?—No, it is all dead. They have no time to clean the nets. They are "agate," working the boat all the time, and they leave them until they come ashore.

55,830. They wait until they come ashore before they throw the small fish overboard ?—Yes, they wait until they have finished the day's work, and they clean the fish as they come back. The small is then thrown away, and it is all dead.

55,831. Those boats are engaged in shrimping at other times of the year ?—Yes; part of their time they are shrimping, and in the other part trawling. But there are some shrimping all the year round. There are only half of them trawling now at Hoylake.

55,832. But of those 20 boats that go from Hoylake and Liverpool, one half of them are engaged in shrimping all the year round ?—Yes.

55,833. And one half give up shrimping for three months, to take to the small trawls ?—Yes.

55,834. Can you recollect when the small trawl was not used by the small boats ?—It is a good many years ago.

55,835. How many years ?—Thirty years, I suppose.

55,836. How many took to trawling then ?—There are about 10 at Hoylake now, out of 30.

55,837. What were there then ?—Not more than two or three.

55,838. Did they greatly increase in number ?—Yes, they increased. Some would have trawls now, but they could not exactly afford it for the time of year.

55,839. What is the length of the beam of those trawls ?—About 30 feet.

55,840. What is the size of the mesh ?—It is very small, about one-inch mesh, I suppose.

55,841. Is there a pocket in the net ?—Yes, the same as in the big boats.

55,842. What is the length of the net ?—It is 14 or 15 yards long from the top of the beam down to the bottom of the cod end.

55,843. Taking the boats shrimping during August, September, and October, do they take any number of small fish too ?—They are taking them all the year round.

55,844. But, during those three months, do they catch a large number of small soles ?—Yes.

55,845. Do many of them have pockets to their shrimp nets ?—No; what they have is a trap. They lace it along the back, and if a big skate or sole comes in, it drops down into the belly, and cannot get back again.

55,846. Is it sufficient to prevent small fry from getting out again ?—The small fry have nothing to do with it.

55,847. If small fry got into it, could they get out

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again ?—No, they could not get out again, if they once got into the net.

55,848. Then those 30 shrimpers that continue shrimping in August, September, and October, catch a considerable number of small fish ?—Yes ; it is they who do the damage.

55,849. What number of shrimpers were there 20 years ago ?—I cannot recollect.

55,850. Was there a great number then ?—Not in Liverpool, but I can hardly tell what there were in Hoylake.

55,851. Have they doubled within the last 20 years ?—There are more, certainly, but I do not know how many more exactly.

55,852. Which do you think do most harm in taking small fish, the shrimpers or the trawlers ?—The shrimpers.

55,853. On what ground,—have they a smaller mesh to their net ?—They are like to have a very small mesh to catch shrimps.

55,854. But, in catching the small fry of fish, the shrimpers do more harm than the small trawlers ?—Yes.

55,855. Is that because they have a smaller mesh ?—Yes, and they are on the bank all the time.

55,856. They fish in shallow water ?—Yes, all the time.

55,857–8. And they are more on the ground where the small fish are found ?—Yes.

55,859. Twenty years ago, were there 40 shrimpers and small trawlers fishing from Liverpool and Hoylake ?—Yes.

55,860. Were there more than that ?—Yes.

55,861. Then this mode of fishing has been going on for a great number of years, year after year ?—Yes.

55,862. But you did not discover any falling off in your fish until two or three years ago ?—No, we did not.

55,863. Do you think there is any mode of preventing the shrimpers from catching the small fry of fish ?—I do not know, I am sure.

57,864. Have you ever considered that there is any mode of preventing them, short of stopping them altogether ?—I do not see how it is to be done, for the shrimps are like to be caught.

55,865. Would the public do without their shrimps ?—That is what I am looking at.

55,866. Is it possible to put a stop to shrimping altogether,—have you considered whether that is possible ?—No, I do not think it is.

55,867. Then you do not think it would be possible to stop the catching of these small fish if the shrimping is allowed ?—All I say is, that if they use their bow nets they would catch a great deal less, but they would catch some for all that.

55,868. Are there a great number of fishermen who fish with the bow net now ?—No, there is not one in Hoylake who fishes with a bow net now.

55,869. Will you point out to me the difference in the nets ?—With a bow net they have a piece of wood, and they drag the net along the bottom. It does not go as much on the ground as the trawls. The shrimpers at Hoylake have proper trawls, the same as the big boats.

55,870. What is the length of the beam of the trawl used for shrimping ?—Twenty-one and twenty-two feet.

55,871. When did they give up the bow net ?—For the last 20 years at Hoylake.

55,872. Did they give it up because they found they could catch more fish with the trawl ?—They can catch twice as much with the trawl.

55,873. Then if they work them as bow nets, they would not catch one half the quantity they do now ?—No, not one half.

55,874. (*Mr. Caird.*) Do you allude to shrimps, or to all the kinds of fish they catch ?—There is nothing but shrimps and fry that they can catch.

55,875. If they used the bow net alone, could they make as good a fishing of shrimps as by using the other net alone ?—No.

55,876. They could get more shrimps by the trawl net ?—Yes.

55,877. (*Mr. Lefevre.*) If a stop were to be put to the small class of trawlers during August, September, and October, would they take to shrimping during those months ?—Some shrimp all the time.

55,878. But if trawling were prohibited, would they be engaged in shrimping during those months ?—Yes, they would be like to go shrimping because there would be nothing else for them.

55,879. Then would it not follow that they would catch more small fry by shrimping than trawling ?—They would not catch the soles they are catching now. They will all go into deep water in another month or two, and then they cannot catch them.

55,880. But you told us that the shrimpers catch more small fry ?—Yes, but it is a smaller sort, even smaller than they catch now.

55,881. Do not the shrimpers catch small soles ?—Yes.

55,882. Then if trawling were given up during those three months by the small class of trawlers they would take to shrimping, and catch as many as they do now ?—There are many shrimping all the time. They would not catch those coming in now.

55,883. They would not catch the larger class of soles, but they would catch the small ones ?—Yes.

55,884. They would catch more unfit for the market, and not as many that would be fit for the market ?—Yes.

55,885. (*Mr. Caird.*) If that was the effect of a close time, it would be rather injurious to the fishing than beneficial ?—All that would be necessary to be done would be that they should have the same size of mesh when trawling as the big boats.

55,886. You think the regulation of the mesh is the best thing ?—Yes.

55,887–90. (*Mr. Lefevre.*) Would it be any injury to the trawlers here, if they were not allowed to use a mesh smaller than $3\frac{1}{2}$ inches when pulled out ?—That would be a great size ; $2\frac{1}{2}$ inches are plenty.

55,891. Two and a half are enough ?—Yes.

55,892. Did you ever hear of a law prohibiting the trawlers from using a mesh of less than $3\frac{1}{2}$ inches when pulled out ?—No.

55,893. You never heard of it ?—No.

55,894. Do you think it would be an injury if such a law was carried out, then ?—They could catch nothing at all, if they had a mesh that size.

55,895. Would it cut away half of your fishing ?—It would cut it away altogether.

55,896. With regard to the length of the beam, you say it is 46 feet long ?—Yes.

55,897. Would it be injurious to be prohibited from using one longer than 38 feet ?—The big boats would have to lay up, they could not work them at all.

55,898. What is the weight of your trawl heads ?—Six score pounds each head.

55,899. What do you weight your foot rope with ?—It will be about a hundredweight and a half when the worm is on it. We put ropes to it.

55,900. Would it be any injury to prohibit you from weighting your ground-rope with more than 110 pounds ?—It would make no difference at all.

55,901. Is there any reason why there should be a limit as to the weight put upon your ground-rope ?—No.

55,902. Do you sometimes put a greater weight than at other times, according to the class of fish you wish to catch ?—Yes, according to where we are. Sometimes we do not put half the weight upon it.

55,903. Do you often come across the herring fishermen from the Isle of Man ?—No, we never come across them.

55,904. Do you not fish off the Isle of Man when the herring-fishing is taking place there ?—No, we catch herrings from here and from Howth in this season.

55,905. But do you trawl there when the herring

fishermen are at work there?—No, we do not go as far.

55,906. Do you fall in with any fleets of herring-boats in Cardigan or Carnarvon Bay?—No.

55,907. Do you trawl in the channel off Dublin?—No.

55,908. Have the fishermen here most of them an interest in the trawl-boats?—Some of them have; some of the captains have.

55,909. Are you paid by shares?—Yes.

55,910. Do the smaller class of trawlers and shrimpers mainly belong to the fishermen?—Yes, they all belong to the fishermen themselves.

55,911. (*Mr. Caird.*) Have you ever noticed on the banks here whether there are any pools of water left when the tide goes out?—Yes.

55,912. Have you observed any small fry in those pools?—No, we never take any notice of that.

55,913. We were told that in some of the bays further north a great destruction of small fry often occurs in consequence of the water being evaporated in warm weather; have you observed anything of the sort here?—No.

55,914. A destruction of that kind does not occur here?—No. It may, but I never knew it myself.

55,915. (*Mr. Lefevre.*) Do you fish much within three miles of the coast, along Cardigan Bay and Carnarvon Bay?—In Cardigan Bay we fish 20 miles off the land.

55,916. Not nearer than that?—No.

55,917. On the Welsh coast generally do you fish within three miles of the land?—Within three and four miles along Redwharf from Ormes Head down to Lynas.

55,918. In what depth?—From eight, nine, and ten fathoms down to 12 and 14 fathoms.

55,919. Do you catch many small fish there?—No, we only go there when the fish are large.

55,920. Is there any time of the year when you catch more small fish than another?—Yes.

55,921. What time of the year is that?—Right in the middle of the summer, the latter end of June and July.

55,922. Where are you fishing then?—All in the bays. There would be no use in going too far off.

55,923. What would be the effect of prohibiting you from fishing within the headlands in the bays? Suppose you were prohibited from fishing within the headlands in the bays, would it be an injury to your fishing?—For what time?

55,924. All the year round.—Yes, it would be a great injury, just when the fish set in. Both soles and flukes, and skate, and everything set in at a certain time of the year, and they are pretty large too.

55,925. What time of the year do they come into the bays?—They are in the bays now.

55,926. In the summer time?—In the latter end of June and July we catch small fish, and then they go larger afterwards.

55,927. Then you fish again in the bays at this time of the year?—Yes.

55,928. Would it cut off one half of your fishing, if you were prohibited from fishing within the headlands in the bays all the year round?—Yes, it would.

55,929. Would it be possible to carry on trawling with benefit from here, if fishing within the bays were prohibited?—We get a good deal now, and the fish are all getting large.

55,930. What would be the effect upon the trawling trade in Liverpool, if fishing within the bays were prohibited?—It would stop us from getting a good deal of fish, that is all I know.

55,931. (*Mr. Caird.*) Then are we to understand from you, that the only remedy you see for the destruction of small fish would be by making a regulation that a certain mesh should be used less than which should not be permitted?—Yes.

55,932. And it should apply to all descriptions of boats, both large and small, fishing in shallow and in deep water?—Yes, they must keep the same rule. Every one must follow the same rule. If you were to allow one to have a small mesh and another a big one, one boat would come in with a catch of whiting and another without any at all; one might have 10*l.* worth of whiting and another not four shillings worth.

55,933. Your remedy is a prescribed mesh, a size of mesh smaller than which shall not be used?—Yes.

55,934. I think you also stated that there should be some regulation as to the shrimp net, viz., that it should not have a bag in it for catching small fish?—The bag does not do any harm at all.

55,935. Then what is the objection you have to the shrimp net?—They ought to have bow nets, instead of trawls.

55,936. The shrimpers should not be permitted to fish with a trawl net?—No.

55,937. The effect of that would be that they would not catch as many shrimps?—Yes; and not as many small fry.

55,938. (*Mr. Lefevre.*) Is there any time of year when the shrimpers catch more small fry than another?—There is a time of year when they would catch more than another.

55,939, But do they catch them in considerable quantities all the year round?—They catch them all the year round, but in the summer they catch a deal more.

55,940. Would it be any advantage to stop shrimping during the months of December, January and February?—No.

55,941. It would be of no advantage?—No, I think not.

The witness withdrew.

THOMAS WHITAWAY called and examined.

55,942. (*Mr. Caird.*) Are you a trawl fisherman?—Yes.

55,943. Are you at present engaged in that business?—No, I have boats of my own, but I do not go to sea.

55,944. You are a trawl-boat owner?—Yes.

55,945. Have you been a trawl fisher?—Yes.

55,946. You have had considerable experience in connexion with trawl-fishing on the coast of Liverpool?—Yes.

55,947. For many years back?—For the last 40 years.

55,948. Can you tell us if the supply of fish which the trawl-vessels get is increasing or diminishing here?—The best supply we get is between Isle of Man and Liverpool, about halfway between.

55,949. Is the supply as good as it used to be?—I cannot say that it is by a great deal.

55,950. Has the number of boats fishing on these grounds increased?—There has not been any increase in the number of boats, but there have been a good many that have gone away, and others have come in their place.

55,951. The boats that have recently been built are larger and finer, and the nets are better?—The nets are longer and the boats are larger.

55,952. Are the meshes smaller?—Yes.

55,953. What has been the result of that,—have they got a larger supply of fish than they used to get?—No, the result has been that one has been getting a smaller mesh, so as to get more fish than another.

55,954. Have they succeeded in doing that?—Yes, a good many of them.

55,955. Do the boats with the smaller mesh get a larger quantity of fish?—Yes.

55,956. Are they marketable fish?—Yes, they bring them into the market, and they are sold.

55,957. Some have not succeeded in getting so

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many fish as they used to get?—No, they do not succeed in getting as many fish as they used to do, by nearly one half.

55,958. What is the cause of that?—I think it is the small mesh.

55,959. The small mesh they themselves use?—Yes.

55,960. Which has generally reduced the fish on the fishing bank?—Yes, I think so.

55,961. Is there a large extent of ground between Liverpool and the Isle of Man which is suitable for trawling over?—The ground is not very extensive. It is in a small compass from this to the Isle of Man and round about, unless the boats go to Wales and Carnarvon Bay. The fishing round Liverpool is not large.

55,962. (*Mr. Lefevre.*) Is there a great deal of ground between this and the Isle of Man that is rough and unfit for fishing?—There is a good deal of ground between this and the Isle of Man upon which they cannot fish. They have only a certain district, a certain length and breadth upon which they can fish.

55,963. What is the length and breadth?—I cannot say exactly.

55,964. Can you give us anything like an idea?—No.

55,965. (*Mr. Caird.*) Can the boats always take fish upon that ground?—At this time of the year the boats shift to look after the fish; when they cannot get it at other places then they draw nearer home.

55,966. During all your experience, the fish have been in the habit of leaving certain grounds, and frequenting other grounds, as the time of year progresses?—Yes.

55,967. The fishermen know pretty well how to follow them?—They follow them according to their own opinion. They go inside or outside, and they search about for them as they think they can find them.

55,968. Then you attribute the falling off in the fish chiefly to the use of the small mesh in the net?—Yes.

55,969. Do you refer to your own vessels as well as to the small vessels which are fishing in shallow water?—I propose that we should have a bigger mesh than we have at present. I think that has been the cause of a great deal of the falling off. We have been killing a great deal of the fry, and I think we ought to have the old regular mesh which we used to have.

55,970. You think that some regulation should be enforced as to the size of the mesh?—Yes, I think that would be better for the fishermen themselves.

55,971. If that were done, you think it would lead to a larger supply of fish?—It would, I think, in the course of time. It might not be in my time, but it would in the course of time. It would not kill the small fry, but it would give them a chance of getting through the net alive.

55,972. Do you catch more whiting with the deep-sea trawls than you did?—They do not catch many now, but they have caught large quantities by using a small mesh.

55,973. Are there any whiting caught by the small boats in shallow waters with the small mesh?—I cannot say what they catch in shallow waters, because I am not much acquainted with them.

55,974. You do not know whether there is any supply of whiting coming from those small boats?—No, I do not, but I think not.

55,975. Then the decrease of whiting must be solely attributable to the use of the small mesh in the large boats?—Yes.

55,976. Have you had any experience of shrimping?—No.

55,977. Nor of line-fishing?—No; all my experience has been in connexion with trawl-fishing.

55,978. Do you not find that the trawl-fishing is as profitable a business as it was some 10 years ago? It is not as profitable as it was, the fish are not caught now.

55,979. Is it not the fact that some new large vessels have been built within the last few years?—They have been building them larger, but that was to enable them to go out all the winter through, when gales of wind are blowing. They have got them larger on that account.

55,980. Your experience then only applies to the deep-sea trawling?—That is all.

55,981. You have only fished with advantage lately in Cardigan Bay?—I never was fishing there.

55,982. Or in Carnarvon Bay?—Yes, I was there, and in Redwharf Bay, but I was never down in Cardigan Bay.

55,983. Is it a good ground for trawling along the Welsh coast?—Yes, it is very good ground, as far as I know it.

55,984. Is there a good ground for trawling between Bangor and the Dee?—Yes.

55,985. Is it regularly trawled over?—Yes, in the season of the year they go there.

55,986. The deep-sea trawl-vessels go there?—Sometimes.

55,987. Is it trawled by the small boats?—Some of the big ones go there trawling, as well as the small ones, at times.

55,988. Is there any particular kind of fish you notice that has fallen off more than another as caught by the deep-sea trawlers?—I do not know particularly. It has all gone away partly, more or less.

55,989. Has there been a large increase in the number of vessels employed in trawling in the deep sea altogether, in your experience?—There are not very many now, but there may be 20 vessels more than there used to be in former times.

55,990. Are we to understand that with the increase of vessels compared with what it was 10 or 12 years ago, there is a smaller total supply of fish caught than there used to be?—Yes, there is not such a supply of fish caught as there used to be, not by one half.

55,991. Has the price of fish increased very much here?—It is according to the catch; according to the quality.

55,992. Has there been a corresponding increase of price equal to the falling off in the quantity of fish?—No; it all depends upon the scarceness of the market when the fish come in what price we get; it may be affected a great deal by bad weather.

55,993. (*Mr. Lefevre.*) How many trawlers have you got yourself?—Three.

55,994. When did you give up going out yourself in them?—About five years ago.

55,995. Since you gave up going out yourself, have they not done as well?—They have not done as well as they did when I was young, and there has not been as much fish caught.

55,996. When did you begin to observe the falling off of the fish?—For the last two or three years.

55,997. Then you agree that up to two or three years ago there was not so great a falling off in the fish?—There had been a falling off, a little at a time, for several years before that, but not to be as it is now.

55,998. The greatest falling off you have noticed within the last two or three years?—Yes.

55,999. When did the trawl-boats take to using a smaller mesh?—I cannot say, but I suppose about four or five years ago.

56,000. Have any of them two nets, one with a small mesh, and another with a large one?—I do not know whether any of them have two trawls, one a small one and one a big one, but I have heard it said that they have.

56,001. Has the weather during the last year or two been any impediment to the fishing?—The weather is a good deal against us sometimes.

56,002. During the last year or two, has the weather been against you?—It has not been so bad here.

56,003. It has not been bad for trawling?—No.

56,004. What is the extent of the trawling ground

you can trawl over ?—About 50 or 60 miles, taking the length and breadth.

56,005. Do all the boats from Liverpool, Fleetwood, Hoylake, and other parts fish on that ground ?—Yes, they are all there at times.

56,006. Do the Dublin boats go over the same ground ?—No, they never go there.

56,007. There must be a fleet of nearly 100 boats fishing on that ground ?—I daresay, with the Liverpool and Fleetwood boats altogether there are 100.

56,008. Is it not possible that the number of trawl-boats have increased too much for the amount of ground they fish over ?—I cannot say, but if they had the larger mesh it would give liberty to the fish to go through.

56,009. If they used the larger mesh it would be better for themselves ?—I think so.

56,010. Have you tried it yourself in your boats ?—No. The piece of net which has been shown to you is what my boats have. I made them bring it on shore on Saturday, and I took the size of it.

56,011. Is your own somewhat larger ?—My own boats are large boats of 41 or 42 tons.

56,012. What is the size of your mesh ?—About two and a half or three inches.

56,013. You say it would be an advantage if you used a larger mesh. Have you not tried it yourself ?—I have not tried it, because I have not been out to sea with the boats for the last five years. The men who are in it try it themselves.

56,014. You leave it to the master of the vessel ?—Yes, to the master of the boat.

56,015. You do not exercise any authority yourself over the mesh ?—No.

56,016. You leave it entirely to the master?—Yes; he finds his own size of mesh, according to what his opinion may be. He uses what size he thinks will do best.

56,017. When you were yourself fishing, you did use a larger mesh ?—Yes.

56,018. Have you ever observed the small fish brought in by the smaller class of trawlers ?—No, I have not been much in the market to see anything of the sort.

The witness withdrew.

JAMES CLARK called and examined.

J. Clark.

56,019. (*Mr. Caird.*) You have heard the evidence given to us in regard to trawling in the deep sea ?—Yes.

56,020. Have you anything to add to it ?—Nothing further than that no boat that fishes with a trawl beam, either small or large, should have less than a three-inch mesh.

56,021. A mesh of less then three inches ought not to be permitted in beam trawling ?—No, and then let their boat be ever so big, they should not be allowed to have above a 40-feet beam.

56,022. Does not the length of the beam depend entirely on the size of the vessel ?—No, they can work a beam of any length in the vessel.

56,023. Have you been practising trawling ?—Yes.

56,024. How long have you been trawling ?—Thirty years and more.

56,025. If you had a large powerful vessel, would it not run away with a small beam trawl ?—Not at all. I never used to have a beam of more than 38 feet long.

56,026. What was the size and tonnage of the vessel ?—The same size as I have at present, namely, 50 feet on the keel.

56,027. What is your beam now ?—Forty feet long.

56,028. What size was it formerly ?—Thirty-eight feet.

56,029. The vessel is of the same size ?—Yes.

56,030. What is the weight of your head-irons ?—They are heavy.

56,031. Are they heavier in proportion ?—Yes, in the same proportion as the largest size of vessel.

56,032. Would it not be the case, if you used a lighter beam and head-irons, that a more powerful vessel would not be able to fish in the same way ?—You can have a beam of the same weight, and the length of the beam, and the weight of the head-irons, and everything in the same proportion.

56,033. What would the effect of that be ?—Instead of sweeping the length we at present sweep, we should only sweep three parts of it.

56,034. Then you would only have a chance of catching three parts of the fish ?—We made a good living before by it. Some of the boats have now got a beam 48 feet long, and some of them have got them quite as large as the vessel. I think they ought to have a beam of the proper length. Let the boat be big or small, a beam 40 feet long is quite long enough.

56,035. If she can have a beam 48 feet long, why should she not have it ?—I think the big boats, which have a beam 48 feet long, would be just as well with a 40-feet beam.

56,036. What is the amount of tonnage and the length of vessel that could carry a 48-feet beam ?—The length of the vessel is 54 feet.

56,037–38. You say you should change and carry only a 40-feet beam ?—Yes.

56,039. What size of vessel smaller than that could also carry a 40-feet beam ?—There is scarcely a boat out of Liverpool that could not carry one.

56,040. Then you would reduce the power of the larger vessels to that of the smaller ones ?—Yes.

56,041. What advantage would there be to the public in that ?—The vessels would catch less fish.

56,042. But we want them to catch more fish, if possible.—They must have a bigger mesh to catch more fish.

56,043. Is it not rather your objection, that a small mesh should be used ?—Yes, and that the beam of the vessel should not be more than a certain length.

56,044. Have you anything else to say to us ?—No, excepting with regard to the shrimpers. The bow nets and the trawl nets they use are killing a great deal of small fish. These shrimpers made a living before they had trawl nets to catch the shrimps, but now they have trawl nets 25 feet long on the beam, and they are killing a power of small fish.

56,045. Have you seen them at work ?—Yes, many a time.

56,046. Have you seen what they have caught ?—Yes.

56,047. Have you seen small fish in the trawls ?—Yes.

56,048. Are you speaking of the shrimpers in the river ?—Yes, the shrimpers belonging to the Liverpool river.

56,049. Where do they fish ?—In the Channel between the light ship and Formby Channel.

56,050. Do they fish with bow nets ?—Yes.

56,051. When did they introduce the trawl net for shrimping ?—18 or 19 years ago.

56,052. Have they been fishing for 18 or 19 years with the trawl net for shrimps ?—I daresay they have.

56,053. When did the damage first make its appearance ?—For a few years past.

56,054. (*Mr. Lefevre.*) Do you agree with the previous witnesses, that a great diminution of the fish here has taken place during the last two or three years ?—Yes, for the last few years a diminution has taken place. It has been since they begun to have the nets with the small mesh. The last time I was out in the deep water we had such a haul of fish that it was as much as we could do to get them on board with the tackle we had; and out of that we had only a basket and a half of good fish. There were 10 or 15 baskets which I shovelled overboard again; I was glad to get rid of it.

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56,055. Were they alive?—Some were alive, but the greater part were dead.

56,056. How long had your trawl been down?—Something like four or five hours.

56,057. (*Mr. Caird.*) What is the size of your mesh?—Our mesh, I daresay, is two inches.

56,058. (*Mr. Lefevre.*) When drawn out?—Yes.

56,059. Then it is one of the smallest class of nets?—No, there are smaller than that. There are boats with nets that you could not push your finger through. Those are the boats which carry a beam of 48 or 49 feet.

56,060. When did you take to the small mesh you speak of?—I never have had a small mesh yet.

56,061. You say that your mesh is only two inches?—Yes, but that is a great deal larger than they have.

56,062. When did you take to that mesh?—I have had that mesh since I have had charge of the vessel.

56,063. Is the vessel your own?—Yes.

56,064. (*Mr. Caird.*) With a two-inch mesh, you told us that something like nine-tenths of your whole catch the other day was small fish?—Yes, they were small garvies, small flukes, and such like fish, which could not escape out of the net.

56,065. With that mesh you did considerable damage to the brood of fish?—Yes.

56,066. You destroyed a large quantity not fit for the market?—Yes.

56,067. Then a two-inch mesh, for that reason, would seem to be too small?—Yes; a three-inch mesh would be little enough for any net.

56,068. (*Mr. Lefevre.*) Would not three and a half inches be the proper size?—No, that would be too large.

56,069. Why?—The hole would not hold the fish about the fins; they would go through.

56,070. What would be the effect of it?—We should catch a great deal less soles.

56,071. When did you alter the beam of your trawl from 38 to 47 feet?—I have always, since I had a vessel, had my beam 40 feet long.

56,072. When did you alter it from 40 to 47 feet?—Last Christmas.

56,073. What made you do so?—Other boats had them, and the men who sailed with me said, "Why "not have a beam of the same length as other "people?" There was considerable grumbling because I did not have a small mesh to catch the whitings; but I thought that, if I did not have whitings, the catch of other fish, on the whole, would be quite as well for me. I have known other boats come up with 40 or 50 baskets of whiting, when I have not had one.

56,074. What size were those whiting?—Some of them were only the length of your finger.

56,075. Were they brought to market?—Of course they came to the market, and in a scarce time they will get something like 4*s.* or 5*s.* a basket for them, whereas, if they were proper fish, they would bring in 10*s.* or 11*s.*

56,076. If the fish were allowed to remain in the water for one year, and you then caught them, they would bring 10*s.* or 11*s.*?—Yes, but they would get bigger fish in less than a year.

56,077. In six months?—Yes.

56,078. Were those whiting damaged at all by being brought up in the trawl?—Damaged?

56,079. Yes; rubbed about, and the scales broken off?—Not much; there may have been a few here and there that were crushed.

56,080. How many baskets have you seen brought up together?—I have seen boatloads come to the market, when I have come in with only six or seven baskets.

56,081-2. How many baskets would they have?—Thirty or forty baskets.

56,083. When they were brought up in such quantities were they damaged from being knocked about and bruised in the trawl net?—Not much. There may have been a few injured, from getting in 12 baskets in a haul. They cannot open the net without having some of them crushed, and many a time we are obliged to tread among them with our feet.

56,084. But, on the whole, there is not much damage done?—There may be several crushed; you may get a basketful out of 20. Some of them are shovelled overboard, but they shovel very few overboard if they can help it.

56,085. Do you ever take up spawn in your trawl net?—Yes, often.

56,086. Where have you done that?—Inshore, between Morecambe, Liverpool, and the light ship.

56,087. What kind of spawn is it?—It is impossible to tell.

56,088. Do you know the difference between herring spawn and squid spawn, and between squid spawn and sole spawn?—No, I don't know the difference between sole spawn and fluke spawn.

56,089. Do you know what sole spawn is?—No; it is like any other spawn.

56,090. But you know that it is spawn?—I consider that all spawn mixes together, flukes, soles, garvies, gurnards, and all sorts of spawn mix together.

56,091. Do you think it is desirable that your boats should be prohibited from trawling in the bays when they are likely to take up this spawn?—I do not think it is a benefit to fish inshore when we we could only catch small fish.

56,092. Then why have you done so?—I have done so because others have done so, in order to make a livelihood. If one or two boats come up with a catch of fish, and I am out in deep water, and cannot get a catch, then I cannot get men to come into the vessel and work for me.

56,093. It does not depend upon your own opinion alone, but upon that of your men also?—Yes.

The witness withdrew.

W. Langharne.

William Langharne called and examined.

56,094. (*Mr. Caird.*) What is your present occupation?—I am master of a fishing smack.

56,095. Of a deep-sea trawler?—Yes.

56,096. Have you anything to add to the evidence we have already heard, in regard to deep-sea trawling?—I have nothing to add in reference to the deep-sea trawling, more than this, that the small mesh that is used is only used when there are scarcely any fry to be obtained. In the summer months the small mesh is taken from the net, and a large mesh is put in. The small mesh is only used in the winter season.

56,097. You do not use the small mesh the whole of the year round?—No.

56,098. In the summer season are you more likely to catch young immature fish?—Yes.

56,099. Then you do not catch many small fish?—No.

56,100. How do you reconcile that with the statement made to us, that large quantities of small whiting are caught?—That is not so. The small mesh is not used in the June season. If we were to use the small mesh, it would be injurious both to the owners of the boats and the men, because we should accumulate great quantities of sand, which would tear the nets out of the frames.

56,101. That would be done equally in the winter and the summer?—No, not in the winter.

56,102. For what reason?—From the coldness of the weather. The sand becomes firmer and harder at the bottom; we scarcely get any in the winter, only in the summer.

56,103. Both for the convenience of working the net, and in order that you may not catch immature fish, you do not use a small mesh in summer?—It is

not because we do not want to catch immature fish, but because we do not want to lose a portion of our nets.

56,104. It is not to avoid the capture of immature fish, but to facilitate your own operations as fishermen ?—Yes.

56,105. Do you think there is a large destruction of small immature fish by the use of that net ?—Not in the winter season.

56,106. Do you not catch small fish ?—No, there are only marketable fish caught in the winter season.

56,107. In the summer season do you catch the small fry of fish ?—Yes ; however large the mesh would be there would be a portion of the fry of the fish caught among the large.

56,108. Is it because your trawl-boats find it to their advantage, that they do not use that small mesh in the summer season ?—Yes.

56,109. As a matter of rule, they do not ?—As a matter of rule, they take away the small mesh entirely. If any one retains it, it is to his own disadvantage.

56,110. Then the small mesh is not used in the summer at all ?—Not as a rule.

56,111. In the winter you say you sometimes catch a proportion of fry with the large mesh ?—Yes, it is in the winter that a portion of fry is caught with the large mesh, but it is only a very small proportion.

56,112. Do they most of them have two trawl nets? —Yes, two trawl nets ; one has generally a large mesh, and the other a small. It is according to the place where we are fishing ; whiting are only taken about certain parts of the coast.

56,113. Is the same size of beam used for both ?—Yes, it is the same frame that the net is fastened to.

56,114. (*Mr. Lefevre.*) There are two kinds of net ? —Yes, one has larger meshes for the tail part of the net and the other small ones.

56,115. Do all the trawlers from Liverpool and Hoylake have these two kinds of nets ?—Yes ; when the fry are most frequently on the coast they use a large mesh, so that the fishing may not be detrimental. It would injure both owner and men if they were to use a small mesh, or if they were to have a mesh any larger than they generally use.

56,116. What is the size of the mesh in what you call the large nets ?—There are several sizes of meshes in the net.

56,117. But I want to know the smallest size ?—In the back part ?

56,118. Yes.—About $1\frac{1}{4}$, I think. That would be the size of the kibble that the net was made upon.

56,119. Do you mean pulled out, or from knot to knot ?—From knot to knot.

56,120. Would it be $2\frac{1}{2}$ inches pulled out, and $1\frac{1}{4}$ from knot to knot on the line ?—Yes.

56,121. That is the smallest mesh used in the large meshed net ?—Yes.

56,122. What is the smallest sized mesh that is used for catching whiting ?—The last that the net is made upon will be three quarters of an inch and from that to one inch.

56,123. Would you attach much importance to any regulation as regards the size of the mesh of the net ?—Not in the least.

56,124. You think the fishermen themselves, from their own interests, would be likely to adopt such a mesh in the various seasons of the year as would be most advantageous to the fishing ?—Yes, it has always been the case for the last 10 years.

56,125. Have you found, in the course of your experience as a fisherman, that there is a larger demand and a better price for small sized fish than there was some years ago ?—There is a larger demand ; the population is much larger, and the increase of boats has not been in proportion.

56,126. Can you get a price for the small fish that formerly you could not get ?—Yes.

56,127. In that way you are tempted to take smaller fish and bring them to the market ?—No, it is the whiting we catch. In the winter season we should not procure half a livelihood, if we did not use the small mesh to catch whiting.

56,128. Is it a fact that the whiting during the last winter have much diminished in quantity ?—Yes, this last winter they did not frequent the coast so much. They are a fish which come to the coast and then leave it.

56,129. You do not attribute it to over-fishing ?—No, because formerly there were no whiting on the coast.

56,130. Two years ago you had a large fishing of whiting ?—Yes.

56,131. You expect them to return again ?—They may return again more plentifully than ever. I hope they will this winter.

56,132. You do not attribute the decrease of the whiting to the size of the mesh of the net you use ? —Not in the least.

56,133. What is your experience in regard to the quantity of fish that are to be caught on the fishing banks between this and the Isle of Man—has it increased or diminished within the last 15 years ?—It has not diminished with me.

56,134. Can you get as good a living as ever you did ?—I can make a better living now than ever I did.

56,135. The haddocks have to a great extent disappeared ?—The haddocks at one time never visited the coast at all. There was a quantity of them that visited the coast for some period of time, but not for any great length, and then they entirely vanished.

56,136. Is there any other kind of fish that has in a marked manner diminished on the fishing banks that you frequent ?—No, I have never taken any notice of anything of the kind. The last season or two I had a better fishing of soles than ever I have had during the time I have been trawling.

56,137. You heard the evidence of the previous witness that not only was the quantity of the different kinds of fish caught by the trawl vessels on these banks very much diminished, but that the quality too, as regards size, had also diminished—is that the result of your experience ?—My experience is, that I have caught more during the last two years than ever I caught before, but I admit that greater exertions have been made.

56,138. In what way have you used greater exertions,—have you visited new fishing grounds ?—No.

56,139. You have been upon the same fishing grounds ?—Yes.

56,140. Have you stayed longer on the grounds ?—No.

56,141. Then in what way have you been using greater exertions ?—We have been going out oftener.

56,142. You have been oftener on the grounds ?—Yes.

56,143. You have worked harder ?—Yes. We are obliged to work harder at the present time than we did formerly. Within my experience, it was a common case for a fisherman to go out and catch a quantity of fish, and bring it to the market, and accumulate as much as would allow them to be in stock for a week or a fortnight. They cannot do that now, if they are anxious to procure an honest livelihood.

56,144. That would show that there is not as many fish to be taken in the same time and with the same exertions ?—There are as many fish to be taken, but there are more boats to take them. The boats were able formerly to accumulate more money from the quantity of fish they caught.

56,145. Then is it the case that the fishing grounds are as productive as ever they were, but that individual boats may not get as many, because there are more boats fishing ?—I think that is the substance of the whole.

56,146. The ground is limited, and there cannot be more than a certain number fishing to a profit upon it ?—There are a greater number of boats and there are larger nets. They must have larger nets to pay the owner, because the boats are now 50 tons, and they take more to keep them up in wear and tear than the boats of 30 tons. They must have

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larger boats and larger beams, or the owners would have to give up their property at a loss.

56,147. (*Mr. Caird.*) Have you fished over the same ground for successive days ?—I have.

56,148. Do you find that they give way in the yield of fish ?—Yes, some portions of the coast will not yield as much fish, but it has always been customary to visit one place at one time and then another, and we go in search of them if they leave the coast.

56,149. If you change your ground, you think you can come upon them ?—Yes ; experience teaches us that some boats come upon good catches, whereas others only get little, not being at the same place.

56,150. What information can you give us in regard to the small trawl-boats ?—I can give no information in regard to those boats, except that to alter their mesh upon the part of the coast where they fish would be detrimental to them.

56,151. Would it be detrimental to the supply of fish to the market ?—It would of the class of fish they supply to the market.

56,152. That smaller class of fish which they catch would be lessened in quantity ?—Yes, if they altered their mesh.

56,153. If they made the mesh larger, would they not catch those fish ? — No ; the large ones do not frequent where they fish, and they would have to go home penniless.

56,154. You say they would not catch as many of that smaller class of fish ?—Yes.

56,155. Would not their not catching that smaller class of fish permit them to grow to a larger size and increase the supply ultimately ?—That would depend upon circumstances. That would depend upon whether the fish altogether escaped or not. There are many times not small quantities, but great quantities of what we call dirt or rubbish.

56,156. What is that ?—Weed of one description or another.

56,157. Not fish ?—No, it chokes up the mesh and retains the small fish when they go into it, and they cannot make their escape when the mesh is not open. When the net is being pulled through the water it is drawn together tight, and there is no opening for the fish to escape out of.

56,158. In that way does it occur that a large quantity of small fish is taken ?—Yes.

56,159. Do you not think that injurious to the general interests of the fishery ?—Yes, no doubt it is injurious to the general interests of the fishery.

56,160. You think so ?—I do think it is injurious to the general interests of the fishery, both to us and them also. Those who are occupied with the small boats, if they would catch great quantities of large fish, would bring them to the market, but where they fish there is not a sufficient quantity of large fish to support them; they would have to leave off altogether.

56,161. I understand you to say, that if they were prevented from catching small fish, it would be a serious injury to them ?—Yes.

56,162. Would that be compensated by the increased quantity of large fish brought into the market ?—I don't know.

56,163. It would increase the supply of large fish ? —Yes.

56,164. Would it increase in a degree corresponding to the loss of those fishermen who fish in the smaller boats ?—There is no doubt that it would increase the large fish that would be brought to market.

56,165. But you have already stated that you do not see any diminution in the yield of fish on the banks which you as a deep-sea trawler frequent ?—I do not.

56,166. If there is no diminution from the mode of fishing you carry on and have carried on for many years, when there was much less of this small trawl-fishing, how can you anticipate that it could improve your fishing ?—It has not improved my fishing, except by the fresh exertions which I have made.

56,167. Do you think the small fish, if they were not caught, would resort to your deep-sea ground ?—There is not the least doubt about it.

56,168. Then the result you bring us to is, that the catch of those small fish is injurious to the deep-sea trawling ?—Yes, most undoubtedly.

56,169. Is there a mode by which that could be prevented without any injury to the general supply to the market ?—I cannot see what mode could be devised.

56,170. You do not see how it could be done ?—No.

56,171. Not by any alteration of the mesh ?—No.

56,172-3. Nor by any close time being established to prevent fishing during the season the young fry come into the shoal water ?—There may be a time when the fishing might be prohibited, but I must speak fairly on both sides. If you were, all at once, to close the fishing, and if they were all to turn shrimpers instead of trawlers, then the shrimps would be at a very low price in the market. That is the reason they resort to trawling to catch fish instead of shrimps, because they are brought down to such a low ebb.

56,174. Have you been a shrimper ? — Yes, for many years.

56,175. By fishing for shrimps over the same ground, do you cause any increase or diminution in the supply ?—There has been no diminution in shrimping since I can remember.

56,176. Then is it the case, that the number of people employed in shrimping has increased ?—Not much.

56,177. There is no falling off in the catch of shrimps ?—No, none.

56,178. Does the price of shrimps vary much ?—Yes, it is sometimes down to threepence a quart and sometimes up to sixpence a quart, just according to the quantity caught.

56,179. (*Mr. Lefevre.*) Do they not fetch as much money in the months of August, September, and October ?—In August, September, and October they vary in price, the same as they do all through the year. In the winter they are more stationary, because they are scarce on account of the frost.

56,180. (*Mr. Caird.*) Have you fished for shrimps both with a bow net and a trawl net ?—Yes.

56,181. Which is the most effective in catching shrimps ?—What we call the shank trawl net. It was first used at Hoylake to catch prawns or shanks, and it derived its name from them. In one of those trawls they will catch as much in a day as a bow net will catch in two.

56,182. Then it would be a great injury to the shrimp fishery if they were prohibited from using that kind of net ?—It would be a great injury, no doubt. I have used both, and we could scarcely make a living with the bow net, where we could earn 5*s.* or 6*s.* a day with the shank trawl.

56,183. Does the shank trawl catch more of the fry of the fish ?—It catches more than the bow net, for this reason,—the length of the beam is on the average 24 or 25 feet, whereas the other is only from 11 to 14 feet.

56,184. It is the length of the beam that affects the thing more than the description of net ?—The length of the beam and the form of the net enable them to catch more than by the bow net.

56,185. Is there a great destruction by the use on the shrimp trawl ?—There is, no doubt, a destruction on this river.

56,186. Do you think that shrimping or small boat trawling is most destructive of the fry of the fish ?—I should consider that the small boat trawling was most destructive, because the small soles do not resort so much to where they catch the shrimps.

56,187. More destructive to the fry of soles ?—Yes.

56,188. But how is it with regard to the fry of all kinds of fish ?—There are many small fish caught by it, but I cannot describe the names of them. There may be some few small flat-fish.

56,189. Would it be ever possible to fish for shrimps at all without some destruction of fry?—It would not. The mesh we require to retain the shrimps is very small.

56,190. Is it impossible to carry on a system of shrimping without a certain degree of destruction to the fry of fish?—Yes, it is impossible. The mesh is so small that we could not avoid catching fry along with the shrimps. No close time would obviate that.

56,191. (*Mr. Lefevre.*) Do you agree with the numbers that have been given us of the shrimpers, namely, that there are about 60 boats from here and Hoylake?—Yes.

56,192. There are 40 from Liverpool and 20 from Hoylake?—Yes.

56,193. Is there also shrimping along the Welsh coast, from Llandudno to Beaumaris?—They work for prawns.

56,194. Do the boats from Hoylake and Liverpool go for prawns there?—They go across the Ribble towards Blackpool.

56,195. Is there much shrimping there?—There are no prawns taken there; there are a great many shrimps taken.

56,196. Has that gone on for many years?—Yes, before my time. There were not as many boats as there are at present.

56,197. How many men are employed in those shrimpers?—Only one man and a boy, often.

56,198. How is it on board the small trawlers?—Generally the same thing.

56,199. Then I understand that you would not have any regulation with regard to the small trawlers, to prohibit them from fishing during certain months, or from using any but a certain size of net,—you would recommend no such regulation?—I would recommend no such regulation, as it would materially injure them.

56,200. What would be the effect of a regulation restricting you from fishing in the bays between the headlands?—Drawing a straight line from the headlands?

56,201. Yes.—That would not hurt me at all.

56,202. Your boat does not fish much within the headlands?—No, it does not.

56,203. Have you fished much in Cardigan and Carnarvon Bays?—No, not myself.

56,204. Have you a boat of your own?—No; I had formerly.

56,205. You work as the master of a vessel?—Yes.

56,206. Have you found that, within the last few years, you have made as good earnings as you used to make?—Yes; I have made better earnings the last two years than when I was fishing before.

56,207. (*Mr. Caird.*) You said it would be disadvantageous to the small boat trawlers to put a stop to their mode of fishing?—Yes.

56,208. That I quite understand; but with regard to the general interests of the fisheries, and the supply of fish to the public, what would your answer be?—There would be a greater supply of larger fish.

56,209. Would there be a greater supply altogether?—There would be a greater supply of larger fish. There would be a greater quantity, either in bulk or weight. An opportunity would be afforded to the small fish of growing into large ones, and we should have them large instead of small.

56,210. (*Mr. Lefevre.*) If you caught them?—Yes.

56,211. What would be the effect of a regulation as to the size of your mesh and beam, and the weight of the head-irons and foot rope,—are any such regulations necessary?—No. The addition to the foot rope is employed to make it last longer. The object is not exactly to add to the weight, or to make it heavy, but simply to make it last longer. We put some of our old ropes round the foot rope, which, of course, makes it heavier.

56,212. Is there any reason why you should be limited as to the weight to be put on your ground-rope?—None at all; and with regard to the head-irons, in the summer season they have summer heads, and in the winter season winter heads. I never used them, however, but there are parties who have two pair of heads, and they put the lighter ones on in the summer season, because the winds are so much lighter.

56,213. With regard to the beam, you would not have a beam greater than a certain length?—It would be very injurious to us if we had a shorter beam.

56,214. What is the size of the beam you use?—Forty-seven feet.

56,215. You do not wish to be restricted to a 38-feet beam?—That would be detrimental to us.

56,216. With regard to the size of the mesh, if you were restricted to a mesh of $1\frac{3}{4}$ inches from knot to knot, what do you think would be the effect of that?—It would be very detrimental to us. The soles we are catching now are termed small soles in the market, but not anywhere else. They are only so called among the market people. They take the larger ones from the smaller ones, and if they have two soles that will not make a pair, they call them little, although they may be of a good size, and half a pound weight each.

56,217. How many inches are the soles?—It will take two of this length (*measuring*) to weigh a pound.

56,218. If you were not allowed to use a mesh less than $1\frac{3}{4}$ inches, you would be prevented from catching those fish that are marketable fish?—Yes.

56,219. Do they form a large proportion of your take?—We often get a great quantity of them.

56,220. Do the smaller class catch a great number of soles of that size?—It is very seldom they catch any larger than that.

56,221. Do they catch any that size?—Some of them, but not many.

56,222. What size are the soles they catch?—They catch very small ones, sometimes not more than three or four inches long.

56,223. Do they get any price in the market?—They do, according to how the markets are.

56,224. Are they sold to the poorer classes?—To anybody who likes to buy them. They are retailed out from standings in the market.

56,225. Are they bought mostly by the labouring classes, or by what class of people?—I cannot tell at all who buys them.

56,226. Is there a considerable demand for them?—Yes; many prefer them because they call them river soles. They consider river soles to be sweeter than those caught in the deep sea.

56,227. (*Mr. Caird.*) There is a preference for that kind?—Yes. They call the soles they catch river soles, and they are sold under that designation.

56,228. (*Mr. Lefevre.*) Are they the same soles you catch in the deep sea?—They are the same class of soles.

The witness withdrew.

George Davis called and examined.

56,229. (*Mr. Caird.*) You are a Hoylake fisherman?—Yes.

56,230. Have you practised both trawl-fishing and shrimping?—Yes.

56,231. Fishing with the small trawl and shrimping?—Yes.

56,232. You have practised the whole of the different kinds?—Yes.

56,233. You have heard the evidence which has been given to us by the deep-sea trawlers?—Yes.

56,234. Do you admit that there is any serious injury done to the fishing by your mode of fishing with the small trawl in the shallow waters?—Yes, I think there is a great deal of injury done by the shrimp nets.

56,235. We will take first the trawl nets used by

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the small trawlers.—The mesh that the small boats have is the same mesh that the large boats have.

56,236. You do not use a different mesh?—There is very little difference; I don't suppose there is half a knot difference.

56,237. But half a knot may be a considerable difference in a small net?—They don't set their nets as we set ours. When the small trawlers set their nets with 50 meshes, the big ones set theirs with three score or 60 meshes at the bag end to begin with.

56,238. Do you catch with your small boats any large proportion of fish unfit for the market?—Sometimes, in the months of July, August, and September.

56,239. Do you catch a larger proportion of these small fry than you did when you were fishing with a deep-sea trawl?—Yes.

56,240. Much larger?—Yes, because when we are fishing in 20 or 22 fathoms of water, we don't get many of them. They are in shallow water of eight or nine fathoms.

56,241. Is there much of that small fish that you catch that is unfit to be taken to the market?—Yes.

56,242. What do you do with it?—Shovel it overboard.

56,243. Is it alive?—No, because it is no sooner out of the water than it is dead. I believe there are very few that ever live.

56,244. Is there a large destruction of fish by that mode of fishing?—There is a good deal at times.

56,245. Has that been the case for many years within your experience?—It has been the case for the last 14 or 15 years.

56,246. Has it shown any injurious effect upon the fishing of the better class of fish?—Yes, a good deal.

56,247. Is there any mode by which it could be prevented, except by putting a stop to the fishing altogether?—The only mode by which it could be prevented is to put a stop to the shrimp nets. When they are fishing upon the banks, they catch small plaice and flukes not that length (*measuring*). They have drawn out six or seven hundredweight of them along with the shrimps caught in the shrimp trawls.

56,248. Is there a greater destruction by the shrimp trawls than by the small trawls?—Yes, a great deal.

56,249. How could you prevent that, except by stopping shrimping?—The only way to prevent it would be to make them shrimp within certain limits.

56,250. Limits of space or time?—Limits of space where the fry frequent.

56,251. Would it be possible to lay down such limits?—I have known places where the boats fished where they caught very little fry, and at Elbury I have known them throw away all that they caught.

56,252. At what time of the year?—In July and August.

56,253. Is most injury done in July and August?—Yes, or September, because most of the fish spawn in the months of April and May.

56,254. Is there any mode, by using a shrimp net with a certain size of mesh, that would prevent the catch of small fry?—No; I don't see that there is, unless they were required to use the bow net, instead of the trawl net. Then they would not catch near as many shrimps, nor as many fry.

56,255. But they would catch some fry?—Yes.

56,256. By any mode of fishing for shrimps you would catch fry?—Yes.

56,257. Does shrimping bring in a good deal of money to the shrimp fishermen?—Sometimes.

56,258. Is it more profitable than any other mode of fishing?—They may make sometimes 6*d.*, 8*d.*, 9*d.*, or 1*s.* a quart, and if they can get ten or twelve quarts of shrimps they can make a good day's work out of it.

56,259. Can they generally make good earnings by the shrimp-fishing?—Yes, unless in the depth of winter, in the frosty weather. At that time the shrimps all go over head in the ground, and they are very scarce until the frost goes away.

56,260. The shrimps have shown no signs of diminution on the whole?—No, I don't think they have.

56,261. (*Mr. Lefevre.*) What have you been doing lately; have you been working with a trawl?—Yes; for the last 10 years I have been trawl-fishing.

56,262. In the larger class of trawlers?—Yes.

56,263. You do not represent the interests of the smaller class of trawlers?—I was brought up to it.

56,264. But for the last 10 years you have been engaged with the large trawls?—Yes.

56,265. Are there any men connected with the small class of shrimpers here to-day?—No, I do not think there are.

56,266. Do you think that you represent what they would state about the matter?—They would only represent the same that I have mentioned to you. I used to go with the large boats in the winter time, and the small ones in the summer.

56,267. But for 10 years you have been almost exclusively in large boats?—No; but for six years I have been regularly in them.

The witness withdrew.

A. Tyrrell.

ANDREW TYRRELL called and examined.

56,268. (*Mr. Caird.*) Do you hold an office connected with the fish market in Liverpool?—I do.

58,269. What is it?—Inspector of Fish.

56,270. Have you been long in that office?—Twenty-two years.

56,271. Has the supply of fish within your experience, from the fishing vessels off this coast, increased or diminished?—It has diminished very materially.

56,272. The total supply?—Yes, the total supply.

56,273. Have you any access to figures or books that show that with certainty?—Yes; we keep a weighing machine, with which we used to weigh all the soles that came to the market.

56,274. Have you books showing with accuracy the weight of the fish for a succession of years?—Yes, every year.

56,275. Can you give us those returns?—Yes.

56,276. Can we depend upon them altogether?—I can show you that the quantity of fish that came into our market 20 years ago is a great deal more than it is now.

56,277. Do you refer to all kinds of fish?—To soles particularly.

56,278. Twenty years ago, was there a larger total supply of fish to the market of Liverpool, from all sources, than there is now?—There was altogether from our Liverpool fishing boats, embracing Hoylake and Southport.

56,279. Not inclusive of the supply derived from the east coast or from other quarters?—We have had a great supply from the east coast and from Ireland of late years.

56,280. Then your increased supply has been derived from other quarters?—Yes.

56,281. Are you taking increasing quantities from the east coast?—Yes, great quantities.

56,282. And increasing quantities?—Yes, every year. This year it has decreased a little.

56,283. What has that arisen from?—I cannot tell. As much fish has not come into the market yet.

56,284. You say that soles have specially fallen off in quantity, as supplied by your own vessels?—Yes; if our markets depended on the Liverpool boats we should have a poor supply.

56,285. Have any other kinds of fish much diminished?—Turbot, brill, and whiting. Haddock has completely left the coast for years.

56,286. How is it with regard to cod?—Codfish is not much caught about this coast; it comes prin-

cipally from the Isle of Man, and Ireland, and the east coast.

56,287. Has there been a great difference in the quality of the soles in the last 20 years caught by your boats?—For the last 10 years there has been a deficiency in the quality.

56,288. Have they been very small?—Yes; I should say the quality will run from eight to ten soles to the pound: they are very small. I have seen them fetching baskets of turbot to the market that would not be more than the size of a half-crown or a five-shilling piece. I think it was a sin to catch them, even in our deep-sea fishing boats.

56,289. Did they find a market?—They did. We have no law to prohibit them from fetching them in.

56,290. Were they readily sold?—Yes; they sell them probably for 2*s*. 6*d*. a basket.

56,291. Those small turbot?—Yes.

56,292. You say they came from the deep-sea trawlers?—The deep-sea trawlers have brought them in as well as the others.

56,293. Formerly, they did not bring them in?—No, they did not.

56,294. Do you know whether they caught them?—I do not think they did; their mesh was larger then than it is now.

56,295. Has the proportion of those small soles greatly increased, as compared with large soles?—They have increased in the last few years more than ever I knew.

56,296. Has that increase been more than equal to the diminution in the larger soles?—It has in one way; but the increase of small soles has diminished the large ones,—the large ones are not as plentiful.

56,297. Has the diminution of the large ones been made up by the quantity of small soles brought to the market?—No.

56,298. Has the price of fish altered much in consequence of the falling off of the native codfish?—It would if we had not had a good supply from other quarters.

56,299. Has the price not materially altered?—It has not.

56,300. Is it much the same now as it was some years ago?—Yes, it is much the same as some years ago. It is liable to vary, according to the quantity of stuff that comes into the market. If a hundred baskets of soles are sent from the east coast, it lowers the price of the fish sent in by the Liverpool boats immediately.

56,301. But, comparing the supply to the population of Liverpool now with what it was 10 years ago, are the people here supplied with fish at much the same cost now as they were then?—Yes, and even at a cheaper cost.

56,302. The fish are cheaper?—Yes.

56,303. They are more plentiful?—Yes.

56,304. Come from whatever source they may?—Yes; there is a great quantity coming from Ireland.

56,305. (*Mr. Lefevre.*) Twenty years ago, was all the fish landed at Liverpool sent to the market?—Yes.

56,306. Is that the case now?—No.

56,307. Then the returns you give us cannot be relied upon as showing the comparison of the takes of the Liverpool trawlers?—No; they land some now at Fleetwood, which go in that way to Manchester.

56,308. And some are sent to shops, and not to the market?—Yes.

56,309. So that a comparison of the returns with 20 years ago would not give a true comparison?—No; there were only three shops in Liverpool 20 years ago, and now there are 50.

56,310. Then the returns would be of no particular value?—From different parts of the country they send direct to the shops.

56,311. Then the returns would be of no value as showing the take of soles?—They would only show what is brought into the market now and what then; but not one per cent. comes in now compared with 20 years ago.

56,312. Not one per cent.?—No, not one per cent.

56,313. Has it fallen off as much as that?—Yes; there is not a Liverpool fishing boat that has had a hundredweight of soles for the last six months.

56,314. Do all the Liverpool trawlers send their fish to market?—It principally comes to the market; none are sent to the shops, except, perhaps, from one boat or so.

56,315. Do the Liverpool trawlers now land their fish at Fleetwood or other places?—They do sometimes, when they are weather bound.

56,316. Did any supply of flat-fish formerly come from Galway and other parts of Ireland?—We have had fish from Galway.

56,317. Flat-fish?—Flat-fish, soles, turbot, and salmon.

56,318. Has that fallen off within the last two or three years?—No; we get a good supply in that way yet.

56,319. Even this year, have you had a supply from Galway?—I have not seen any supply of flat-fish from Galway this year; but there has been a good deal of salmon.

56,320. Can you tell us anything as to the supply of oysters?—The supply of oysters has not been so good for years back; but I think they will be better this year than ever they have been, as there are great quantities coming from the west coast of Ireland.

56,321. And also from Beaumaris?—There is a large quantity laid down there which have been brought from the east coast of Ireland, from Wexford and Arklow.

56,322. When do they come?—All the year through.

56,323. All the twelve months?—Yes.

56,324. During the close season?—Yes. All the other beds are closed except those at Beaumaris; I do not know how it is they allow them to be open.

56,325. Do you know the Beaumaris beds?—Yes.

56,326. What sized oysters are they?—They are very large ones.

56,327. What is the size of the beds?—Fifty acres, if not more.

56,328. Are they all the property of one man?—No; they are divided in beds, separated from one another by a bit of a ridge formed of stones.

56,329. Do you pay for them?—Yes, we pay the Corporation for each bed, and 2*l*. a load for the year.

56,330. You buy the oysters from Arklow and Wexford?—Yes; they come by the packet.

56,331. Was there any attempt made to prevent their selling oysters in the close season from Beaumaris?—Yes, they stopped them at one time; but they allowed them to go on again. They seized one smack loaded with oysters in Beaumaris, but I believe it had only come from Arklow with a cargo fresh taken off the beds.

56,332. I suppose the oysters do not breed on the beds at all?—No; except they are down at low water in the deep.

56,333. Are they principally laid upon the ground between high and low water?—Yes.

56,334. Are there any laid down under the level of low water?—No, they would not get them then.

56,335. There is no dredging there?—No.

56,336. In what condition are the oysters in the close season?—They are large sized oysters, caught between Arklow and Wexford.

56,337. Are they in good condition for eating?—No, they are not in good condition; they are rather watery and thin.

56,338. Is there a good demand at that season for them?—No; they send them up the country.

56,339. What is the price during the close season?—Three shillings a hundred, or from 28*s*. to 30*s*. a thousand.

56,340. During the close months?—Yes.

56,341. What is it at other times of the year?—I have seen them as low as 18*s*. to 20*s*. a thousand.

56,342. Have you seen the oysters on the Beaumaris beds?—Yes; they have laid them there for years.

LIVERPOOL.

A. Tyrrell.

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56,343. Are there many less than 2½ inches in diameter? What is the average size of the Arklow oyster when it is laid down?—I think the oysters laid down there would be about four inches across.

56,344. As much as that?—Yes; they are good-sized oysters. The Wexford oysters are large oysters.

56,345. Are the Arklow oysters as large?—They are smaller; they are about 2½ or 3 inches across.

56,346. Are there many less than 2½ inches?—There are.

56,347. Is there a great demand for oysters less than 2½ inches,—do they get a better price for them?—Of late years the demand has been from London and France; they take all the smaller ones, and would sooner have them.

56,348. Then the larger ones are taken for Beaumaris, and the smaller ones are sent to London and France?—Yes.

56,349. How long have they been laid down at Beaumaris?—They commence as soon as the close season is over in September; they commence laying them down in October.

56,350. When are they fit to eat?—They are fit to eat now.

56,351. After being laid down for how long?—Sometimes they only lay them down for a week, and sometimes they come direct from the beds, and sell them here.

56,352. Are the oysters fit for eating at once?—Yes, they are when the close season is over. In the month of September they are often fit for eating after having been dredged.

56,353. From the Arklow beds?—Yes.

56,354. (*Mr. Caird.*) Then is it only during the close season that they are placed on the beds at Beaumaris?—They are placed on the beds before the close season, but during the close season they fetch them from Beaumaris here.

56,355. Then the beds are only used for the purpose of having a quantity that can supply the market during the close season?—They supply the market from the beds all the year through. During stormy and rough weather they could not get them from Arklow. I may say that we get a great quantity of spring herrings in our market here during the months of January, February, and March.

56,356. Where do they come from?—They come from Lowestoft on the east coast. They are herrings that are caught with a very small mesh.

56,357. What is the size of those herrings?—They are not much bigger than the sprat. They come here in great abundance, and I am informed, by parties who send them to our merchants here, that they can buy them from twopence to threepence a hundred, and sell them there to manure the land.

56,358. What is the effect they have upon your market?—The effect they have is, to diminish the price, and they are of no earthly service.

56,359. Do people eat them?—Yes.

56,360. Do they buy them for food?—Yes.

56,361. Do they like them for food?—Some do. They sell them here for 1*s.* per 100.

56,362. Then they come largely into consumption by the poorer classes at that time?—Yes.

56,363. When other fish are not to be had cheap?—They would have to give more for other herrings.

56,364. Is that not of considerable advantage to the poorer classes?—Yes; but they are not good for them.

56,365. Do the poorer classes complain?—I have heard many say they are dry, and that they have nothing in them.

56,366. Yet they do buy them?—Yes; but if they were to remain for three months more they would be good food.

56,367. What effect have they on the market, that makes you complain of those fish coming here at all?—The effect they have on the market is, that I do not consider them good food at that season of the year, they are so small; but if they were allowed to run for three months more they would be useful to the working men.

56,368. But it appears the working men do get them here at that time, and that they do buy them?—Yes.

56,369. And that has some effect upon the general price of fish in the market here at that time?—Yes.

56,370. Does it depreciate the price?—Of nothing but herrings.

56,371. Are fish generally dear at that time?—No; they are no dearer than during other parts of the year, except in the warm months of the year. In January and February soles may come to 1*s.* or 1*s.* 3*d.* per lb.

56,372. What is the nature of your objection to those fish coming here?—I think they are not seasonable fish.

56,373. If you can tell us how it affects you here, we shall be glad to hear your opinion about it?—I consider that it affects the fishing in the summer time, when the fishing would be good.

56,374. It does not affect your fishing on this coast?—Not in the least.

56,375. (*Mr. Lefevre.*) There are no herrings off the Liverpool coast?—No.

56,376. There have not been for the last 20 years?—There have been a few taken by stake nets down at Crosby.

56,377. There has been no drift-net fishing?—No.

The witness withdrew.

W. Langharne.

William Langharne recalled and examined.

56,378. (*Mr. Lefevre.*) How many trawlers are there at Southport?—About 11.

56,379. How many small ones?—A great number.

56,380. Have they increased of late years?—I cannot say that they have. They are all in the shrimping line. They are boats that were set up for the herring-fishing at Fleetwood, but as it has failed for the last year or two they have returned to shrimping.

56,381. Are the larger class of trawlers of the same size as the boats here?—There are one or two of them of the same size, but not the rest.

The witness withdrew, and the inquiry was adjourned until the 4th of October, at Carnarvon.

Carnarvon, Wales, Tuesday, 4th October 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

LLEWELLYN TURNER, Esq., called and examined.

56,382. You are the Mayor of Carnarvon?—Yes.

56,383. You are well acquainted, I suppose, with the fisheries on this part of the coast of Wales?—I am, from the circumstance of being an old yachtsman and an old life-boat volunteer. I have been a good deal on the water.

56,384. Is there any important fishery here?—In our bay we have several beds of oysters, and there is a great quantity of very beautiful soles, and turbot, and other fish of that sort; and in their season, mackerel, and so forth.

56,385. Has the supply of fish here—the quantity caught—been increasing or diminishing of recent years, taking all kinds into account?—Well, judging from the reports of the fishermen here, which I don't think are particularly to be relied upon, they seem to say that the quantity of soles has rather decreased.

56,386. Are they much fished?—Yes, they are very much fished by the Liverpool and Hoylake fishing-boats, which are virtually the same thing. We sometimes see six, seven, or eight boats here for months together, especially with an east wind. They catch enormous quantities of fish, and send them to Liverpool.

56,387. They are deep-sea trawlers from Liverpool?—Yes.

56,388. Do they trawl in shoal water, or at a distance out?—They trawl at a distance. They trawl in the bay. The bay is pretty much in this shape (*pointing to a plan*), and they cross it at a distance of two or three miles from the bar. There is trawling ground along the Anglesey coast, and all about the bay, with the exception of some few patches, where there is rough ground.

56,389. Are there boats belonging to this place which trawl on the same ground?—There are a few boats, very inferior boats to the Liverpool boats, and they do not keep out so long, partly in consequence of the preference of the men to be at home drinking, and partly from their inferiority to the men in the other boats.

56,390. Is the fishing business an increasing business here?—Not among the people themselves. Some years ago there were beds of oysters discovered by some Jersey men, and we have always at Carnarvon about half a dozen very fine Jersey smacks. That is about the average number.

56,391. Are they engaged in oyster-fishing?—Yes.

56,392. About what part of the bay do you find the oyster beds?—There are different beds. There are beds down along this shore, and patches in different parts of the bay. I cannot exactly point out where they are.

56,393. Have they been long known to be in existence?—Yes. The oyster beds were discovered here, as far as I can recollect, about 15 years ago, or perhaps rather more than that; but for a short time, owing to a little local jealousy, they were not worked.

56,394. Are they held to be the property of the corporation?—No, they belong to the public.

56,395. Anybody may use them?—Yes; but at first, after they were discovered, and after the Jersey men came to use them, the trawlers of the place attacked them with their own vessels, and drove them off the ground; but I happened to be sailing out in my boat and put a stop to it, and had them all bound over to keep the peace. Ever since that time the Jersey men have come here.

56,396. Are the Jersey men the principal oyster fishers here?—Yes.

56,397.—Do the natives not fish them at all?—Not to the same extent.

56,398. What do the Jersey men do with the oysters?—They lay them down on beds on the banks in the Menai Straits.

56,399. And they take them away to Liverpool and other places?—Those that are put on the beds along the sea shore here, are sold here in great quantities, and are sent to Manchester and other towns by railway.

56,400. Has that become an important business?—There are about six Jersey vessels employed in it; and sometimes some of our own vessels go from here also.

56,401. The oysters do not breed, I suppose, on the beds on which they are laid in the Menai Straits?—No, they do not.

56,402. They are only brought there to deposit, and for feeding?—Yes, that is all.

56,403. Do they fatten there and improve?—Yes.

56,404–5. What is the average number of boats?—I think the average is five or six, and there are a few of our own boats; but as far as our own boats are concerned the men are very idle, and they never adhere to one class of fishing. The consequence is that they destroy the demand here. They go fishing for herrings, and from herrings to oysters.

56,406. How many fishermen and boats have you here belonging to the place?—I think there are not more than four or five boats.

56,407. Then it is a very unimportant business, so far as the trade of the place is concerned?—Yes, it is all done by foreigners and strangers.

56,408. With regard to the soles, you state that the people themselves say that the quantity has decreased of late years?—Yes, they say so; but I don't think that is the case myself. They attribute the decrease to the number of Liverpool boats that are trawling.

56,409. Do the people here themselves trawl inshore in the shallow water for soles?—No, they do not. I have seen it tried in the straits a little, but only to a small extent, not worth mentioning at all.

56,410. Do you think there is any destruction of spawn or fry caused by the mode of fishing followed here?—No; that I am not prepared to say. I don't know sufficient of the nature of fish to answer that question.

56,411. Perhaps you may have seen very small fish taken, so small as not to be marketable, and thrown away as waste?—No, I cannot say that I have.

56,412. Has the quantity of turbot taken off the coast diminished or increased of late years?—That I don't know.

56,413. You referred to the mackerel-fishing as being followed here sometimes; is it of any consequence?—They catch very considerable quantities of mackerel; but the season for them is rather late; it does not begin till the month of August. It is generally considered as being at its best in September. In August and September they are at the best perhaps. They come in July, but I know that it is a late fishery.

56,414. Do any but the native fishermen come for mackerel-fishing here?—No, they do not.

56,415. Then if it is confined to a small number of fishermen, it is a very small affair?—Yes. It is generally carried on by smaller boats than those I have alluded to; smaller boats than the four or five fishing vessels that I have mentioned. They go out to fish mackerel with lines. It is all a line fishery. A great number of boats go out for that, but they are not regular fishers.

56,416. Have you any herring fishery here at Carnarvon?—No, not at Carnarvon.

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56,417. Do you never have any here?—Not that I am aware of.

56,418. Nor anywhere else on the Welsh coast?—Yes. In Cardigan Bay. There is a great fishery there. They bring in immense quantities. There was a herring fishery here, and perhaps they catch a few now, but nothing in any quantity. They bring immense quantities of herrings from Pwllheli, and all along there. They bring them in Crickieth carts; immense quantities are caught there.

56,419. Is there a good herring fishery generally in Cardigan Bay?—Yes, and in this part of it. The fish are not in good season that we get from there. There is a herring fishery at Bangor also, but it is not nearly so good as it was.

56,420. Have you any shrimping along this coast, or in the straits?—There is very little here. Indeed, it has always been a matter of surprise with me, that, with so many sand banks here, there is so little. We never get any prawns, except at low-water at spring tides. We never get any at neap tides. The shrimping here is very little indeed. There is no shrimping at all, except that which is carried on by hand.

56,421. Being a yachting man, you have some knowledge of Cardigan Bay?—Yes, I have.

56,422. What is the nature of the fishery carried on there, and what are the principal stations for fishing there?—There is an immense quantity of sole, and turbot, and conger, and the same fish we have here, but by no means of such good quality; and that is shown by the fact that it does not keep near as well. The Cardigan Bay sole is a blacker-looking fish than ours, and when it is taken away for transportation across the country, when it is sent away for sale, it does not last so well; it decays sooner, and that is supposed to arise from the fact that ours is a cleaner bottomed bay than the other. They have a great number of beds of oysters in Cardigan Bay.

56,423. What are the chief stations for fishing in Cardigan Bay; is there any at Barmouth?—No, not at Barmouth; the only parts I can speak to are Pwllheli and Crickieth.

56,424. Are there any large fishing stations in the bay where there are boats and men?—At Pwllheli there are a great many small fishing-boats. A great many congregate there. Great numbers of Liverpool fishermen go there to fish.

56,425. We have had evidence of the Liverpool fishermen going into Carnarvon Bay to fish, and should like to have local evidence as well?—There is a gut or place called Sarn Badrig, a reef of rocks, that is supposed to be a submerged town. There is a tradition with regard to it to that effect; and there is a gut outside of Pwllheli where they get immense quantities of fish, but they are not good fish.

56,426. (*Mr. Lefevre.*) When did the Liverpool trawling vessels first come here?—They have been in the habit of coming here ever since I can remember.

56,427. Do they land their fish here generally?—They land a good deal of it here, and send great quantities by railway and steamer. They send great quantities by steamer from the bridge also.

56,428. Has the number of boats increased of late years?—Yes, I think it has.

56,429. Then looking at the increase of the Liverpool trawlers, do you say the quantity of fish in the bay has fallen off or not?—No, I don't think the fish have fallen off myself; but when people complain of the deficiency of fish, which is a great complaint, they assign as the cause that there is not so much fish; but I tell them they don't go to get it.

56,430. You think the Liverpool fishermen get it, and take it directly to Liverpool?—Yes.

56,431. What is their season for coming here?—They come all through the summer.

56,432. Is there any extensive line-fishing at this place?—No, nothing but mackerel-fishing to speak of.

56,433. Is there no cod fishery?—No, the cod-fishing is principally an in-shore fishing in the Menai Straits. Boats go out and anchor, and fish with lines; but I cannot call it a large fishery.

56,434. Do the oyster fishermen observe the close-time here?—Yes.

56,435. Do they observe any regulation as to the size of the oysters they take?—Not that I am aware of.

56,436. Do they take them of all sizes?—I believe so, but I cannot speak positively to that; but possibly the Collector of Customs can do so. I may mention in reference to the oyster-fishing here, that the oysters are of very different sizes. There are very large oysters, and very small oysters.

56,437. Lying on different beds, I suppose?—Yes; lying on different beds.

56,438. Do you think they are different kinds of oysters?—Yes; I think they are. It is rather a curious thing, but there is no mistake about the fact, that the Carnarvon Bay sole is a very superior fish to the Cardigan Bay sole, and that the Beaumaris oyster is a very superior oyster to our oyster.

56,439. But the Beaumaris oyster is brought from Arklow and laid down there; it is not indigenous to the place?—They have oysters that they dredge at Penmaur.

56,440. At Penmaenmaur?—No; at Penmaur, off Puffin Island.

56,441. Are there extensive oyster beds there?—I don't think there are.

56,442. Has the number of Jersey smacks increased or diminished of late years?—There are not above half-a-dozen of them altogether.

56,443. Then the number remains about stationary?—Yes, about stationary; perhaps there may be one or two more than there were at first.

56,444. Then you argue from that that the oysters have not decreased in consequence of being fished?—No, there is no appearance of it. At first when they came, there was a great run upon oysters, and there were a great many Carnarvon boats, as well as Jersey men engaged in it, when they could fish in fine weather; but when the Custom House enforced the close-time, then almost all the Carnarvon boats went out of the field.

56,445. I suppose that the Jersey boats are qualified to fish the bay in the winter time during the exposed weather?—Yes, they are much better boats; they are very superior boats to ours, and they are not only superior boats, but they are manned by a more respectable class of men—nice, tidy, sober men.

56,446. What sized boats are the Jersey boats?—About 30 tons.

56,447. What number of men do they carry?—They carry very large crews, much larger than ours. I think they carry six or seven men.

56,448. Do you know the number of dredges they use; do they use more than one dredge?—I don't know.

56,449. Is any complaint made by the fishermen here of their not being allowed to dredge the oysters during the summer months?—At first there was. At the time it was disallowed, they complained; but since then they seem to have abandoned the trade to the Jersey men. We hear nothing about it now; but they feel it a grievance, no doubt.

56,450. Is the bay so exposed that it is a matter of difficulty to dredge the oysters in the winter time?—In winter it is; but often in the month of September and October we have very fine weather. Of course that is not always the case.

56,451. Are the oysters which are laid down on the bed for fattening taken up during the close-time and sold?—Yes; all the year round.

56,452. So that there is a sufficient supply of oysters during the close-time for the market?—Yes; and I have heard a great deal of comment upon that. It is said that the Manchester people enjoy them exceedingly when they are full of milk.

56,453. I suppose the oysters are laid down on the ground between high and low water?—Yes.

56,454. Are any laid down below the level of low water?—No, none of them.

56,455. In the close-time are they in a poor condition?—There is a milky appearance about them.

56,456. But the public seem to buy them notwithstanding?—Not the public here. It is the Lancashire public who admire them.

56,457. Are there mussel beds in the bay?—Not in any great quantity.

56,458. Is there any flounder-fishing to speak of?—Yes; they get flounders; the trawlers get them with the soles and turbot.

56,459. Do they take any number of small flounders?—Yes; they get all sizes of fish. The men who fish for codfish when at anchor in boats in the straits sometimes catch them with their lines.

56,460. (*Mr. Caird.*) Have the wages of labour increased here much of late years?—Oh yes, very much.

56,461. Do you suppose that has had any influence in changing the pursuits of the people from fishing to other occupations?—No; I don't think it has. They are a sort of distinct class. It has not operated with those who were previously engaged in fishing; but it frequently may have prevented new men going into it.

56,462. Have you any idea what change has taken place in the ordinary rate of labourer's wages of late years?—Yes; you cannot get a man, generally speaking, under about 14*s.* a week. They get more in the quarries.

56,463. I suppose it has been in consequence of the operations in the slate quarries and the great demand for labour there that wages have risen?—Yes; in a great measure.

56,464. Do you think that fishermen, on the average, can earn as good wages as fishermen as if they went into the slate quarries?—Yes; I have no doubt whatever that sober men can, and that sober men do; but unfortunately the class of fishermen have got into bad habits, and have not stuck steadily to the fisheries at all.

56,465. (*Mr. Lefevre.*) Can you explain why it is that the two important fisheries here, the oyster fishery and the trawling outside, have fallen into the hands of strangers?—I think it is from having been taken up by an improvident class; and I have no doubt if we could succeed here in getting up a company of working fishermen, we should not only confer great benefit on the neighbourhood, but it might be made to pay very well if properly managed.

56,466. Do you know at what season of the year herrings come into Carnarvon Bay?—I don't know; but I think it is about June or July. They come, perhaps, not so early. Probably in July or August. I cannot tell exactly.

56,467. Do they come with regularity from year to year?—Yes, always.

56,468. How long do they remain in the bay?—Till about this time.

56,469. If trawling were prohibited within the headlands of the bay, would you have any supply of fish?—No, we should have to get it from Liverpool and Dublin. There is whitebait in the straits here at the Swilleys. It is capital whitebait.

56,470. How is it caught?—It is caught in the weirs.

The witness withdrew.

THOMAS TURNER called and examined.

T. Turner.

56,471. (*Mr. Caird.*) Can you give us any information as to the fisheries along the Welsh coast, and particularly in Cardigan Bay?—I can say nothing more than my brother has said with regard to the fisheries.

56,472. Do you think the increased rate of wages paid for labour in the slate quarries has had some effect in directing the attention of the natives to that source of employment, rather than to fishing?—I think in the herring-fishing it would, where they are a sort of mongrel labourer, as at Clanhire and other places along the coast, where the men are employed on both. They go at a certain time of the year after the herrings; but now there are various works all along the coast. For instance there is a large set work quarry.

56,473. What are sets?—They are for laying down as paving stones. The men have constant employment there, and would not go to an irregular thing like herring-fishing.

56,474. So there is constant employment for the labourer?—Yes; the labourer can get any amount of employment now anywhere.

56,475. May not that be the chief cause why fishing for oysters and trawling in the bays has gone seemingly into the hands of strangers?—I don't think that affects anything but the herring fishery. The oyster fishers and trawlers are a distinct class of men. It is a regular sailor who goes into the oyster and trawl-fishing.

56,476. Do you know whether the sons of these regular sailors continue to be fishermen, or do they go into the regular labour afforded in the neighbourhood?—No; I think they go as fishermen, or to sea as sailors.

56,477. (*Mr. Lefevre.*) How many fishermen are there here who are fishermen all the year round?—I think there are very few. There are not more than three or four boats, and there may be from 15 to 20 men.

56,478. Are the herring fishermen in Cardigan Bay fishermen all the year round, or only during the herring season?—I think they are only temporary fishermen.

56,479. Do they catch herrings at all with the seine-nets?—Yes, I think so.

56,480. Is it mainly with seine-nets that they fish?—Yes, they have two-ended boats.

56,481. With a net between two of them?—I think they lay them out with buoys.

56,482. Then that is drift-net fishing?—Perhaps it is.

56,483. (*Mr. Caird.*) They are not anchored, or fixed to the bottom?—Yes, I think they are laid out and fixed.

56,484. But they are not fixed to the bottom; they are allowed to drift with the tide?—I think they are fixed for a time. The fishermen then go out, take up the nets, and unmesh the fish which have meshed in them.

56,485. (*Mr. Lefevre.*) I think you said there was a herring fishery at Bangor some time ago?—Yes; they have weirs at Bangor.

56,486. When did that fishery cease?—It has not ceased. They catch herrings now on the Swilly rocks, and at Penrhyn as well.

56,487. At what time of the year?—About July or August.

56,488. Has that gone on from year to year?—Yes, ever since I can remember, and I can recollect as far back as 40 years ago. The fishing, however, is very uncertain. It depends upon the amount of herrings that come in.

The witness withdrew, and the inquiry was then adjourned until October 7th, at Tenby.

Tenby, Pembrokeshire, Friday, 7th October 1864.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

TENBY.

J. Gifford.

7 October 1864.

JOHN GIFFORD called and examined.

56,489. (*Mr. Caird.*) You are a fish salesman here?—Yes; I have been a buyer of fish here for the last 20 years.

56,490. You are well acquainted with the state of the fisheries here and the supply of fish to the market in this neighbourhood?—Yes.

56,491. What are the principal kinds of fish that are bought here?—We get here all the various sorts of fish that are caught in the sea. They are brought to the market at one time of the year or another, such as brill, turbot, gurnard, soles, mackerel, dories, mullet, and fish of every description.

56,492. Cod?—Yes, codfish.

56,493. Have any of the different varieties you have mentioned been on the increase, or have they diminished in supply during the last few years?—The codfish has diminished in supply considerably, compared with what it used to be.

56,494. Is cod the only kind of fish that has diminished?—The herrings have got scarcer also: there used to be a large quantity caught when I first came here.

56,495–6. There is not a regular fishery of herrings at Tenby?—No.

56,497. When did cod begin to show any sign of diminishing?—They have not been so plentiful for eight or nine years as they were 17 or 18 years ago. They were caught in large quantities 20 years ago.

56,498. Are they caught with the long-line here?—Yes.

56,499. Have you heard any reason assigned as the cause of that diminution?—No, I have not.

56,500. With regard to the other fish you have mentioned, have they remained stationary, or are they increasing in the supply?—I think the supply averages one year with another, for the whole period of time I have been here, much about the same; taking one time with another, they are no scarcer.

56,501. Are they more plentiful?—No, and they are not more plentiful. There has been a larger quantity of gurnards this summer than I have ever seen; they have been the most plentiful fish we have been catching this season.

56,502. Gurnards are increasing?—Yes.

56,503. To what markets do the gurnards go? Are they fish of a cheap character?—Yes; we can hardly find a market for them.

56,504. Are they chiefly consumed by the lower classes?—Yes, and in the country as well. I think they are a very good fish.

56,505. Are they increasing in price?—No.

56,506. Are they diminishing?—No; they fetch the same price, namely, so much a basket.

56,507. Has that been the case for many years back?—Yes, for 20 years.

56,508. You say they have been caught in such an abundance that you could scarcely find a market for them?—Yes, this last summer.

56,509. How are they caught?—By a net—by the trawl net.

56,510. They are trawled fish?—Yes, and there are large quantities taken by the hook as well.

56,511. Are the soles diminishing?—They have been about the same they always were. We get a plentiful supply for two months.

56,512. What two months are those?—June and July.

56,513. They keep as good as they formerly were?—Yes.

56,514. In quantity?—Yes.

56,515. Do you get more small soles than you used to do, or are they about the same?—Much about the same.

56,516. How is it with regard to the price of soles?—They are about 3½*d.* a pound.

56,517. Are they increasing in price?—No.

56,518. Have they remained stationary for some years back?—Yes.

56,519. How is it with regard to turbot?—Turbot generally sells at a crown apiece for the large fish, and the other size will sell for about 6*d.* a pound.

56,520. How are they caught?—They are caught in the trawl.

56,521. Are they increasing?—Yes, there is a good supply of them; they are increasing, compared with what they were some years ago.

56,522. Are they as good now as ever you knew them?—Yes.

56,523. Do you get any haddock now?—Yes, occasionally in the summer. Sometimes we catch a great many in the winter time. They get them with the hook as well, but I think that they are not as plentiful, the same as the codfish.

56,524. They are diminishing rather?—Yes.

56,525. Has the price of the haddock kept about the same thing?—Yes.

56,526. I suppose it is regulated by the price of other fish a good deal?—Yes.

56,527. Do you get any flounders or flukes here?—No flukes, but plenty of flounders.

56,528. Are they increasing?—There have been large quantities caught all the summer.

56,529. Where do you find a market for them?—At Cardiff, Merthyr, Swansea, Neath, and other places where there is a large population of the working classes.

56,530. Do you say that the supply of flounders is increasing?—I think it has increased this summer.

56,531. And does the price remain stationary?—Yes.

56,532. Are there any oysters caught here?—Yes.

56,533. Are they caught in large quantities?—No, nothing like the quantities in which they used to be caught.

56,534. When did they show signs of diminution?—I think they have been getting scarcer and scarcer every year for the last ten years.

56,535. Have there been any new beds of them found?—Not that I am aware of.

56,536. Have the fishermen continued fishing on the grounds which have been fished for many years?—Yes.

56,537. Are they fished without any restriction of any kind?—I believe they are.

56,538–9. Is there any restriction as to the size of the oysters allowed to be brought ashore?—I believe not.

56,540. Is there any regulation as to the size?—I think not. I never saw anyone overhauling the boats to see if there were small oysters. There has been no regulation of that kind ever since I have been here.

56,541. Do you know if there are small oysters brought to the market here?—Yes.

56,542. Of what size is the smallest?—There are some about the size of a crown piece.

56,543. Is it thought by the fishermen themselves that that is destructive of the brood of the fish and the general supply of oysters?—I do not know whether they think so, but I do.

56,544. How do they sell the small description of oysters?—They are about a shilling a hundred here.

56,545. What is the price of the best?—Two shillings and sixpence—that is the wholesale price. I do not know what they get for them when they retail them about the town.

56,546. There is a perceptible decrease in the oysters?—Yes.

56,547. Did you formerly send oysters to other markets from this place?—Yes, to Bristol; that was the principal market.

56,548. Do you still send to Bristol?—I do not, but there are men who do still send to the Bristol market.

56,549. Do you know anything about the quantities of oysters taken in the season?—No, I cannot say; I never kept an account.

56,550. They do not fish them in the months of the close season?—Only from September up to March.

56,551. They observe that very strictly?—Yes, very strictly.

56,552. Does anybody enforce it?—I do not know if there is anybody to enforce it, but I never saw the men dredging from the last of March up to the 1st of September.

56,553. Is the close time to the end of March or April?—I think it is the end of April.

56,554. They may fish in every month with an "R" in it?—Yes.

56,555. That is the common rule?—Yes; they take the dredges out of the sea the very day the last month is up.

56,556. Are there any fish caught in the seine nets here?—Yes.

56,557. What kind of fish?—Every sort of fish you could mention.

56,558. Is the seine net much used?—Yes; but there has not been much caught with it this summer.

56,559. Are some summers more favourable for the use of the seine net than others?—Yes; it depends entirely on the weather.

56,560. Is it used along the shore?—Yes, if the weather would permit.

56,561. Do they fish for herrings with the seine net?—Yes, occasionally.

56,562. With regard to the herring fishery has there ever been an important herring fishery here?—Not that I am aware of.

56,563. There never has been an important herring fishery?—No, not an important one.

56,564–9. How many boats will there be engaged in the herring fishery?—I should say not more than four. I never knew more than four.

56,570. To what markets are the fish sent from Tenby as a rule?—Cardiff, Swansea, Merthyr, Neath, Newport, Gloucester, Cheltenham, Bath, Bristol, Birmingham, London, and anywhere there is a demand.

56,571. Do you yourself send fish to those inland markets?—Yes.

56,572. Are we to understand that, speaking from your knowledge and experience extending over a good many years, the supply you send inland from this place is not diminishing?—It is not diminishing at all. It is not less than ever it was, except with regard to codfish.

56,573. The general supply of all other fish has not diminished?—It averages near the same.

56,574. Is it increasing?—No.

56,575. It keeps much about the same?—Yes.

56,576. That is shown by the boats keeping about the same in number?—There are more boats than there used to be.

56,577. Do not those additional boats catch more fish?—They are sure to catch more.

56,578. Then your supply will be increasing?—They do not all fish for this market. Some run away to Swansea with the fish.

56,579. Has the market changed in any way since the opening of the railway to other places?—Yes, we could send only twice a week by packet until we had the railway.

56,580. Has the opening of the railway very much facilitated the getting of the fish to the market?—Yes.

56,581. Has the opening of other railways in other districts prejudiced you in any respect?—Yes, I think so, as to the demand for codfish. They can get it in from the markets from the north as quick, and even quicker than we can here.

56,582. Does any other fishing station on the north side of the Bristol Channel export as much fish inland as you do?—I do not think so.

56,583. (*Mr. Lefevre.*) Do the Brixham boats bring in their fish here?—Some of them do, but they mostly go to Swansea.

56,584. Has the number of Brixham boats that fish off here increased of late years?—No; they average about the same; there may be a few more in some years.

56,585. What has been the increase?—There has been an increase of several boats.

56,586. But of those, some of them send their fish to Swansea?—Yes.

56,587. When you spoke of the supply being about the same, did you mean the supply brought into Tenby itself, or did you mean that by all the boats fishing off here the whole supply taken had increased?—The more boats there are on the ground, of course the more fish is caught. The quantity of the fish in the sea averages nearly the same.

56,588. When did the haddock begin to fall off?—About a dozen years ago.

56,589. Has it very much fallen off?—They never were very plentiful,—not in the winter. Some boats may have caught five or six with the codfish on the same lines.

56,590. Are they ever caught in the trawls?—Yes, in the summer large quantities are caught.

56,591. In what condition are they then?—Very good.

56,592. Are they caught in the deep water?—Yes, out in deep water.

56,593. Have the whiting fallen off?—Sometimes we get a hamper or two about the month of August; they are very small whiting.

56,594–5. Are they caught in the trawls?—Yes.

56,596. Do you know what number of boats are engaged in line-fishing?—They may average about 20 boats when they are all at it in the winter.

56,597. Has that number fallen off of late years?—No, it has rather increased.

56,598. Do they depend mainly on cod and haddock?—Yes, and oysters.

56,599. Are the same boats used for oyster dredging during the part of the season and for line-fishing during the rest of the season?—Yes; there are one or two small boats that fish for cod only, and not for oysters.

56,600. When did the oysters begin to fall off?—They have been falling off every year for the last 12 or 14 years.

56,601. Have you observed a greater falling off during the last three or four years?—Yes.

56,602. Is that due to there not being any spat for the last three or four years?—I do not know.

56,603. Do you know if there has been a good spat here?—I do not know.

56,604. Are oysters brought here for the purpose of laying down on other beds?—Not of late years.

56,605. Are they sent to the market at once?—Yes.

56,606. Is there no smaller class of oysters brought in not fit for eating at once, but which are laid down on beds?—No; there have been none laid down on beds that I have seen.

56,607. Are all of those that are brought in fit for the market?—Yes, and they are generally sold here.

56,608. Are there any so small that they are not fit for the market?—No; they manage to sell them whether they are too small or not; but they would not answer my purpose to send to the market.

The witness withdrew.

TENBY.

R. Parrott.

7 October 1864.

ROBERT PARROTT called and examined.

56,609. (*Mr. Caird.*) You are a Coastguard officer here?—Yes.

56,610. You have been stationed here for some years?—Yes.

56,611. You are well acquainted with the fishing in this bay?—From my position in the service I have been enabled to see the vessels coming in and out.

56,612. Can you tell us the number of boats engaged in the fishing here?—No; but I can tell you the number of boats here which may be said to belong to Tenby at present.

56,613. What is the number?—Thirteen.

56,614. Are they open boats?—No, trawlers.

56,615. There are 13 trawlers?—Yes.

56,616. Decked trawlers?—Yes, decked trawlers.

56,617. Belonging to Tenby?—Yes, they may be said to belong to Tenby. Some of them belong to Milford, but the men who work them reside here.

56,618. Are there any other trawl-vessels that fish here besides those 13?—During the summer season the Brixham boats come here.

56,619. How many of them?—I think there were about 17 or 18 this year.

56,620. How long do they remain here?—They come generally about May, and stop till the latter part of September.

56,621. Is there any particular kind of fishing followed by the trawlers at that season of the year?—No.

56,622. Are the fish all in-shore or in deep water? Is there any distinction in the mode of fishing then and in the winter season?—In the winter season they confine themselves to the bay, and in the month of August they gradually draw out to the channel.

56,623. The trawlers?—Yes.

56,624. Did you ever hear the Brixham men give any reason for coming during those particular months, and not during the rest?—No, I never heard any reason assigned, but I believe it is because they consider the ground is not enough, or the water as deep as it is in the English Channel. The same parties come here almost every year, and they have been here for the last 20 years, and their fathers before them.

56,625. You do not know why they come at a particular time?—Because the fish are more plentiful in the summer time.

56,626. Do your own fishermen find the fish more plentiful in the summer time?—Yes.

56,627. Are the fish more in the bay in the summer or further out at sea?—In the early part of the summer the fish are in the bay, but in the month of August they draw out into the channel; perhaps they may go earlier, in the month of June.

56,628. Have those numbers you have given us been on the increase or decrease during the last 10 years?—I do not think they have varied much.

56,629. Is there always about the same number of Brixham boats coming here?—Formerly there were more, but the last eight or nine years there have been about the same number, and they have been generally the same persons.

56,630. And about the same number of boats belonging to this place?—No.

56,631. Have they increased?—Yes, considerably.

56,632. When did that considerable increase take place?—Within the last seven or eight years.

56,633. Are they increasing every year?—No, not every year.

56,634. Are there not some more put on every year?—No; I do not think there were more boats last year than there were the previous year.

56,635. Are the Brixham boats and the boats of Tenby much of the same class?—Some of the Brixham boats are larger, but we have now four or five vessels belonging to this place that are equal to the Brixham boats.

56,636. The new boats that are being built now are of a larger size?—There have not been any new boats built,—they were purchased.

56,637. Do you know what length of beam they carry?—No.

56,638. Then with regard to the line fishermen, can you tell us how many there are that go to line-fishing?—They vary considerably; they work the oyster dredge and the line-fishing together.

56,639. The same boats work both?—Yes; except that the smaller boats are more confined to long-line fishing.

56,640. How many boats are there of that smaller size that are open boats?—They are all open boats.

56,641. How many of them are there?—There may be 20 or 30 of the dredge boats.

56,642. Are they increasing in number?—Yes, they have increased. Recently there have been two or three built.

56,643. Then from your knowledge of the fishing here, do you know if the fishermen find it a profitable business and increasingly so?—From appearances I should say that they do.

56,644. Have you observed the oyster-fishing here?—Yes.

56,645. Do you agree with the previous witness that it is declining?—Yes.

56,646. Have you noticed when that decline commenced?—No, it has been gradual.

56,647. What do you suppose is the cause of that decline?—I have been told (but that is not within my own knowledge) that formerly they used to bring the oysters from Stackpool and put them down on Caldy Island. The beds were replenished in that way at one time, but not lately.

56,648. (*Mr. Lefevre.*) Was that from the Stackpool beds?—Yes.

56,649. (*Mr. Caird.*) They did that formerly?—Yes.

56,650. Do they not do that still?—No.

56,651. What is the reason that they do not continue that?—I do not know why they do not do it.

56,652. You cannot give us any reason, within your own knowledge, for the falling off of the oyster fishery?—No.

56,653. Is there any regulation enforced at all or understood among the fishermen as to the size below which they will not take oysters or bring them ashore?—I have repeatedly gone down, and, as Gifford said, there is no notice taken of them. I am very particular, and I have always been so in reference to the stoppage of the oyster season. On the last day of April they cease to fish. I do not say that they give me any trouble, because they do not. They do not commence to fish again until the 1st of September.

56,654. There is no attempt to fish during the close season?—I never saw any attempt for some years.

56,655. Is there any regulation enforced or understood among the fishermen as to the size of the fish they catch?—Yes; I believe it is generally understood that they are not to bring in small oysters.

56,656. Does anybody look after that?—I have myself gone down and remonstrated with them. I was not aware they did it.

56,657. Is there any standard size recognized among the fishermen, below which they are not to bring ashore oysters?—No.

56,658. No one does prevent them bringing ashore oysters of any size they like?—I would do so.

56,659. Have you ever done so?—Yes.

56,660. Have you prevented them from bringing in small sized oysters?—I have remonstrated with them, and told them to throw them on the beds. I have not done so lately.

56,661. Do they bring many small oysters ashore?—I do not think they do.

56,662. Do you think that the bringing of small oysters ashore has in any way injured the fishing?—It would decrease the number. If they were left they would grow larger; but I do not know that it has decreased the number.

56,663. Do you know if there has been an increase of spat or not?—No.

TENBY.

R. Parrott.

7 October 1864.

56,664. Is there a good breeding ground for oysters?—They are always recruiting themselves.

56,665. Has the number of oyster boats increased or diminished lately?—Increased.

56,666. The boats have increased?—Yes.

56,667. How are you aware that the quantity of oysters caught has diminished?—From what I have seen brought in. I used to see the boats bring 2,000 or 3,000, but now that is not so.

56,668. Does each boat get fewer now?—Yes, each boat gets fewer.

56,669. You do not know if as many oysters leave this place for the inland market as formerly?—They are not brought ashore, therefore they cannot be taken away.

56,670. (*Mr. Lefevre.*) Have you any instructions to look after the size of the mesh of the trawls?—Yes.

56,671. What are your instructions in reference to the mesh?—I have not got them with me, but I think the mesh is not to be less than $1\frac{3}{4}$ inches.

56,672. One and three-quarters from knot to knot?—I have the Act of Parliament; but I want to know what our instructions are to be. Some time ago there was a petition sent from Brixham, requesting that they might be allowed to wear out their old nets, and the reply was, that permission was to be granted.

56,673. Have you, from time to time, inspected the nets of the trawlers?—Not lately.

56,674. When you last inspected them, were they using meshes of a legal size?—The mesh was rather larger, but it was about that time that the petition went up from Brixham.

56,675. At that time they were using a mesh rather smaller than $1\frac{3}{4}$?—I think it was rather larger.

56,676. Rather larger?—Yes.

56,677. And do they still use a mesh rather larger than $1\frac{3}{4}$ from knot to knot?—I do not know. I have not measured them lately.

56,678. For the last few years you have not taken any pains to see what the mesh is?—Not lately, I have not.

56,679. What have you done with regard to the length of the beam or the weight of the head-irons?—There are only a few trawlers here. There are 13 now, but a few years ago there were not more than four or five. As they were Brixham trawlers, we took it for granted that their nets were proper when they came from Brixham, where the laws are strictly enforced, and that they could not on the passage make the mesh larger or smaller.

56,680. Do you take pains to see that the trawlers from this place use the legal mesh or not?—We have not done so lately.

56,681. Then you cannot say whether they do or not?—No.

56,682. What is done in reference to the length of the beam or the weight of the trawl-irons?—I was not aware that there was any restriction as to the length of the beam.

56,683. There is no such restriction observed here at all?—No.

56,684. Have you any instructions of a similar nature in regard to oysters, and the size of the dredge or the mesh of the dredge?—No, I think not. The only instruction I have, is to enforce the Convention between the French and English Governments, in 1856.

56,685. You have received instructions from the authorities of the Coastguard to carry out that Convention here?—Yes.

The witness withdrew.

C. Claxton.

Christopher Claxton called and examined.

56,686. (*Mr. Caird.*) Are you a trawl fisherman here?—Yes.

56,687. Have you been long a fisherman here?—Fifty-five years.

56,688. And you have always been a trawler?—Yes.

56,689. During all that time?—Yes, sometimes at Brixham, sometimes here. I have been here for 45 years.

56,690. Have you for the last 20 years been acquainted with the trawl-fishing off the coast of Tenby and South Wales?—Yes.

56,691. Have you observed whether there has been any increase in the number of vessels trawling along the coast within the last 10 years or so?—Yes, there have been a great many more vessels.

56,692. Has the size of the vessels increased as well?—Thirty years ago there was only one here.

56,693. Only one trawler?—Only one belonging to Tenby.

56,694. When you first began to fish as a trawler were the Brixham boats in the habit of coming here, or have they only come here more recently?—I used to come here myself.

56,695. Are you a Brixham man?—Yes.

56,696. When did you first come here?—In 1810 I came here first.

56,697. Have you been acquainted with the coast ever since?—Yes.

56,698. Is the quantity of fish caught here by the trawlers as plentiful or more plentiful than it was then?—It is much about the same thing in the proper season of the fishing.

56,699. Are there particular fishing grounds you are well acquainted with in the Bristol Channel, where you are pretty sure to find fish?—Yes, in the part of the Channel I am acquainted with.

56,700. Is the ground along the coast favourable for trawling generally?—It has failed lately for a few years. The only account I can give of that is that there are more vessels coming here. There is as much fish in the time of the year, but there are more vessels to take it up.

56,701. Have you ever trawled in Cardigan Bay?—No.

56,702. In St. Bride's Bay?—No.

56,703. Milford Haven?—No, only off here.

56,704. How far to the westward have you gone?—Off St. Govans,—to the westward of St. Govan's.

56,705. How far up the Channel do you go?—Up as far as the light-ship.

56,706. Just across Carmarthen Bay?—Yes.

56,707. How far south do you go?—Away three parts across to Lundy.

56,708. Do you trawl all the way between Lundy and Carmarthen Bay?—Yes.

56,709. Is that the best trawling ground?—It is only at a certain time of the year that we go there,—three or four months in the summer season.

56,710. What time of year do you trawl in the deepest water?—In July or June, and on that way.

56,711. (*Mr. Lefevre.*) Where are you fishing then?—Outside, in the deep water between Lundy and Caldy.

56,712. In the deepest water?—Yes, off St. Govan's—from that to Lundy is the deepest water. The further westward we go, the deeper water we find.

56,713. (*Mr. Caird.*) Are there 26 or 27 fathoms of water?—Yes, and I have found 30 fathoms between Lundy and Carmarthen.

56,714. Do you find the same description of fish that you used to catch upon the same ground?—There are just the same fish there now as there were 50 years ago.

56,715. There is no change in the kind of fish, and they do not seem to have diminished?—Not that I know of.

56,716. Do you get as many soles now as you were in the habit of getting formerly?—Yes, at times, but it is not very regular, as it used to be years ago. Sometimes we get a good haul, and at another time we hardly get anything.

TENBY.

C. Claxton.

7 October 1864.

56,717. Is there any particular ground that is favourable for soles?—No.

56,718. There is no well-known ground which is very good for soles?—No, it is just the same that it used to be.

56,719. Do you get many turbot?—Yes, sometimes.

56,720. Do you get as many now as ever you got?—Yes, and more sometimes.

56,721. Do you ever get any cod in the trawl?—Very rarely. We may catch one or two sometimes.

56,722. Do you get large quantities of gurnard?—Yes, there have been a great many gurnards this summer.

56,723. And flounders?—Yes, what we call plaice. We do not call them flounders. The flounder and the fluke are river fishes.

56,724. Do you get them nearer to the shore and in shallow waters?—Yes, and we get some in the bay in the time of year,—we catch what we call plaice.

56,725. Has the size of the trawl net you use been increased—is the mesh larger or has it become less in the course of the last few years?—Some have got smaller, and some larger. I have the mesh of my trawl as big as the proper size.

56,726. Is there anybody who looks after the size of the mesh that is used in the trawl-vessels, in order to ascertain if it is of the proper size?—No, there is no person here who does that.

56,727. Is there any rule among the trawl men here as to what the size should be?—No; one has one size, and another another.

56,728. Every one pleases himself?—Yes.

56,729. As a matter of rule among the trawlers, has the mesh gradually become smaller of late years?—Yes; in Brixham they have got them so small that you can hardly put your finger through. They catch mullet with them.

56,730. Is the mesh getting smaller here?—It is much about the same here.

56,731. Much about the same as at Brixham?—No, it is smaller at Brixham than here.

56,732. Are you not using a small mesh the same as they are using at Brixham?—We do not use as small a mesh here.

56,733. Do you not catch smaller than you used to catch?—No, we do not get as many small fish as we did 50 years ago.

56,734. You got more small fish then?—Yes.

56,735. Did you find a market for them, then?—We threw them overboard again. We took out the best and swept the rest overboard.

56,736. What do you do with them now?—Boys pick them up and take them away. They would not do us any good if they were brought ashore. We might just as well throw them overboard as bring them ashore.

56,737. Are all the small fish you catch brought ashore?—Not all.

56,738. All you can dispose of?—Yes. Sometimes they can sell them and sometimes they cannot.

56,739. Is there any large proportion at all of all you catch so small as to be unfit for sale or consumption in the market?—Yes, a good deal of them are unfit for the market when we have caught them.

56,740. Is there one-third of the whole catch, or what proportion may there be unfit for the market?—I cannot say what quantity.

56,741. How many baskets do you sometimes get with a good haul in one trawl?—Unfit for the market?

56,742. No, altogether, that you bring on deck with a good haul of the trawl?—Of small fish?

56,743. No, of all kinds?—Sometimes more and sometimes less. We have sometimes hardly any at all, and sometimes a very good catch.

56,744. What is a good catch?—Four, five, or six baskets.

56,745. Do you consider five or six baskets a good catch?—Yes, sometimes.

56,746. Did you never make a better catch than that in old times?—Yes, sometimes we caught a dozen baskets, sometimes only one, and sometimes four or five.

56,747. Suppose you catch six baskets, how many baskets out of those six will be so small as to be unfit for the market?—Sometimes they were all fit for the market, when we caught them outside, and sometimes in the bay there would be no small fish at all among them.

56,748. Sometimes they are not all fit for the market?—Yes; sometimes there is a good bit of small fish among them.

56,749. Would there be one or two basketfuls?—No, not half a basketful.

56,750. What do you do with them?—We pick them out; they are of no use.

56,751. There is no large proportion of all you catch destroyed in consequence of being of no use to anybody?—No. There are some that are of no use to anybody, but that we cannot help.

56,752–3. (*Mr. Lefevre.*) When you first came here, do you recollect what number of line fishermen there were?—I do not think there were any here at that time.

56,754. And there were no trawlers?—None belonging to this place. There were only one or two little boats. They used to go trawling then in the small boats in which they go codding and oystering now.

56,755. Then trawling was introduced by the Brixham boats?—Yes.

56,756. And the people here eventually took to it?—Yes.

56,757. Are the boats belonging to Tenby now manned by Brixham men or by Tenby men?—By Brixham men. A good many of the Tenby boats are manned by Brixham men.

56,758. They are manned chiefly by Brixham men?—Yes.

56,759. Then there is a kind of colony of Brixham men here?—Yes. There are several Brixham men who go in Tenby boats.

56,760. What is the size of the boats belonging to Tenby?—16 or 17 tons, and there are some big ones.

56,761. The smaller class are of 16 or 17 tons?—Yes.

56,762. And the other class will be of about 30 tons?—Yes.

56,763. Do you own a boat yourself?—No.

56,764. Are you master of a boat?—Yes.

56,765. What is the length of the beam you use?—38 feet, and some have the beam 40 feet.

56,766. What is the size of the boat you are master of?—About 17 tons.

56,767. Do the larger class of boats use a larger beam?—Yes, the bigger the boat, the larger the beam.

56,768. Is there any reason why they should be restricted to a beam of 38 feet in length?—Some use them 38 feet and some 40 feet. I do not think any of them use a beam of more than 40 feet. Not here at Tenby, but in Plymouth and Brixham, they use them of 42 feet in length.

56,769. Do you trawl much in winter between Caldy Island and Worms Head?—In the winter time we are all fishing in the bay.

56,770. Why are you fishing in the bay only in the winter time?—Because there are no fish outside.

56,771. It is not on account of the weather?—No; if we go outside of Tenby we find no fish at all; that is the reason we keep in the bay at that time of year.

56,772. Do you fish at all in the bays during the summer time?—No, not if the fish are outside, but in the first of the season, in March, April, and May, we fish in the bay.

56,773. But in June, July, and August, when the boats are lying in the harbour, they do not fish until they get outside?—No.

56,774. They do not let down their trawls?—No, not till they commence fishing outside. We do not

think much of fishing in the bays during those three months.

56,775. Have you ever yourself tried trawling in the bay during summer time?—Yes, I have tried several times.

56,776. What kind of fish did you catch in the bay then—did you catch a great number of small fish?—Yes, small fish, and some big fish too.

56,777. Was there a large proportion of small fish then?—No, much about the same as there is now.

56,778. What would be the effect upon the trawlers belonging to Tenby, if trawling were prohibited in the bays?—I cannot say, I am sure.

56,779. Would it cut off much of your fishing?—Yes, it would at this time of the year, but in the summer time, in the height of the summer, there would be no difference, because we do not go into the bays.

56,780. But would it injure your fishing in the winter time?—If we were not allowed to fish in the bay in the winter time, we might as well give it up altogether.

56,781. It would not prevent the Brixham trawlers from coming here trawling outside in the summer time?—No.

56,782. But it would stop the trawlers from trawling here themselves?—Yes.

56,783. Would it injure the Tenby boats?—Yes.

56,784. And not the Brixham boats?—No.

56,785. Would it cut off the winter fishing of the Tenby boats?—Yes, from this time until March again.

56,786. (*Mr. Caird.*) Do you ever foul any of the long-line fishermen's lines?—Yes, sometimes we have done so.

56,787. Do you and the long-line fishermen fish on the same ground?—We do mostly.

56,788. Do you interfere with each other much?—Sometimes we do in the bay.

56,789. Do they complain much of it?—No, they do not complain, because we do not get foul of them very often.

56,790. Do you carry away their lines? What do you do when you do get foul of them?—We clear them in the best way we can. It is by night that it is done. In the daytime, if they go in the way of the trawlers, it is their own fault.

56,791. Do you trawl both day and night?—Sometimes, but not at this time of year. We are generally in by night at this time of the year.

56,792. Do the long-line fishermen fish in the night time and in the day time?—Yes, their hooks are out night and day, and the trawlers come in the night, unless it is very fine weather.

56,793. Can the trawlers easily avoid the same ground that the long-line fishermen are fishing upon?—No, but the trawlers are not out. They are laid up almost all the winter, when the men begin to fish with long lines here.

56,794. (*Mr. Lefevre.*) Do not the trawlers fish at all in the winter time?—One may go out, but not many; they are generally in.

56,795. Is not the line-fishing principally in the winter here?—The trawlers are almost all laid up in the dead of the winter.

56,796. The trawlers are laid up?—Yes.

56,797. When are they generally laid up?—There are no fish caught, and they lay by for three or four months. There are no fish coming in; of late years they have been very scarce.

56,798. What months are you laid up?—From November and December; we laid up last year until January and February; when March and April came we were out again.

56,799. What did the men do in that time?—They did anything they could; they went in boats or anything.

56,800. Do they take to oyster dredging?—I do not myself, but most of the men in the vessels do.

The witness withdrew.

JOHN NOWALL called and examined.

56,801. (*Mr. Caird.*) Are you a Brixham or a Tenby man?—A Brixham man.

56,802. Have you long been in the habit of coming here fishing?—For 20 years.

56,803. Do you live here now?—Yes.

56,804. Have you heard the evidence which has been given by the previous witness?—Yes.

56,805. Do you generally agree with what he stated as to the supply of fish being quite as plentiful as it used to be?—The fishing here is according to the weather.

56,806. Have you noticed a large increase in the number of boats fishing on this ground during the last 20 years?—Yes, there are more boats than ever there were.

56,807. Have you never extended your fishing ground in that time?—No, we have always been fishing upon one piece of ground.

56,808. Do you ever go westward to Govan's Head?—No.

56,809. Nor into St. Bride's Bay, nor round into Cardigan Bay?—Not from here.

56,810. (*Mr. Lefevre.*) Do you never go eastward of the lighthouse?—No.

56,811. (*Mr. Caird.*) Then you just fish in Carmarthen Bay?—Yes, between Lundy Island and Caldy Island.

56,812. That is the ground you have fished upon for 20 years?—Yes.

56,813. And on that comparatively limited ground there has been a great increase of vessels fishing?—Yes.

56,814. Have you noticed any diminution in the number of fish?—No, there has been very little difference.

56,815. Have you found on going on the same range of ground now that you get the same fish you did?—Yes, just the same in the season.

56,816. Do you get as many soles as ever you got?—Yes, during the summer months, that is all.

56,817. Have you at all altered the size of the mesh of your net during that time?—No, we never do. We have a regular size, and two inches is the smallest mesh.

56,818. Has it been the same during the whole of your life as a fisherman?—Yes, as a regular rule that is the smallest mesh we have in the trawl net.

56,819. Is that commonly observed by the trawlers who fish in the bay?—Yes, it is mostly a guide for every one.

56,820. During what months of the year do you find the fish in Cardigan Bay?—About the last of May and the first of June; then they go inside, as the fish get scarcer.

56,821. Do you fish the whole year round?—No, there are no fish about Christmas. The boats are then all hauled up and there is nothing doing.

56,822. For how long?—We do not commence again until March or April. We commence the spring season on the first of April, but even then we get very little fish.

56,823. Are there very few fish to be caught here in the months of January, February, and March?—Yes, very little.

56,824. Do you not attempt to go further off the land?—No, it would be of no use. We have been off, but we have not found any fish. Some of the boats have gone out in the month of May, when the fish have not been plentiful in the bay, but they have got no fish.

56,825. Do the Brixham fishermen go out?—Here?

56,826. Yes.—No, not here, but they are always out there, both winter and summer.

56,827. Are there no fish found here in the winter?—No, not in the deep water.

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56,828. Where do you find them ?—Between Caldy Island and Lundy Island, and from that to Worms Head.

56,829. Does the stormy weather affect your fishing? —Yes, a great deal.

56,830. In what way ?—If it blows a gale of wind from the south-west, in the first two or three days of the season, we can scarcely get any fish until the water becomes smooth again.

56,831. You do not find fish in stormy weather ?—Not at all times.

56,832. Is it in consequence of the bottom being at all moved or altered by the stormy weather that the fish change their position ?—It is supposed that it is from the strength of the tide and the ground sea. As soon as the weather becomes fine we get fish again.

56,833. You never go much outside the limits you mention ?—No, we do not like to go there and fish, the tide is too strong. We would rather fish on what we call the clear ground.

56,834. Has nobody offered to fish outside the limits ?—Nobody about here, off this coast.

56,835. Is there plenty of fish inside ?—It is not very plentiful, but we have to put up with it whether it is much or little. The fish are not plentiful, far from it.

56,836. Do none of the Brixham men ever fish in St. Bride's Bay ?—No.

56,837. Or Cardigan Bay ?—No, they never go from this coast. They come here for a few months in the summer time, and they all went away last week.

56,838. In what season do you get the smallest sized fish ?—In the spring we get small fish.

56,839. What distance from the land will it be ?—Eight miles, I suppose.

56,840. How close in do you ever come with your trawl-vessels ?—In the hake season we come in very handy to the land, but we do not take any small fish then.

56,841. Have you never observed any large quantity of small fish in your trawls ?—Sometimes a few baskets.

56,842. On the whole, do you catch a smaller class of fish there than you used to do,—do you catch more young fish ?—I do not see much difference in regard to that.

56,843. Have you ever destroyed the spawn of fish in the trawl nets ?—I do not think we have. We often see barnacle spawn and the like of that, but we never see the spawn of any fish.

56,844. Is there any herring spawn in the bay ?—No, we do not take any particular notice of any kind of spawn, but I do not think we destroy any spawn except barnacle spawn, which gets about the vessel at one time in the season.

56,845. Do you ever foul the lines of the long-line fishermen ?—Sometimes we come in contact, but not often.

56,846. Is there any complaint in that respect ?—They will make a bit of a bother at the time.

56,847. Do you both fish on the same ground ?—Sometimes, but not if they set their lines in deep water; we do not interfere with them then at all.

56,848. (*Mr. Lefevre.*) In the winter time you are fishing over the same ground that they are ?—It is in the winter season they commence codding.

56,849. Do you fish much at night during that season ?—Very little at night.

56,850. Would it be of any disadvantage if you were prohibited from fishing during the night time ?—I do not think there is any call for that, because we do not do it; there is very little of it done at this time of the year.

56,851. Do any boats come from other places to fish here—any trawlers ?—Not many.

56,852. Only from Brixham ?—There were two from Plymouth last year.

56,853. Are you the owner of the boat you fish in ?—No, the smack I belong to comes from Swansea.

56,854. Have many of the fishermen shares in the boats ?—Very few now.

56,855. The boats are owned by others ?—Yes, they are sailed under masters; very few have got any part in them.

56,856–8. Do they get a share of the take ?—Yes.

56,859. Have there been any new ones built for the last few years ?—No, none at all, they are all old vessels and they are now glad to dispose of them and get rid of what there are here. The fishing here is very trifling at present upon this coast.

56,860. (*Mr. Caird.*) The fishing now is very trifling ?—Yes; they would sell a great many of the vessels which are here now, if they could, as they do not pay.

56,861. (*Mr. Lefevre.*) Are they not paying the men ?—No.

56,862. (*Mr. Caird.*) You said some time ago that the fish were as plentiful as ever they were ?—That is owing to the weather.

56,863–4. The weather is the same as it used to be, is it not ?—No, the summer season is not the same as it used to be. This has been the finest summer we have had for many years.

56,865. (*Mr. Lefevre.*) Then it is not the scarcity of the fish, but the wind and other circumstances which have been against the fishing ?—The fish are not as plentiful, and they do not come about as they used to do.

56,866. Do you think that the ground may have been over-fished,—are there too many vessels fishing upon it ?—The more the ground is stirred up, the more fish there are. It is so on the Brixham coast.

56,867. Have you observed that here ?—No, it is not the same here. There are 150 smacks at Brixham, all over one bit of ground, and most of them get fish every day.

56,868. What then do you think is the cause of there not being so many fish ?—I cannot say, I am sure.

56,869. Do you fish much within the point in the bay, between Caldy Island and Worms Head ?—Yes, that is all the place we have to fish.

56,870. In the winter time ?—Yes, in the winter time.

56,871. Do you catch many small fish in that part ?—No, there are not many small fish to catch.

56,872. What would be the effect of preventing you from fishing within the headlands ?—I do not know what the effect would be.

56,873. Would it put a stop to trawling from this port ?—I cannot say anything about that.

56,874. Would it cut off a good deal of your fishing ?—I daresay it would.

56,875. Would it be profitable to own trawlers in Tenby, if that were the case, and if you were not allowed to fish within the bay ?—I do not know how that would be. Where could we fish besides ?

56,876. What would be the effect ?—I think you might as well stop our bread at once, if you take our bay from us; we might as well sell the vessels at once. That is the only bit of ground we have to go over on this coast.

The witness withdrew.

DAVID WILLIAMS called and examined.

56,877. (*Mr. Caird.*) Are you a fisherman here?—Yes.

56,878. Have you long been acquainted with the fishing in this bay?—Yes, for 20 years.

56,879. What kind of fishing do you follow?—The seine-fishing and oyster-fishing.

56,880. Will you describe to us how the seine-fishing is carried on?—When we see a shoal of mackerel, we shoot the net right round them and draw them towards the shore.

56,881. Have you good mackerel-fishing here?—Some years we have had it very good.

56,882. It varies very much?—Yes; this year there was nothing, and last year it was very poor, but the year before we had a good mackerel-fishing.

56,883. Do you fish herrings with the seine net?—Yes, sometimes.

56,884. Do you catch them in the bays?—Yes.

56,885. Do you get large quantities of them?—Sometimes.

56,886. Are they fished in the same way as pilchards are on the coast of Cornwall?—They are not nearly as plentiful.

56,887. But do you fish them the same way as the Cornish people fish pilchards?—No, not exactly the same. I think the net is a different kind of net.

56,888. Do any pilchards come here?—Very few.

56,889. What is the length of the seine?—About 70 fathoms.

56,890. And what is the depth?—Somewhere from 15 to 20 fathoms.

56,891. What is the size of the mesh?—It varies in size. It is very large at the ends, but when it comes towards the middle it gets smaller.

56,892. Is it very small then?—It is small enough to catch mackerel.

56,893. Will it catch anything smaller than mackerel?—It will catch herrings.

56,894. Will it catch anything smaller than herrings?—I have seen small things in the net when there has been a great body of fish.

56,895. Do you catch a considerable quantity of small fish in those nets?—The bait comes in with it.

56,896. Whitebait?—Yes.

56,897. Is the mesh small enough to catch whitebait?—Fish about the size of my thumb will go through.

56,898. But a good many small ones are caught with it?—Not many small ones.

56,899. Do you catch any so small that they cannot be used for food?—No; all of it would go through the net, except some whitebait, which come in when there are such a lot of mackerel. The sea is all white when we are drawing it ashore in consequence of the going out of those fish.

56,900. Is there any large quantity of fish destroyed, which cannot be used for food, by that mode of fishing?—Nothing at all.

56,901. Is there none left on the beach or thrown into the sea?—No, it will be all washed into the sea.

56,902. Are they all alive or dead?—All alive.

56,903. Is there any large quantity of fish caught with the seine nets here?—In years gone by there was a good many.

56,904. Are there many men employed in that way?—Yes, five men to each boat.

56,905. Are there many boats?—Seven or eight, I believe, altogether.

56,906. Are they increasing or diminishing?—There are more boats than there were five years back.

56,907. More now?—Yes, more now.

56,908. Is the fishing increasing, do you think?—I do not think there is much difference in regard to catching salmon or anything like that.

56,909. Do you get salmon in the seine nets?—Yes, sea salmon.

56,910. Do you get many?—Sometimes five or six, or more or less.

56,911. Do you fish with the seine net?—Yes.

56,912. Do you work it during the day?—Yes, always for mackerel.

56,913. And for every other kind of fish at night?—Yes.

56,914. Do you sometimes get large hauls of herrings with that net?—We may catch some years about 1,000.

56,915. Is that the largest haul you have ever had?—Yes, I think it is. I do not recollect more at a haul.

56,916. Are you a dredger of oysters?—Yes.

56,917. Can you tell us if the quantity of oysters here is diminishing or increasing?—There is nothing like the quantity there was here a few years back.

56,918. Are the beds far off the shore?—No, not very far.

56,919. Have you always been in the habit of fishing on the same beds for many years back?—Yes.

56,920. They are not dry at low water, are they?—No.

56,921. The oysters could not be lifted off the beds?—No.

56,922. Is there any regulation among the fishermen themselves as to the size of the oysters they take to the shore?—No, but it would be of no use to bring small things on shore,—they would be no good at all and we throw them overboard.

56,923. Do you cull them when they are fished and throw the small ones over?—When the dredge comes up, we throw the small ones overboard with the rubbish.

56,924. Is there a particular kind of oyster here which, although it is of the size that is sometimes taken for oysters that are suitable for the market, is really only the young of the oyster and has very little in it?—It would be of very little service to take oysters of that description.

56,925. Do you fish any of that size?—No, most of them are thrown overboard.

56,926. Is there anything in that oyster do you suppose?—Very little. It would be no good to carry it to the market.

56,927. Are there many oysters like that caught from your oyster beds and brought ashore?—Not many. There may be a few. All that is small we throw overboard. It is an oyster that is knocked off a big oyster. We should not have time to knock it off in the boat, and it is carried off to the shore fast to a big one. It is what we call a knocker.

56,928. What do you suppose is the reason that the oyster beds are not yielding as well as they used to do,—are they over-fished?—I cannot tell.

56,929. Are they fished out of season?—No, only during the season.

56,930. Are there more boats oyster-fishing than there used to be?—There are more, but they do not fish the beds half as long as they were fished formerly. We all want to catch good fish.

56,931. Do you say that the beds are not as long?—The beds are of the same length.

56,932. You do not fish for as long a season,—is that what you mean?—Yes, we fish now for about a month, perhaps, and then we go to catch codfish, and there will be very few boats then on the oyster beds until the cod-fishing is done,—that will be near January and then they go to the oyster beds again.

56,933. When did you notice the great diminution in the oysters?—They have been diminishing for a good many years.

56,934. (*Mr. Lefevre.*) Do you recollect the oysters being brought from Stackpole and being laid on the beds?—I have seen the boats in the habit of going down there cull the small ones and throw them out.

56,935. Has that ceased altogether?—There have not been many boats down there very lately, not worth speaking of.

56,936. Do they not catch oysters off Stackpole now?—I think they have gone scarcer.

56,937-8. Do they not lay down the small oysters

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they catch there?—They throw them on the oyster beds at once.

56,939. What is the size of those beds?—Perhaps a mile in length and more—there are different beds.

56,940. Are there any persons who throw oysters down there, and take them up again?—I do not know how it is with regard to that.

56,941. Have you laid down oysters there?—Yes.

56,942. Have you gone again and brought them away?—No, other men get them up. A great many boats come from Stackpole and throw their oysters there as well as us.

56,943. They would not lay them down there with the view of taking them up themselves?—No, the bed never dries.

56,944. Then it is below the level of low water?—Yes, it is in six fathoms of water.

56,945. Then anybody dredges there who likes?—Yes, anybody belonging to the town may dredge there.

56,946. Has the price of oysters increased of late?—No, I do not think it has.

56,947. Does it keep about the same?—Yes, just about the same.

56,948. Are there many oysters sent away from here to Bristol?—No, none.

56,949. Very few?—Yes, because there are very few to be got.

56,950. Then the supply is not much more than sufficient for Tenby itself?—Very little.

56,951. What number of men are there in an oyster boat?—Three in each boat.

56,952. Have they only one dredge?—Yes, one dredge.

56,953. What is the size of the mesh that you use in the dredge?—The mesh in the bag is very large, and the ring is $2\frac{3}{4}$ inches.

56,954. Then you will not catch many of those small oysters?—No, small oysters will get out through the rings.

56,955. Then unless the small oysters adhere to the larger ones, they would not be caught?—No, they go out.

56,956. Do all the fishermen use the same sized ring?—It is very likely the same sized mesh, but not the same sized dredge. A dredge must be according to the boat.

56,957. They only use one dredge, I suppose?—Only one.

56,958. Do you go line-fishing yourself?—I have been.

56,959. What is the season for codfish here?—It commences the last of this month.

56,960. And it goes on for how long?—Through November, December, January, and February.

56,961. Do you agree with the first witness, who told us that codfish has fallen off of late?—Yes, it has been falling off. I have not fished much in the bay; in fact, we cannot fish much in the bay.

56,962. Why?—Because there are so many trawlers carrying away our hooks, and of late years we have been obliged to go outside on the rocks.

56,963. Some years ago were you in the habit of fishing much in the bay?—Yes, it was all in the bay.

56,964. It was always in the bay?—Yes.

56,965. When did you find yourselves obliged to go outside on account of the trawlers?—Three or four years ago.

56,966. During those three or four years have you observed trawlers fishing more in the bay than they used to do?—Not a bit.

56,967. Why did you not go on fishing in the bay?—We often had a good deal of trouble; then we went outside and got better fish outside.

56,968. Did you fish by night as well as by day for cod?—Yes.

56,969. Have you found as many codfish outside as inside?—Yes, there are more outside, but we cannot get there unless it is fine weather. We can fish in the bay at all times, except it blows very hard.

56,970. You think that the codfish are plentiful, but you are not able to go out often to catch them?—We are not able to go out often to get them, but they have fallen off outside for the last two years as well.

56,971. You think that the supply of codfish outside has fallen off?—Yes.

56,972. Or is it that you have not been able to go out as often?—There are not as many.

56,973. And you are not able to go out as often as you used to do when you fished in the bay?—It is only when it is fine weather that we can go outside.

56,974. When you do go outside, do you catch as many fish as you used to do?—We have not done so for the last two seasons.

56,975. Have you ever observed what the codfish have inside them at that time of the year,—do they feed on the herrings, or what?—They feed on different sorts of things altogether, small fish, and other things.

56,976. You have never observed any herrings inside them?—No, not lately.

56,977. Do you know how many seines there are belonging to the place?—Five, six, or seven.

56,978. What is the value of a seine net?—It depends on the size—perhaps 20*l.*

56,979. Do they ever shoot the seine net out in deep water and bring it round in a circle without dragging it ashore?—No, the seines are not fit for that, they are too small and too shallow.

56,980. Do you look for the herrings before you set your seine net, or do you shoot it in the chance of catching fish?—We shoot it in the chance of catching fish.

56,981. Are the fish in good condition when you catch them, or are they at all injured by being rubbed together?—They are in very good condition.

56,982. Have you got any of the trammel nets?—No, there is not one in the town that I know of.

56,983. We were told that there were four boats that went out with nets for herrings that were not exactly drift nets, but were like the drift nets, only they were anchored?—Yes.

56,984–8. What ground do they fish upon?—They are regular herring nets, the same as those which are used everywhere else. They may drift them for two or three hours and then moor them.

56,989. What is the usual season for the herrings coming into the bay?—From October until about Christmas.

56,990. When the herrings are in the bay, do you find that you get as good a price for those caught in the seine nets as for those caught by the drift nets?—Yes, about the same, but we cannot catch them in the seine if there is rough weather, because we cannot land them.

56,991–2. Then you often catch them in the seine net the same night they are caught by the drift nets?—No, not very often. The drift nets are better when there is a little surf.

56,993. (*Mr. Caird.*) What kind of bait do you use for your lines?—What they call whelks.

56,994. Do you find them on the shores here?—Not on the shores but in the Roads.

56,995. Do you dredge for them?—We catch a lot in the dredge, and we have traps for taking them also.

56,996. Do you get plenty of that bait?—Yes, a good many.

56,997. You have no difficulty in getting bait to follow your line-fishing?—No, except there is frosty weather, or an easterly wind, or something like that.

56,998. Is there much of the ground off this coast that is rough ground, unsuitable for trawling?—Yes, at the back of Caldy Island there is.

56,999. Is it good for line-fishing?—Pretty fair, only it tears the lines generally on rough ground.

57,000. Do you fish on the rough ground much yourself?—Yes.

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57,001. Are the fish in as good condition there as on the smooth ground?—Yes, they are very good.

57,002. The trawlers cannot go on that ground at all, I suppose?—No.

57,003. Is there much extent of that ground?—There are different spots of it.

57,004. (*Mr. Lefevre.*) Have you suffered much from trawlers in the last few years, by losing lines?—Not in the last few years, because I have not been in the bay.

57,005. Are the trawlers all numbered?—I believe they are.

The witness withdrew.

George Cadwallader called and examined.

G. Cadwallader.

57,006. (*Mr. Caird.*) You are an oyster dredger?—Yes.

57,007. Do you follow any other kind of fishing?—Yes, cod-fishing.

57,008. With lines?—Yes.

57,009. Do you agree with the previous witness, that the oyster beds are not yielding as well as they used to do?—They are not yielding as well as they used to do.

57,010. Is there a great falling off in the supply of oysters?—Yes.

57,011. Do you catch many more of the small oysters than you did formerly?—The small ones are not as plentiful as they used to be.

57,012. They are not as plentiful?—No, not near as plentiful.

57,013. Do you catch a larger proportion of large ones than you used to do?—No, they are very scarce; it is not profitable to catch them now.

57,014. Not to catch any?—No.

57,015. Are there not many people employed in the oyster fishery here?—They had better do that than do nothing, but it does not pay wages, and it is hardly worth while to dredge for them; it is very poor property.

57,016. What is the cause of the fishing having fallen off?—I cannot tell.

57,017. They used to be very good?—Yes, at one time.

57,018. You used to get plenty of oysters?—Yes, it was very good.

57,019. Are there as many boats as there were then?—There are a few more boats now than there were then.

57,020. Do you think the oyster beds have been fished out, or have they been over-fished?—Formerly they used to put oysters on the beds, from Stackpole. Then the gentlemen of the town were accustomed to give us half a day's work in putting them down there in the spring of the year. If we could have encouragement like that to work on the beds, I think it would do good.

57,021. What did they give you?—They gave us a trifle for going down.

57,022. Could you not do it yourselves?—We could not afford.

57,023. It would be as well as doing nothing?—We have shrimps or something to catch.

57,024. Do you think the oyster beds would be much better, if you were to take again to the plan of lifting them from Stackpole and placing them on the oyster beds here?—Yes.

57,025. Will nobody do it?—We don't do it. If we could have encouragement to do it, I have no doubt we should take off to it. We are all poor men, and we cannot afford to give our labour for nothing.

57,026. Are there plenty of oysters to be found at Stackpole?—They are not as plentiful as they used to be, but there are a great many there.

57,027. Then if you were encouraged to go there, you would not get as many as you did formerly?—There are not as many as there used to be. We have not been able either last winter or the winter before to go there; the weather has been very rough, and it would not have been safe to have gone there.

57,028. I think you said that you were a line fisherman?—Yes.

57,029. Do you find that you catch as many fish by the line now as you used to do?—They are not as plentiful as they used to be.

57,030. What is the cause of that?—I cannot tell.

57,031. You said that you can get shrimps sometimes?—Yes, I can get a good many shrimps in the spring of the year.

57,032. Is this a good place for shrimping?—Yes, very good.

57,033. Do you shrimp with a net from a boat?—No, we walk along the sands and push the net before us, up to our knees in the water.

57,034. Do you ever try shrimping from the boat with a small trawl?—No.

57,035. That is not practised here?—No.

57,036. Did you get many small shrimps in that net?—Sometimes.

57,037. What do you do with them?—We put them away in the water.

57,038. They are not destroyed?—No.

57,039. (*Mr. Lefevre.*) Where do the oysters principally lie in the bay here?—Between here and Caldy Island, and outside St. Caffyn's Island.

57,040. Are there several beds of them?—Yes.

57,041. Were the oysters that were brought from Stackpole smaller than the oysters that were picked up here?—They are much like those we have here.

57,042. Are they about the same size?—They are not as good in flavour at Stackpole as they are here.

57,043. Are they not good enough for consumption in the market?—Not half as good as the Caldy oysters, but they come good afterwards.

57,044. They require being laid down on the beds here before they are fit for the market?—Yes, then they come a good deal better.

57,045. They improve on the beds here, and grow fit for the market?—Yes, the beds here are all sheltered by Caldy Island, and by St. Margaret's Island.

57,046. Is there any ground here that would answer for laying down oysters above low water for the purpose of fattening them?—No, that plan has been tried, but the oysters were knocked about by the surf and the ground sea that came in.

57,047. Was the sea too heavy for them?—Yes.

57,048. You are obliged to put them below the level of low water, in order to preserve them from the surf?—Yes.

57,049. When was it that the operation of putting down these oysters ceased,—how long ago?—Ten years ago.

57,050. Nobody has thought it worth while to do it since then?—No one has given us encouragement to do it since.

57,051. Did it give employment to a good many boats?—Yes, to all hands.

57,052. Are the beds at Stackpole very large?—Yes, there are several very good patches of oysters there. They are good large beds.

57,053. What was the matter with the oysters there,—were they green?—They looked watery and were of a darker looking kind than the Caldy oysters. The Caldy oyster is as white as possible.

57,054. Then they are not laid down on the beds here to fatten, but to improve in flavour?—Yes, and to fatten also.

57,055. Have you any complaint to make against the trawlers for trawling in the bay here?—Our lines are not safe here one hour together. It is not safe for us to go home even and get a bit of breakfast.

57,056. Do you agree with the last witness,—that you are obliged to fish further from the shore in con-

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sequence of trawling in the bay?—Yes, we are bound to put our lines down somewhere.

57,057. You were formerly in the habit of fishing a great deal on the grounds in the bay, but are now obliged to go further out?—Yes.

57,058. Do you often lose your lines?—They have been torn all to pieces sometimes, and we have had a deal of bother with them.

57,059. Did you lose them?—Yes, by stress of weather they have been dragged away, and I have had them dragged away when there has been no stress of weather.

57,060. Did you ever lose your lines, when you knew that they had been carried away by the trawlers?—Yes, I have lost them several times, for three weeks at a time, and I have found them much injured.

57,061. How long ago was that?—Eight years ago.

57,062. At what time of the year?—In the month of November.

57,063. Was that in the night time?—Yes, they were hauled away in the night time.

57,064. Were you in the boat with the lines, or had you gone out and left them?—I had left them for the night.

57,065-6. You were not by to take the number of the trawler?— No, I was not there when they trawled them away.

57,067. Then it would have been possible for you, had you remained out with your lines, to have taken the number of the trawler?—Sometimes it blows very hard, and our boat being only a small one, we want to get in every night.

57,068. But if you had been out, would you not have taken the number of the trawler, and have got something for your lines?—I could have taken the number, if I had been there.

57,069. If you were able to fish in the bay, do you think you would catch more fish than you do outside?—I don't see why we should not.

57,070. Do you think it a hardship that you are not able to fish there?—We feel it a very hard case. Our boats are very small to go outside.

57,071. What would you suggest,—what do you think ought to be done to prevent this hardship?—They should give us a place to put our hooks in, and they would still have plenty of room to trawl in. They ought not to trawl away our lines. They could easily give us room, and we should give them room too. Trawling ought to be prevented within certain distances. The bay is big enough for them and for us too.

57,072. You think you could divide the bay between you?—Yes.

57,073. Is there not that division already? do they not take the bay, and you the rough ground, where they cannot trawl?—Sometimes the weather is too bad for us to go outside.

57,074. Do you agree with the trawlers who told us that they do not trawl much at night?—Yes, they do not trawl very often at night.

57,075. Do you shoot your lines often in the daytime?—Yes, night and day too.

57,076. Is there no rough ground in the bay?—Yes, outside, and off the Woolhouses.

57,077. How much of the bay is rough ground?—I cannot tell exactly.

57,078. What proportion of the bay is rough ground?—To the eastward of the Woolhouses.

57,079. About a half or a third?—No, about a mile or two.

57,080. Do you not set your lines there occasionally?—We do at times.

57,081. If you were to set your lines in the night time in the bay you would catch fish, and the trawlers would not interfere with you?—Sometimes the fish take the line better in the daytime.

57,082. But if you set your lines sometimes in the night the trawlers would not interfere with you?—Sometimes they are trawling night and day, and then we don't know where to put our lines.

57,083. You said just now that they trawled by night?—It is very uncertain; some do, and some do not.

The witness withdrew.

C. Creese.

CHRISTOPHER CREESE called and examined.

57,083*a*. (*Mr. Caird.*) Are you a dredger?—Yes.

57,084. Did you hear the evidence of the previous witness?—Yes.

57,085. Do you agree with him generally as to the oysters having become fewer than they formerly were?—Yes, quite so.

57,086. What is the cause of that?—I cannot give you any cause, except that the beds have not been mended as the last witness described.

57,087. How could they have mended them?—By adding to them.

57,088. By bringing other oysters from Stackpole?—Yes.

57,089. Why don't you bring them?—It is a very dead time of the year. We cannot get half a living by oyster dredging, and we are obliged to go and do what we can.

57,090. Would it not pay you sufficiently,—would it not afford you remuneration to do it?—No, unless it was improved very much.

57,091. (*Mr. Lefevre.*) Has there been much spat for the last two or three years?—No, I think not.

57,092. Has there been any at all?—There has been a little, but very little.

57,093. Only very little?—Yes.

57,094. When did you observe the last spat?—There has been a little at all times. We have found a little every season.

57,095. But there has not been a good one for four or five years?—I cannot speak of one time more than another. There has been nothing of consequence of late years.

57,096. Do you agree with the last witness as to trawling being a hardship to line fishermen on account of their not being able to set their lines in the bay?—I quite agree with his evidence. The rocks he mentioned are many miles off the land, and perhaps there may not be one day in a month when we can go there. There is a piece of ground close inshore, in Sandy Pool Bay, where we resort to and set our hooks, but we cannot be sure of them for one hour.

57,097. What kind of bottom is it—a sandy bottom?—There is a small piece of rough ground there, but there is not room upon it for four men to get a living, let alone 40.

57,098. Are there 40 line fishermen here?—Yes. There are two or three men in each boat. There are some vessels which make a practice of trawling all night and day too, and sometimes they stop out for two or three nights together. Nearly all the vessels were out last night.

57,099. When there has been a bad day they take advantage of a fine night to trawl?—Yes, and some vessels follow it all during the winter. They scarcely ever give it up. Some of them are laid up, but not all.

57,100. How many boats are there that fish with lines?—Twenty boats.

57,101. As many as 20 boats?—Yes, there are more sometimes, when some of the trawlers drop off and commence line-fishing.

57,102. Are most of the boats engaged as pleasure boats during the summer time?—Yes, nearly all of them, with few exceptions.

57,103. In the winter time do the trawl-boats occupy themselves in oyster dredging and line-fishing?

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—Yes, some of the trawlers lay their trawls up and go on the oyster beds.

57,104. Then you have two or three months, namely, December, January and February, when you can fish with the long-lines in the bay?—There are some two or three trawl-boats which follow trawling all the year round. They scarcely lay up one day when there is weather for them to go out.

The witness withdrew.

W. Smith.

William Smith called and examined.

57,105. (*Mr. Caird.*) What kind of fisherman are you?—I am a long-line fisherman—a cod fisher.

57,106. Have you anything to tell us which we have not heard already?—No.

57,107. Where do you follow the long-line fishing?—I go on the rough ground, out of the way of the trawlers.

57,108. Have you ever found many fish in the bay, on the smooth ground, for your lines?—Not since I have been going fishing, but others have caught a great many in the bay.

57,109. Where have you generally found the best fishing for your long-lines?—Outside on the rough ground.

57,110. That is best?—We get the best quality of fish there.

57,111. Is there some rough ground in the bay?—A little.

57,112. Do you fish it?—No.

57,113. Have you never fished it?—Some few times, but not often.

57,114. In what way do the trawl-vessels interfere with the long-line fishermen?—They drag them away.

57,115. They foul their lines?—Yes.

57,116. Is there any other harm that they do except that?—They could not do any harm, if they did not carry our lines away.

57,117. Can you catch as many fish outside now on the rough ground as you used to do?—No.

57,118. Are they getting scarcer?—They were a great deal scarcer last winter.

57,119. Was last year the first year that there was any scarcity?—No, the year before they begun to get scarcer.

57,120. What do you suppose is the cause of that?—I cannot account for it.

57,121. What kind of fish more than another have got scarcer?—Cod-fish.

57,122. Are the other fish you catch with the long-line also scarce?—We catch scarcely any other fish. We catch a haddock or two occasionally, but as a general rule we get nothing but cod. It is only a chance haddock that we get.

57,123. Do you get any conger?—Yes, we may have a few conger now and again, but nothing of any account. We also get a few dog-fish, two or three rays, and so on, just to make up the complement.

57,124. What bait do you use?—Whelks.

57,125. Do you find bait easily?—We have regular traps for them. We put a ray on a hook, and put a net on it and sink it down and the whelks go to it.

57,126. Do you find it a good bait?—Yes.

57,127. Have you ever used herrings for bait?—We never have a chance of getting any, except salt herrings.

57,128. Do not the herrings come here?—Not often—not often enough to get them for the hooks.

57,129. (*Mr. Lefevre.*) Were you in the habit of catching any large number of haddocks some years ago?—No. I never saw any great quantity caught by the hook.

57,130. It never was a fish you caught much with the long-lines?—No.

57,131. Is there a great extent of rough ground on which you can set your lines?—Yes, enough for all the boats.

57,132. Enough for all that are fishing over the ground?—Yes, enough for more boats than are here.

57,133. On that ground the trawlers cannot work at all?—No, they dare not show their faces there.

57,134. Do you think that they ought to be restricted also on some of the smooth ground as well?—There are some of the little boats that cannot go out, but I prefer going there, if I can.

57,135. You prefer the rough ground to fishing in the bay?—Yes, but there are other boats which are not able to risk going out there often. They could go and make a day's work in the bay, when they could not go out there and make a day's work.

57,136. They are quite a small class of boats?—Yes.

57,137. What number of boats are there?—There are some eight or nine or more. In fact, all the dredge boats are too small to go out there when it is rough weather.

57,138. When it is rough weather?—Yes.

57,139. When it is a little bit rough?—Yes. We were going out there last winter with the smacks when we had no business.

57,140. On the rough ground?—Yes.

57,141. How many smacks are there?—Only two.

57,142. Are trawl-boats ever used for long-line fishing in the winter time?—Not regularly. Sometimes one of the trawlers knocks off trawling, and agrees to go with our boats and take a hand-line. On the rough ground we have been talking about there are no codfish till the middle of December. We have tried repeatedly, and never found any.

The witness withdrew, and the inquiry was adjourned until the 8th of October, at Swansea.

Swansea, Glamorganshire, Saturday, 8th October 1864.

Present:

J. Caird, Esq., M.P. (Chairman). | G. Shaw Lefevre, Esq., M.P.

SWANSEA.

J. Bevan.

8 October 1864.

John Bevan called and examined.

57,143. (*Mr. Caird.*) You are a fisherman here, and have been for many years acquainted with the fishing at Swansea?—Yes, for 30 years.

57,144. What kind of fishing do you practise?—Oyster-fishing and trawl-fishing.

57,145. During the oyster season you practise oyster-fishing, and when that season is over you take to trawl-fishing?—Yes.

57,146. Can you tell us how many boats are engaged in the oyster-fishing here?—One hundred and forty-four.

57,147. Of what tonnage may the boats be on the average?—Eight tons.

57,148. Are they all decked boats?—Yes; they are all decked boats, or nearly so. There may be a few pulling boats, but I don't think there are many.

57,149. How many men are there in each boat?—Three.

57,150. Do you know whether the number of boats and men has increased or diminished within the last 10 years?—No, I don't think there has been much improvement during the last 10 years.

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57,151. They keep much about the same in number?—Yes.

57,152. When you have had occasion to build new boats, do you build them about the same tonnage, or larger or smaller?—Just about the same tonnage.

57,153. You find that tonnage suitable for the work?—Yes.

57,154. Where are the oyster-beds situated on which you fish?—In this bay down as far as the Worms; about 13 miles in length.

57,155. You fish as far as Worms' Head?—Yes.

57,156. Do the oyster-banks extend over any considerable extent of ground off the Worms' Head?—They go as far as Lundy, and over to the other side of the channel.

57,157. Right across from Worms' Head to Lundy?—Yes.

57,158. Do you find oysters all the way across?—Yes.

57,159. Is there any other part of the Bristol Channel or Swansea Bay, in which you find them?—Yes, down in Caldy Roads. There are oysters below that, and down in Milford Haven there are plenty of them.

57,160. (*Mr. Lefevre.*) How far eastward up the channel?—Never further than Fairway, close to the entrance of the Neath River.

57,161. (*Mr. Caird.*) You never go eastward of that point?—No.

57,162. Are there no oysters found further up the Bristol Channel than the entrance to the Neath River?—Not on this side.

57,163. Do all the fishermen who come to Swansea fish over the extent of ground you have mentioned; namely, in Carmarthen Bay, Swansea Bay, and off Lundy Island?—At a chance time they go there to try.

57,164. There is a very large extent then of oyster-beds?—Yes.

57,165. Do you come on the same ground as the Tenby fishermen?—Yes.

57,166. Do you never fish where they fish in their bay?—No, we only trawl there in the summer time.

57,167. Have you found any part of the oyster-beds less productive than they used to be of oysters?—No, rather more so. There are so many boats that they tear the ground up.

57,168. Do you think that that improves the fishing?—Yes, it does. This year there are oysters where there were never oysters before.

57,169. Is there as good a fishing this year as you ever knew of?—Yes, just as good.

57,170. Do you take any large quantity of small oysters?—No, none. We only take them of a proper size. There would be no one to buy them, if we did not.

57,171. There would be no sale for them?—No, not here.

57,172. Have you any gauge by which you fix the size of the oysters you bring to the market?—No; but we know the size, which is $2\frac{1}{2}$ inches in diameter. We take them up in our hands, and if they are not that size, we throw them out.

57,173. Is there any regulation with regard to the size of the mesh of your dredge?—No.

57,174–6. Nobody interferes with you in any shape whatever?—Not at all.

57,177. What is the size of the ring?—About three inches.

57,178. Is that the smallest size?—Yes, that is the smallest. They are all of the same size; they are made by a gauge.

57,179. For all the fishermen?—Yes.

57,180. You never have a smaller size than that?—No.

57,181. That is a regulation you have among yourselves?—Yes, that is the regulation.

57,182. Has that long been a regulation among yourselves?—The men who make them, make them all by gauge. They are all of the same length.

57,183. Is the size of the mouth of your dredge pretty uniform among you all?—Yes, it is just the same.

57,184. What is the width of the mouth of the dredge?—Four inches or four and a quarter.

57,185. That is the mouth?—Yes.

57,186. What is the length?—Three and a half feet.

57,187. That is the regular thing among the whole of the fishermen?—There are smaller boats which do not have them quite as large.

57,188. Do you use one dredge or two in a boat?—Two.

57,189. Do you always work with two dredges, or one up and the other down?—We work with two.

57,190. Is there any regulation as to the season in which you fish for oysters?—Yes.

57,191. Does anybody enforce it, or do you attend to it yourselves?—The cutter comes round, and the Coastguard.

57,192. The Coastguard will not permit you to fish during the close-months?—We are not allowed to carry the gear in our boat. She is seizable if we have a dredge in her.

57,193. Is that strictly looked to?—Yes, they come and overhaul us. If there are boats coming down after the close-season is over, they come and see whether we have any fishing gear; and if anything of that sort is found, they take it away and stop the boat directly.

57,194. In what months of the year do you find the oysters in the best condition?—In the first of the season, that is, about now.

57,195. Does the season begin in September?—Yes.

57,196. Are the oysters in as good condition in September as they are in October and November?—Yes.

57,197. Do they continue in as good condition throughout the whole of the season?—Yes.

57,198. Are they in good condition in the month of April?—Yes.

57,199. There is no desire on the part of the oyster fishermen to extend the season, or alter it?—Yes, they desire to lengthen it.

57,200. How do they want to do that?—They want to dredge in the month of May, and stop in the month of September.

57,201. To begin in October and finish in June?—Yes.

57,202. Is that a general wish among the fishermen?—Yes, among some parties.

57,203. What do you think of it?—I think the season should remain as it is.

57,204. Is that the general opinion of the oyster fishermen?—It is my opinion. I think the oysters ought to rest sometimes, and those four months are when they spawn.

57,205. When do they spawn?—During the four months in which we do not catch them. We catch them sometimes in the trawl in the night-time, and if we open them we find them full of spawn.

57,206. Then you think that the months which form the present close-time are the most suitable for the brood of fish?—Exactly.

57,207. You do not desire any change?—No.

57,208. Have you had a good spawning season lately?—We fall in with the young spawn now and again.

57,209. But has there been a good oyster spawning during the last few years?—Yes; the oysters are quite as good as they have been for the last 10 or 12 years.

57,210. There has been a good spat?—We call it spawn.

57,211. Have you not observed that there are sometimes seasons in which the spawn is not very favourable?—Yes.

57,212. There is a considerable difference in the seasons as to spawning?—Yes, a good deal. This has been a fine summer; the finest summer I have known.

57,213. Then you expect a large fishing this season?—Yes; there are oysters everywhere, go where you will.

57,214. The price of oysters has increased, has it not?—Yes. There has been more traffic since the railways came, and since the steamers have been taking them away.

57,215. Are the oyster fishermen making a good trade of it now?—They are making a living out of it.

57,216. With the increase of price, and the oyster-beds continuing to be productive, are you not improved in your circumstances?—No, there is very little of that.

57,217. You say that during the close-season you go trawling?—Yes.

57,218. With the same vessel that you fish for oysters?—Yes.

57,219. What is the size of the trawl that you use?—Thirty-one feet.

57,220. What is the smallest size of mesh?—One and a quarter inches.

57,221. (*Mr. Lefevre.*) Is that from knot to knot?—Yes, it is from knot to knot.

57,222. (*Mr. Caird.*) Where do you trawl?—Perhaps I should say that the bag of the net is three inches where the small fish go through.

57,223. Where do you trawl?—At the higher end of this bay, down Carmarthen Bay, off the Worms' Head, and down to Caldy Island.

57,224. That is very much over the same ground that you dredge upon?—No; we don't trawl there. It would cut our net all to pieces.

57,225. You must keep on the soft bottom?—Yes, on a sandy bottom for trawling.

57,226. Do you find that your trawl-fishing now, is as successful as it was in former years?—No, sometimes we may fall in with a shoal of fish, and sometimes not.

57,227. Is there any particular kind of fish that has fallen off more than another?—I think they have fallen off about this part. There used to be plenty in the season, and now we hardly see one.

57,228. What fish do you refer to?—Salmon and sewin.

57,229. What is sewin?—White trout, sea trout. They go down the same as the salmon to the salt water.

57,230. Did you formerly get many of them?—Yes.

57,231. In what way did you catch them?—With a seine-net.

57,232. Do many fishermen use the seine-net here now?—Yes, a good many gentlemen use them in the summer time with yachts.

57,233. Do they fish from the shore or with boats?—From boats, they pull them round.

57,234. They make a circle?—Yes; they pull them round.

57,235. You say that the trawl-fishing on the whole has decreased?—Yes.

57,236. Is there any cause you can assign for that?—Yes.

57,237. What is it?—I think they injure them and kill them in the summer time with weirs. I am sure of it. I have seen hundreds and thousands of them destroyed.

57,238. Is this (*pointing to a model*) the sort of thing you call a weir?—Yes; I have seen lots of small fish go in there, and then be found dead.

57,239. Are the fish all dead when taken out?—No, not when they are taken out; but all that are left, because they are not big enough to take away, perish.

57,240. Have you seen those weirs fished?—Yes, scores of times.

57,241. Do they get many fish?—Sometimes they do.

57,242. What kind of fish do they catch?—Soles, sewin, mackerel, and different sorts in the season.

57,243. Do they kill many fish with those weirs?—Yes, thousands of them.

57,244. Of good marketable fish?—No, only young fish.

57,245. Do they not kill good marketable fish?—Sometimes they do.

57,246. Is there any large proportion of the fish caught here, caught by that description of weir?—Sometimes there is, but they kill the spawn before it becomes marketable.

57,247. Are these weirs in use the whole year round?—Yes, every day in the year.

57,248. Do they get any salmon in them?—Yes, and sometimes sturgeon. I have seen sturgeon caught in the weirs.

57,249. What kinds of small fish have you seen caught in them?—Soles, and all kinds of flat and round fish.

57,250. Small young fish?—Yes.

57,251. Have you repeatedly noticed whether there were any large quantities of those young fish caught that were useful for food, and allowed to waste?—Yes, thousands of them. I have seen them on the sands. They put down the net in the water, and bring them up, and what is saleable they take away, and the rest they leave behind.

57,252. They throw it aside?—Yes.

57,253. Is there a large quantity of that description of fish thrown aside?—Yes, thousands of them.

57,254. That mode of fishing has been a long time in existence?—Yes.

57,255. As long as you can recollect?—Yes.

57,256. When did the diminution in the fish begin to take place in the time you refer to?—Ten or 12 years ago.

57,257. Do you think these weirs have had any effect upon the general fishing?—It is the weirs that have destroyed the fishing.

57,258. They have been in existence long before 10 years ago?—Yes, as long as I remember.

57,259. How long is that?—Thirty years ago.

57,259*a*. Was there any complaint about this mode of fishing before 10 years ago?—I have heard complaints all along at different times.

57,260. (*Mr. Lefevre.*) How many boats are employed in trawling in the summer time?—There may be a dozen.

57,261. I mean of the oyster-boats?—Not more than a dozen.

57,262. What do the others do?—They are laid up.

57,263. You say that you recollect the fishing here 30 years ago?—Yes.

57,264. Do you recollect what number of oyster-boats there were then?—I should say that there were as many then as there are now.

57,265. Were the same number employed in trawling then, as during the close-time?—There were more then. They worked by the hand, and there were four men in each boat.

57,266. That was in the oyster-dredging?—Yes.

57,267. But were the same number of boats employed then in trawling during the close-time?—There were none employed in trawling then.

57,268. When did they begin to trawl?—They began trawling about May.

57,269. But how long ago did they begin trawling?—Ten or 12 years ago the small ones; but there were large ones here then.

57,270. The large ones came from Brixham?—Yes, and Plymouth too.

57,271. There were no large boats belonging to Swansea?—Yes, two or three.

57,272. Did they fish off Carmarthen Bay?—Yes.

57,273–4. Is there any cause you can assign for the falling off in the supply of fish?—Perhaps the quantity of ore that comes down the water may have some effect in destroying the fish. The water is quite tainted with ore.

57,275. Do you think that has had any effect in the bay?—It has not affected the oysters.

57,276. But has it affected the soles and other fish?—I cannot say about the fish; but it has not affected the oysters.

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57,277. I thought you said that the falling off in the trawl-fish might be owing to that?—It is either that or the weirs.

57,278. It has affected the salmon and the sewin?—Yes, the spawn has been killed, and we cannot expect to have the fish after that.

57,279. Do you find that the oysters in the bay are coloured by the copper ore; are they at all green?—No, not one of them.

57,280. Are all the oysters caught here brought into Swansea, or sold on the quay?—No, not one fourth of them.

57,281. Where are the rest sent to?—There are 70 or 80 boats down at Mumbles.

57,282. Did you include those 70 or 80 boats in the 140 you gave us?—Yes; and there are also boats at Portatyn, which are included in the 140.

57,283. Do they bring their fish in at Mumbles?—Yes, and send them away by rail.

57,284. Do they send them up from here to Bristol and other places?—Yes.

57,285. Are there any oyster grounds here for the purpose of laying down oysters?—Yes.

57,286. Are there many such beds about here?—Yes, there are men who have beds of their own at Mumbles.

57,287. Are there any men in Swansea who have beds upon which to lay oysters down?—No.

57,288. Is there any demand for small oysters for that purpose?—No.

57,289. Will the merchants here not buy small oysters?—No.

57,290. What is the smallest size they will buy?—Two and a half or three inches in diameter.

57,291. Do you take up in your dredge a great number of small oysters?—Sometimes when we fall in with them; but if they are not saleable we put them overboard again.

57,292. Do you not find it worth while to bring them in, because you cannot get any market for them?—Yes, we have no sale for them.

57,293. Do you find any difference in the size of the oysters if you go into deeper water?—Yes, they are a good deal larger.

57,294. Is there much ground in the middle of the channel which you are unable to fish, on account of the bad weather in the winter?—Yes, we could not go down the channel with the trawl, and the wind against us.

57,295. Are you able to fish that ground better as the season advances, say in March and April?—Yes.

57,296. Suppose the open-time were extended, would you fish the ground more than you are able to do now?—Yes.

57,297. Do you at all recollect the fishing here before the close-time was enforced?—Yes; I have been scores of times at it.

57,298. Did you dredge then during the whole of the year?—Yes.

57,299. Did you fish the same grounds then as now?—Yes.

57,300. Did you fish further out in the channel than you are able to do now, on account of the weather?—Yes.

57,301. When was the close-time first enforced here?—About 11 or 12 years ago.

57,302. Previous to that did you observe any decrease in the quantity of oysters in consequence of fishing all the year round?—No, not any. If there was fine weather, there were as many oysters as ever there were.

57,303. Did you get a good price for the oysters in the summer time during the close-season?—No, we did not get as much for them.

57,304. Did you take up a great number during the summer time?—Yes, we caught more than we could ever sell.

57,305. Since the close-time was enforced, I think you said the number of boats has not increased?—No.

57,306. Nor the take of oysters?—No, I don't think there are more boats here. There are 144 here, and at Mumbles, Portatyn, and Tyguin.

57,307. Previous to enforcing the close-time, was the number of boats gradually increasing from year to year or not?—They did at one time increase, a few; but I do not think they are increasing now.

57,308. But previous to the enforcement of the close-time, did they go on increasing or not?—Yes, they were increasing before they were stopped.

57,309. But they have not increased since the close-time has been enforced?—No; there may be half a dozen, or seven or eight, or thereabouts.

57,310. When they were allowed to fish in what is now the close-time, did they chiefly go into deeper water in the summer time?—Yes, they went into deeper water in the summer time than they do now.

57,311. I think you said that tearing the ground did good, in clearing and cleansing it?—Yes; the boats tear the ground, and throw the spawn in all directions. There are oysters now where there were none eight or ten years ago. There are the spawn of oysters all over the bay now to a much greater extent than was the case formerly.

57,312. Then you think you make a better fishing than you did 10 or 12 years ago?—We make as good a fishing if not a better.

57,313. Is there much variety in the oysters you find in different parts of the bay?—There are some of them better than others.

57,314. Is there much difference in the colour?—Yes, there is a difference in the colour.

57,315. Do you find any green oysters in any part of the bay?—No, not one.

57,316. What is the difference in the colour?—Some are reddish, and some are white.

57,317. Is there a good deal of smooth ground mixed up with the oyster-beds over which you can trawl during the close-time?—No, we cannot trawl on the same grounds that we dredge.

57,318. Then you have to go outside the line from Worms Head to Lundy Island before you can trawl?—Yes, that is all clear ground, with a sandy bottom.

57,319. Do you go outside that line?—I go right round the bay, off Carmarthen Bay altogether.

57,320. Across Carmarthen Bay?—Yes, right across.

57,321. Do you ever trawl eastward of the bay, up the Bristol channel?—Yes.

57,322. What do you catch there?—Soles, hake, turbot, gurnard, and different fish.

57,323. Do the herrings ever come into the bay here?—Sometimes, but not often.

57,324. When is the last time you recollect the herrings in the bay?—Five or six years ago.

57,325. Are the boats provided with herring-nets here?—Yes.

57,326. With drift-nets?—They catch them in the weirs sometimes.

57,327. But are the boats provided with drift-nets?—No, nothing of the sort.

57,328. Are they only provided with seine-nets?—They put them on poles on the sands.

57,329. A kind of trammel-net?—Yes, or stake-net.

The witness withdrew.

G. Harry.

GEORGE HARRY called and examined.

57,330. (*Mr. Caird.*) Do you hold an office connected with the corporation of Swansea?—Yes, I am deputy town clerk of the borough. I gave some evidence on the occasion of the visit of the Salmon Fishery Commission, and that evidence I wish to repeat before this commission, as it applies more particularly to the inquiry which you are making.

57,331. It applies to the sea fishery?—Yes.

57,332. You are about to give us evidence with regard to the fishing weirs?—Yes, and the stake-nets on the coast.

57,333. Have you had your attention called to a mode of fishing carried on in the bay of Swansea by weirs?—Yes, I have frequently.

57,334. And you have already given evidence before a Royal Commission in reference to those weirs?—Yes.

57,335. You desire to repeat that evidence now?—Yes, I was asked if I concurred in the evidence given by Mr. Matthew Moggeridge, and I said I did. This is the evidence:

"Are there any fixed engines for fishing upon the estuary?—Nearly the whole sweep of the bay is covered with weirs ending in traps.

"What are these engines that you call 'weirs' constructed of?—Wicker-work; they are brought to an apex, so that nothing once in them can escape.

"Are there any of these wicker weirs across the mouth of the river?—No; they would be in the way of the navigation.

"What fish do these weirs take?—Salmon and sewin are the only river-going fish that they take. What I complain of is, that their destruction is such that they not only take big fish, but destroy an immense number of very small fish. You will see soles and turbot, and all sorts of fish, not longer than a few inches, destroyed in thousands, I might almost say millions.

"Are there any other fixed engines in the estuary?—There are stake-nets, and the same objection applies to them. Great quantities of young turbot, soles, and flat-fish, that are quite worthless for the market, are destroyed by the stake-nets.

"Are there a great many stake-nets?—They are not so extensive as the weirs."

I was then asked:

"Do you know what are called stake-nets upon the coast?—Yes. I reside on the margin of Swansea Bay, and I can speak particularly of the fishing-engines that are erected there, and of the things you have heard called weirs."

57,336. You draw a distinction between weirs and stake-nets?—Yes.

57,337. Are there stake-nets also in the bay?—Yes; I was then asked:

"Are these weirs made of wicker-work?—Yes; they come to an apex, and at the apex they have a basket; that basket generally contains a large quantity of water at low tides, so that the fishermen are obliged to take the fish out with a small round net, and with that net they take pretty nearly all the fish that are in the basket. I have myself upon numerous occasions seen fish of a pitiful size taken out; small turbot, brill, soles, and other fish.

"Have you ever seen salmon peal in those baskets?—I have seen them; but not frequently.

"What is the size of one of those baskets?—In most cases the baskets are, I should say, about six or eight feet long by four or five in diameter.

"What prevents the fish from getting out?—The wicker-work; the water runs out of the basket through the interstices in the wicker-work. There is also, in many cases, a small door at the extreme end with holes in it, for the purpose of cleaning the basket out, and for the purpose of fishing the basket; there is a trap-door on the top of the basket, which is generally kept locked. The stake-nets to which you referred, are used more particularly in this bay for the herring fishery; these nets have a small neck, and I am not aware that they are used to take any other fish than herrings.

"Is there any trap to them?—No; nothing whatever. There is a series of upright poles stuck in the ground, and the nets hang between each pole something like a draft-net.

"Do very small sewin get into the stake-nets sometimes?—I have never seen them.

"Do the fish mesh in the stake-nets?—They do. There are two other descriptions of fishing in this bay practised by labourers on the coast, as well as fishermen; that is, by a draft-net or draw-net, and angling.

"Are salmon or sewin taken with the draw-net?—They are.

"Is that net much used?—Yes; within five or six miles of Swansea, and I think, as low as Oxwich. In fact, nearly all the bays on the southern side of the peninsula of Gower are fished in that way.

"Are the fish taken in any quantity?—I have seen great quantities of fish taken. There are phases in fishing; sometimes they are very successful, and at other times they are not successful. It depends very much upon the state of the water, and the bright appearance of the night."

57,338. That is seine-fishing of which you speak now?—Yes, draw-nets.

57,339. Have you any further information to give us with regard to this particular instrument, the weir?—I had no other desire than a wish to draw the attention of the commissioners to the plan now before them, which shows the numerous engines fixed in that form in this bay.

57,340. What is the object of that part of the fence which is loaded with stones on the outside on each side?—That is for the purpose of defending the weir itself from the action of the sea.

57,341. It has no object with regard to the fish itself?—No; it is only to strengthen and form a good foundation for the weir.

57,342. Are these weirs set close together all along the bay where they are set?—Yes, in continuation of each other.

57,343. Does the second weir come close to the first?—Yes.

57,344. And there is a series of weirs all along?—Yes.

57,345. Without intervening openings?—In some cases there are openings.

57,346. (*Mr. Lefevre.*) Are they set for a distance of five miles along the bay?—Not the whole distance. I should say that for something like a couple of miles or more they are continuous.

57,347. (*Mr. Caird.*) Are they in a single line?—Yes.

57,348. There are no double lines; that is to say, there is not one row in one place, and another inside?—No, except in cases where I have observed that weirs of an ancient date have become dilapidated, and instead of repairing that identical weir, a new one has been set up a short distance from the former one, generally further out at sea.

57,349. Is it a muddy bay?—Yes, rather.

57,350. And there is a strong tide running in it?—Yes.

57,351. Is it not the case that such weirs have a tendency to silt up?—No; I think the weirs do not, although silt is gradually settling in our bay. Since the opening of the harbour took place, there has been a habit of putting in ballast, and the debris from the public works.

57,352. Has it floated away and been collected there?—It has not collected generally, but it settles there in that part of the bay.

57,353. These weirs have been in existence from time immemorial?—Yes.

57,354. Have they increased in number of late years?—I think they have.

57,355. Have they been set closer?—No, the same relative distance is maintained; but additional ones have been erected.

57,356. Lengthening the lines?—Yes.

57,357. Have they continued to make them of the same form as hitherto; have they been very closely wattled?—Yes; but the form of the present modern weir has been changed from that of the ancient weir. The ancient weir had at its apex a lane or neck. They are now constructed more particularly in the form of the model.

57,358. This is found, I suppose, to be a better killing net?—No doubt it is a more killing one.

57,359. Does this part of the basket work (*pointing to the model*) run outwards to the sea?—Yes, it does.

57,360. And the fish come inside?—Yes.

57,361. Are they caught chiefly in the flow or ebb of the tide?—In the flow generally. They flow up with the tide, and they are caught with the ebb.

57,362. Then they must come in at one end of the long line of weirs?—They flow over.

57,363. And they are caught as the tide goes down?—Yes.

57,364. Everything that happens to come in with the tide is sure to be caught in fact?—Yes; every small fish that gets within the line of weirs must be caught, as there is no means of escape.

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57,365 Do you know what height the weir is above the basket?—About five or six feet.

57,366. At the highest point it is about five or six feet high?—Yes.

57,367. What height does the tide flow, or what depth of water is there over the top of the net at high water?—The chart, I think, will show that. You may take it from 18 to 20 feet.

57,368. That will be a depth of about 12 feet over the net?—Yes, that will be somewhere about the average.

57,369. Have you any idea as to what number of those weirs there may be all along the shore?—I can give it to you from the chart. I think there are 13 altogether; but some of them are old ones.

57,370. Still they are in existence?—Yes, but they are not in complete repair. There are 13 or 14 of them, I think, altogether.

57,371. These nets stand on the sand, and are fishing the whole year round?—They are.

57,372. And at no time, either Sunday or any other day, are they left open, so that the fish may have an opportunity of escaping?—No, they are not.

57,373. From year end to year end they are fishing perpetually?—Yes.

57,374. And everything that goes inside of them stands a chance of being caught?—Yes, and I find they are particularly destructive of the fry of soles, flounders, brill, and turbot.

57,375. You have observed that, I presume, from having noticed the basket when it was being emptied?—Yes.

57,376. What quantity have you seen of the fry of different kinds of fish, in proportion to the whole catch of fish?—I can scarcely tell you that, for this reason; at some tides they catch a quantity of this fry, while at other times, little or none is caught. I can scarcely, therefore, give you the relative proportion of the fry to the large fish caught.

57,377. Are you aware whether there is any large quantity of fish caught by these nets, which are unfit for consumption, and are not sent to the market at all?—Yes, the fry are too small for that purpose.

57,378. Do you know whether the supply of fish from these nets to the market is considerable?—No, it is not very considerable.

57,379. All that is got of a marketable character is not considerable?—It is not considerable, in my opinion.

53,380. Is the destruction that they do, of much greater importance than the supply they give to the market?—Undoubtedly.

57,381. Has it been a matter of complaint on the part of the fishermen, and those interested in the fisheries, that a great destruction of fry takes place by the use of these nets?—I have frequently heard such a complaint made.

57,382. From your own experience do you agree with it?—I think it is well founded. The inner portion of the weir has a quantity of standing water in it all the year round, and that is fished by shrimp-nets, and nets of a similar description. They take out from that part the fish that are caught, but are not in the basket.

57,383. Is this mode of fishing practised on any other part of the coast of England?—I do not know; but I think it is practised on some parts of the coast of Carmarthenshire.

57,384. (*Mr. Lefevre.*) Westward of the Mumbles Point?—No, I believe not.

57,385. Eastward of this bay are there any?—There are one or two, I believe; but very few. They principally congregate in this bay.

57,386. Have you ever observed at any time of the year more of the young fry of fish in these weirs than at any other time?—No, except in the spring and summer months. I have observed them at that time. I should say that I am not a frequent visitor to the weirs. I merely go down alone from curiosity. I do not make it a monthly or a weekly practice. My visits there have simply been made from curiosity, and a desire to obtain information.

57,387. You cannot say whether the take in the weirs has been falling off or increasing of late years?—I have heard the fishermen complain of a falling off.

57,388. The fishermen to whom these weirs belong?—Yes.

57,389. Do you think that the increase of works on the river and the discoloration of the water has had any effect upon the fishing in the bay?—Well, I have no doubt that that has had an effect upon the bay fishing.

57,390. And also the silting up of the bay which you have described to us, may affect it?—No, I do not think that has had any effect upon the fishery.

57,391. As the weirs have silted up, have they been erected further out in the bay?—No; they are pretty much in the same place, within a few yards. When I refer to the silting up of the bay, I ought to say that it is scarcely appreciable in many cases, and that there is only a thin layer on the general run of the bay.

57,392. Is it altering the character of the bottom of the bay?—Yes.

57,393. Not so much silting up the bay as altering the character of the bottom?—Yes.

57,394. What is it becoming now?—It is becoming of a sandy character now from a muddy one.

57,395. Do you think that might have any effect on the fish in the bay?—No, I do not think so.

57,396. You state that inside these weirs a great deal of shrimping is carried on?—Shrimps and prawns are caught there, I believe.

57,397. Is that by the hand-trawl?—Yes, by the hand-net.

57,398. Have you observed whether many young fish are caught in that way?—No, I have not; but I do not think there are. I do not think that any young fish are destroyed by that kind of fishing.

57,399. Is there any mode in which these weirs could be used without destroying young fish?—No, I think not.

57,400. I think you said that there were stake-nets for herring besides these weirs?—Yes.

57,401. Will you describe what those nets are?—I observed them as being erected principally between the Mumbles and Oystermouth village, and that end of the weirs.

57,402. Are they set at right angles from the shore, with the nets stretching down towards the sea?—There is no particular direction observed by the persons who set them. Sometimes they are set across. They are generally set in front of the flood; and they are principally constructed by the erection of poles, to which they are hung.

57,403. What is the depth of the net?—In some cases I have observed a net of something like four or five feet deep.

57,404. Do you know what the mesh is?—No, I do not.

57,405. May anybody set these nets along the shore?—Yes.

57,406. There is no exclusive right of setting them?—I never heard of any exclusive right.

57,407. What time of the year are they set?—In the spring months.

57,408. What condition are the fish in then?—In excellent condition.

57,409. Are they full fish?—Yes, very full.

57,410. Do they spawn in the bay?—I do not know.

57,411. Do you agree with the last witness, who told us that the herrings have not been here in great abundance for the last five or six years?—I do.

57,412. Previous to that time, were they more abundant?—Yes.

57,413. Used they before that to come in with regularity?—No, they were irregular in their visits.

57,414. Do they ever take the fry of herrings in the weirs?—Yes, they do.

57,415. In any quantities?—I have seen them in quantities.

57,416. At what time of the year?—In the spring and summer months, and in the autumn occasionally. I have also observed great quantities of small mackerel taken in the weirs.

57,417. Have you observed greater quantities of young herring to be found the year after the herrings visited the bay, or did they come every year into the bay?—As I have said, their visits have been very irregular. The young and small ones came the year after.

57,418. They generally came the year after the herrings had been in abundance?—Yes.

57,419. (*Mr. Caird.*) Do you know whether there are any mussel-beds in the bay?—There are but very few. I think the mussel-beds may be found on the other side of this port.

57,420. To the east?—Yes.

57,421. Are they fished for any purpose; for market or for bait?—Not for market. They are principally fished by persons for their own use.

57,422. For bait?—No, for food. The French sailors especially are very fond of them.

57,423. Are they not sent to the market at all?—No, they are not.

57,424. They have not become an article of trade for the market?—No, they have not.

57,425. On other parts of the coast, we have found that they have to a large extent?—That is not the case here.

57,426. Are the mussel-beds valuable or extensive?—No.

57,427. Is the quantity of mussels obtained declining or increasing?—I cannot tell you, but there are fishermen here who can.

57,428. Is there any other point on which you wish to make a statement?—Not that I am aware of.

57,429. (*Mr. Lefevre.*) Were the weirs inquired into by the Salmon Fishery Commissioners?—Yes, they were.

57,430. Were they excepted in the Act?—I have got a copy of the bill, and I rather think they were referred to in it.

57,431. (*Mr. Caird.*) But by the Act of Parliament, as it now exists, they were permitted to remain?—So I apprehend; that is my view of the question. I visited the stake-nets and weirs with Sir William Jardine, the Chairman of the Commission, for the purpose of showing him their effect on the fisheries.

The witness withdrew.

DANIEL BENSON called and examined

D. Benson.

57,432. (*Mr. Caird.*) Are you a fisherman here?—Yes. I am the owner of two weirs.

57,433. What part of the coast are they on?—On this coast.

57,434. Do you rent them?—Yes.

57,435. Where are they?—Near the infirmary.

57,436. Can you show us on the chart whereabouts your weirs are?—They are here (*pointing out the position*).

57,437. Are those weirs all set in succession, and touching each other?—Not exactly.

57,438. Are they close to each other?—There is room for a cart to pass between them.

57,439. Between every one?—Yes.

57,440. In no place is there room for more than a cart to pass?—No; except at the east end, which is all open together.

57,441. For how far is it open?—Up to the pier. There are miles of it open then.

57,442. Are there no weirs there at all?—No, nothing at all.

57,443. What length of sand is there from this point to this (*pointing to the map*), where the weirs are set successively?—Somewhere about three-quarters of a mile.

57,444. Have the weirs been extended at all within recent years, or have they diminished?—Neither the one nor the other.

57,445. Do you remember them for many years back?—Yes.

57,446. How long?—About 20 years.

57,447. And were the weirs made in exactly the same form then that they are now?—Yes.

57,448. And they do fish all the year round?—They do not fish all the year, because in neap tides we cannot go near them.

57,449. But the weirs are there?—Yes.

57,450. Continually fishing?—Yes; but they cannot catch any fish when the tides are all over them. At neap tides, the tides do not leave them for three or four days.

57,451. And the fish can get away?—Yes.

57,452. Not if they get into the basket?—Yes, they can get away again. We can see them often going backward and forward.

57,453. Are there no means of taking down the weirs at any time of the year?—They are always fishing, except there is a gale of wind.

57,454. Is there no Sunday or other day on which the weirs cease to fish?—No; nothing of the sort; only the neap tides.

57,455. What may be the length of the opening between the two wings of the weir?—About 100 yards.

57,456. And what depth is it from the centre of the opening to the mouth of the basket?—About 70 yards from the arm down to the butt of the basket.

57,457. The height is about six or seven feet?—About five feet.

57,458. What description of fish do you catch in the weirs?—Generally whiting and sprats.

57,459. Does it vary in different seasons of the year?—Yes; but we have not been doing much with them for several years past.

57,460. In what season do you catch most fish?—In the winter fishing.

57,461. When does it begin?—In this month.

57,462. In the month of October?—Yes.

57,463. Until when does it last?—Until the month of January.

57,464. What kind of fish do you catch?—Whiting, flat-fish, and a few herrings.

57,465. Any soles?—Very few soles.

57,466. Turbot?—A chance turbot; but I have not taken one turbot this summer.

57,467. Any smelts?—Very few. Perhaps I may have had half-a-dozen pounds this summer.

57,468. Is this a good place for fishing smelts?—No, very poor. I have never seen half-a-dozen pounds of smelts taken at once.

57,469. Are whiting increasing or diminishing in quantity?—They are very scarce. The weirs will hardly pay anything at all now.

57,470. After January, what do you get?—Very little. Sometimes we get a few mullet and basse.

57,471. From January until when?—From January until May, or all the summer round.

57,472. Does the fishing begin to improve in the month of May?—No, it is very slack.

57,473. Is it slack the whole of the season?—Yes; the whole of the summer.

57,474. Up to the month of October?—Yes.

57,475. Do you visit the weirs every day to see if there are fish in them?—I have only been down to them one night this week.

57,476. Do you sometimes find fish dead in the basket?—No; except sprats, which if they are not taken out get meshed in the basket, and die there.

57,477. In the spring tides do not the weirs become completely dry?—There are three feet of water always inside.

57,478. In the basket?—Not in the basket altogether; but it is impossible for the fish to die.

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57,479. Is there any water in the basket ?—Yes, about two feet.

57,480. At all times of the day ?—Yes.

57,481. Even at the lowest spring tides ?—Yes; there is always two feet of water in it.

57,482. So that if the fish are caught there, they are always alive ?—Yes, until they are taken out.

57,483. Is the basket sunk in the sand ?—No, it is not.

57,484. How can the water remain there if the tide goes away beyond the basket ?—We keep it down in a certain depth of water, so that the fish can always run over a portion of it.

57,485. It is sunk in the sand then ?—Yes, the round part of the basket is laid down in the sand.

57,486. What depth in the sand ?—Sometimes more than two feet.

57,487. Your object is always to have water in the basket ?—Yes.

57,488. (*Mr. Lefevre.*) Then the tide may recede altogether from the weir ?—Yes, it does.

57,489. Leaving a pool of water in which the basket is sunk ?—Yes.

57,490. (*Mr. Caird.*) It is always open at the mouth of the basket, where the fish go in ?—Yes, it is always open.

57,491. Do you keep the lid locked ?—Yes ; there is a small door in the basket, and it is locked.

57,492. That is to prevent anybody from taking the fish out ?—Yes.

57,493. Might they not take it out through here (*pointing to the model*) ?—Yes, they may take some of it, but not all. They could not reach well into the bottom from there.

57,494. What are the dimensions of the basket ?—Between five and six feet long, and about three feet six inches in depth and width.

57,495. What is it made of ?—Small wicker-work ; hazel in general.

57,496. Do you know whether this description of weir for fishing is used on any other part of the coast, except here ?—There is one at Llanelly on the Carmarthen shore, about 12 miles off. There are one or two there.

57,497. How many years have you been fishing with these weirs ?—About 16 years.

57,498. During those 16 years, have you found any increase or decrease in the quantity of fish you can take ?—There have been less fish taken since a heavy frost we had eight or nine years ago, than previously.

57,499. What influence had the frost on the fisheries ?—I do not know. We had great quantities of herring in then ; but we have had none since.

57,500. Do you catch many herrings in that way ?—Sometimes.

57,501. Have you had any large takes of herrings in that net ?—There have been a few taken, but not a great number.

57,502. And since that frost which you mention as having occurred nine years ago, has the fishing decreased ?—Yes, it has.

57,503. Have you had no good fishing by means of these weirs for the last two or three years ?—Sometimes we have.

57,504. What do you pay as rent for the use of your two weirs ?—We rent the ground, and then we have to build the weir ourselves.

57,505. What do you pay for the ground ?—We pay the Duke of Beaufort 1*l.* a year.

57,506. For each of them ?—Yes.

57,507. (*Mr. Lefevre.*) Is it expensive to keep up one of these weirs ?—Yes, very expensive. The building of one of these weirs cannot be done for less than 20*l.*

57,508. How long will it last ?—Sometimes not 12 months. A heavy gale of wind will knock them all to pieces.

57,509. Do you have them on lease ? —No.

57,510. But is there a sort of understanding that you are to continue in possession, as long as you pay your rent ?—Yes.

57,511. (*Mr. Caird.*) Is the whole quantity of fish you get in the course of the year from these weirs considerable ?—No ; they have not paid for attendance. For the last 12 months they have not paid for attending to them.

57,512. For some years back, have they not been a matter of importance to the men who rent them ?—No, nothing to speak of. There are a few sprats in now ; but the weirs have not paid for some time.

57,513. Do you get many sprats in them ?—Yes, occasionally. I took nearly three hundredweight yesterday evening.

57,514. Are they more destructive of small fish, like sprats, than large fish ?—Not at all.

57,515. When you have a good take in one of those weirs, what may it consist of ; what different kinds of fish ?—It is not often that we get a good take.

57,516. But when you do get a good take, what does it consist of ?—The take I had yesterday is the largest take I have had for some time. There were from 250 pounds to three hundredweight of sprats.

57,517. Do you correctly represent the feeling of the other people who fish these weirs along the coast, because, if so, it appears not to be a matter of great importance, even to the fishermen, that the mode of fishing should be continued ?—If they were destroyed, it would not be such a great loss to them. Of course, the greatest loss would be the expense to which they have been put in building the weirs.

57,518. Merely that ?—Yes, that would be the greatest loss to them.

57,519. Would there be a great loss to the public if these weirs were done away with ?—There would be no sprats now if the weirs were not there, and fish in Swansea have become very scarce.

57,520. If the weirs were removed, do you think that the supply of fish to the market would be greatly lessened ?—In the winter time it would be. We should not be able to catch whiting as we do now.

57,521. Could you not catch them as in other places ?—Not as well.

57,522. Could you not catch sprats, as in other places, by nets ?—I don't know how they do in other places ; but our sands are very shallow.

57,523. Have you heard it alleged by the fishermen who do not have these weirs, that the weirs are very destructive to the brood of fish ?—I do not think that they do catch the brood of fish.

57,524. Do they not catch small fish ?—If they do, we throw them into the water again.

57,525. Are they alive or dead when thrown back ?—They are alive. It is impossible to kill a sole. A sole will live for 12 hours.

57,526. Have you never seen them dead when you have taken them out of the nets ?—No, I have never seen them dead.

57,527. And do you think that all you throw away go back to the sea ?—Yes; they are thrown back into the water, and they return to the sea.

57,528. (*Mr. Lefevre.*) Do you throw them back into the basket, or into the sea ?—Not into the basket ; but into the pool of water outside the weir.

57,529. (*Mr. Caird.*) Then, when the tide comes up, have they an opportunity of escaping ?—Yes, they go away to the sea again.

57,530. How many weirs are there of that description altogether ?—Thirteen.

57,531. Thirteen altogether ?—Yes ; 13 altogether.

57,532. And they are all rented yearly in the same way ?—Yes ; I think so.

57,533. They pay 13*l.* a year to the proprietor ?—Yes ; Mr. Vivian has three, and I think he has the right to them himself.

57,534. Does he fish them ?—His men do.

57,535. Are they fished in exactly the same way as yours ?—Yes.

57,536. With the same results ?—Yes.

57,537. Do you catch any salmon ?—No salmon

have been caught on these sands this year. I have only caught five salmon for these 16 years.

57,538. Are there many salmon caught in the bay? —No; very few.

57,539. Not by any other means?—No; there are a few sewin taken, but not salmon.

57,540. Sewin, or sea trout?—They call them sea trout, I believe, in England.

57,541. (*Mr. Lefevre.*) Do you catch many flounders in them?—Not so many since the patent fuel works were erected here. They have destroyed more fish than anything else.

57,542. Where are they?—Close by in the river.

57,543. Do they discharge their refuse in the river? —Yes; the coal-tar comes down into the bay.

57,544. And that has injured the fishing?—Yes; more than anything else.

57,545. Do you not agree that a great number of young herrings are taken?—No; and I never saw the last witness down to see the fishing.

57,546. Do you take any young herrings in that way?—A few sometimes.

57,547.—Do you sell them?—They are herrings three parts grown.

57,548. What length are they?—Six or seven inches long.

57,549. They are marketable fish, and fetch a price in the market?—Yes; they may fetch a halfpenny apiece.

57,550. Have you observed much shrimping inside this bay?—Yes; sometimes.

57,551. Do the shrimpers catch any quantity of small fry?—They catch as much outside as inside, and more so, because we do not allow them to fish in the weirs.

57,552. Not inside the weirs?—No.

57,553. Is there any shrimping in boats with a trawl?—No.

57,554. All is done by the hand?—Yes; with a net six feet or eight feet long.

The witness withdrew.

George Grant Francis called and examined.

G. G. Francis.

57,555. (*Mr. Caird.*) You live in Swansea?—I live in Swansea.

57,556. And you have turned your attention a good deal to the sea fisheries?—Not a good deal to the sea fisheries directly, but more indirectly, in consequence of complaints which have been made by the inhabitants to me as taking a great interest in the locality. I made an application last spring to the Government on the question of the fish taken and destroyed in this bay, and after going to the Treasury and being sent about to a variety of offices, and happening to be rather short of time, I got into the hands of the wrong Commissioners. They told me they were the Salmon Commissioners, and I failed altogether to find out the proper people to communicate with.

57,557. Do you desire to make any representation to us on the subject of the fisheries in this bay?— Yes.

57,558. Will you kindly do so?—My attention has been drawn to the state of the fishing in this bay for some years, but more especially within the last twelve months, in consequence of those who frequent the weirs having an impression that the system carried on by the owners of the weirs is extremely faulty. I am very glad to have been in the room when Benson, the last witness, was examined, because it will save a great deal of trouble. That fisherman is a man of considerable experience here, but he has altogether lost sight of his own interest and the public interest in the fact that the formation of those weirs is of so close a character that the young fish are destroyed. It is difficult to use words which would properly convey an idea of the number of small fry taken and destroyed by those instruments, but there are hundreds of thousands of them.

57,559. Do you speak from your own observation? —Yes; hundreds of thousands of the small fry of all descriptions of fish are caught in the base of these triangular weirs which are so closely filled up at the bottom that escape is impossible. On many occasions, persons knowing me to be greatly interested in the welfare of this locality, and being what is commonly called a public person, have applied to me in order to ascertain whether something could not be done to prevent that enormous waste of small fish whereby the habitat of the fish, so to speak, is destroyed. Those fish which would frequent the bay from a love of home, perhaps, or from some other natural causes, if they are not allowed to grow into a middle age, will never become adults; and there is an impression here that the wicker-work in these weirs is filled up at the foot with small branches with leaves upon them, which grow so close to the foot that it is impossible for anything to pass through them.

57,560. What have you observed yourself; what facts can you state to us from your own observation? —I have seen large quantities of small fish amounting to hundreds of thousands detained, and dead in the bottom of these weirs.

57,561. Have you seen them dead?—Yes, I have.

57,562. The previous witness stated that they are detained, but that there is always plenty of water to keep them alive?—I am sorry to differ from him.

57,563. You can speak of having seen the fish dead?—Yes.

57,564. You have seen them yourself?—Yes.

57,565. In vast quantities?—Yes. I state that as a fact, and if I might be allowed to follow up my statement to you as I have done before former Royal Commissioners sitting in this place, I will supplement it by a statement of facts, or I would have no objection to go to London and complete my evidence there. If I had had an idea that you were going to sit here to-day, I would have been better prepared than I am at present.

57,566. We shall be glad to hear any statement you have to make. We understand that you, from your own observation, have seen that this mode of fishing is very destructive to the brood and fry of the fish that frequent this bay?—Most undoubtedly.

57,567. Are you aware that it has caused any decline in the general productiveness of the fish that frequent this bay?—That is my decided opinion, and it is the opinion of persons who have much larger opportunities of discussing the question than I have.

57,568 Can you tell us from your own observation whether these engines yield large quantities of marketable fish to the market?—They do not. The last witness has properly stated that so little fish does he find in his weirs that he has only been at them once a week.

57,569. Is that the general feeling among the fishermen who fish with those weirs?—The general impression among those I have conversed with is that they yield a very small and uncertain supply.

57,570. It would appear from what has been stated by the last witness, and from what your information has led you to imagine, that the weirs are neither profitable to the men who fish them nor to the owners? —My impression is that the Duke of Beaufort does not derive, and much less do the fishermen who rent the weirs, that profitable use from them that the skilful adaptation of means to ends would justify in this bay. We have a right to believe that when hundreds of thousands of fish frequent this bay as a natural habitat, if they were properly cultured we should get in increasing quantities a very large and valuable supply daily.

57,571. That is a matter of opinion; we want to know what quantity of fish is supplied to the market from this mode of fishing?—It is unusually small from so large an area.

57,572. Do you know anything about the herring stake-nets used in the bay?—No, I do not.

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57,573. (*Mr. Lefevre.*) Are you a member of the corporation here?—I am not now, but I have been; and I have been mayor of the borough.

57,574. Has the purchase of these weirs ever been contemplated by the corporation?—No.

57,575. Would it not be desirable to buy up the weirs if they are so destructive to the interests of the town?—That question was never brought before the public body while I was a member of it.

57,576. You are aware that these are private rights which have been exercised from time immemorial. I presume, therefore, it would be necessary to buy up these rights if anything were done. Is the corporation of Swansea ready to go to that expense?—I am not able to say. The corporation here are a very liberal body, and representing the town properly, whatever would be for the general benefit of society, and especially of the municipal borough, I think they would willingly enter into. The Duke of Beaufort and his ancestors have had these weirs; but many persons have discussed the question whether weirs are property.

57,577. Would it be possible to use the weirs without causing a great destruction of small fry?—The same principle that applies to properly skilled fishing of all descriptions ought to be followed here, and that is not to destroy the future supply by killing the young.

57,578. I quite understand that; but would it be possible to fish with those weirs in such a way as not to cause a great destruction of young fry?—That is a moot question, and I would not like to give a positive answer to it.

57,579. Have you formed any opinion upon it?—My opinion is that at present they are decidedly too close for fishing. If they were used at all, that should be so constructed that while the net could take proper sized fish, the small fish could get away without being detained.

57,580. Would it be possible to construct them in such a way that the small fish would get away, and only the large ones be detained?—I think so.

57,581. You told us that you have seen great quantities of small fish in them dead?—Yes.

57,582. Have they been in the water?—Yes; large quantities live, but they cannot get out. This is such a close beach that the action of the sea is unable to drive them out.

57,583. Have they been there in such quantities that they have been left dry by the receding tide?—Yes.

57,584. Have they not gone into the water?—No; large quantities have tried to get out, but they could not.

57,585. Have you examined those small fish to see what they were?—No.

57,586. Can you say what description of fish they were?—They were very much in appearance like whitebait.

57,587. Like whitebait?—Yes, to the eye, but I have not examined them carefully.

57,588. Did you take the trouble to see if they were soles, flounders, mackerel, or herrings?—I can state that apparently they consisted of round white-fish, and white-bellied fish.

57,589. But what were they?—Small flat-fish, small soles, small cod, and small whiting. I can recollect identifying those fish, but I have no doubt there were many others.

57,590. You say you think a weir could be constructed so as to prevent the take of small fish; can you point out in what way that could be done?—The lines along the bottom of the weirs at present are filled with small branches covered with quantities of leaves, so close that they prohibit the passage through the weirs of anything small.

57,591. But when the tide recedes it would not much matter what the nature of the stakes would be, whether they were set widely apart or closely, because the fish would remain?—If the opening was sufficiently large the small fish would get away.

57,592. Is it not necessary to have this erection of stones to protect the weirs?—No, I think not.

57,593. Do you think the stakes might be supported without the erection of stones?—I think so; it is a mere temporary rough expedient.

57,594. You do not think it would be necessary to do away with these stake-nets altogether?—That I am not competent to say. I think if the men here fished properly, as on other parts of the coast, they would not require these weirs, but would obtain plenty of fish by other means.

57,595. The corporation of Swansea have never discussed the question whether it is desirable to buy up these weirs for the interest of the town?—No, not to my knowledge.

The witness withdrew.

G. Harry.

George Harry recalled and examined.

57,596. (*Mr. Caird.*) How far does the borough of Swansea extend?—The borough of Swansea, over which the corporation takes an interest, does not extend to where the weirs are erected.

The witness withdrew.

G. G. Francis.

George Grant Francis recalled and examined.

57,597. (*Mr. Caird.*) The borough of Swansea does not embrace the whole of the weirs?—No, only those which lie between Brynmill Park and the river Dowey.

57,598. Then does the borough contain a considerable number of the weirs?—Yes.

57,599. Is it within your own knowledge that the supply of fish from the trawlers has decreased of late years?—Yes, certainly. I understand from the men themselves that the fish are gradually getting less and less, and that they are not worth following. We are very remarkably situated on this coast, sometimes we cannot get a bit of fish even for dinner for two or three days in the week.

57,600. Is there not a good deal of fish landed here by vessels fishing in Carmarthen Bay and sent off to markets in this district?—I should doubt if much fish is landed now, because different branches of the railway go to all the ports in South Wales, and there are places all on the coast equally accessible to the fishing vessels.

57,601. Were the trawlers formerly in the habit of landing more fish here than they do now?—I think so.

57,602. Does that account for the supply of fish in Swansea market being not as great as it was formerly?—Yes, I think so.

57,603. Have you observed whether there are greater quantities of these small fry at any particular time of year?—I cannot answer that question. I observed them at one time much larger in quantity than another, but I have nothing to indicate in what period of the year I made that observation.

57,604. You cannot say when the largest quantity of small fish is found?—No.

The witness withdrew.

DAVID EVAN MICHAEL called and examined.

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D. E. Michael.
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57,605. (*Mr. Caird.*) You are an oyster fisherman from the Mumbles?—Yes.

57,606. Have you been long acquainted with the oyster fishery at Swansea?—Yes, since I was a boy I was brought up to it.

57,607. Has the number of boats employed in the oyster fishery increased or diminished?—It has increased very much.

57,608. Have they increased of late years?—Yes.

57,609. What is the increase altogether?—I can tell you with regard to the Mumbles, but with regard to other parts I cannot.

57,610. Do they include other places?—Yes, Portatyn and Swansea.

57,611. What number is there at Mumbles?—About 66.

57,612. Are they the same class of decked boats as those which are used here?—Yes.

57,613. With three men in each?—Yes.

57,614. How many are there in Swansea?—About eight, and there are 12 in Portatyn, and 66 or 68 in Mumbles.

57,615. The number within your knowledge is increasing?—Yes.

57,616. Are the boats of a different class to what they used to be in former years?—Yes.

57,617. Are they larger boats?—Yes.

57,618. Do they carry a larger dredge?—No.

57,619. They carry two instead of one?—Yes.

57,620. They do double the amount of work?—Yes.

57,621. Do you fish on the same ground for oysters now that you have frequented for many years back?—Yes.

57,622. Can you tell us how far westward you go?—We go down nearly to the Worms' Head.

57,623. Not any further west than that?—No, we do not go as far west as that.

57,624. How far do you go to the east?—I should think about a mile from the Fairway buoy, as near as possible.

57,625. How far south?—To the White Oyster Ledge. We go about two miles above that.

57,626. Do you go as far as the red revolving light?—No, not as far as that.

57,627. (*Mr. Lefevre.*) You do not go out as far as Lundy Island?—No, we scarcely ever see it.

57,628. (*Mr. Caird.*) Do you vary your ground in fishing much during the season?—We vary with the winds.

57,629. Do you find now upon the same ground that you have fished for many years back, as many oysters as you used to get?—I am very sorry to say it is not so.

57,630. Then you do not agree with the witness who tells us that he finds as many oysters as ever he did?—That is all moonshine.

57,631. Do you think they are getting scarcer?—I am sure they are.

57,632. Does one boat not get as many oysters as it used to get?—No.

57,633. There are a great number of boats, you tell us?—Yes.

57,634. But each boat does not get as good a catch?—No.

57,635. Can you tell us the difference in your experience between a good catch now and one 10 years ago?—I have been going out in a morning seven years ago, and have had seven hauls; and I have brought in as many as 8,000 oysters.

57,636. In seven hauls?—Yes. Now I may go out all day, and if we come back with 3,000 or 4,000, we think we do very well. We consider 4,000 an extra day's work.

57,637. Four thousand oysters?—Yes.

57,638. Are the oysters much of the same quality and size as they were when you got those larger hauls?—Yes; about the same. I do not see much difference in them.

57,639. Do not you catch a larger proportion of small fish now?—No.

57,640. What do you consider the reason of the decline in the yield of oysters?—The continual dredging.

57,641. Are there more people employed upon it?—Yes.

57,642. Do you think the beds are over-fished?—Yes, I do fancy that they are rather over-fished at the present time.

57,643. Have there been good years for spat lately?—I have not seen any. This last summer there were some symptoms of it; but I am not exactly up to the mark, and cannot understand these questions. I have been trying to understand the spat, but I have not been able to do so. There has not been much upon our ground as yet. It has scarcely shown itself yet.

57,644. Have you not observed that at some seasons you have a better brood than at others?—Yes.

57,645. Within the last four of five years has there been generally a good brood?—No.

57,646. Has it fallen off?—Yes, it has rather fallen off to what it has been.

57,647. Has that had any effect in causing the decline in the oysters of late?—Well, I fancy it must; because the ground has been so much disturbed that if the spat lit upon it at all, the boats were continually going over it.

57,648. Do you think the disturbance of the ground is injurious to the oyster-fishing?—I do not fancy it is, and we could not avoid it, although we have a large space of ground to go over. There are 60 boats going down and across the channel, and they take everything almost before them. I know of instances where we used never to throw a dredge in, where they have now been taking out oysters too small to be marketable.

57,649. And in that way the oyster-beds have been injured?—Yes, they have been injured I think.

57,650. Are there any oysters brought from any other part of the coast and laid down on any of the beds here, for the purpose of fattening or growing?—No.

57,651. That has never been practised?—No, it has never been practised.

57,652. Is there any suggestion you have to offer to us as to any mode by which oyster-fishing might be improved?—No, I do not know that I could suggest anything; but as you have given me the chance, perhaps I may speak with regard to one thing which we think will be a disadvantage.

57,653. Yes; we shall be glad to hear all you have to say?—We have been thinking, and I think it is a fact that cannot be controverted, that the railway which is about to be formed at the Mumbles will very much injure us as a fishing port.

57,654. In what way?—They are going to bring the railway down close to where the boats are lying at their moorings, and I think we cannot have such a fishing port in future as we have hitherto had; for instance, our boats in landing and getting off, will be in great danger of being destroyed.

57,655. Is that in reference to the harbour there?—Yes.

57,656. And the facilities you have in going to sea and coming in?—Yes.

57,657. Has it anything to do with the oyster beds, and their productiveness?—Whether it would injure the beds or not, I cannot say; that would have to be proved.

57,658. It does not directly affect the boats in any way?—No.

57,659. Is there anything else you have to mention to us?—No.

57,660. Is there any regulation among you as to the size of the oysters you may catch?—Yes; they must be 2½ inches across.

57,661. All oysters below that size are not marketable?—No.

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57,662. Would the dealers not buy them from you?—Whether they would buy them or not, our Coast-guard would not allow us to sell them.

57,663. They look after you?—Yes, I have had them on board of my own craft.

57,664. Do the fishermen pretty steadily adhere among themselves to not bringing ashore small oysters, smaller than $2\frac{1}{2}$ inches?—I believe they do, in general.

57,665. Have you any remarks to make with regard to the oyster season here; is there any feeling among the fishermen that the close-time should be altered or increased?—At one time we did get up a petition, and sent it to Parliament, to have the month of May for dredging; but on the whole I believe it would be better to leave it as it is. We have got from September until April, which gives us eight months in the year, and I fancy that that is quite long enough to be continually dredging on the same ground.

57,666. Then, if such an opinion did exist among the fishermen before, it is not now their opinion that the month of May should be taken from the close-time?—I have never heard anything of it since. That happened to be a very poor season with us, and we thought we would get up a petition. We did not wish to disturb any ground we had been on for the eight months; it was simply that we might be enabled to go in search of better beds of oysters. There are oysters over at Lymouth which cannot be caught here; but in May we could go over and catch them, and market them; and if they are left there, they are left to die.

57,667. Do not the fishermen of Lymouth fish them?—No.

57,668. Not at any season?—No.

57,669. You cannot fish them earlier than May, on account of the open character of the coast?—Yes.

57,670. When do you first find the oysters getting milky?—In July.

57,671. Not before that?—No; in July and August.

57,672. Do you find the oysters in a good condition in the month of May?—Yes, they are very good.

57,673. It is not on account of the oysters being out of condition then, that the desire against having a fishing in the month of May has arisen?—No, not at all.

57,674. But simply to give the oysters rest?—It is the best month we could get in the year for selling oysters.

57,675. And the oysters are in good condition then?—Yes.

57,676. Are they in good condition in September? Yes.

57,677. And during the whole of the winter months?—Yes.

57,678. What do you do in the summer months, when you are not oyster-fishing?—The boats are generally laid up, and the men go to sea.

57,679. As sailors?—Yes.

57,680. They do not take to any other kind of fishing?—I think there were one or two boats that started trawling last summer.

57,681. Deep sea-trawling?—Yes.

57,682. Were they successful?—They fished for 5*s.* or 6*s.* a week.

57,683. Each man?—Yes; and I suppose they wound up their boats.

57,684. They did not find it profitable?—No.

57,685. Do you ever do anything at seining?—No; some chance times they seine when the mullet are in in the summer time.

57,686. Do you seine for mackerel?—No, not for mackerel.

57,687. Have you had any experience with these fishing weirs?—Yes, a little.

57,688. What do you think of their effect upon the interests of the fishing here?—If I must be candid and plain, I think they ought to be destroyed.

57,689. Do you think they do any harm to the fishing interest?—I am certain they do.

57,690. Do they kill large quantities of the brood and fry?—I cannot say; but I have seen large numbers from the time I was a boy.

57,691. Have you seen large numbers?—Yes; quantities of them.

57,692. Dead?—Yes.

57,693. Dropped inside?—Yes, inside and out. If they get out they get on a bank, and cannot get to sea. They are fixed altogether.

57,694. What is done with them?—The birds take them. They are dead, or they cannot survive in a low spring tide. The tide is a mile outside of these weirs in a low spring tide.

57,695. Is there nothing but sand except within the basket?—They are left quite dry. Sometimes there is a little pool formed there, and the fish are deposited there, and are all alive. It is a splendid sight to see them. But in some of the weirs the water will run out and leave them quite dry. Common sense will tell you that fish under those circumstances must die ultimately, after being left dry for two or three hours.

57,696. But where there is water, they are alive?—Yes, they are all right enough then. They have a small net by means of which they pick up those fish. They take out what is marketable, and drop the other out on the sands, in such a way that it is impossible for them to get out to sea.

57,697. What description of fish have you seen thrown out upon the sand, and left to perish in that way?—Whiting, ling, codfish, and different others.

57,698. Soles?—Yes.

57,699. Any large quantity of young soles?—Yes, very small.

57,700. Any turbot?—Yes, small turbot now and then.

57,701. You think there is a great destruction of the brood of fish by those nets?—There is no mistake about it.

57,702. Every year?—Yes, every year.

57,703. Have you yourself often gone to look at the nets; have you ever fished them?—I have been there scores of times. I have been up there as a boy getting small fish, after they had been left in that way.

57,704. Have you ever fished them yourself?—I have been fishing them after the owners have been taking the fish out with the small nets. I have got a small basket perhaps of sprats, and whiting, ling, and gurnard, and of the small fish they would not take.

57,705. Is it the general opinion of the fishermen here, that these weirs are destructive of the brood of fish?—It is so with us.

57,706. If they were taken away, could the fishermen by other means get the same fish, or an increased quantity of fish?—I believe our bay would be very prolific of fish, if these weirs were done away with.

57,707. You think it would greatly increase the quantity?—There is no mistake about it.

57,708. (*Mr. Lefevre.*) Have you observed the same quantity of small fish year after year in these weirs?—Yes; and I have been brought up there from a boy.

57,709. For the last two or three years, have you observed the same quantity of small fish as you did when you were a boy?—Yes, near about the same.

57,710. Have you ever observed when the tide has receded, and the water has been left in a pool in the weir in the summer time, that small fry have been killed by the heat of the sun?—One half of them will be killed, because they have not enough water, and they all get together. The consequence is, that one half of them die.

57,711. Have you ever observed that in cases where there are no weirs, and the young fish are caught in pools of water in the bays, when the water has receded, a quantity are killed by the heat of the sun?—I cannot answer that question.

57,712. Have you never seen it?—No.

57,713. Is there any mode of fishing the weirs without causing a destruction of small fry?—I ques-

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tion if there is, except by using a net of a proper mesh.

57,714. Would it be possible to have permanent stakes and hurdles, without stones behind, so as to allow the small fry to escape through the stakes, and go away with the receding tide?—I question it.

57,715. Is it absolutely necessary to have this erection of stones, if they are to fish these weirs at all?—I do not fancy that they have any need of it, because the stakes are driven down into the clay; but we have very coarse weather here sometimes.

57,716. With regard to the oyster-fishing, do you think there are large beds of oysters in the deep water in the middle of the channel which are not fished by the oyster-boats at present?—That was the very reason we petitioned to get the month of May.

57,717. You believe there are such beds?—Yes.

57,718. Beds that you are unable to fish in the winter time?—Yes.

57,719. Do you recollect the fishing before the close-time was enforced?—Yes.

57,720. Did you fish the beds then?—No; we had smaller boats then, and we were obliged to keep nearer the shore.

57,721. Could you not go that distance in the summer time?—No; we could not venture out.

57,722. Have you observed any difference in the condition of the oysters which you have taken up towards the close-time, with regard to the spawn?—Yes.

57,723. Do you think they spawn at different times, according to the depth of water in which they lie?—I cannot say.

57,724. Have the oyster dredgers of Mumbles got any oyster-beds on which they lay down the oysters?—No.

57,725. Are there any oysters here?—There are no regular beds on which they deposit them; but when they come in, they lay them down, and take them away again in a few days.

57,726. They are merely thrown down?—Yes, there are no beds.

57,727. They deposit them in perches?—Yes.

57,728. What are those perches?—When the boats go out and have one or two days catch, they put them down in these perches which we rent from the Duke of Beaufort.

57,729. What is the size of them?—Some of them are not as large as this room.

57,730. Do you lay them down there until they are fit to send to market?—Yes.

57,731. Do they fatten there?—No; they are only laid down for our convenience.

57,732. Do you lay down many to supply the market after the close-time?—There are a good few laid down sometimes.

57,733. How long are you able to supply the market after the close-time?—Up to July, and sometimes through August.

57,734. In May, June, and July?—Yes.

57,735. And sometimes through August?—Yes.

57,736. Then you are very nearly able to supply the market during the whole of the close-time?—It is a very small supply. There are only a few that are deposited down, just a few that are required for sauce.

57,737. Is there not a good deal of dredging just before the close-time, in order to get up a supply for the market during the close-time?—It depends on the weather.

57,738. If you are able, you do so?—Yes, and all through the season. It is only the weather that prevents us.

57,739. Do you pay anything for those perches?—Yes.

57,740. How much?—Seven shillings and sixpence each.

57,741. Each of the fishermen has his own perch, on which he lays down his oysters?—Yes.

57,742. Are the boats mostly owned by the fishermen?—Yes.

57,743. What is the cost of one of those boats?—About 150*l.*

57,744. Do any boats come from a distance here, such as the Jersey boats?—No. We had a few from the east many years ago. They came round from London.

57,745. Have they not been here lately?—No, not lately; not for years.

57,746. You do not trawl yourself?—No.

The witness withdrew.

R. Sparkes.

Robert Sparkes called and examined.

57,747. (*Mr. Caird.*) Are you an oyster-fisherman?—I have been; but not for the last 15 years.

57,748. What kind of fishing have you been following lately?—Weirs, stop-nets, and cod-fishing.

57,749. Have you fished the weirs?—Yes, for 40 years.

57,750. Are you fishing them now?—I have part of one. I have not fished them this summer. I have given it up. It is on the other side of the river, and belongs to a man named Harrison.

57,751. Is it in the same form as those on this side?—Yes.

57,752. You have had a long experience of the fishing of these weirs?—Yes, I do not think there are many who have had a longer experience than myself.

57,753. Have you observed, whether in the course of your experience, the quantity of fish taken in the course of a year by one of these weirs, has been increasing or diminishing?—It has diminished very much.

57,754. Cannot you take now as much as you used to take in former times?—Not one third.

57,755. Is the quantity of fish smaller than it used to be?—Three parts of it is small.

57,756. What description of fish?—I have seen hundreds of little cods not three inches long. I have seen hundreds and thousands of them.

57,757. What was done with them?—The gulls had them. They were thrown away, and they died on the sand. Thousands and thousands were destroyed.

57,758. Have you observed a great destruction of small fry by the use of the weirs?—Yes.

57,759. Is the destruction of the fry increasing or diminishing?—Increasing; because as soon as they come in they are all dead and killed.

57,760. Have you altered the shape of your nets at all in your time, or the mode in which they are made?—No, they are all the same.

57,761. Are they so close that nothing can escape that gets inside?—Yes.

57,762. Have you yourself used any other description of net than these weirs?—Yes, I have used a stop-net on the same principle, fixed on a pole.

57,763. Is that as close?—No, not as close as that.

57,764. Can the small fish escape through it?—I have got herrings in my net now that are much too small. If all of them were to be constructed on a good principle, and were to have a good mesh, I think we should have good large fish; the inhabitants would be supplied with double the quantity, and we should be ten times better off than we are now.

57,765. Do you catch sprats now?—Yes.

57,766. Can you catch them with a net?—Yes, if I had a proper sprat-net, and not a destructive net like that. We ought to have a regular sprat-net, and not fish with nets like these all the year round.

57,767. You do not catch sprats all the year round?—No; only from about this time up to Christmas. After that we have nothing but thousands of little herrings, the fry of the herrings.

57,768. Is there a great quantity of small herrings

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killed by these weirs?—Yes, and sold at twopence a pound. Those which are two inches long we pick up, and the smaller ones are thrown away and die.

57,769. Is there a large take on the whole of those small fish unfit for consumption?—Yes; seven parts out of eight are fit for nothing.

57,770. Seven-eighths are totally wasted and lost?—Yes.

57,771. What do they consist of?—Small soles, brill, cod, small hake, and small pilchards in thousands.

57,772. Is it the case that some of them do not die, but remain alive in the water in some cases in the nets?—In some of the weirs there is a pool about three feet deep. They can swim about in that pool; but in the summer time, with a four hours tide out, the water gets so hot that they all die. They are scalded by the water. I have seen hundreds of conger eels in a hot day come out from under the stones.

57,773. Congers?—Yes; of about half a pound, and from that to two pounds.

57,774. So that even where there is water, when there is a vast quantity of small fish, they die in consequence of the heat of the weather?—Yes, and there are thousands of gulls that come round and will soon take them all away; indeed, they are nothing but food for gulls.

57,775. Do you follow any other kind of fishing; have you been a trawler?—Yes; but never much.

57,776. Have you been a line-fisherman?—Yes, that is my following. I shall commence next week for large cod.

57,777. Is the take of cod increasing or diminishing?—There are not as many as we used to get.

57,778. Do you get good cod?—Yes; and some of them poor.

57,779. Is it the long-line that you fish with?—Yes.

57,780. How long?—A mile and a half.

57,781. How many hooks?—About 300.

57,782. What do you bait with?—Small herrings, and small flat-fish, and small whitings.

57,783. Do you use mussels?—No.

57,784. Nor flukes?—No.

57,785. You can always get plenty of bait, can you?—No, not always. When we are short of bait we dig for lug worms in the sand.

57,786. (*Mr. Lefevre.*) Are you still the lessee of one of these weirs?—I have got part of one; but I have not fished them this summer. I got nothing in it, and I have given it up. It is all good, however, at this time except the basket; the basket has gone.

57,787. Did you give it up because it did not pay?—Yes; I got a stop-net instead.

57,788. Do you think that other people would give them up also?—Yes.

57,789. Do you think it possible to use the weirs in such a way as to allow the young fish to go through?—Not at all. In making them they are intermixed with old straw and matting, and stones, and they are put down into the sand. The stream runs into the basket, and throws the fish into the basket, from which they are fished out.

57,790. Then is there no means of using these weirs in such a way as to allow the fry to escape?—I think not.

57,791. Do you think the weirs ought to be removed?—They ought to be condemned.

57,792. You would like nets to be used instead of weirs?—Yes.

57,793. Nets of the same shape?—Yes.

57,794. During any month of the year do you use nets small enough to catch sprats?—Yes.

57,795. Would they not catch also the small fry of other fish?—No; they would go through the mesh.

57,796. Would small soles go through the mesh?—We catch them very small, a quarter of a pound sometimes.

57,797. But small herrings would be taken with the sprats?—They would go through, unless a little dirt got in and stopped the fry from going out.

57,798. Would you use a different class of net at another time of the year, so as to catch bigger fish?—I think if the small mesh were done away with we should have a better class of fish.

57,799. But the mesh must be small enough to catch sprats?—I think we ought not to have a mesh as small as that.

57,800. You think you ought not to be allowed to catch sprats?—Yes.

57,801. Are you ready to give up the right to catch sprats?—Yes, if the other fishermen would do the same; and in two years time, I think, there would be six times the supply there is now.

57,802. How would they catch sprats?—They would get a net and move it after the sprats.

57,803. You would still use a net for the sprat season?—I do not think it worth while to get sprats.

57,804. I thought you said you were catching thousands of sprats?—They are doing so in the weirs.

57,805. But do you not in your net?—No; they go through.

57,806. What time of the year do you find the greatest quantity of the small fry?—In the summer time. About May they commence, and go on from May until this time; and if the wind is fine, I have seen them so plentiful in the basket that we could not shove the lid down.

57,807. What have you done with the small fry, when you have taken them in such quantities?—Thrown them away.

57,808. Have you thrown them out on the dry land or in the water?—We have thrown them ashore.

57,809. Have you seen them die there?—Yes; and I have seen them baling them out continuously for twenty minutes.

57,810. What proportion of marketable fish would they take at the same time?—Perhaps not 2*s.* 6*d.* worth of fish, perhaps 5*s.* worth, and perhaps only eighteen pennyworth.

57,811. (*Mr. Caird.*) Is the object of loading these weirs with stones on both sides of the net as much for the purpose of getting a stream with the tide in the basket as anything else?—Yes, and to stop the fish from getting out.

57,812. The object is to prevent the fish from getting any other exit?—Yes.

57,813. Is it also to prevent the fish from getting through the basket?—Yes, and to prevent the water from undermining the weir.

57,814. Can the water get out at the end of the basket?—No, it has a plank.

57,815. Where does it get out?—From the sides which are made of basket-work. They make it as close as they can, to prevent the eels from getting in.

57,816. The water does get out?—Yes, or else it would break with the pressure of the water.

57,817. (*Mr. Lefevre.*) Do they take many eels in these weirs?—No; perhaps two or three quarts.

57,818. You spoke of having a net instead of a weir; would you catch the same quantity of fish?—Yes; we should catch three times the quantity, and we could take the net in if it blew hard, or if we wished.

57,819. What would be the cost of a net of that kind?—20*l.*

57,820. Then you would have a different sized net for the sprats?—Yes.

57,821. What would be the cost of that?—About 2*l.* We could put it at the head of the other net.

57,822. Would it only be necessary to have a smaller mesh at the end to catch sprats?—Yes, that is all.

57,823. What kind of trap would you have at the end?—We have got no trap; but we let them come down to the end.

57,824. Is there any water there?—No, it runs dry.

The witness withdrew.

DANIEL BENSON recalled and examined.

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57,825. (*Mr. Lefevre.*) You said in your evidence that you had only been down once last week to take the fish out of the basket of your net?—Yes.

57,826. Has that been the case for some time past?—Very often in the summer time we do not go down at all, because there is nothing doing. There are neither big nor small fish, and it is not worth our while to look after the nets. The fish are better in the winter time; from this time until the month of January.

57,827. Has that always been the case since you can recollect in the summer time?—Yes, ever since I can recollect.

57,828. Do you consider that these embankments of stone round the weirs are necessary?—Yes, the weir would be of no use unless it had something of the sort, because the sea would undermine the wicker-work, and the fish would go out under the wicker-work.

57,829. Would it be possible to substitute a net for this hurdle-work?—We have nets of the same shape now, but there is no pool inside the nets, and the fish stop on the dry sand.

57,830. Do you find that you catch as large a quantity of large fish in those nets?—Yes, we catch more in the nets than in the weirs, but the net which has been spoken of has what is called a sprat-mesh, and there are more small fish killed by it in one tide than a weir would kill in ten years.

57,831. If you catch more fish in the nets than in the hurdles, why do not you use the net?—In the winter time we catch fish we could not catch in the nets, such as whiting and sprats; we could not catch them in a large meshed net.

57,832. But you could use a net with a smaller mesh for sprats?—And then we should destroy ten thousand times more than are now destroyed by the weirs. There are very few fish destroyed at all by the weirs.

57,833. Why would you destroy more in the sprat-nets than in the weirs?—Because they pick up everything.

57,834. It is quite as impossible for the small fry to get through these weirs?—If you were able to come down to the bay you could judge for yourselves what small fish could get through.

57,835. Do you say that small fish could go through?—A dog in some places could crawl through them. They are not at all as close as has been mentioned to you.

57,836. Further out in the continuation of the stakes small fry can get through?—They do get through.

57,837. But when they come up towards the basket there is an embankment which confines them?—They can come out over the embankment above the wicker-work. At low water there is always sufficient water for them. There is a depth of water up to the height of the stones, and it is deep enough for the fish to swim about at all times.

The witness withdrew.

FRANCIS PRICE called and examined.

F. Price.

57,838. (*Mr. Caird.*) You are agent to the Duke of Beaufort?—Yes.

57,839. You have heard the evidence which has been given to us?—Yes.

57,840. Have you, as agent to the Duke of Beaufort, any remark to make?—I have no part to take in the inquiry. I merely came here to listen to what took place.

57,841. (*Mr. Lefevre.*) Does the Duke of Beaufort claim the right of setting any kind of net along the foreshore?—Yes, anything.

57,842. He claims the right of doing what he likes on the foreshore with regard to catching fish?—Yes.

57,843. He claims the foreshore for any purpose whatever?—Yes, he claims to deal with the shore and the sand in any way he thinks proper, irrespective of either the corporation or any body connected with the neighbourhood.

57,844. For how long a distance on the shore does he claim that right?—For 20 miles.

57,845. With the exception of Swansea Bay, are there many of these nets used?—There are one or two at Pentlow, upon the river at the estuary.

57,846. Is that outside Swansea Bay?—It is outside Swansea Bay. It is outside the land towards Carmarthen.

57,847. Is Swansea Bay the only bay well qualified for the use of these nets?—Yes, and there are a great number, because it is quiet; it is not subjected to storms, and it is a sandy bay adapted for driving down stakes.

The witness withdrew.

JENKIN JENKINS called and examined.

J. Jenkins.

57,848. (*Mr. Lefevre.*) How long have you been a fisherman at Mumbles?—I was born there.

57,849. How long have you been dredging then?—About 22 years.

57,850, Have you dredged for oysters, as well as trawled at other times of the year, during the close-season; or have you dredged only?—We were not allowed to dredge during the close-season.

57,851. Have you also trawled?—I have been trawling, but not for the last summer or two. There is not much fish.

57,852. Are you the owner of one of the boats lying off here?—Yes.

57,853. Have the number of boats increased at Mumbles of late years?—Yes.

57,854. Have they also increased in size?—They have increased in size, but not in number. 20 years there were as many boats as there are now, but they were all rowing boats.

57,855. All open boats?—Yes.

57,856. Ten or 12 years ago, did they begin to use the small skiff?—Yes, about 12 years ago.

57,857. They are those they now use?—Yes.

57,858. Boats of eight or 10 tons?—Yes.

57,859. Do they carry the same number of men?—No; one man less.

57,860. Is the number of fishermen then smaller than it used to be?—No.

57,861. Is it about the same?—About the same. There are not quite as many employed as there were. There are three men now in a boat where there were formerly four.

57,862. Do the boats bring in as many oysters now as they did formerly?—Yes, there is not much difference in that respect. There are many calm days when they cannot go out, when the rowing boats could go out formerly.

57,863. Then is the supply of oysters not greater than it used to be a few years ago?—No, there was more then than there is now. The old rowing boats were catching as many as they liked, but they could not get more than 5*s.* or 6*s.* a thousand for them then.

57,864. Have you observed any decrease in the oysters during the last four years?—Yes.

57,865. Are they not as plentiful?—No.

57,866. What is that owing to?—It is owing to so much dredging for them.

57,867. Do you think it is due to the over-dredging?—Yes, if they were not dredged so much there would be more oysters.

57,868. For the last four or five years, has there

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been a good spawn or spat?—There has been more than we have seen for a good many years.

57,869. During the last few years, have you observed the same?—No; last year there was not much spawn, but we have seen a good deal this season.

57,870. Then do you think the falling off is due at all to the want of spat?—No, I think it is owing to so much working upon the beds.

57,871. You told us that 12 years ago, when open boats were in use, you were able to catch as many as you do now?—Yes.

57,872. Then there was as much dredging then as now?—Yes, but we are out longer now. We were not in the habit of stopping out so long in the open boats as we do in the skiffs.

57,873. Do you fish over the same ground?—Yes, on the same ground.

57,874. You do not go further out?—Yes, we go further to the westward, off Worms Head.

57,875. And further off the shore?—Yes.

57,876. When you bring the oysters in, do you lay them out on the perches?—Yes.

57,877. And supply the market from them?—Yes, as they are wanted.

57,878. During the open-season do you lay in a large stock on those perches?—If we can sell them we do not lay them down. If there is any sale for them we send them away direct.

57,879. But if the market is over-supplied, you keep them here?—Yes.

57,880. And besides those perches you have plantation beds below the level of the water?—Yes, below ebb spring tide. That is a softer bottom.

57,881. What are those plantation beds for?—For keeping the oysters in the summer months, where they will fatten and feed; and there is no trouble in turning them over. They will gather sand if we do not turn them over once a week.

57,882. When you dredge up oysters in the bay, do you cull them at once?—Yes.

57,883. Do you throw over all under $2\frac{1}{2}$ inches?—Yes, that is the way we bring them in; you can see them lying on the beach.

57,884. They do bring in a certain number of small oysters?—Yes, a few that come in by chance.

57,885. When you lay them down on the perches, do you cull them again before you send them to the market?—Yes, we reckon them again, and if there are a few too small, we take them out to the plantation beds.

57,886. Besides that do you lay down a considerable number of large oysters on the plantations?—Yes, as we catch them.

57,887. Then at the close of the open-season you have a considerable stock on the plantations?—Yes, the merchants come there to buy them.

57,888. What is the difference in price in the close and the open-season?—We got 10*s.* last season, and from that up to 12*s.*, 14*s.*, and 16*s.*

57,889. During the close-season?—It was at 10*s.* before the season was out, and the price went up to 20*s.* in the close-season.

57,890. Do you always find an increased price in the close-season?—Yes, always.

57,891. That increased price is an inducement to the fishermen to lay them down in perches?—It is done to oblige the merchants, who depend on a stock all the year round; but if we could sell more oysters we should not keep any.

57,892. You would sooner sell them at once at a small price than store them up so that you may get a larger price, in the close-season?—Yes, because it would come to much about the same thing then. Sometimes vessels come in, and will steal 400, 500, or 1,000 in the course of a night.

57,893. Cannot you prevent them from dredging where the plantations are?—Yes.

57,894. Do they not dredge there?—No.

57,895. Do they send their men on shore in the night and take them?—Yes, they send their boats where the beds are, and take them.

57,896. Have you not sufficient protection for the plantations in the close-time?—No, it would not do for us to go out and watch.

57,897. Has each boat got its plantation ground?—Most of the boats have.

57,898. But notwithstanding that loss, you lay in a considerable stock to supply the market during the close-season?—Yes.

57,899. At the end of the open-season what supply do you think you have on the plantation beds, and in the perches?—It depends upon what sort of season we have had.

57,900. Taking an average season, what would there be?—Last season the London merchants came and bought cargoes, and took them away in their vessels; this year they could not take any at all, as the price was too high for them.

57,901. How many were there at the commencement of the close-time this year?—1,500,000 I should think.

57,902. Was that sufficient to supply the merchants who ordinarily buy here in the close-season?—No, they did not have many; the fishermen kept them back, and held on to have a few every week.

57,903. The difference in the price was about 8*s.* per 1,000?—No, they got up to 15*s.* and 16*s.* per 1,000 in the last week of the season. Then those who had them afterwards got 1*l.* for them.

57,904. What was the price at the close of the open-season?—15*s.* and 16*s.*

57,905. The price got up afterwards?—Yes, that is the highest price ever paid here; it was never so high before.

57,906. Do you recollect the oyster-fishing here before the close-time was established?—Yes, I recollect when the open-season lasted all the year round.

57,907. Did you fish all the year round?—Yes; but there was no market for the oysters then.

57,908. During the close-season?—No, we only sold a few about the town, a few now and then, perhaps one day's catch.

57,909. Do the oysters breed and spawn on the plantation grounds?—Yes.

57,910. Then the oysters you send away in the close-season are in a milky state?—Some may be. If you open them you may see milk in some of them; but there are some chance ones on the ground in April which are in a milky state.

57,911–2. Do you think on the whole that the enforcement of a close-time has done any good to the oyster-dredging here?—Yes, they would all have been fished out before this if we had kept at work all through the summer.

57,913. Before the close-time was enforced was the supply falling off?—No.

57,914. They dredged throughout the whole of the year?—That was before the skiffs came here.

57,915. But you told us that the open boats caught as much as the skiffs?—Yes; but the people had no market for them, and they were forced to knock off.

57,916. Then were there not many fishing then in the close-season?—No.

57,917. But a certain number did fish all the year round?—Yes, if they could sell their fish. Every man was his own merchant, and there were only four or five who were able to sell oysters.

57,918. If there was no close-time now, would dredging go on all the year round?—Yes.

57,919. Do you think that the oyster dredgers would fish grounds which they do not fish now if they were able to fish in the close-time?—I dare say they would find oysters all along.

57,920. Do you think they would fish upon new ground which they are not able to go upon now in consequence of the weather?—I do not know that they would; some might go out and look for oysters because the days would be longer, that would be one thing, but they would go generally where they thought they could get the most. There were a good many new patches found last season, and the ground on

which we dredge now is ten times as large as it was when I first went dredging.

57,921. Is this petition which you have placed in my hands one signed by the fishermen, and intended to be presented to the Fishery Commissioners ?—Yes.

57,922. Have you signed it yourself ?—Yes.

57,923. I think you said that you have been trawling, but not during the last two years ?—Yes.

57,924. Did you give it up on account of the decrease in the supply of fish ?—No, there never was much fish caught by trawling here on account of the weirs ; great quantities have perished in the weirs on the sand here.

57,925. Did you ever trawl when it was worth while ?—The trawling ground is on the other shore.

57,926. On the other side of the bay ?—Yes, in the east part of the bay where there is a fine soft bottom.

57,927. Are there no weirs there at all ?—No.

57,928. Do you think that the supply of fish has fallen off of late ?—Yes, they used to get plenty in the weirs, and did not know what to do with them.

57,929. Do you think that the weirs catch as many fish as they did ?—No ; but they have destroyed thousands.

57,930. Have the weirs been there ever since you can recollect ?—Yes.

57,931. Has the number of weirs fallen off ?—Yes.

57,932. Have you not in consequence found the supply of fish improving ?—No.

57,933. Has the supply of fish continued to fall off ?—Yes.

57,934. What number of weirs do you think there are in the bay ?—I cannot exactly say ; I daresay there are a dozen.

57,935. And besides the weirs, there are a considerable number of stop-nets ?—Yes.

57,936. In this petition you complain of the mesh of the stop-net ?—Yes, it is too small.

57,937. What is the general size of the mesh of the stop-net ?—From 1 to 1¼ inches. It is so small that you cannot put your finger into it, and nothing can get out of it.

57,938. What kind of small fish do they catch that you complain of ?—Small cod, bream, flukes, and small soles, herrings, sprats, and all sorts of fish.

57,939. Do the fish mesh themselves in the net ?—No, the stop-net ebbs dry. The sun kills them in the summer time, and the birds eat them up. Then there is what they call "cramming"; they take heath from the common and put it down, and lay stones on that to keep the water in.

57,940. Has the number of stop-nets increased of late years ?—There were none six years ago.

57,941. How many are there now ?—Six or eight.

57,942. Then as the weirs fall off in number the stop-nets seem to take their place ?—Yes ; the stop-nets catch more fish than the weirs.

57,943. Do the stop-nets catch more small fish than the weirs ?—Not as much I think ; small round fish have a chance of going out through the stop-net.

57,944. What number of boats trawl from Mumbles during the close-season ?—There were five last season, and there used to be eight or 10 in Swansea, besides the Brixham boats.

57,945. Do they trawl mainly off the shore here, or in Carmarthen Bay ?—It is only a chance time that they go there, these boats are too small for that ; they trawl in Oxwich Bay, and off here. There is a fine land for trawling off the weirs.

57,946. Do the trawlers take any considerable quantity of small fish themselves ?—No ; they do not bring in the fish that are too small to be sold.

57,947. Do they take up any quantity of small fish ?—In the trawl ?

57,948. Yes.—No, the mesh is too large.

57,949–50. What is the size of the mesh ?—The mesh in the trawl-net is, I daresay, about 3½ inches.

57,951. Is that when it is pulled out ?—Yes.

57,952. What is it in the cod of the net ?—It comes down to 1½ inches in the cod of the trawl.

57,953. That is three-quarters of an inch from knot to knot ?—Yes.

57,954. Are there any of those trawls now lying in the boats ?—No.

57,955. Can you show us one of them ?—I think I can ; they have a large mesh in the top of the net, but when it comes down it is only 1½ inches.

57,956. Is it only in the close-season that these vessels are engaged in trawling ?—Yes.

57,957. In the summer months ?—Yes.

57,958. Do they trawl mainly in the bay ?—Yes, in shallow water.

57,959. What is the depth of the water ?—They trawl off the weirs in the east part of the bay in from two to five fathoms of water.

57,960. What fish do they catch most of ?—Plaice, sole, and turbot sometimes.

57,961. And flounders ?—Yes, and hake and skate.

57,962. What are the smallest soles they bring to the market ?—It would take five or six of the smallest soles they bring to weigh a pound ; from the weirs it would take 20 to weigh a pound.

57,963. Five or six to the pound ?—Yes.

57,964. What is the length of a sole of which it would take five or six to weigh a pound ; would it be five or six inches ?—Yes, about that, about six inches ; they bring them in of that size.

57,965. Is there not a considerable quantity taken in the trawl of a smaller size than that which they throw overboard at once ?—Yes, sometimes. It is very seldom they come up very small in the trawl that they are not fit for the market.

57,966. Is there any line-fishing off here also ?—Yes, a good deal.

57,967. During the close-season ?—Yes ; sometimes a great many fish are caught, two or three dozen.

57,968. With the long-line or the hand-line ?—With the hand-line.

57,969. Is there any long-line fishing ?—There are no spilliards. They only fish over the side with a line held in the hand.

57,970. Is there any cod-fishing in the winter ?—No, there is no fishing in the winter, only for oysters.

57,971. Where do the trawlers bring in the fish ; do they bring them into Swansea ?—Yes.

57,972. Do you think the quantity they have brought in during the last two or three years is less than it used to be ?—It was rather scarcer last year than it was the year before.

57,973. In the year before that or in previous years had there been a falling off ?—I think there had been.

57,974. Has the number of boats employed in it fallen off ?—No, there are the same number. Boats come here from Brixham and Dartmouth.

57,975. Has the number of those boats fallen off ?—Yes ; there is no room for them to fish here.

57,976. Is there much ground here in the bay where they can trawl ?—No.

57,977. Will you point out on the map what ground there is for trawling ; is there ground on which you can trawl from White Oyster Ledge ?—There is nothing off that.

57,978. Is there no trawling ground outside ?—No, and no dredging ground. It is rough ground outside there.

57,979. Is it too rough for dredging for oysters ?—Yes, we have tried all up and down there, and there are none about the White Oyster Ledge.

57,980. Inside the White Oyster Ledge is there a trawling ground ?—There is ground all the way along for oysters.

57,981. Are there oysters on the Outer Green ground ?—Yes.

57,982. And the Inner Green ground ?—Yes ; there are oysters all along there.

57,983. Is there ground for trawling ?—Yes, not far from the shore.

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57,984. Is that the principal ground you trawl on?—No; up towards Port Talbot.

57,985. Do you trawl here?—Yes, there are a good many fish caught here inside the oysters altogether.

57,986. Then is it the opinion of the fishermen here that if the weirs were done away with trawling would increase, and there would be more fish for the trawlers to take?—Yes, and there would be plenty for the boats to catch with the hook and line. The small fish that are now destroyed would become large ones.

57,987. The oyster season here has already begun?—Yes.

57,988. Have you been taking as many oysters as you did formerly?—Yes, for the time we have been out. The weather has been very bad, and very much against us. It has been blowing very strongly all the time, and we have not been able to go down much where our best grounds are, away down off Oxwich.

57,989. When you have been able to go down have you brought as many away as in average seasons?—Yes, looking back to the last day of September, there was only a difference of 200 oysters caught in that month and in the previous September.

57,990. Have you kept return of your takes?—Yes.

57,991. What supply have you now laid down on the perches?—Not many now; they are going away as fast as they are caught. There is more sale for them than ever.

57,992. What is the price you are getting for them now?—12*s*.

57,993. Twelve shillings a thousand?—Yes, and there is more demand than there ever was.

57,994. How many have you got laid down in your own perch?—I have about 30,000 laid down there now.

57,995. Besides that you send off to the market every week?—I send off a good many.

57,996. What has the average per week been during the present season?—Some send 10,000 and 12,000, and on like that.

57,997. Do you think that during the present season you have sent off 10,000 a week?—Yes.

57,998. Are the men paid by shares?—Yes, by shares.

57,999. What share goes to the boat; one share?—More than one share; one-third.

58,000. A share and a third?—No; one-third.

58,001. One-third of the whole take?—Yes.

58,002. Do you divide the oysters?—No; each man gets 2*s*. 6*d*. a thousand, and the captain gets 3*s*., and the boat 4*s*. The boat takes one-third, be it what it may.

58,003. Do you separate the oysters?—No, they are all sold together in bulk.

58,004. Does each boat have its own perch, and keep oysters there?—Yes.

58,005-6. Do you make up your accounts at the end of the year?—Yes; I daresay the average would be 200,000 last year.

58,007. Two hundred thousand altogether?—Yes. In the dead of the winter, for about three months, there were not many caught. If we could not catch a little when we first go off, and in the last two months of the season, we should be very badly off.

58,008. Is there anybody to look after the oysters, and see that you do not bring them ashore too small?—Yes, the Coastguard.

58,009. They do exercise some control?—Yes.

58,010. Do they inspect the perches from time to time?—Yes, and if the captain can find a dozen oysters too small and under the proper size, he would seize the boat, and put us in prison for six months.

58,011. Have there been any seizures of that kind?—No, not one.

58,012. Then in your opinion do the fishermen observe the proper size?—They would be too small for the market. We cannot send them away less than the legal size. They would not go away if we brought them in. Perhaps a chance one may be brought in, but nothing more.

58,013. Are there many here from London who purchase oysters for laying down on other beds?—No, they take them away in their own vessels, and send them away to their own places.

58,014. They do lay them down in the Thames and elsewhere?—Yes; 13 cargoes went away in the spring of the year.

58,015. Were they all full-sized oysters?—No, young oysters.

58,016. What size were they?—They cannot take them less than two and a half inches. They may be three or three and a half inches, as long as they are young oysters.

58,017. Are the oysters they take fit for the market, and for eating?—They take oysters fit for the market.

58,018. But with regard to the oysters they take for the purpose of laying down, are they oysters ready for the market and fit for eating, or so small that they have to be laid down for fattening?—No, they are fit for eating, but they lay them down for August, and they grow and fatten.

58,019. Their object is to get a better price for the oysters during the close-season?—No, they take them from here to wait until the market opens. Then I believe they dredge them up again for the London market in the mouth of the river. There are two prices for oysters; we used to have for the small ones, which we called "knackers," 3*d*. a hundred, when they were plentiful years ago.

58,020. Is there a difference in the price now for the two sizes of oysters?—No.

58,021. Do you sell them of two sizes?—No.

58,022. Do you not sell a smaller class of oyster to the London people, who want them for laying down?—When they were here, and there were plenty of oysters, they wanted the small ones.

58,023. How long ago is that?—Ten years ago.

58,024. Have there not been purchasers here from London since then?—Yes; but the price got too high for them. The Liverpool merchants came here, but the price got too high.

58,025. Were oysters sold for that purpose every year until last year?—Yes.

The witness withdrew, and the inquiry was adjourned until the 4th of March 1865, at Whitstable.

Whitstable, Kent, Saturday, 4th March 1865.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

WHITSTABLE.
J. H. Nichols.
4 March 1865.

JOHN HAMPTON NICHOLS called and examined.

58,026. (*Mr. Lefevre.*) You are foreman of the Whitstable Oyster Fishery Company, I believe?—I am.

58,027. When was the company incorporated?—In the year 1793.

58,028. Incorporated by a special Act of Parliament?—Yes.

58,029. Had there been an oyster fishery here before that time?—Yes, from time out of mind.

58,030. But the company at that time bought the

rights of some previous company, and were incorporated by an Act of Parliament, for the purpose of carrying on the business of an oyster fishery ?—Yes.

58,031. What was the number of men who formed the company at that time ?—I cannot say exactly. Some time further back than that, just before they purchased the rights you refer to, I believe they were only 36 in number.

58,032. Have they gradually increased in number from that time until now ?—Yes.

58,033. How many are there now ?—There are now about 400.

58,034. Is the mode in which the freemen of the company are elected provided for under the Act of Parliament ?—Yes.

58,035. Does each of the freemen have a boat of his own, or do the boats belong to the company ?—They belong to the company individually.

58,036. And do the widows of members of the company have any right to share in the profits of the company ?—Yes ; we always allow them a portion of whatever sum of money is divided in any shape or way, whether for work, or by way of bonus, or anything else.

58,037. How is the company governed ?—There is a foreman, a deputy foreman, and a jury of 12.

58,038. Are the jury chosen by the fishermen ?—No.

58,039–40. Who are they chosen by?—By the foreman, the deputy foreman, and the treasurer.

58,041. What is the number of boats you have at the present time belonging to the company ?—There are now 95 boats belonging to the company.

58,042. What is the size of the boats ?—They are of different sizes.

58,043–4. What is the average size?—They run from 10 tons up to 30 ; but generally speaking they are of about 14 tons.

58,045. How many men work in each?—There are generally three men in a boat. When they all go out, they go about three or four in each. Now that the number has increased, they will probably go four in a boat.

58,046. Does the number you gave me, 400, as the members composing the company, include only the fishermen who are working, or the widows as well ?—It includes the whole. There are, I believe, 408, including widows.

58,047. How many of the number are working men? —About 300. There are 300 who attend to the work. Then there are others who may be ill, and some who are disabled by infirmities, and sickness, and so on.

58,048. Do they receive any portion of the profits ? —Yes, they have their allowance given to them without going to the work. Parties who are able to attend to the work, work for those who are not able.

58,049. How is the admission of young men to the company regulated ?—By a water court attended by a steward.

58,050. Who has a right to become a member ?—Only sons of the freemen. Formerly it used to be otherwise, but when the number increased so much, the system was altered.

58,051. What is the extent of the ground belonging to the company ?—Barely two miles.

58,052. Two miles in each direction?—Two miles square barely.

58,053. Making four square miles ?—No, very little more than two. The whole of the ground is not used for laying down oysters. A great portion of it is taken up as a bay for boats.

58,054. Is all that ground fit for laying down with oysters ?—Not the whole of it, because we cannot use all of it. It might be made all fit for laying down oysters ; but in that case, we should have nowhere to put the boats. We must keep a bay for the boats.

58,055. With the exception of a bay for boats, where they lie at anchor, is all the rest of the ground fit for laying down oysters ?—Yes.

58,056. Besides the ground which is in the possession of the Whitstable Company, is there any other ground in the bay in the hands of other persons ?—There is, on the edges, viz., the west Sea Salter ground ; but that is rather smaller than ours.

58,057. I believe the Whitstable Company spend a great deal of money every year in purchasing oysters from a distance, and laying them down on this ground ? —Yes, they spend a great deal of money.

58,058. Besides that is there much oyster brood on the ground itself ; I mean the spat of the oysters which lie there ?—There has been a good deal of spat lying on the ground at times. When the weather is suitable, a great deal of spat falls.

58,059. Did you have any good spat last year ?—No.

58,060. When was the last time you had a good spat ?—The last time was in 1858. It fell very heavily on the ground then, but there has scarcely been any since.

58,061. There has been none since ?—There has been a little, just now and then, but no considerable quantity.

58,062. Do the company keep the regulations as to close-time ?— Yes, they are all under regulations. They receive orders from the foreman and jury as to what they shall do.

58,063. Do they observe the general law on the subject, or do they follow their own regulations with regard to close-time ?—The foreman and jury make regulations, and the company are obliged to work according to the orders they receive.

58,064. Do those regulations vary from time to time, or have they been the same for a number of years ?—There has been very little difference in them.

58,065. When does your close-time generally begin? —We hold our court in July, on the second Thursday in that month.

58,066. Is dredging for oysters permitted on the ground belonging to the company until that time ?—No, it is not permitted on our ground.

58,067. When do you leave off dredging for oysters? —We always leave off dredging for the market about the 9th of May. We never catch any for the market after that time until the 3d of August.

58,068–9. Do you not consider that the sections of the Convention Act between this country and France with regard to oysters operate upon your ground ?—I think it would be better for us to have the month of May for the spring season. We cannot do much with our stocks in February and March. The weather is very severe then, generally, and the boats cannot work in the deep sea.

58,070. But I understand that you go on dredging for oysters in the early part of the month of May ?—I believe there are three months in which dredging is prohibited, but there is a great deal of it carried on notwithstanding.

58,071. There are five months under the Act ?—I think it is only three, from May until September, or rather from the last day in April until the first of September.

58,072. That will be four months ?—Yes.

58,073. But I understand you to say that the company here permit oyster-dredging during the early part of May, notwithstanding that Act ?—We prohibit them from being sold ; we never sell any after the regular time until the 3d of August again.

58,074. You permit dredging to be carried on during the early part of May ?—That is only for the purpose of removing the stock, and selecting the full-grown oysters from those which are under-sized, for sale in the season. For instance, next May, when we have done selling oysters in the market, we shall begin to look over the stock, and shall select the full-grown oysters from the young ones in order to lay them on a bed by themselves. We leave the young to lie by themselves for the whole of the winter undisturbed.

58,075. During the open months are your men dredging over the whole of the ground belonging to the company ?—Not after we begin for the market season. We do not touch the ground on which the

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young oysters are from that time, only now and then, just to watch it in order to see whether any vermin have got upon it. We only work upon the bed where the oysters are.

58,076. The oysters fit for market?—Yes.

58,077. Then your ground is divided into two parts?—Yes.

58,078. The market ground and the open ground?—Yes; we keep laying fresh stock on that portion of the ground which we do not use for sale in the market. We put oysters there during the whole of the season as long as we can buy any.

58,079. As long as you can buy them from outside?—Yes, from anywhere.

58,080. When the close season commences do you take up those oysters on the open ground, select the best oysters to lay upon the market ground, and supply the market from them in the open season?—Yes, we select oysters from the beds during the summer months.

58,081. You begin selling again on the 3d of August?—Yes; but it has long been my firm opinion that the work that is done between May or the early part of June, and from then on to August, in the selling of oysters, does a great deal of harm. Indeed I believe that that is the principal cause of the scarcity of brood in many parts. In my opinion the scarcity of brood has arisen in a great respect from that practice.

58,082–3. That is not the case with your oysters?—No.

58,084–5. At what time of the year do the oysters on the Whitstable ground spawn?—That depends in a great measure upon the character of the spring months of the year. If the spring sets in warm they will go off early in May, and sometimes under different circumstances they will not begin to spawn until June.

58,086. Then during that time, from the time the oysters begin to breed, you do not sell in the market at all?—No, we never do.

58,087. But you complain of others for doing so?—Yes, there are other parties who do it, and I think it is very wrong.

58,088. Do you conceive that you have power under your Act or Charter to sell during the whole year, or not?—Yes, we could do so if we chose.

58,089. Do you find that there is no demand for your oysters when once the spawning season has begun?—I do not know, but we would rather not do it; we believe it would be to our advantage not to do it.

58,090. Do the oysters breed on what you call the open ground?—Yes.

58,091. And do they also breed on the market ground?—Yes, they will breed anywhere wherever the spat may happen to fall, and where the ground happens to be clean.

58,092. Do you go on dredging the ground for the sake of sizing the oysters during the spawning season?—We do not go on dredging if we see any spawn on the ground. We generally see it as soon as it falls. We watch the oysters very closely in order to find out when they spawn. When we expect them to be spawning we carry out magnifying glasses with us, and when we can once get a sight of any spawn settled, we prohibit working on the ground directly, until the spat grows to a size so that we can handle it without destroying it.

58,093. How long do you consider it will take before that occurs?—A month will do it.

58,094. One month?—Yes.

58,095. Then do you conceive it to be a disadvantage to the oysters that there should be any dredging going on while the spat is still on the ground?—Yes, we do believe so. We leave off directly we see the spat.

58,096. What is the nature of the bottom of the sea here?—Shells, from the full-sized oyster-shells down to small pieces.

58,097. What is the nature of the ground itself; is it clay?—No, there is no clay except upon one small portion of it. In towards the shore it is generally what we call a shale, all broken shells ground as fine as dust nearly.

58,098. Is there sand below the shale or clay?—It is sand for a small depth, and then after that I believe it comes solid clay as hard and dry as this table.

58,099. Do you take any pains to clean the ground when the oysters are laid down?—It is our particular work from the month of May until June. We are employed then and constantly kept working over the whole of the ground to keep it clean.

58,100. Is that in order to prevent the settlement of mud?—To prevent the settlement of weed rather. Weeds are what we are mostly troubled with.

58,101. How do you work over the ground?—With the dredges.

58,102–3. But you do not take up the oysters?—We do not carry them away; we only simply take them up and collect the full-grown ones. We carry them away to the other bed and sometimes we throw them overboard; we save none of them. We merely haul them up and take away any rubbish there may be among them, such as five fingers, and any dead oysters; we carry them away from the ground.

58,104. Does the governing body of the company decide how much labour shall be employed in that way?—No, the jury do all that. They have the whole management of the beds.

58,105. Do they decide how many men shall be employed in cleaning the ground?—No, every man is at liberty to go and work if he is at home and wishes to go.

58,106. Do all receive the same amount; are all paid alike?—Yes.

58,107. Are the men paid wages?—It is according to circumstances; it is according to how the oysters are sold. They bring in a certain amount of money, and they divide out a certain portion of it, keeping the other part back for purchasing the brood of oysters from other places in order to lay upon the grounds.

58,108. The supply of spat on your own ground is not nearly sufficient to keep up your market supply of oysters?—No, we lay out many thousands of pounds in the purchase of oysters from Essex.

58,109. Is the spat you buy from Essex taken all over the estuary of the Thames down here and along the Essex coast?—No, it is taken from the rivers in Essex generally.

58,110. Do you buy the spat from what are called the flats?—Yes, that is the principal spot.

58,111. I see in the evidence which you gave before a Committee of the House of Commons last year, you gave a return of the quantity of spat the company have bought during the last few years?—Yes.

58,112. Does that include spat brought from all quarters or only from the flats?—I believe I gave evidence of the whole quantity of spat brought, so much from the flats and so much from Essex.

58,113. You say "the quantity of brood obtained "from the ground proposed to be taken for the new "fishery," referring to the Herne Bay fishery; does that mean the whole of the ground which goes under the name of the flats?—It means all the flats between the Spaniard and the shore.

58,114. What extent of ground is that?—It is a large extent.

58,115. Is it a much greater extent of ground than is taken by the New Fishery Company?—Yes, it is larger than that and wider.

58,116. Do you also buy oysters from other parts of the country besides Essex?—All between the North Foreland and here.

58,117. But not elsewhere?—And in Essex. When we go beyond the North Foreland we only get common oysters, deep-water oysters.

58,118. They do not produce as good an oyster as the native oyster?—No.

58,119. Have you got oysters from Ireland and the south coast of England?—Yes, there are some on the voyage now. We expect them in to-day.

58,120. Have you been obliged to purchase there in consequence of the falling off of the spat here during the last few years?—No, we have always got as many as we wanted from that source, but we lose

a great many in the passage from there to here. Sometimes a very great many are lost. We cannot get them home in time. But the common oysters are only a secondary consideration with us.

58,121. Your main object is, I presume, to supply the London market with native oysters?—Yes.

58,122. The Channel oysters and the Irish oysters do not produce as good an oyster as the native spat?—I do not suppose they do.

58,123. It is only when you cannot find a sufficient quantity of natives that you import spat from other quarters?—We generally lay down common oysters for use during the first two months of the season. By that means we can send a good quantity to the market during the early part of the season, say for about the first two months before the natives properly come in. We do not like to sell natives in the first part of the season. We consider that they have not got over their spawning sufficiently to make them good oysters for the market.

58,124. How long is it since you had a good spat upon your own ground?—Not since the year 1858.

58,125. Has there been a falling off in the spat from other quarters?—There has been a falling off, I believe, in the spat everywhere.

58,126. Since the same date?—Yes; there has been a falling off everywhere since 1858.

58,127. Has the spat been equally scarce on the Essex coast and on the flats?—Yes, it has been more scarce of late years than was ever known.

58,128. In consequence of that have you been obliged to pay larger sums for spat?—Yes, we are paying now four guineas for a bushel.

58,129. Will you supply the Commissioners with the return you gave to the Committee last year, and add to it the quantity of spat you bought last year, and what you paid for it?—I have not got that return with me, but I will supply you with it.

58,130. I see, in this return you say "quantity of "brood obtained from other sources," are they really native oysters?— Yes, all natives.

58,131. Does it not include any oysters brought from a distance?—No.

58,132. I think you said that you are obtaining a certain quantity from Ireland and the south coast?—Yes; from Ireland, Falmouth, and from Scotland.

58,133. Has the quantity you have obtained in that way been very large during the last year or two?—We have had something like 10,000 bushels from the several places, Ireland, Falmouth, and Scotland.

58,134. Is a wash the same as a bushel?—No, it is a quarter of a bushel, a London peck.

58,135. I believe when the company was originally started it had no capital?—No, it borrowed money.

58,136. The company borrowed capital on the security of their rights?—Yes.

58,137. What was the amount of capital borrowed at first?—20,000*l.*

58,138. Was that added to from time to time?—Yes, according to what was wanted, until it got as high as 30,000*l.* at one time. I believe that was in the year 1829. They made a large purchase in that year, and the amount of borrowed money was increased until it reached 30,000*l.*

58,139. Within the last few years have you been able to pay off that debt?—Yes.

58,140. And now you remain without any debt?—Yes, we are without any debt at present, and we are now working for our own money. Of course it is much better for us, and it will be better still if we can keep so.

58,141. How are the returns divided among the men eventually?—Do you mean through the year?

58,142. Yes.—Well, we send off the men belonging to the company to catch a certain quantity of oysters, and for each man so much money is allowed for the stint as we call it. Those parties who do not go out, such as those who are sick, have a small portion less than the men who do the work; and the widows receive one-third of what the men get.

58,143. Do the jurymen receive any more than the other men?—No.

58,144. Do you as the foreman?—No.

58,145. What have the shares amounted to lately?—I have taken the average for 18 years and it amounts to 23 shillings and some few pence.

58,146. Twenty-three shillings per week?—Yes, per week. The last three years it has been something better.

58,147. Have the profits been improving of late years in consequence of the high price of oysters?—It is not from that alone; the money divided among the men of late years has increased in consequence of our paying off our debt; instead of having to pay away our money to creditors, we have been enabled to divide it among ourselves.

58,148. In that average have you included any money given to the members of the company by way of bonus?—Last year each man received 16*l.* by way of bonus, and the year before 20*l.*

58,149. Have you included that in the estimate of the wages?—Yes, it is all included.

58,150. Do you include it in the estimate of 23 shillings a week?—Yes, but it will be more now. The last two years will add considerably to that amount.

58,151. What has it amounted to during the last two years?—Something like about 100*l.* in the course of the 12 months.

58,152. And during the last 15 years has the number of members been gradually increasing?—Yes.

58,153. Has the number greatly increased?—Yes, and it will go on increasing more now. Last year we added to our number 15 I think, and the year before 20. Then there are something like six or seven who die off in the course of a year.

58,154. Is there room upon your ground for all this increase of members?—We are quite enough in number now to fill up the ground we have. It would be much better for us if we could have a little more ground.

58,155. Have the members the right of nominating any number of their sons, or is there a limit?—Everyone, every son born.

58,156. Then as long as the society goes on in a flourishing condition, the number is likely to increase very largely?—Yes.

58,157. But there must be a limit to it, I suppose, some day or other?—We calculate that it is the oysters, the oysters do a great deal of it.

58,158. Is the whole time of the men employed upon the ground of the company?—No, they have a certain quantity of oysters to get, and sometimes they will not be more than half an hour about it; at other times they may be engaged for two hours. Then again in another season of the year they have to work the ground in order to cleanse it. Each man works upon that for four hours.

58,159. Do I understand that the men only work for about two hours a day in the open season, and four hours a day in the close season?—Yes, four hours a day in the close season when they are cultivating the oysters as we call it.

58,160. Then with that exception the rest of their time is at their own disposal?—Yes. We have sometimes worked for six hours, but as a general rule it is only four hours.

58,161. And you are only engaged for two hours during the open season?—I do not suppose that it will average more than that. Taking the whole season through that is about the time it occupies in catching the stint of oysters for the market.

58,162. Do the members work on the open ground as well as upon the Whitstable ground?—Yes, sometimes they have to get the greatest portion of their living from it. That was the case until within the last year or two.

58,163. Do they work four hours twice a day in the close season?—No, only once a day.

58,164. And only two hours once a day during the open season?—Yes. The dredging takes about two

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hours, but there is in addition the time occupied in going and coming, which may take two hours more.

58,165. When the members are working outside the Whitstable ground, are they working for their own benefit or for the benefit of the company?—They are working then for their own benefit.

58,166. Do they sell the produce of their labour to the Whitstable Company?—Yes.

58,167. Then besides the 23*s.* a week which they have made on the average from the company they can make a good deal of money by what they call working outside?—Yes, sometimes they earn a good deal more outside than they get from the grounds. For some years that was the case regularly.

58,168. Are they entirely employed in dredging for oysters when they are working outside, or do they fish in any other way?—They catch various things, whelks, mussels, five-fingers, oysters, and oyster brood. All is fish that comes to the net when they go catching for themselves.

58,169. Is there any supply of full-grown oysters on the flats outside?—Yes, there are some of them that are very full grown and are very large, but they are in very small quantities.

58,170. Very small quantities only are to be found?—Yes, we could only get a few gallons in the day.

58,171. What the men find there mainly is the spat?—Yes, that has been their principal work of late years, but even that is worn out now.

58,172. There has not been much spat, you say, since 1858?—No.

58,173. What was the size of the spat they brought in?—From half an inch to an inch and a half.

58,174. Do you find those small oysters over a very large extent of ground?—They were found over a very large extent of ground at the time we had the spat.

58,175. If they were allowed to remain there, are you of opinion that they would have grown into big oysters?—No, they would all have been destroyed.

58,176. Why would they have been destroyed; what would have destroyed them?—They would have been destroyed by the vermin.

58,177. What makes you think that they would have been more destroyed when they grew up to be big oysters than when they were small?—They would not be destroyed when they became large oysters, but they would be destroyed more when they were small than large.

58,178. I understand you to say that previous to 1858 you found a considerable quantity of those small oysters on the ground, and that then they were destroyed by the vermin?—They would have to lie there for three or four years before they would grow to their full strength, and during that time a great deal of vermin would go among them and destroy them.

58,179. How long do you think it takes for an oyster to grow to half an inch?—It will do that in one summer.

58,180. In one summer?—Yes, if there is a good warm summer it will do it in one summer.

58,181. Do the Whitstable men go over to the Essex coast and dredge for spat there?—No.

58,182. Do they confine themselves to the flats?—They could go over to the Essex coast; but they confine themselves to the ground nearer home within our own limits. All they get is obtained between the North Foreland and here.

58,183. What time do they dredge for spat?—All the year round.

58,184. Then they do not observe any close season for that?—No, but the oysters got then are not fit for eating purposes. They only remove them from one ground to another. For instance, they will take them out of the water to-day from the flats, and deliver them to the company to-morrow, if they have weather to enable them to get the oysters into the water.

58,185. Then do not you consider that the Fishery Convention Act operates on this part of the coast with reference to dredging for young oysters?—I think not.

58,186. Why do you think it does not apply?—We have applied to the Board of Trade about the matter.

58,187. And they have granted you permission?—Yes. We have to obtain a licence.

58,188. To what extent of ground does the licence apply?—To ground within three miles from the shore, all within the limits of the port of Faversham.

58,189. (*Mr. Caird.*) You are not to dredge outside the three miles?—No.

58,190. (*Mr. Lefevre.*) Do the fishermen restrict themselves to that, or do they go outside?—Most of the work lies between that limit. There is not much to be done beyond the limit of three miles.

58,191. Is that the case also on the Essex coast?—On the Essex coast they do not go out so far. The oysters there lie pretty much near the land.

58,192. Have they a licence there to fish for spat in the close season?—I do not know; but we always do here every summer.

58,193. Do you pay anything to the Board of Trade for the licence?—No, we get it from the Customs.

58,194. Is it given to any man who likes to ask for it?—Yes, if any person wishes for a licence he goes and asks for it, and he can have it. But I take a licence for the whole of our boats. All the people who work for the Whitstable Company do it in a body instead of individually.

58,195. This dredging for spat goes on during the whole year?—Yes.

58,196. Is there a greater amount of it during the open months or not?—The summer months are the best for it when the ground is open.

58,197. What months do you say?—We may take it from May until October.

58,198. Why are they better months than the others?—The weather is warm, and the ground is loose. Although one might think that under water the weather would make no difference to the ground, that is not really the case. It is only as the weather is warm that the ground is loose, and we may then catch brood in a spot where we would not catch it at all in the winter. In the winter time the ground gets quite close and hard, and we cannot catch it at all.

58,199. I suppose that all the private beds in the mouth of the Thames are supplied in the same way?—Yes.

58,200. What would be the effect of carrying out the Convention Act, and preventing you from dredging for young oysters in the close months?—If we were prevented from working on the ground in the close months it would materially injure us no doubt. It is very possible that it might be the occasion of our losing a great portion of our oysters. There is no telling when the vermin would set in. Whenever a bed of five-fingers moves and settles itself upon the oysters, there they lie, and destroy everything before them unless they are removed.

58,201. What would be the effect of limiting the size of the oysters which you may dredge? What would be the effect of limiting the size to above two inches and a half in diameter?—If you were to do that there would be some native oysters that would never be sold, because they would never grow to that size.

58,202–3. Would it put a stop very much to your trade here?—I do not believe that it could be carried out at all.

58,204. Can you tell what proportion the oysters you bring from a distance bear to the oysters growing on your own ground?—No, we lay them all together.

58,205. Do you think the oysters grown on your own ground—the spat upon your own ground—bears any large proportion to that which you get from a distance?—No, we get the greatest portion from a distance.

58,206. Would it be a serious injury to you if you were not allowed to bring oysters from a distance,—say from Ireland and the south coast of England,—which are smaller than two inches and a half in

diameter ?—We do not want them small when we get them from a distance. If we go to Ireland to buy oysters we want oysters that we shall be able to sell off in the season before the winter comes. They will not stand the winter here.

58,207. Then what is the size you wish to obtain them ?—About two and a half or three inches.

58,208. You do not buy any large quantity of oysters from so great a distance as that of a smaller size ?—We do not buy any large quantity from a further distance than Arklow in Ireland.

58,209. What is the size of the oysters you get from Arklow ?—From two and a half to three inches in diameter.

58,210. Do you ever buy any from Falmouth ?—Yes, we have got some lying there now ready to send home.

58,211. What is the size of the oysters you get there ?—They are about the size of the native oyster. There is very little difference between them.

58,212. They are no larger at Falmouth than they are here ?—No.

58,213. Are they as large as two inches and a half in diameter that you bring from Falmouth ?—Yes, quite. We always take very great pains when we are working for the market ourselves to keep all undersized oysters back. It is of more benefit to us to have the oysters grown to a full size before we sell them.

58,214. What has been the lowest price of the native oyster within your recollection ?—The lowest price that I can remember ?

58,215. Yes.—Ten shillings a bushel.

58,216. What year was that ?—It was somewhere about 1822 or perhaps 1824. That was when I first began myself.

58,217. Can you supply us with a list of the prices of native oysters for the last 20 years ?—I daresay I can do so.

58,218. Has the price been greatly increasing since 1858 ?—Not until within the last five or six years. It has varied from 30*s.* to 40*s.* and 42*s.* That was all the difference in the variation until within the last four or five years.

58,219. Then has it been gradually increasing since? —Yes, it has been increasing every year since, first from 40*s.* to 50*s.*, then from 50*s.* to 60*s.*, and so on.

58,220. What is the price now ?—It is now as high as 90*s.*

58,221. Do you expect it will rise still higher ?—Very possibly next year it may be 100*s.*

58,222. Did you have any spat this last summer ? —Very little indeed. It was only here and there that I saw any.

58,223. Has there been any spat on the Essex coast ? —I believe there was a little at Burnham.

58,224. What is the reason that the spat has come to nothing ; can you form any idea of it ?—Our opinion is that the weather has not been suitable. We have not had for the last few years any warm nights. The days have been very hot, some of them, but the nights have been cold. We believe it is the temperature of the water. The nights have been so cold that they have not allowed the water to get a sufficient warmth to bring the spawn to perfection. That, however, is only our supposition. There is nothing else that we attribute the failure of the spat to.

58,225. Do you think the high price of oysters is really due to the absence of spat since 1858 ?—Yes.

58,226. And not to the falling off of the grounds, the consequence of over-fishing ?—No, it is not from over fishing, it is over market. The market would take more than we can catch.

58,227. What proportion does the price of the native oyster bear to other oysters—say the Channel oysters ?—That is no criterion. Persons can buy the native oysters at 90*s.*, and make a living and profit out of them, when they could not make a profit out of the Channel oysters at 12*s.*

58,228. What is the price now of the Channel oysters ?—The last time I was in London I went on board a boat there which was selling Channel oysters or Cheney Rock oysters at 13*s.*, and even at that low price the people who bought them could not make anything out of them.

58,229. When your oysters are selling at 40*s.* and 50*s.* a bushel, what is the price of the Channel oysters then ?—They would not fetch more than 6*s.* a bushel then.

58,230. Then the Channel oysters have also gone up in price, but not in anything like the same proportion that yours have ?—I suppose the native oysters rule the market generally ; if they are cheap they do not care to buy common ones scarcely at all ; but if they go up to an enormous price the buyers will take Channel oysters and common oysters.

58,231. The Channel oysters are much larger and coarser oysters ?—Yes, but there is no number of them in a bushel, and when they have got them they cannot sell them for less than a penny each. Thus they get very little for them, and in addition the Channel oysters are generally very coarse oysters.

58,232. Is there much ground besides the ground off Whitstable that is fit for converting into oyster-beds ?—At Faversham they have ground adjoining ours outside, and the Sea Salter ground is a very good ground.

58,233. What is the size of the Faversham ground? —Near about the size of ours.

58,234. Do they supply the market with as many oysters as you do ?—No, they do not speculate ; they only get what falls on their own beds, and that will not supply their trade.

58,235. Have you found any limit as to the quantity of oysters you can fatten for the market upon your ground ?—No.

58,236. Supposing you have a very good spat indeed and a vast quantity of brood on your own ground, and from other beds also, will they all come to perfection at the same time ?—Yes, all the same, no matter whether they fall on our ground or on the flats, all come to perfection at the same time.

58,237. They will all fatten to a certain point when they are laid on your ground ?—When they are laid down together they will fatten together. All will be alike, so that you will not be able to know one from the other.

58,238. Have you found any limit as to the quantity that will fatten when you lay them on the ground ?—No, all of them do about the same.

58,239. When you have a very good spat will it supply sufficient young oysters for three or four years, or do they all come to perfection about the same time and go off to the market ?—The best spat that ever fell on the ground that I remember, provided oysters for sale which lasted 11 years, including the spat that we obtained from the flats at the same time.

58,240. Were you enabled to extend the sale of them over so long a period by keeping them in stock, and only removing a certain portion to lay down on the fattening ground ?—We kept them generally on the ground and sorted out about half a mile. The ground which we selected for fattening ground would hardly be half a mile. We spread the spawn of the oysters and sold to the market from that. That would be sufficient to last the season.

58,241. Do you spread the oysters you intend to supply the market with rather thinner over the ground than those you keep on the store ground ?—No, we reckon them to lie as near as they can but they will not lie two or three one upon another. The thinner they are the better the oysters will do.

58,242. How long do you recollect the oyster-fishing here ?—About 50 years.

58,243. During that time, how many good spats have you had ; can you give me any information upon that point ?—No, I do not know that I can call to memory just now how many good spats we have had. I remember that we had one in 1818 and then another in 1822, and a third in 1827. It went on somewhat in that way.

58,244. At intervals of some years ?—Yes, there

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was not a good spat every year, but there was generally five or six years between.

58,245. Have you often had five or six years when you have had no spat at all?—Yes, there have been some years when there has not been any to be seen.

58,246. During the 50 years with which you have been acquainted with the oyster-fishing here, have you often had an interval of five or six years when you have had no spat at all?—Yes, and there were 16 years once.

58,247. An interval of 16 years without any spat?—Yes.

58,248. Have you found the same difficulty in getting spat from a distance as in obtaining it here?—No, we could always get a supply from Essex in former years; we could always obtain from their grounds whatever we wanted.

58,249. Then has it been during the last five years that the Essex supply has failed for the first time?—We have had more brood from Essex, I should say, during the last 10 years, than was brought from there for 40 years before.

58,250. I understood you to say that the supply from Essex had fallen off during the last few years?—Yes; we cannot buy them there now, but formerly we could go there year after year, and buy 5,000 or 10,000 bushels in any year. Now this year I do not suppose we could buy two if we took with us all the money we could carry.

58,251. Do you think that the spat you find on what you call the flats, is the brood of the oysters lying on the Whitstable bed, or is it the produce of oysters lying scattered over the flats themselves?—It is more likely to be from the oyster-beds here, as there are only here and there oysters lying over the flats from which the brood could be obtained.

58,252. You think the spat you get from the flats has drifted out from the Whitstable beds?—Yes, out or in.

58,253. In looking at the chart of the ground, I see there is a spit of sand that stretches out from the shore close by Whitstable?—Yes, for a mile.

58,254. Do your beds lie mainly within that spit?—Yes, on the western side of it.

58,255. Have you any ground that lies outside of it?—Not to the eastward of it.

58,256. Then between that and the ground granted by Act of Parliament to the Herne Bay Company there is another space?—Yes.

58,257. And you are making an application to Parliament for a grant of that?—Yes.

58,258. Is it with a view of using it for fattening beds or to enable you to have the exclusive right of taking the spat there?—If we can get a grant of it we shall make the best use of it we can. If there is not sufficient room on our own ground to hold the quantity of brood we could get we should then put some there.

58,259. What do you value the property of the Whitstable Company at?—I can hardly answer that question.

58,260. Have they got a considerable stock of oysters?—Yes; we have got a very good stock, but it is lying over such an extent of ground that it would be a mere guess to say anything about the value of it.

58,261. You have been able to supply yourselves with spat for the last year or two, although at a considerably enhanced price?—Yes.

58,262. And I suppose you expect that the great increase of the price of the fat oysters will make up for it?—Whatever our oysters go at in the market, whether it is a high price or a low price, it rules the price of the brood we have to buy.

58,263. Do the Whitstable oysters fetch a better price than any of the other oysters about here?—I believe they do.

58,264. Can you tell what proportion of the supply of the market they form?—No; the oysters we send to the market are from all parts, they are all mixed up together, so that we do not know whether they are from the flats or from the Essex coast or where.

58,265. Can you give us a return of the quantity of oysters you supply every year to the market?—I can for the last few years.

58,266. Is there any great difference in the quantity you sell one year as compared with another?—Some years we sell a great many more than in others. Last year we sold about 20,000 bushels. The year before we sold very nearly 40,000. It has been about 20,000 bushels for some few years, and then down as low as 10,000 bushels.

58,267. Is there any regulation which you could recommend generally for the oyster-fishing, which in your opinion would be advisable?—Well, I do not know that I can say anything further than I have said respecting it. I believe if the oysters were not sold in the market for eating purposes in the close months, it is very possible that there might be more spat got than there is now. I recollect when I myself went as a boy to Jersey in 1816, that that year was the first year they went to work to the south of Jersey Island catching common oysters for companies here. There were seven or eight companies who were supplied year after year with those common oysters, up to within the last four or five years. Now there is not a single company that goes there. At the time I am speaking of they could always get plenty there. Some had 20,000 bushels, some 10,000, some as high as 30,000, to lay on their beds for stocking the ground; but after they began to work and to sell the oysters in the summer months, from that time the quantity began to decrease until they came down to none at all. I do not know whether that is the cause of the falling off or not, but at any rate it is in our opinion.

58,268. Were you in the habit, in those days, of laying down a considerable number of Jersey oysters?—Yes, a very great quantity.

58,269. Were they as good as the native oysters?—No, but they were the best common oysters we could get. They were superior oysters of the common sort.

58,270. Were they better than the Channel oysters?—Yes, they were worth three or four times as much as the Channel oysters.

58,271. Of what size did you buy the Jersey oysters?—They would run somewhere about four inches.

58,272. Did you buy the spat of those oysters?—No, it was full-grown oysters that we got.

58,273. Were they laid down for a few weeks here?—Yes, in the months of April and May.

58,274. You did not buy the spat?—No, nothing but full-grown oysters, and they were all sold off our beds again before Christmas.

58,275. Were you in the habit of buying the oysters during the close season?—No, not in the close months. We used to go there in the latter part of February and send the oysters home until the last day of April, then the season was shut up.

58,276. Then I understand you to say that you think that the selling of the oysters during the close months for the market was a bad thing?—I believe it was a bad thing.

58,277. Was it done with the Jersey oysters?—Yes, it was done with the Jersey oysters. It has been done ever since that time.

58,278. Were they brought here and laid down on beds?—Yes, they were brought across to Shoreham, Southampton, and other places, and sent from there into the market.

58,279. You are aware that for many years, oysters were allowed to be taken in Jersey during the whole of the year without reference to any close months?—It has only been for a few years that they have been sold during the close months. If they were taken in the close months, it was not for the market.

58,280. Are you aware that until five years ago oysters were allowed to be taken from the Jersey beds, and in the Channel generally, during the whole of the year?—Yes.

58,281. And that the close months have only been strictly observed during the last five years?—Yes;

companies would take them themselves for a certain time, then they would leave the island, and the Jersey boats would bring them across.

58,282. That was during what are now close months?—Yes; to Southampton and other places.

58,283. Then the enforcement of the close months has not done much good to the Jersey beds?—No, I believe not.

58,284. (*Mr. Caird.*) I think you stated that one objection you have at present is that some persons sell oysters during the close time; you consider that an injury is sustained in consequence of that?—Yes.

58,285. Who is it that does so?—They do.

58,286. Who or where?—They are what we call the local buyers, individuals who go into various places to buy oysters. They are not the companies, but some of the companies do sell them.

58,287. Is that from the beds in the Thames?—Yes, they do so at Milton and Queenborough, and send them into the London market.

58,288. Are the oysters they send native oysters?—They send all sorts, but principally common oysters.

58,289. In your experience, which has extended over a considerable number of years, have you found that you are able to supply a larger quantity of oysters in the year to the London market now than you did in former years?—Yes.

58,290. From your own company's beds?—Yes.

58,291. Is the quantity you are able to supply progressively increasing?—No, there is a decrease now.

58,292. What was the largest quantity you ever supplied to the London market?—40,000 bushels.

58,293. Of native oysters?—Yes.

58,294. What is the smallest quantity you have sent within the last 10 years?—Somewhere about 10,000 bushels.

58,295. You say the quantity is decreasing?—Yes, it is decreasing again now. 40,000 bushels were sent away a year or two back. Last year we sent only 20,000 bushels, and this year we shall not send quite so many.

58,296. Have the oyster-beds belonging to other parts as well as to the company increased in extent in recent years; has the cultivation of oysters as a matter of business increased?—We have not been able to buy or purchase so many oysters. The stocks have not been so large. The prices have gone up so much, and are now so high, that the trade will not take the quantity they did when they were cheaper. It is impossible for everybody to eat oysters now at the price.

58,297. The question I put to you is, whether you are aware that the number of oyster-beds cultivated as a matter of business is increasing within this district of the Thames?—No; the oyster companies have not increased. On the contrary, they have rather decreased. At Rochester the fishery has gone right out altogether. I believe that they have not laid any oysters down at Rochester for the last two years.

58,298. Was Rochester formerly a good place for oysters?—Yes, it was formerly considered the very first ground.

58,299. Had it been for many years a good oyster ground?—Yes, it had been very good for many years.

58,300. Has it ceased to be a good oyster ground now?—I don't know anything of it now. They have not been putting oysters upon the ground for the last two years.

58,301. Can you speak of your own knowledge of Rochester having ceased to be a ground for yielding oysters?—I know it does not yield oysters now. It hardly ever did yield any of itself. They were in the habit of getting their supply from other places; their brood was brought from other places.

58,302. And do they not any longer do that?—No.

58,303. Is that in consequence of the scarcity of spat?—No; I think they have failed somehow in their money matters, and they have broken up.

58,304. Has anybody else taken the business there?—No.

58,305. Have you observed in the course of years that the ground has become a better fishing ground? I mean that by constantly cultivating it, has the same ground improved in the course of years?—We believe that ours has improved.

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58,306. It has become a richer feeding ground?—Yes.

58,307. Do the oysters become of a better quality?—They do generally.

58,308. Do they sooner fatten?—Yes; every year now oysters are got very good, which formerly would not be good above once in six or seven years. They would not become a good fish regularly.

58,309. What is the cause of that; is the water richer for the oysters?—I cannot tell whether it is in consequence of the cultivation of the ground or not. We cultivate the ground more now than we did formerly, there being such a number of us. We can now work all over the ground in a week, whereas when I first went to sea we did not go to work in the summer months at all.

58,310. Do you think the feeding ground on which the oysters are fattened is much better for being worked over backwards and forwards?—Yes, I think it must be on account of the cultivation. I do not know any other cause for the improvement of the oysters. It is the same ground it always was.

58,311. Has the sewage or filth turned into the River Thames in any way influenced the feeding grounds?—It has had no influence upon our ground.

58,312. Not that you are aware of?—No.

58,313. Have you ever observed any change in the appearance of the water?—No, except in consequence of gales of wind.

58,314. You stated that you leave off fishing for the market at the beginning of May, and begin to catch oysters again on the 3rd of August?—Yes.

58,315. Do you begin to supply the market on the 3rd of August?—Yes, we send them to Billingsgate.

58,316. That is now in the close-time, is it not?—Yes, it is now in the close-time provided by the Convention between England and France, but we are not on that side of the land. It does not affect the oyster fisheries in Kent.

58,317. Then the oyster-fishing in Kent begins in the month of August?—Yes.

58,318. (*Mr. Lefevre.*) When the season first begins, I understand you to say that you do not supply the natives to the market, but only send oysters which you obtain from a distance?—Yes, there are just a few customers who want them, and the oysters we send are sent to supply them.

58,319. But what you supply are oysters from a distance; what you call Channel oysters or common oysters?—Yes.

58,320. (*Mr. Caird.*) I think you stated that the time for the spat was in May and June?—In June and July generally.

58,321. Have you noticed whether the common oysters which you bring in are as early in spatting as the native oysters?—Quite so.

58,322. Are they as good oysters for sale in the beginning of August as the natives are?—They are generally more fit and better for the market in the early part of the season than the natives are.

58,323. In the early part of the season, I suppose, the demand for the natives is not so good?—No.

58,324. It is not so good a season for selling them?—No, it is not.

58,325–6. Then do you reserve the natives, they being a better quality of fish, for the last part of the season?—Yes.

58,327. Is there any large proportion of the whole catch of oysters during the season that consists of common oysters?—No, only just for a month.

58,328. The first month?—Yes.

58,329. Then these common oysters you must have fished and brought from the sea, and placed on the ground during the previous close-time?—We get them from now until May.

58,330. You never allow them to lie longer than a

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few months on the beds?—We begin now at this time, and we finish placing them upon the beds towards the latter part of April. We begin to sell them in August. We do not touch anything for the purpose of selling in the close months, either with regard to the common or the native oysters; nor do we buy any commons to lie down on the ground in the close months.

58,331. I think you stated that the common oysters would not stand the winter here?—No, the common oysters would not.

58,332. Have you any reason to give us for that?—Where we obtain them they are got out of deep water, and when they come here to lie in the shallow water, the frost and snow have so much effect upon the water and make it so piercing cold, that it kills them. The oysters are weakened very much in that way, and in addition gales of wind stir up the sand and frequently choke and disturb a considerable quantity of the oysters.

58,333. You find that you cannot keep them with advantage during the winter?—Yes, we have found that to be the case. Upon two occasions we tried it and failed. We obtained three cargoes from Wales on one occasion, and at another time we had two cargoes from Scotland. They were not exactly such fish as we wished for the market at that time, and our people here said, "Let them lie; we will keep them "there until next year, as they will not fetch anything "now. We will keep them until they will fetch more." We did keep them, and the winter killed every one of them. Whole boatloads were destroyed.

58,334. Were not the native oysters destroyed at the same time?—No, the weather will not kill them, they stand the winter.

58,335. What part of Scotland did you get the oysters from?—From Edinburgh, Leith, and thereabouts.

58,336. What time did you bring them in from Edinburgh and Leith?—About this time.

58,337. During the open fishing season?—Yes, they leave off on the last day of April.

58,338. From what part of Ireland did you obtain them?—From Arklow.

58,339. (*Mr. Lefevre.*) Do they lie upon your ground during the whole of the close season?—Where we push them over there they lie until we want them in August. After laying them down we do not disturb them while they are growing.

58,340. Do your own men during the close season go to fish for the brood of oysters?—Many of them do.

58,341. On the flats about here?—Yes.

58,342. You mentioned that you have sometimes paid four guineas a bushel for brood?—That is being paid now in Essex.

58,343. That is the price at present?—Yes.

58,344. For oysters obtained from the flats?—No, the price of oysters is not so high. The oysters from the flats are inferior now.

58,345. Is that price of four guineas paid to any person who has the right of selling oysters, or to the persons who catch them?—They are obtained from private grounds.

58,346. Then is the price paid to the proprietors of private grounds?—Yes, and it is also paid for oysters obtained from other parts of Essex, where everyone goes to work the same as we do here on the flats, and gets what he can. They are not, however, of quite so good a quality, and we only give 4*l.* a bushel for them.

58,347. In that case do the men who catch them get the money for themselves?—Yes.

58,348. That is chiefly done by your own men, is it not?—No, it is all done by Essex people. There are 300 or 400 of them engaged in it.

58,349. From what part of Essex do you get this brood?—From between Brightlingsea and Bradwell.

58,350. All up the rivers?—All round the island of Mersea.

58,351. Are there any got on the Maplin sands?—No.

58,352. Are there any oysters on these outside sands—the Maplin and Dengie flats?—No, I never saw any there; but I never saw an oyster on the sand at all.

58,353. At what age do you consider the native is fit to be sent to market; when is it in perfection?—We do not want to send them to the market when they are less than four years old.

58,354. Do I understand you to say that they grow to the size of half-an-inch in the course of a month?—Yes.

58,355. What size will they grow to in four months?—They grow very fast for two years. The first two years they grow a good deal more than the next two, and after the fourth year they grow very little at all.

58,356. Do they then improve in condition and fatness?—They grow thick after the fourth year and become deeper.

58,357. Do they become prime then?—Yes, after the fourth year. During the first two years they grow broad and thin.

58,358. Can you tell the age of an oyster after four years?—Not very well. Some people fancy that they can do so, but I do not think they can tell whether an oyster is six years old or eight.

58,359. Do they go on improving as they get older?—Not after six years of age. After that they begin to grow a shell at the heel. They get what we call open-heeled and the shell gets thicker.

58,360. Do you send the oysters to London by rail or by boats?—By boats.

58,361. Do you send the whole of them by boats?—Nearly all. Perhaps a few may go by rail.

58,362. Are there any other shell-fish found on this shore?—Yes, mussels and cockles.

58,363. Are they in great abundance?—Yes, there are plenty of them.

58,364. Are they fished for the market?—This year they have been very fine indeed.

58,365. Which, cockles or mussels?—Mussels.

58,366. Are they sent to the London market?—We only send very few away. We allow the poor people to go down on the shore and pick them up for food.

58,367. Is there any large quantity obtained?—Thousands of bushels.

58,368. Where are they sent to, to what market are they sent?—They sold about 500 or 600 bushels a short time ago to a person at Southend, who came down and bought them for laying down on the south shore.

58,369. Are they sold for food or bait?—For food.

58,370. Is that a trade that is increasing here or otherwise?—I should suppose that it increases, but there are many mussels now coming from Holland and other parts, which makes it worse for the parties hereabouts who have mussels themselves.

58,371. Does it lower the price?—Yes, they cannot get as good a price as they used to do, because the market is sometimes glutted with them.

58,372. Does the oyster fishery interfere with the mussel fishery, or the mussel fishery with the oyster fishery?—No.

58,373. The two do not come into contact?—No.

58,374. Does the cockle fishery interfere with the oyster fishery?—No.

58,375. I see there are fish weirs marked on this chart?—Yes.

58,376. For what object are they?—They are put there to catch plaice, herrings, and any fish that swim up and down that may get into them.

58,377. To whom do they belong?—To individuals along the coast. There is one at Sea Salter. I believe there are three weirs between this place and Faversham, but one of them is an old one.

58,378. Do they catch any salmon in them?—I never saw them take salmon.

58,379. Did you never see salmon caught in these weirs?—No, I have seen mackerel caught in them, and sometimes herrings and sprats.

58,380. Is there any shrimping carried on here?—Yes, there is a great deal of shrimping carried on here

sometimes, but there was very little last summer. There were only very few shrimps indeed got then.

58,381. Are there any sprats caught here?—There has been a good quantity of sprats caught here five or six miles off.

58,382. Do you allow the sprat fishers to come on your oyster-beds?—No, not on the oysters.

58,383. Do you not allow anything to pass over the oyster-beds?—No, nothing that would damage them.

58,384. Nothing that would in any way damage the bottom?—No.

58,385. That would be injurious to the fishery?—Yes, anything of great weight passing over them would injure the oysters.

58,386. Or anything that would pick up the oysters?—Yes.

58,387. It would do no harm to the oyster-bed if it did not disturb the oysters?—No, a net or a rope would not do any harm, but anything heavy or made of iron, or anything of that sort would.

58,388. You go over the oysters yourselves when you are cleaning them?—Yes.

58,389. Have you any difficulty in preventing people from dredging for oysters on your ground?—No, nobody comes here to attempt that at all, unless they do it in the dark, and we are not able to see them.

58,390. Of course you are a powerful body yourselves?—We should not do anything in the way of lynching anybody. We should not use any physical force, but if anybody came to take the oysters we should go through the proper forms.

58,391. Have you any powers under your Act to prosecute people for dredging upon your beds?—Yes.

58,392. How would you deal with them?—We should take them before the civil courts.

58,393. Does the Act give you power to do so?—Yes, we can appeal to any civil court in Kent.

58,394. I believe that until recently you claimed the right of preventing people from anchoring on the ground?—Yes, on the oyster beds.

58,395. Has that been decided in your favour or not?—The case that was decided was not in reference to the oysters. It was a piece of ground in the bay where we used formerly to dredge, but now since there have been so many ships coming here we have given up a certain portion of the ground, and allowed the ships to ride there upon receiving an acknowledgment of a shilling from them for the accommodation.

58,396. (*Mr. Caird.*) You watch the ground, I suppose?—Yes.

58,397. (*Mr. Lefevre.*) Do the mussels on the ground interfere with the oysters at all?—If we got mussels among the oysters, they would very soon smother them.

58,398. Do you take any means for destroying them?—I will tell you what means we did take. Some time ago a bed of mussels fell upon the oyster ground. It was some years ago, but still it was in my time. We set all our fleet of boats and every man we had to work in taking them up and destroying them when they were only as large as peas or beans; but with all the work we could do they grew faster than we could catch them. The result was that we could not reduce them at all. We then thought among ourselves, knowing that what we call "five-fingers" are as destructive to mussels as they are to oysters, that we had better go upon the flats and look out for a bed of "five-fingers," and put them on the mussels. While we were talking that matter over, some few "five-fingers" came in and settled on the mussels. They formed a bed, and very soon cleared out the whole of the mussels. By that means we got rid of the mussels. We could catch the "five-fingers," but not the mussels.

58,399. Although the "five-fingers" are enemies of the oysters, they are still greater enemies of the mussels?—Yes, they will eat mussels before oysters.

58,400. Then you keep the mussels down by using a certain number of "five-fingers"?—Yes, but the mussels do not often come upon the oyster-beds. That is the only occasion on which I remember their doing so.

58,401. Are you much troubled with "five-fingers"?—Not on the ground now.

58,402. You are constantly working to keep them off?—Yes, there is so much working upon the ground that they will not stop there after they get on.

58,403. Do you employ any labour besides that of the members of your company?—No, not upon our grounds.

58,404. Is it entirely confined to the sons of members?—Yes.

58,405. Do the widows remain members if they marry again?—If they marry away from the company, their right as widows goes with them.

58,406. I think you said that the oysters they find on the flats now are of a fair size?—Yes, there are large oysters there.

58,407. Are they good for the market?—They are good oysters, but they cannot be sold at first-rate prices.

58,408. They will not fetch so good a price in the market as your fattened oysters?—No.

58,409. But still they do fetch a price in the market?—Yes, they are a good second oyster.

58,410. Are they found in any number?—No, only in very small quantities.

58,411. Are they found for any great distance over all this ground that I see marked on the chart; is there much ground besides the Whitstable ground fit for enclosing and converting into private property for the purpose of oyster-fishing?—It does not appear like it. It is nearly all so much clay ground.

58,412. Parliament has already granted a considerable extent of ground to the Herne Bay Company?—Yes.

58,413. If Parliament were to proceed in the same direction, and to make grants to other people, what would be the effect upon the trade here?—It would cost a deal of money to bring the ground into cultivation.

58,414. Would it in any way interfere with the supply of spat to the different companies which are now in existence?—Yes, it would interfere with us in this way. For instance, if any portion of the brood was to fall upon the Herne Bay ground now we should get none of it.

58,415. Suppose Parliament were to make grants of a greater portion of the foreshores in the estuary of the Thames to different companies for the purpose of converting them into private oyster-beds like yours, do you think it would interfere with your business?—It would interfere with the interests of the public generally. The oyster-beds would not be so good.

58,416. In what respect?—I do not think they would be so good.

58,417. Do you think it is better that all this ground should be left open?—I believe that we shall get a better supply from it as long as it is left open.

58,418. The only supply which you get from it at present is the small oysters and the spat?—It is all of it taken to our grounds, and nursed, and brought to perfection.

58,419. But if this ground were converted into a private ground, you would still have the spat falling upon it?—Yes.

58,420. It would then become the property of the persons on whose ground it fell?—Yes.

58,421. And the consequence would be that you would not get so much of it without paying for it?—It would not do so well for us.

58,422. (*Mr. Caird.*) Is the shore, and other parts of the ground along here not so well fitted for the cultivation of oysters as your ground?—It is not so well fitted for the cultivation of oysters at present. It would require a good deal of attention to be paid to it, in preparing it, and rendering it fit, if indeed it could be made fit at all.

58,423. I think you stated that a sandy bottom is quite unfit for the cultivation of oysters?—Yes; sand is quite unfit for the cultivation of oysters.

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58,424. Is a clay bottom also unfit for the cultivation of oysters?—No; the only thing about clay is that you hardly ever find good fish if they have been lying on clay.

58,425. What is the cause of that?—I do not know from what cause that arises.

58,426. (*Mr. Lefevre.*) Do you ever find the young spat there?—Yes; but when we find it upon clay we have it taken away and placed upon our own ground, so that it may be cultivated.

58,427. Is there not every reason to suppose that the spat deposited there, and which you remove in that way, would grow up and become large oysters?—Yes, it would do so, if it was not destroyed before it had time to become large.

58,428. Do you mean that it is destroyed by vermin or carried away?—It is both destroyed by vermin and carried away.

58,429. Does not the spat lie upon shingle?—Yes; it will lie upon anything that is clean to receive it, either shells or little stones, or large stones, or anything of that sort.

58,430. When your men are dredging on the flats for spat, do they carry away everything?—No.

58,431. Do they throw the stones back again?—They pull up the stones with the spat attached to them. They pick out the brood and throw the stones back again.

58,432. Has there not for some years been a trade carried on here, in dredging up stones for cement?—Yes, there have been thousands of tons dredged up on these flats, between Herne Bay and this place, by thousands of people.

58,433. Are they stones to which spat has been found adhering?—No.

58,434. Then that has not done any injury to the oysters?—No.

58,435. Has it made no difference to the oyster ground?—No, the oysters generally fall better upon small stones or shells.

58,436. What other beds are there besides the Faversham bed and the Rochester bed on the south side?—Do you mean the south side of the Isle of Sheppey?

58,437. No, south of the Thames?—They are all on the south side, except those in the Lea.

58,438. What beds are those?—The Cheney Rock bed is one.

58,439. Does it belong to a company?—No.

The witness withdrew.

S. Kemp.

STEPHEN KEMP called and examined.

58,440. (*Mr. Lefevre.*) Are you an oyster dredger in Whitstable?—Yes.

58,441. Are you a member of the Whitstable Company?—Yes.

58,442. How long have you been a member of the company?—Ever since I was 17 years of age.

58,443. Do you agree with all the foreman of the company has told us?—I agree pretty much in what he has said, but I think there are several things which might have been stated to you a little more clearly.

58,444. Can you mention any point to us in which you differ from the statements which have been made by Mr. Nichols?—I am not aware at this moment of anything very essential. With respect to the brood, it appears to me to be the object of the commissioners to ascertain what means can be taken for preventing the oysters from becoming extinct; or to create a larger supply than can be obtained at present. Much has been said about the flats, or the oyster brood obtained on the flats, and likewise from Essex. We have stored our grounds principally from the flats and from Essex, and until late years our young men were able to earn a great deal more money by going upon the flats and catching the brood, than in working upon their own ground. The spawn very frequently falls upon the flats. You have asked what is the cause of the brood falling, and you have also asked how the oysters spawn. Now that used to be a great mystery to almost everyone. We have watched the oysters in the summer, when the spat has been falling, and we have found that that operation has generally taken place in very hot, still, sultry weather, and particularly we have noticed that it has taken place on warm nights.

58,445. (*Mr. Caird.*) That is what the previous witness told us?—Yes, he told you that in effect. When the spat falls, it comes upon the surface of the water. It does not grow upon the surface, but it is driven about by the tide until it assumes a certain consistency, and it then settles itself upon any suitable object that may present itself. If there is a favourable bottom, such as stones or shells, or things of that sort, it will adhere, and grow, but if not it becomes destroyed.

58,446. (*Mr. Lefevre.*) Will you point out on the chart what you call the flats, and explain what the extent of ground is?—What we call the flats extends from the sands to the shore.

58,447. (*Mr. Caird.*) Close inshore?—Yes, from the Spaniard buoy to the shore. With regard to the brood obtained from a distance, there are very many persons who have an idea, that the brood by being brought here, and laid down on our own oyster ground, become natives. They think that, let it come from where it will, if it is only laid down on the flats for a certain length of time its character changes, and it grows into natives. That is altogether a wrong impression. It will do no such thing. If it is not destroyed by vermin it would grow into large oysters, quite out of proportion as compared with natives, and would really become common oysters.

58,448. Would any brood got upon your side of the river or upon the Essex side become natives?—I cannot answer for the Essex side of the river, but that which is got on our side certainly would not become natives. The principal part would not, but would become large overgrown oysters.

58,449. (*Mr. Lefevre.*) That would be the result if it were left on the flats?—Yes, provided that it escaped its enemies, which are legion.

58,450. Do you think the native character of the oyster is due to its cultivation?—Certainly I do.

58,451. From the place in which it is deposited and laid down on your beds, and where it fattens?—Yes; but it must be deposited on a certain place on these grounds, or upon the Essex coast.

58,452. Then a young oyster on the flats, if it remained in its native place, would not become a native?—No.

58,453. But when transferred to your beds it would?—Yes.

58,454. Is it also the case with regard to the oysters which are brought from a distance, from Ireland for instance?—No.

58,455. The brood, after being laid on your beds, is converted into native oysters, is it not?—No, that is not so. The public think it is so, but it is not the case. They have an idea that by making an oyster-bed at Herne Bay, and bringing spat from Scotland and Ireland to stock it, they will produce native oysters; but it is no such thing. On the contrary, all they will do will be to take these flats away, and they will be likely to produce a contrary effect, by limiting the supply of brood, and causing native oysters to be dearer.

58,456. Can you tell me the extent of ground on which you are able to fish for spat upon these flats?—The ground will be about eight or nine miles in extent.

58,457. Eight or nine miles, by what in width?—Say three miles.

58,458. Three miles broad?—Yes, in a rough estimate.

58,459. What makes you think that the spat never

comes to perfection on the ground?—We have evidence of that.

58,460. What evidence have you?—All the brood that is left there becomes overgrown.

58,461. Yes; but it grows up to be large oysters in the end?—It would never have substance enough. Those oysters, if they were left there for two or three years, would not gather substance, but would continue growing.

58,462. Upon being removed to your beds do they fatten and become better?—Yes.

58,463. I presume, that if they were left upon the ground, they would fatten and come to the market, but that they would not be so good as your native oysters?—Yes.

58,464. Then you do not agree that they would fall victims to five-fingers and other vermin?—Yes, I think they would. I say they would grow large, provided they escaped the vermin. Our system of doing business is to buy all the brood we can buy of everyone who offers it, and to give the market price for it.

58,465. Can you recollect the time when all over the flats there was a considerable supply of large oysters as well as of brood?—There was never any great quantity of large oysters. I have hardly ever known them able to catch what we call a London bushel, perhaps they may have got a small quantity when they have been catching whelks.

58,466. Do you not think it possible that the failure of the spat is due to an insufficient number of oysters being left on the flats for the supply of brood?—I do not think that is the cause of it.

58,467. You think the brood that does now grow upon the flats is deposited there by the oysters lying at Whitstable, and not from the oysters left there?—We are inclined to think so.

58,468. You believe that the spat that does fall there comes from the private beds inshore?—Yes, that is our opinion.

58,469. Do you think it possible that the flats may have been over fished, and that there is no brood there, because there is no supply of oysters to spawn there?—There are no oysters on the flats to speak of now.

58,470. Do you think there can be no spat, unless it happens to drift away from your own beds?—Yes, I will try to illustrate what I mean by the Faversham beds, to the east end, as we call it. They are hardly ever without a spat of brood. Whenever the spat falls it is sure to be at the east end. Those beds are situated to the north-east corner of our ground. The tide runs in an eddy for a considerable time, both ebb and flood, and during the eddy, the brood swings about, and a portion of it falls, I think.

58,471. But the tide may carry it away to a place where it cannot do any good?—Yes, all along the shore, as it has done frequently.

58,472. Do you not think it possible, that by constantly fishing upon these flats, you have denuded the beds of large oysters, so that there are now no oysters to provide natural spat for the ground itself, and requiring the ground to rely upon the casual spat which is drifted upon it by the tide from the private beds?—I think it is much better to take care of the brood when young, than to let it take its chance and be killed.

58,473. Where the flats are most worked, do you find most brood?—We can account for that. It is because the soil is cleaner.

58,474. But is it so?—Yes, it is so, although we have a great spat of brood very seldom, there is generally, if I may so term it, a limited supply afterwards. For instance, for a year or two after a heavy fall of spat, a small quantity of brood falls in the season.

58,475. (*Mr. Caird.*) After a good spat year?—Yes.

58,476. Where do you suppose the spat comes from? From what place does it find its way to the flats?—My opinion is, that it drifts from the oysters on our beds. As I have said, it then acquires a certain consistency, and falls. You may see it with a microscope.

58,477. The small oyster?—Yes.

58,478. Have you ever yourself examined the spat?—Yes.

58,479. Where do you suppose it comes from?—From the oyster itself.

58,480. But from what particular part of the coast do you think it comes from? Does it come from your cultivated beds?—Wherever there are most oysters, there is likely to be most spat; and our beds are always replenished with oysters.

58,481. Is there not a good place for spat off Herne Bay, and is there at present any cultivated bed near that?—No, at present there is no cultivated bed near that.

58,482. But is there not brood to be found there?—I have known when there was none along the shore to speak of, and when it has been covered with it at other times. At times it has been carried all along the shore for miles. That, however, is according to the way in which the tide carries it.

58,483. Then, according to your experience, the quantity of brood does not depend on the quantity of mother oysters lying upon the ground?—No, oysters are so prolific that they will produce a great deal of spat, if the season is favourable for it. Perhaps I may be allowed to say, that there is some difference of opinion among the fishermen as to what constitutes the brood. When I was a young man, I had an idea that the spawn of the oyster was not the brood.

58,484. (*Mr. Lefevre.*) Do you think that there would have been a better spawn in the last few years if there had been more large oysters left on the ground which you call the flats?—No, I do not think so.

58,485. Have they been so cleaned off the ground, that at present there are no parent oysters on the ground at all?—No, that is not the cause of it. I believe the sole cause is the want of suitable weather. There is always brood every year, if the weather is favourable for its preservation. I told you just now that when I was young I had an idea that the spawn of oysters was not the brood; but after the most strict investigation, I have come to the conclusion that the spat is the brood. We have it every year, but the last year in which we had it when it was successful was in intense hot weather. I never knew it hotter than it was for some days in that season.

58,486. And it resulted in a satisfactory spat?—It did.

58,487. What was the year you refer to?—It was in 1858. There was no spat last year worth speaking of. There was only a bit here and there.

58,488. Have you sometimes had a good spat for three or four years running?—Occasionally there has been spat for as many as three or four years running. But, generally speaking, the first year is the best.

58,489. When do you think that the oysters begin to breed? At what age are they when they spawn?—We find them sick as soon as the warm weather comes on. The reason why, when I was young, I fancied the spawn was the spat, was that I have frequently killed brood with what we call the milk in them.

58,490. Of what size would they be?—Not much larger than an inch and a half across.

58,491. What age would they be?—They would not be more than two years old. It was a long time before I could divest my mind of the impression that these oysters had not arrived at sufficient perfection to enable them to breed.

The witness withdrew.

EDWARD JOHNSON called and examined.

58,492. (*Mr. Lefevre.*) I believe you can give us some information as to the ground on which the brood of the oysters is found here?—Yes. Here (*pointing to the chart*), in what is called Whitstable Street, is where our ground is enclosed. The last time we had a good spat of brood, as you have already been told, was in 1858. That fell all in the fish weirs and away down along the beach in the Copperas Channel, at Cliff End, and underneath the Hook Spit and the Gore. All along there was covered with the young brood.

58,493. (*Mr. Caird.*) That was in 1858?—Yes.

58,494. That was a very good year for spat, and was the last favourable year you had?—Yes, both in 1858 and 1859 the spat fell in the places I have mentioned, and extended right down as far as Margate. I believe that oysters were caught after that fall of spat right down the South Channel.

58,495. Do you think that the whole of that spat came from the oysters upon your beds?—Yes, that was our opinion. There were no other oysters upon the ground from which it could have come.

58,496. Was it carried down from your beds by the tide, and deposited in the places you have mentioned?—Yes.

58,497. (*Mr. Lefevre.*) In other years upon what part of the flats did you find the spat?—Sometimes we have found it out here by the Pansand ground and down through the gat ways over by Spaniard Sound.

58,498. Have you observed that it falls in any particular depth of water?—No, I have not observed that. It has been found all over these places in the channels.

58,499. It has not been found in the main channel?—No, not in Prince's Channel or in Queen's Channel, because the water is deeper there, but it is found in different parts of the small channels which are formed under the lee sand.

58,500. Is it found between the main channel and the sand?—Yes.

58,501. Upon what kind of ground have you generally observed it?—Principally upon ground formed of sand and shells.

58,502. Are they found on sand?—It is a peculiar sort of sand.

58,503. You do not mean fine sand?—No, it is not a sand like that upon the Maplin sands for instance. No oysters would live there, but it is a sort of sand with blue clay mixed with it.

58,504. Not stiff clay?—No, it is blue clay; a kind of slubby clay.

58,505. Does the spat adhere to stones and shells at the bottom?—Yes, but in places up here by the Pollard there is rather a shifting soil, which is slubby, muddy, and soft. It sometimes comes down and covers the oysters so that they cannot be laid down there on that part of the coast.

58,506. (*Mr. Caird.*) Is the whole of the ground capable of being covered with oysters?—No, all along this part (*pointing to the chart*) there is a great deal of copperas stone. Wherever that is we find that the oysters do not succeed so well as in other places. They become stunted in their growth and the shells get full of little worm holes.

58,507. They do not grow there very well?—No.

58,508. Is that upon the ground recently given to the Herne Bay Company?—Yes.

58,509. Further down, how is it?—I should say that it is the same here (*pointing to the chart*) down the Gore Channel.

58,510. Are there not oysters at present laid there and cultivated?—No, but there are oysters there which are uncultivated.

58,511. They are not taken care of in the same way that the oysters on the ground off Whitstable are?—No. When the fishermen go down there to catch whelks they catch oysters at the same time. The oysters there grow up large fat oysters.

58,512. They do not become natives?—No, not a bit of it. They are the worst sort of oysters we ever get.

58,513. Where are they obtained?—Upon the Pansand ground.

58,514. Are there any oyster-beds cultivated about the Isle of Sheppey?—No.

58,515. Is not the ground there suitable?—No, but up above there is suitable ground.

58,516. Are the oysters found upon that ground much of the same kind as those at Whitstable?—I cannot say. I do not know anything of them at all.

58,517. Is there anything on this part of the ground (*pointing to the chart*) that is likely to prove disadvantageous to the cultivation of oysters?—I cannot say. It is principally yellow clay, I believe.

58,518. What, in your opinion, is the best description of ground on which to establish an oyster-bed?—That is a very difficult matter to say. You require a little piece of ground, and you want to have it placed in a right situation.

58,519. What should be the situation?—It should be near the mouth of a river where the fresh water and the salt water join. It should also be in such a position that you can work it continuously and keep it clean. Then, again, it is necessary that it should be sheltered as much as possible from heavy seas. Heavy seas rolling in upon the oyster-beds would do them a considerable amount of injury.

58,520. Should the ground itself be gravelly clay or sandy?—A composition of blue clay and sand is good ground for the oysters.

58,521. Without stones?—Shells are very good for the brood to fall on. Of course it is necessary to have a proper bottom before you can cultivate an oyster.

58,522. Are your oyster-beds always covered at low water?—Yes, they are always covered at low water.

58,523. Is that necessary for breeding-beds?—Yes, I think it is absolutely necessary.

58,524. It must never be quite bare of water?—No.

58,525. For what reason?—Because in the winter the frost would kill the oysters.

58,526. Then the tide never leaves your oyster-beds?—We have occasionally had very extraordinary tides when the whole of the shores have been left dry. But that only happens once or so in the course of 20 years.

58,527. Has no damage been done to the beds in consequence?—No, because it did not happen to be frosty weather. If it had been freezing hard at the time or snowing the oysters would have been injured.

58,528. What depth of water is there upon the beds at low water and high water?—I believe the soundings are all marked upon the chart. The depth varies from four feet to five feet and seven feet.

58,529. Then are the whole of your oysters, as a rule, from four to six feet under water at the time of low water?—Yes, in ordinary spring tides. Perhaps in extraordinary spring tides there would not be more than three feet of water over them.

58,530. Is the ground to the west of this as well adapted for oysters as your ground?—I think so, but it is shoaler water.

58,531. It has the other advantages of a mixture of fresh and salt water which your ground possesses?—Yes.

58,532. Your ground is equally good for feeding as for breeding oysters?—Yes. There is a very remarkable thing in connexion with our ground which I will mention. Our people can go off after oysters in a fog, and they will be able to tell where they are by the description of oysters they dredge up.

58,533. They can tell that from the appearance of the oyster itself?—Yes.

58,534. Your oysters here are considered very good?—Yes, there are no better oysters grown than those we get down here.

58,535. Do you agree with the opinion which has been expressed to us by another witness, that oysters will not become natives, unless they are placed upon

such a bed as you have here?—Do you mean our oysters?

58,536. What I mean is this, are you of opinion that oysters taken even from the Essex coast, if left on the flats instead of being cultivated on your beds, are a different description of oyster when they come to the market from those which are placed on your cultivated beds?—Yes, quite different.

58,537. Are you able to say what is the cause of that?—I suppose it is occasioned by the cultivation which the oysters get after they are placed on our beds.

58,538. Do you suppose that there is anything in the character of the deep water towards the centre of the river, as compared with what it is here in the estuary of the smaller river, which in the one case leads to the production of a coarser description of oyster, and in other of a finer?—I do not think that there is anything in the character of the water to cause the difference. I think it is rather in the character of the soil. The same water, it is evident, must flow over the oysters there as here.

58,539. Is the difference so great within half a mile of the oyster-beds?—Yes, even on our little piece of ground here we can go off, as I told you just now, on a foggy day and heave out the dredge and tell where we are from the description of oyster we take up.

58,540. I suppose that the oysters you might dredge up of a different description from those on the regularly cultivated beds would be good oysters?—Yes, but you can see a difference in the growth of the oysters.

58,541. Upon which part of the ground do the oysters grow best?—They grow faster about here (*pointing to the chart*). They grow larger and faster.

58,542. If you were to form an oyster-bed to the eastward of this, further to sea, and work it in the same way as the Whitstable beds, could you not get native oysters there also?—I do not think we could. That ground is well worked now and always has been.

58,543. Then it is not the working upon the ground that has anything to do with the production of native oysters?—I believe that the working upon a bed of oysters improves them very much indeed.

58,544. But is there not something in the nature of the ground itself?—Yes, to begin with, and no working in the world would make native oysters of the oysters that grow down there. That is where the copperas stones are.

58,545. Over what extent of the bed of the Thames do you obtain a supply of native oysters for the London market?—There are no native oysters sold from anywhere except the companies' grounds. There are our company, the Queenborough Company, the Faversham Company, and the Rochester Company, but they do not sell any now, I think. Then there is the Sea Salter Company; the Pollard ground is where they send from, and they do not send away many now. A good many are also sent over from Essex. In point of fact, that is where the principal part of the native oysters come from.

58,546. Then the native oysters are found on both sides of the river; both on the Essex coast and the Kent coast?—Yes, decidedly.

58,547. But they are confined to certain small localities on both sides of the river?—Yes.

58,548. Is that dependent upon the character of the soil upon which the spat is deposited, and upon there being a mixture of fresh and salt water?—I believe it is dependent both upon the soil and upon a mixture of salt and fresh water. The nearer you get to the Thames the better the oysters are on both sides of the river. Those obtained from Burnham are far better than those obtained further down on the coast.

58,549. Are the oysters better at Sheerness than at Whitstable?—No, I think not.

58,550. That is further up the Thames?—Yes, but we have the Swale which comes down here as well as the Thames, and there is not the same favourable kind of soil at Sheerness.

58,551. Is there any extensive ground on which native oysters could be cultivated which is now unoccupied?—Yes, a large extent of ground.

58,552. Is there any ground still unoccupied which might be advantageously cultivated with oysters?—Yes, this piece here (*pointing to the chart*) might be cultivated, or at any rate some parts of it.

58,553. Has the culture of oysters been extending within your experience?—Yes, I think so, decidedly.

58,554. Then is the supply at present larger than it used to be 20 years ago?—No, on the contrary, I think it is less than it has been within recent years. Perhaps, speaking of 20 years ago, it may be larger than it was then.

58,555. Are there not more capital and more labour applied to it now than there were 20 years ago?—Yes.

58,556. And is not the high price which oysters have attained likely to spur up the people here to greater endeavours to increase the supply?—Yes, they are doing so now.

58,557. Is the cultivation of oysters extending now?—No, but that is the result of a scarcity of brood. No brood to any extent has fallen for the last six years.

58,558. But suppose you had a good year for the brood such as you had in 1858, what would the consequence be?—It would make a great many more native oysters for the market if it were taken care of, as it was in 1858. If the native brood fell here under favourable circumstances and was caught up, laid on private grounds, and taken care of, it would give a supply of oysters for another six years.

58,559. Would the present extent of private grounds be sufficient to take all the brood an excellent spat season would yield, or would it be proper to make preparation for receiving the brood which would be supplied by such a good spat season?—I think that if we could make sure of another spat like that of 1858, and if all the companies already in existence were to purchase brood and lay it down the same as was done at that time, we should not require any more space. The grounds we have now would be quite sufficient without anything additional. The more grounds you make the dearer the oysters will be, because it makes so much more competition in the market.

58,560. Just explain that to us, because that is not in accordance with the usual principle of increasing the supply?—What I mean is this,—Over in Essex, for instance, we should have been able last year to have purchased brood for 18*s.* a wash, but the Herne Bay people went in and offered 1*l.* per wash. That of course makes the oysters dearer to the market.

58,561. The competition you refer to is a competition between the buyers of brood and not between the persons who sell the oysters?—Yes. It is the price of the brood that regulates the price of the oysters. If I give 1*l.* a wash for the brood I cannot sell the oysters for the market at less than 90*s.* per bushel on account of the loss which will occur from death. We are sure to have deaths. Some portion of the oysters will die whatever care we may take in laying them down.

58,562. If there is a good spat season there is a great increase in the quantity of brood for sale?—Yes.

58,563. And you can then obtain it at a very low price?—Yes.

58,564. You are therefore able to stock your grounds more largely?—Yes.

58,565. Would the present extent of ground cultivated be sufficient to receive that increase of stock from a fortunate spat season?—It always has been hitherto.

58,566. Is not the demand for oysters increasing?—I do not think that it is. It may be over in France. I believe that there is at present a greater foreign demand, but that is all.

58,567. Do you sell many natives that are taken

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away to France?—Yes, and also to Belgium. We have sent some away this week.

58,568. To Belgium or to France?—To Belgium.

58,569. Were they sent away direct from here?—Yes.

58,570. In your own boats?—Yes.

58,571. Where were they sent to?—To Ostend.

58,572. Is that a new trade?—No, we have had it for five years and more.

58,573. Do they pay a higher price for the oysters than you can get in the London market?—No, they pay the same price. They give the same price here. If they buy them when the price is 90*s.* a bushel in London they get them at 88*s.*, but they have to pay the carriage.

58,574. Do you send oysters to France?—No.

58,575. Do they not go to France?—Yes, but we do not send any to Dunkirk. They come here, however, to buy them.

58,576. They also go to Ostend, and are distributed over the Continent?—Yes.

58,577. Is that foreign trade a trade that is increasing?—Yes.

58,578. When did it begin?—It sprang up about six or eight years ago.

58,579. Has it been increasing every year since?—Yes.

58,580. To what extent is it carried on now as compared with your whole trade; that is to say, what proportion do you think of the whole of the oysters caught in a year on the grounds of your company is sent away to the foreign market?—Perhaps a tenth part. I am not certain about the figures, as it is a matter I have not calculated. It would be necessary to examine the bills we keep in reference to the oysters sent abroad in that way, in order to ascertain the real quantity.

58,581. But, speaking at a rough guess, you think you send away one-tenth of all the oysters you get in the course of a year to the foreign market?—Yes.

58,582. Has this foreign demand, to a certain extent, operated in increasing the price in the home market?—It has. There is not the slightest doubt of that. It has operated not only in increasing the price of oysters in the market, but in increasing the price we pay for the brood.

58,583. You pay more for the brood in consequence of the increased demand for oysters to go abroad?—Yes. The same persons who buy our oysters for the foreign market, go to Essex and buy their half-ware and stuff which we used to buy.

58,584. For what purpose do they buy that?—To take over to their own ground. They want small oysters for that purpose.

58,585. They purchase what you would otherwise buy for laying down?—Yes,

58,586. Then in that way it operates as a double injury to you?—Yes, it does.

58,587. By depriving you of what you want for food, and also of what you want for laying down on your grounds?—Yes, and that is one of the principal causes of the increase in the price of oysters.

58,588. (*Mr. Lefevre.*) What is the size of the oysters that are taken away to be laid down on foreign beds?—They are very small.

58,589. Are they an inch and a half in diameter?—Yes, perhaps they will be about that.

58,590. Are they laid down on beds abroad?—They are not laid down upon beds, but they have a sort of pit in which they put them.

58,591. Are they placed there for feeding?—They do not feed them, but the sea comes in upon them.

58,592. Are they put there in order that the oysters may fatten?—No, they are already fattened before they go there. The people who take them will make two or three or four voyages, put the oysters together and lay them in those pits. They send them from those pits to the market for sale. They cannot keep them there for any length of time.

58,593. (*Mr. Caird.*) Are they kept there fresh?—Yes.

58,594. They are not put there for the purpose of enabling them to grow?—No, they will not breed or grow there; they would never come to anything there.

58,595. You say that the taking of oysters for the foreign market has been injurious to you?—Yes, I believe that that has been the principal cause of the scarcity of oysters down along this channel.

58,596. It has affected the price?—Yes, it is one of the things that have affected the price.

58,597. (*Mr. Lefevre.*) Are not those small oysters laid down abroad for the purpose of growing into big ones?—I believe not.

58,598. Have you told us of all the private beds on the south side of the Thames, when you mentioned Queenborough, Rochester, Faversham, Whitstable, and the beds immediately adjoining?—Yes, Herne Bay and Pollard.

58,599. And Sheerness?—Yes.

58,600. I think you said that 1858 was the last year in which you had a good spat?—That was the first year of the good spat. There was spat more or less for a year or two afterwards.

58,601. Did you begin to take up the young oysters the year after, namely, in 1859?—Yes.

58,602. How long did that last?—We kept on catching the spawn for three years more or less. The first year, however, gave us the greatest quantity of spat.

58,603. The spat lasted for two or three years?—Yes, in 1858 they discovered it, and then they found that there was spat or brood on the flats. They went to work on the flats, and they found the ground covered all over with brood.

58,604. When they began taking it, what size was it?—About the size of a shilling. Some would be less than that.

58,605. I suppose they took it until they exhausted the ground?—They worked at it as long as they could for the weather, until the winter set in, when we would not purchase it for fear it would die. There was then no other chance of catching it until the spring came. When the spring came they went at it again, but they found that what had been left all along the ground was all dead.

58,606. What had been the cause of that?—It had been killed by the five-fingers settling upon it and destroying it. They left nothing but the shells.

58,607. By 1862 were you not able to find any at all?—There has always been a little to be found here and there.

58,608. There was a question I put to the last witness, which I will repeat to you. Is it not possible that the whole ground upon the flats has become exhausted of oysters, and that there are no parent oysters left to breed?—I do not think that that has anything to do with it. I do not think that the spat that falls upon the flats ever comes from parent oysters upon the flats. There never has been anything there of any account. The flats have always been worked by the flatsmen, and every oyster has been caught off the ground that could be found upon it. There never was any quantity found on the flats.

58,609. Were there never any large oysters there?—No, the flats always depend for a supply of oysters upon the grounds adjoining. When the weather is suitable for a good spat, the sea becomes entirely filled with spawn; not from our grounds alone, but from all the grounds on the Essex coast as well. The estuaries of the Thames become filled with spawn.

58,610. (*Mr. Caird.*) That is in a good spat season?—Yes, in 1858 there was a general spat over the grounds in this country and in France. That was the year that M. La Coste obtained his success with the tiles. He has never had success with them since. I know that many people say that they have succeeded in raising spat, but it is not the case; they have not done so.

58,611. (*Mr. Lefevre.*) As the supply of beds here is somewhat limited, might not the tide carry away the spawn to places where it could not find anything

suitable for attaching itself to?—Very true; but whatever comes from those private grounds would go as it has done all over the flats, and that enables those persons who make their living by dredging upon the flats, to take it up and carry it away for sale to the owners of private grounds.

58,612. Do you believe that the flats were not worked more in 1858 than they were previously?—I do not think they were.

58,613. Then there is no reason why there should be less spat there since that time than there was before?—No.

58,614. In point of fact, you think that the spat from the private beds adjoining the flats falls so thickly in a favourable season, that it is quite sufficient to supply spawn to the whole of the flats, if all the conditions are favourable?—Yes, that is my opinion.

58,625. Would not those conditions be rather improved by planting private beds on other parts of the coast?—There would be more oysters laid in places where there are none now.

58,616. Would it not improve the chance of some of the spat finding favourable conditions, and by that means becoming preserved?—Yes, if oyster-beds were made there, and the soil was suitable, and there were shells there to receive it. In that case, no doubt, more of it, when it fell on such places, would be preserved.

58,617. Do you agree with Mr. Nichols, that if the spat were left on the flats it would never arrive at maturity, but would be strangled by the five-fingers?—Yes, I am very strongly of that opinion, and we have had it proved.

58,618. What ground have you for thinking so?—That has been the case when any of the spat has been left there. In 1860, when we had our last spat, some portion of it was left there in the winter time, when we could not go to work upon it, because if we had taken it away and laid it upon our grounds it would have been killed by the frost; we therefore left it lying upon the flats, and when we went for the purpose of taking it in the spring of the year following, we found that it had all been destroyed by five-fingers.

58,619. Did you upon that occasion find many five fingers upon the ground?—Yes, they came in like swarms of bees, completely filling the ground in a day. I never saw anything like it; we saw all the water filled with them.

58,620. Then it would be of no advantage to the fishery here if a large supply of oysters were left upon the flats for the purpose of breeding?—No, I think it would be of no advantage at all.

58,621. Then, for the same reason, it would be of no advantage to make regulations with regard to the flats for preventing oysters from being taken in the close-time?—No, it would not.

58,622. Are there any regulations as to the size of the oysters that are to be taken?—No, I believe that if you were to interfere in the matter, you would destroy all the fisheries entirely. It would also be injurious to enforce regulations preventing working on the beds in the close-time. The fact is, the more the ground is worked upon, and the cleaner it is kept, the better chance the spat has of adhering and coming to perfection when it falls. If the ground was not worked upon, every oyster would very soon become covered over with weeds. It would become coated all over with a kind of slimy weed, and the spat when it fell would not rest upon it.

58,623. Then you think it is a matter of very great importance that dredging should go on all through the summer?—Yes, I am strongly of that opinion.

58,624. Although there has been no fall of spat for the last two or three years under circumstances suitable for its preservation, do you think that that is any reason why the failure should continue?—No, but although there has been no spat the dredging has always gone on all the same for whelks. They continue dredging every year.

58,625. Dredging for the whelks would be sufficient to keep the ground clean and suitable for the fall of spat?—Yes, they do the same thing in catching the whelks as in catching the oysters.

58,626. Do you agree with Mr. Nichols in his statement that there is no considerable quantity of oysters brought from Ireland and the south coast, and laid down here?—There cannot be any large quantity, because they would not live over the year. Sometimes we had oysters on the ground which have now and then got mixed up with the natives, and have lived, but that is not often the case. If you take them as a body, you cannot get them to live over the winter time.

58,627. Then, I take it from your answer, that you do not wish to purchase oysters of less than $2\frac{1}{2}$ inches in diameter, except from the flats and the Essex coast?—Just so. We do not require oysters of a less size than that from a distance.

58,628. Then no advantage would result to you from a regulation to prevent oysters of less than $2\frac{1}{2}$ inches in diameter from being taken in the Channel, or on the Irish grounds?—No; but I think it would be a good law if some regulation were enforced for prohibiting the sale of oysters during the close season for eating. It would, however, be a good plan to allow people to catch them in the summer months for the purpose of stocking their grounds.

58,629. Would you have the Whitstable Company prohibited from selling their oysters in the four months, commencing with May and ending with August?—It would make no difference to us; we never do so.

58,630. I thought you sold oysters in the month of August?—It is only the common oyster that we sell then.

58,631. Then would you restrict the close-time to the months of May, June, and July?—Yes.

58,632. Then would you make a special exception with regard to the supply for the London market in August?—Yes.

58,633. You would limit the close-time to three months?—I think so. If the oysters have not spatted by the month of August, I know that it would be of no use their spatting afterwards. They ought to spat in May or June.

58,634. Would you prevent any oysters whatever from being sold during the month of May?—Yes, I would not allow any oysters of any kind to be sold for the market in the month of May.

58,635. Not even Channel oysters?—No.

58,636. You are aware that at present a considerable quantity of Channel oysters are sold during the month of May?—I know that that is so.

58,637. Do you also know that they are in the best state during May?—I do not think that they are best in May.

58,638. (*Mr. Caird.*) The Channel oysters that are sold in May are not caught in May?—I am speaking now of catching them in the Channel itself in May.

58,639. (*Mr. Lefevre.*) The oysters I am speaking of are caught in the Channel before May. They are laid down on beds in the neighbourhood of Shoreham, and the market is supplied with them from Shoreham during May and the early part of June. Would you put a stop to that?—Yes, I would not allow any oysters to be sold during three months; namely, May, June, and July.

58,640. That would suit the Whitstable people, I suppose?—I do not know that it would suit us more than other people.

58,641. (*Mr. Caird.*) You must understand that these oysters are not caught in May and June; they are oysters that are caught in the Channel and placed on beds to fatten at Shoreham?—Yes, I believe that is done.

58,642. They are allowed to be sold off those beds at any time, because they are not breeding oysters?—Yes.

58,643. Then what harm would that do?—They will bring in oysters from the Channel that are breeding oysters.

58,644. But nothing can be brought in from the

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deep sea after the beginning of May?—Then it could not make any difference. The common oysters on our grounds are of no use for spawning. All the oysters that we get from the Channel we have to supply the market with in the first part of the season, in August and September, before the natives come on.

58,645. We have been told by witnesses in other parts of the country, that oysters, which have been brought from their grounds and laid down on your beds, have become native oysters; is that so?—No, it is not.

58,646. The oysters which you call common oysters are, I suppose, deep-sea oysters?—Yes, some of them.

58,647. Do they improve in quality by being laid down on your beds?—Yes, I opened one yesterday. It was fat, and I could hardly tell the flavour from that of a native.

58,648. Had it become like a native?—Yes, so far as the flavour goes, but it was not like a native in the shell.

58,649. Would the common oysters taken direct from the sea, from the deep sea, bring as good a price in the month of August, as the common oysters taken from off your beds?—No, I believe they do not fetch quite as much. When ours will fetch 12*s*., theirs will only fetch 9*s*.

58,650. Nine shillings a bushel?—Yes.

58,651. Then the common oysters improve by being laid down on your beds?—Yes.

58,652. From the experience which you have had as an oyster fisherman, can you offer any suggestion to us by which you think the supply of oysters to the London market might be increased, I mean the annual supply of oysters; have you any suggestion to offer by which that could be increased?—I do not know any other way than by getting a good spat of brood.

58,653. Then you consider that the great matter is to secure a successful spat season?—Yes, that is what we require now.

58,654. Are there no artificial means which you are aware of by which the spat of every year might be to some extent economised?—I think not.

58,655. Is it not a fact that the oysters do spawn every year?—I think so.

58,656. But the spat does not vivify in some years?—No, it does not.

58,657. Are there not some means by which so rare an article as oyster spat might every year be brought to live?—I believe there are none.

58,658. Has it been tried anywhere within the estuaries of the Thames?—Yes, I believe that some of our parties here have tried it.

58,659. In what way was it tried?—I believe Mr. Gann tried something of that sort on his ground. He dug a pit, and put some oysters in the pit; he then had some pipes laid down leading from the bottom of the pit, as I have been given to understand; I did not witness it myself. By that means he kept up a continual supply of sea water, and, I believe, the men used to go with buckets to refill the water as it ran away from the pit. The pit was formed in a warm place, and the oysters were laid there with shells and one thing and another for the spat to fall upon.

58,660. What was the result?—Nothing ever came of it.

58,661. Then the attempt was a failure?—Yes. I believe he then had a sort of pit dug, and lined with faggots; it was on the flats, and in the shallow water, and he had some oysters laid there. That was also a failure.

58,662. That was an attempt artificially to create a season favourable for the oyster spat?—Yes.

58,663. And it did not succeed?—It did not.

58,664. Do you know of any instance in the Thames where a successful attempt has been made?—No, and I think the only way is the natural way; and Essex is the best place for receiving the spat when it does fall. The coast there is surrounded by little inlets, by which means the spat is sheltered when it falls in the sea in heavy weather. If the spat falls here, and there comes on a north-east gale, it would blow it all away and destroy it.

58,665. Then the Essex coast is naturally the best spawning-ground?—Yes, I think it is naturally the best spawning-ground there is in England; and all the artificial cultivation in the world would not secure us as good spat as that on our own coast every year.

58,666. It would appear from your evidence and that of other witnesses, that the line in which an improvement should be looked for is more by securing spat than by the cultivation of the oysters afterwards?—Yes.

58,667. You say that a great loss takes place if the character of the season is unfavourable to the spat?—Exactly so.

58,668. You also say that if by any means spat could be had you would have a good supply of oysters; that seems to be the origin of the whole difficulty?—If we could get the brood we could make the oysters.

58,669. As yet there has been no successful attempt to cultivate the oysters artificially?—No, there has not.

58,670. You have no suggestion to make in that respect?—No.

58,671. How many years have you been practically acquainted with oyster-fishing?—I was brought up in this place, but I was not much acquainted with oyster-fishing until the last three or four years.

58,672. Then cannot you speak of your own knowledge of the fishing 10, 12, or 14 years ago?—No.

58,673. Has the fishing ground improved as a fattening ground?—There is no doubt of that, the same ground makes better fishing now. We never had better fishing than we have had this year.

58,674. To what do you attribute it?—To the continual working of the ground. There are a great number of us, and there are a great number of boats. More oysters are laid down and moved about during the year, especially in the summer months, and that makes the oysters so much better.

58,675. You do not attribute it in any degree to the quality of the water in which the oysters are fed?—I believe the water has something to do with it.

58,676. It is notorious, as you are aware, that the sewage of the Thames has been increasing every year, and that in the course of the last 20 years the difference has been very great?—Yes, exactly so.

58,677. Do you think that that has had any influence in fattening the oysters, namely, the dirty state of the Thames?—No, I think not; we do not get much of the sullage of the Thames here.

58,678. (*Mr. Lefevre.*) Have you been to the French oyster ground laid down by M. La Coste?—No.

58,679. Do you ever find oyster spat attached to quite large stones?—Yes.

58,680. Would it be worth while to collect the stones and scrape off the spat as M. La Coste did?—Not in the early stage of spatting I think; not until the oysters are sufficiently large to remove. As soon as we can remove them without destroying the shell, it is better to remove them. The oysters are then growing shapeable.

58,681. Has the Whitstable Company tried putting down faggots or anything of that sort for the spat to adhere to?—No, and for this reason, there are weirs both above and below our grounds, and during the heavy spat of brood in 1858 we never found any spat of consequence upon those weirs, although those weirs were made just in the same ways as the fascines and faggots you are speaking of. They were made of wood, and formed in fact a regular hedge.

58,682. What is the best material for the spat to adhere to?—There is nothing like oyster and cockle shells. Oyster shells are better than anything, and we have any quantity of them on our ground.

58,683. Are there a large number of people engaged in fishing for whelks?—Yes, a great number.

58,684. What number?—I cannot say exactly; I

must say, however, that to my knowledge there are about 400 or 500 people fishing there.

58,685. Is it by trotting or dredging ?—Both.

58,686. Trotting for whelks is stringing crabs on little strings, is it not ?—Yes, and hanging them over the boat's side. The whelk feeds on the crab.

58,687. What is the principal ground for whelks ?—All over the flats; there are a great many down on the river side.

58,688. Are there many whelks on your Whitstable ground ?—We have got a few.

58,689. Do you allow the men to trot for them here?—It is not worth their while, there is not a sufficient number; nor do we allow it.

58,690. Are the whelks sold for bait ?—Yes, and also sent to the London market.

58,691. Are they eaten by the people ?—Yes, I think so.

58,692. Is there any sprat-fishing here ?—Yes, we got a good many this year.

58,693. What number of men are there fishing for them ?—There are a good many men from Essex, and some of our own people. There may be about 30 or 40 from our own place and from Essex. Most of the sprats caught off here are brought into this place and sold to the farmers. Some are sent to the London market.

58,694. Is there any shrimp-fishing here ?—Yes.

58,695. Are there many men employed regularly in fishing for shrimps ?—Perhaps there are 20 boats that go shrimping.

58,696. All the year round ?—No, only in the season.

58,697. What is the season for shrimping ?—In the summer.

58,698. Is there any trawling for flounders, and soles, and so forth ?—Yes, in the autumn and in the spring. There are a good many soles caught here, and also plaice and dabs.

58,699. Are many of the men belonging to the Whitstable Company employed in those fishings ?—Some of them are, but there are a great many men who make their living out of it entirely.

58,700. How many fishermen are there in this place independent of the Whitstable Company ?—I cannot say exactly, perhaps 200.

58,701. Do they mostly have boats of their own ?—Some of them have boats.

58,702. Are there many oyster-boats above the Nore, above Sheerness ?—I think not.

58,703. Or above Shoeburyness ?—I think there are at Southend and at Leigh.

The witness withdrew.

FREDERICK MONGER called and examined.

F. Monger.

58,704. (*Mr. Lefevre.*) You are foreman, I believe, of the Faversham Company ?—Yes.

58,705. That company was incorporated by an Act of Parliament passed in 1840 ?—Yes.

58,706. Of how many members does the company consist ?—There are 267 members at present.

58,707. Is the Faversham Company a company like the Whitstable Company, and arranged on the same plan ?—Yes, exactly the same.

58,708. Did it begin with any capital; had it any capital of its own to begin with, or did it borrow some ?—We have always, for a great number of years traded with borrowed capital.

58,709. What is the extent of the ground you have?—It is in patches. There is not one square piece like the Whitstable ground.

58,710. About what size is it ?—I cannot state the area.

58,711. Is it of about the same size as the Whitstable ground ?—I should say that it is quite as much in extent, taking it altogether.

58,712. Was that ground under cultivation for oysters before the incorporation of your company ?—Yes, oysters were got from it long before our company was established.

58,713. Did you originally buy it of somebody else, or did you lease it ?—I believe that for 800 years it has been worked by a company.

58,714. Has the company been in existence for 800 years ?—Yes, I believe so.

58,715. But it did not obtain an Act incorporating it until 1840 ?—No.

58,716. It was incorporated in that year ?—Yes.

58,717. Has the number of men who belong to the company been increasing since then ?—I think not.

58,718. Has there been any decrease in the number ?—No.

58,719. Then it remains about the same ?—Yes, I believe there is about the same number of men in the company now as there was 20 years ago.

58,720. Can you tell me what the earnings of the company have amounted to per man ?—It varies according to the spat of brood that falls upon the ground.

58,721. Has the company been doing well with the oysters lately ?—For the last year or two they have.

58,722. In your evidence before the Committee of the House of Commons last year, you gave returns of the quantity of brood you have brought from different parts ?—Yes.

58,723. And you also gave returns of the quantity you have laid down every year ?—Yes.

58,724. Are those returns correct ?—Yes; they were taken from our books.

58,725. Did you hear the evidence which has been given to us to-day by Mr. Nichols and the other witnesses who have been examined ?—I only heard part of Mr. Nichols' evidence.

58,726. Did you hear that of the last two witnesses?—Yes.

58,727. Do you agree with what they have told us ?—I quite agree with all they have said, and particularly with the last witness, Mr. Johnson.

58,728. Are there any circumstances at Faversham which differ from those in connexion with the oyster grounds at Whitstable ?—No, I think not.

58,729. Then are there no facts in connexion with the Faversham grounds which you wish to bring before us ?—No, not that I am aware of at present.

58,730. Have you at Faversham had any greater difficulty than the people here in getting brood ?—Yes, we are at a greater difficulty than the company here.

58,731. In what way; how does it arise ?—It is because we have a smaller fleet, we do not get so much.

58,732. Do your oysters fetch as good a price as the Whitstable oysters when you send them to the market ?—Not quite as much.

58,733. What is the difference ?—We are usually about 4*s.* under the Whitstable people.

58,734. Four shillings a bushel ?—Yes.

58,735. What is the reason of that ?—Our oysters grow larger and faster.

58,736. And for that reason are they not as suitable for the market; is that the case ?—Yes.

58,737. The Faversham oysters are slightly inferior to those obtained from the Whitstable grounds ?—We do not get quite so high a price for them.

58,738. Do they not fatten as well as the Whitstable oysters ?—Yes, they are equally as good a fish; but they are generally of a larger size.

58,739. And upon that account they obtain a lower price ?—Yes.

58,740. Are they not as choice for the public ?—Yes, I think they are.

58,741. Do the public not like them as well ?—Yes, I believe they do.

58,742. Then why should there be a difference in the price ?—Being a larger oyster in size than the Whitstable oyster, the number is not so great in a

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bushel, and when they are retailed by the score or dozen they do not bring as much money.

58,743. (*Mr. Caird.*) Where is your ground situated; is it to the west of the Whitstable ground?—Yes, the Faversham ground is to the west, and also to the north of the Whitstable ground.

58,744. Is it further up the Swale?—Yes, and it is more shallow.

58,745. You do not produce anything like the same quantity of oysters that the Whitstable men do?—No; but our company is not more than one-third in number as compared with the Whitstable Company.

58,746. (*Mr. Lefevre.*) What is the reason that you are not able to produce as many oysters as the Whitstable men do; is the ground not adapted for the cultivation of so many oysters as the Whitstable ground, or is the reason that you have not so many men to work it?—At the present time we have only 150 or 160 working men. That is all we have.

58,747. If your number was as large do you think you would have the same supply as the Whitstable men?—We should be able to obtain more oysters from the flats when they are to be got.

58,748. Do you have a spat on your own ground?—Yes, frequently.

58,749. Is that the case more frequently than upon the Whitstable ground?—I cannot say.

58,750. How long ago is it since you had the last good spat?—About six years ago.

58,751. (*Mr. Caird.*) Was it in the year 1858, when there was a good spat here?—Yes.

58,752. The spat was general in that year?—Yes.

The witness withdrew, and the inquiry was adjourned until the 9th of March, at London.

London, Thursday, 9th March 1865.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, M.P.

EDWARD THOMAS FERNANDEZ, THOMAS SLADE, and JOHN DARK called and examined.

LONDON.

E. T. Fernandez, T. Slade, J. Dark.

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58,753. (*Professor Huxley to Mr. Fernandez.*) Have you been a fisherman?—I have been manager of a fishing company.

58,754–5. You reside, I believe, at Barnstaple?—At Instow, about 2½ miles from Barnstaple.

58,756. And you are the manager of a fishing company there?—I am not the manager of a fishing company at present, but I was the manager of a fishing company on the coast of North Wales.

58,757–8. Are you now connected with fishing in any way?—No, not at the present time.

58,759. We understand that you and Thomas Slade and John Dark are deputed by the fishermen of that locality to represent their interests before this Commission?—Yes, we are.

58,760. By whom are you so deputed?—We were deputed by a public meeting held at Appledore.

58,761. By whom was that public meeting attended?—It was attended by fishermen.

58,762–3. From what places?—We cried it round Bideford and Barnstaple. If you please, I will hand you the report of the proceedings which took place at that meeting. The meeting was called in consequence of Captain Whyte having appointed persons as his own nominees to come up here to represent the fishermen of that district, and the fishermen there did not think that the persons whom he had chosen were the most fitting persons to represent them, so they called a public meeting, and we were chosen.

58,764. (*Mr. Lefevre.*) How many fishermen were there present at that meeting?—About 50.

58,765. Were those who were present substantially such as represented the whole of the fishermen of the district?—Yes, there were some from Bideford, some from Barnstaple, some from Instow, and most of the owners at Appledore.

58,766. Can you tell me how many fishermen there are in that neighbourhood, including Bideford, Barnstaple, Instow, and Appledore?—The fishermen altogether that get their living by fishing at Appledore alone are more than a hundred in number.

58,767. How many are there at Instow?—At Instow there were about 10 or 12.

58,768. Are there many in Bideford itself?—Several.

58,769–71. Can you specify the number?—From Bideford and the other towns in the neighbourhood, taking the whole fishing in the bay together, there are 300 men nearly employed.

58,772. (*Professor Huxley.*) And do you consider those 300 persons were fairly represented by those who attended that meeting?—I do.

58,773. That meeting of which you speak seems to have agreed with respect to the numbers of the boats and the men who are employed in fishing in the neighbourhood of Appledore, and they say that there are in Barnstaple Bay 17 or 18 trawlers, employing three men in each, is that so?—Yes.

58,774. And that there are in the port of Barnstaple 8 to 10 boats employing 40 men; Appledore, 18 boats, 4 men in each; Braunton, 8 boats, 32 men; Bideford, 4 boats, 16 men; Fremington, 2 boats, 8 men. The families of the men average five to a household. We may take that, I presume, as a fair representation of the number of fishermen employed there?—Yes, each number mentioned there was put to the meeting and carried by it. We thought it best to be quite safe, therefore everything that was mooted there was put to it and carried.

58,775. It is further stated that there are 20 boats employed in rod and line fishing?—No, that is a mistake, it is hook and line fishing which was spoken of, not rod and line.

58,776. What is the description of fish which is usually caught in that district?—We catch every description of fish there, except the red mullet.

58,777. Do you catch codfish?—Yes.

58,778. And haddocks?—Yes, and whiting, and bass, and soles.

58,779. Your fishing-ground extends, I suppose, down to the Bristol Channel?—Yes, it extends from Bideford Bay down to Lundy, that is where the trawl-boats go.

58,780. Are flat-fish caught there in considerable abundance?—Yes.

58,781. Is there any herring-fishing there?—Yes, at Clovelly and round the coast; but Dark can speak to that better than I.

58,782. Do you consider that there has been any falling off in the supply of fish there of late years?—No, except from extraneous circumstances, such as bad weather and so on.

58,783. Have you noticed whether there has or not been any falling off in the supply of haddocks?—No, the supply runs generally about the same as that of some years past, but there has been a falling off of fish inside the harbour, but that we attribute solely to the cutting of the sea-weed. I can recollect when the sea-weed there was six or seven feet high, but now there is not a bit left, in some places; they strip it all off the rocks, and the consequence is, that there is no shelter at all for any of the smaller fry, and what is there is carried away in the weed. It ought to be prevented, if possible.

58,784. You are not aware, however, of any falling off in the quantity of haddocks within the last few years?—The haddocks are not so plentiful as other fish there.—(*Dark.*) Haddocks do not come in until Christmas time, and then haddocks and ling come in together, but they do not continue long.

58,785. We will take your view of the matter presently. (*To Mr. Fernandez.*) You have not heard any report of the supply of haddocks having fallen off of late years?—No.

58,786. Is that the case with regard to cod also?—Yes, I think so.

58,787. You spoke just now of the cutting of the sea-weed. Is that a source of complaint by the fishermen?—Yes, and it is most monstrous that the practice should be permitted.

58,788. How long has that custom of cutting the sea-weed been practised?—Ever since Mrs. Cleveland pretended to own the foreshore, which she said she had bought of the Admiralty, but she could not prove her right to it, and consequently everybody who chooses goes and cuts sea-weed there.

58,789. What property does Mrs. Cleveland own?—She owns property on the Instow side. She is lady of the manor, and claims a right to that weed, but lately it has been proved that she has no such right, and everybody goes and takes it. Every bit of weed is stripped off, and there ought to be some measures adopted for preventing it. Slade says that he has seen 50 people gathering it there this winter.

58,790. They cut this sea-weed for manure, I suppose?—(*Slade.*) Yes, it is used for manure, and they cut it, carry it away, and sell it to the farmers. At present there is not a bit of weed there the length of my hand. Formerly, I have been out and got in one afternoon more than 200 saleable prawns, but now if you go out all day you cannot catch 100.

58,791. How many years has that been going on?—It has been going on several years. Mrs. Cleveland claims it, and says she bought it, and Mr. Ffennell, the Inspector of Salmon Fisheries, is urging upon the Commissioners of Woods and Forests the necessity of preventing it, and certainly it ought to be prevented, for as it is the fishermen lose all the fish which used to go there to feed. I believe Slade can bear me out that there never was a year when more fish came into the harbour than there did this year, but we cannot catch them, because the best time for catching fish there is when it is nearly low water, but now, there being no shelter for them, they all go out of the harbour before that time.

58,792. What kind of fish are there in the river?—Bass, and mullet, and soles, and so on.

58,793. How are they caught?—In different ways, with hook and line and nets, both.

58,794. Then what you complain of chiefly is, not that the quantity of bass and mullet has diminished, but that you cannot catch them?—We cannot catch them, because they do not come into the harbour.

58,795. But you do not think that the quantity of fish has diminished in that neighbourhood?—No.

58,796-7. You do not think that the cutting of the sea-weed has diminished the fish in quantity, but that they will not now come into the harbour because there is no shelter for them?—We know that we cannot catch them, and we know that codfish would come there because we used to see them grovelling their noses among the sea-weed seeking for food, but now that they can get none they do not go there. They just come in and look around, and then they go out again.

58,798. One source of complaint then which you have is, that in consequence of the cutting of the sea-weed in Bideford Harbour the fish no longer resort to that harbour to stop in it?—No, only at high water, and then they just come in, look around them, and go out again.

58,799. You are not aware, so far as your experience has gone, that the cutting of the sea-weed diminishes the quantity or supply of fish?—No.

58,800. (*To Mr. Fernandez.*) What other matters of complaint are there in Bideford?—That was the principal cause of complaint before Mr. Whyte took on himself to issue this notice, under the Commissioners of Woods and Forests, we suppose, by which the fishermen were not allowed to go out without they used nets with a mesh of $3\frac{1}{2}$ inches, and that they were not to sell fish unless they were from 12 to 16 inches. The consequence is, that not a fisherman has dared to go out since on this coast, and the men are in a state of starvation. We consider this Act obsolete, that it ought to be repealed, and a new Act framed, so as to allow fishermen to use a fair net.

58,801. Can you place the notice before us?—Yes; it is a notice issued by Mr. Whyte.

58,802. What authority has Mr. Whyte to issue this notice?—He has been appointed by the magistrates, and the fishermen say that they could not have appointed a worse man for them.

58,803. But under whose authority is he appointed?—He is appointed under the authority of the Salmon Fisheries Act as conservator, and the notice has arisen out of his having taken this obsolete Act up, and the men have not had any one to represent the matter for them in its true light.

58,804. He is appointed as conservator of what?—As conservator of the rivers Taw and Torridge, in 1861. He considers he is everything and everybody, and he has taken on himself to issue this notice.

58,805. Does his authority, as conservator of the Taw and Torridge salmon fisheries, extend over the harbour and estuary?—It extends over the harbour as far as the bar, I believe, only as far as the salmon fishery is concerned, but he has taken a great deal more upon himself, and has put a noose round the necks of the men engaged in fishing, the consequence of which is, they have been thrown entirely out of work, and the greatest distress has been occasioned. Here is Slade, who is here now, has a distress in his house at the present moment.

58,806. Where is the notice which Mr. Whyte has put forth?—It is here (*handed to the Commissioner*).

58,807. I had better read it, that it may be recorded:—

The attention of fishermen is called to 1 Geo. 1. cap. 18, which is unrepealed, and still the law of the land.

By sect. 4 it is enacted:—"That if any person or persons "shall use at sea upon the coast of England any trawl net, "drag net, or set net whatsoever, for the catching of any kind "of fish (except herrings, pilchards, sprats, and lavidnian), "which hath any mesh or moke of less size than three inches "and a half at least from knot to knot, &c., all and every such "person or persons so offending shall forfeit all and singular "such net or nets so used contrary to the intent and meaning "hereof, and also for every such offence the sum of 20*l.*; and "in default of payment of the said 20*l.*, or of sufficient distress, "the offender to be imprisoned in like manner during the space "of 12 months."

The moiety of such penalty goes to the informer.

By sect. 7 it is enacted:—"That if any person or persons "shall bring to shore in England, sell, offer, or expose to sale, "or shall exchange for any other goods, matter, or thing, any "unsizeable fish, that is to say, bret, turbot, brill or pearl, "codling, whiting, mullet, bass, plaice, soles or flounders, "which shall not be of the sizes following,—bret or turbot, "16 inches; brill or pearl, 14 inches; codling, 12 inches; "whiting, 6 inches; bass or mullet, 12 inches; sole, 8 inches; "plaice or dab, 8 inches; flounder, 7 inches,—all and every "person so offending shall, for every such offence, forfeit all "and every such unsizeable fish so brought on shore, sold, or "offered or exposed to sale, or exchanged, as aforesaid, to the "poor of the parish or place where such offence shall be com-"mitted, and shall also for every such offence forfeit and pay "the sum of 20*s.*," &c.

The Conservators feel called upon to make this known.

Have any proceedings been taken under this Act?—No; because every man is frightened. They do not dare to go out, knowing that there is no mitigation of the penalty. The fishermen wanted to get a case tried before one of the Superior Courts, but they could not raise the money among themselves, because they did not believe that this Salmon Fisheries Act applied to the harbour, and, moreover, that it was void, from so long a period having lapsed since it had been brought into operation. We thought it was of no force, but it seems that it is of force, because counsel's opinion has been taken upon it.

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58,808. (*Mr. Lefevre.*) You communicated with the Board of Trade on the subject, and they told you that it was still in force, and referred you to our Commission?—The Salmon Fishery Commission was referred to, but it refused to interfere, and handed over the letter to this Commission. There is no doubt whatever that the Act is in force, because the Salmon Fisheries Act of 1861 repeals certain clauses of this Act, which puts all the other clauses in force.

58,809. It is still in force, for although it has been suffered to become obsolete, it has never been repealed. It is quite obsolete in other parts of England?—The only places that we know of where it is in operation are those places in which it has been brought into force by Mr. Whyte.

58,810. What was the mode of fishing practised by the Bideford fishermen which brought them under the operation of this Act?—Mr. Whyte was appointed by the Salmon Conservators, and in his apprehension that, by the use of their ordinary nets, the fishermen might catch unsizeable salmon, he has issued this notice, which really prevents them from fishing altogether.

58,811. But what I want to get at is, what was the mode of fishing by the Bideford fishermen which brought them under the section. Tell me what kind of nets they use?—That is the kind of net they use (*exhibiting a piece of net to the Commissioners*). It is what is called a seiner's net.

58,812. Will you be good enough to describe the seine which is used?—Do you mean the size of the mesh?

58,813. Describe the character of the net generally?—It is a drag net from 60 to 70 feet long and from 18 to 20 feet deep.

58,814. Is that a kind of net which is used for seining in-shore?—Yes, it is for drawing in-shore.

58,815. It is the ordinary seine net?—Yes.

58,816. What is the size of the mesh from knot to knot?—(*Slade.*) We always used to fish with nets the meshes of which were $1\frac{1}{2}$ inches from knot to knot. Those are the nets which he has prohibited, because the Act says that the meshes of the net shall be $3\frac{1}{2}$ inches from knot to knot.

58,817. It will shrink a little, will it not?—(*Mr. Fernandez.*) No, a good twine will always come up again.

58,818. What description of fish would you catch by means of that seine net?—(*Slade.*) We caught bass, and whiting, and mullet, soles, and flat-fish. We used to catch a large quantity of soles.

58,819. That is to say that the fishermen of Bideford do endeavour to get a great many fish besides herrings, pilchards, sprats, and lavidian with their nets?—(*Mr. Fernandez.*) Yes, they have got their living by it.

58,820. And in consequence of the meshes of their nets being less than $3\frac{1}{2}$ inches this section of the Act has come into operation?—Quite so.

58,821. Then the practical effect of this has been, that under the impression that this section of the Act could not or would not be put into operation, the fishermen have been allowed to fish with nets having meshes less than $3\frac{1}{2}$ inches from knot to knot?—Not a man could fish there unless he had such a net.

58,822. How many of these seine nets have been habitually used about the neighbourhood of Bideford?—About 13 or 14, and from Appledore and Instow four or five.

58,823. Were they used frequently,—almost constantly in fact?—They were used almost every night. More particularly for the purpose of catching soles.

58,824. Used you to obtain considerable quantities of soles in that way?—Yes.

58,825. What would be the average yield of one of these nets,—I mean in point of value,—what would be the value of the fish?—During a month or a week do you mean?

58,826. Take it in whatever way you like; give us the average weekly value, if you like?—Well, the value of the yield has lately very much increased in consequence of the railway and the facilities of sending away the fish by steamboats.

58,827. Did you fish there last year, Slade?—(*Slade.*) Yes, the whole of last year. Each man would get about 1*l.* a week.

58,828. So that each net would yield probably 6*l.* per week?—(*Mr. Fernandez.*) Yes, and we do not count that anything very great.

58,829. There would be, speaking roughly, a score of these nets at work?—Yes.

58,830. That is a fair average yield of 20*l.* a week?—Yes.—(*Slade.*) That is in our own harbour, with Barnstaple, Bideford, and Appledore boats.

58,831. So that you may be fairly said to supply the country with 120*l.* worth of fish per week by the use of these nets?—Just so.—(*Mr. Fernandez.*) That is all inside the bar.

58,832. (*Mr. Lefevre.*) From the bar right up to the river?—(*Slade.*) It runs for about 14 miles, your honour, that is the rough calculation.

58,833. (*Professor Huxley.*) Along the Appledore shore there is a great pebbly beach. Do you get any fish there?—(*Mr. Fernandez.*) They get soles directly under there, but there is generally a great sea running there.

58,834-5. How many years has the fishing, by means of these seine nets, being going on?—(*Slade.*) My father was drowned in it, and my grandfather fished there before him.

58,836. At any rate it has been going on for the last three generations?—Yes, I know that.

58,837. Has the number of these nets increased or diminished during the time that you have known the fishery?—They have increased, and they are more valuable than they were in my day at first.

58,838. How many nets do you suppose there were 20 years ago,—I am speaking of these seine nets?—I do not believe there were more than 10 engaged at any time 20 years ago.

58,839. Do you think that within the last 20 years the number of nets has doubled?—Yes, especially since the railroads have been made and the fish could be sent away easily.

58,840. In your opinion, the quantity of fish which is taken per net, has remained about the same, it has neither increased nor diminished?—I see very little difference. I never saw more fish there in my life than I did last summer; but this winter I can say nothing about it, because we could not go out in consequence of this notice.

58,841. Then I presume that there has been no falling off in the quantity of fish which is taken per net during the last 20 years?—No, although at different times of the year it does fall off.

58,842. So that there being twice the number of nets, you get twice the quantity of fish which you used to get?—It is not exactly double the quantity, there might have been 13 or 14, I cannot exactly say.

58,843-4. But speaking generally merely, the quantity of fish taken has increased in proportion with the increase in the number of nets used?—Yes, there was no demand, no outlet for the fish in those days like there is now; there were no steamers and no railroads. In my opinion, and it is the public opinion there, that, in consequence of the sea-weed being cut away, we do not get as much as we ought to have. On one occasion, I counted 50 persons there in boats and craft of all descriptions taking the sea-weed right off. I stopped there, and saw them putting it into the boats, and I saw little fish by hundreds and thousands being taken away with the weed, carted up and sold for manure.

58,845. Where is that practised,—for what distance?—From nearly out to the bar from Middle Ridge buoy, as we call it. (Mr. Fernandez explained to the Commissioners the places from which the sea-weed was taken away as described by Slade, by a reference to the map. He said it was all round by the rocks up to the lighthouse, about a mile and a half.)

58,846. (*Professor Huxley to Slade.*) Mr. Fernandez said that, in his opinion, it rather prevented the

fish being caught than diminished the quantity,—is that so ?—If they carry away the weed, it must diminish the fish, for they will not come in when they can get nothing to eat. If bret and all kinds of small fish are prevented sheltering there by the weed being carried away, it stands to reason that the great fish will not come in there.

58,847. When you are soleing, do you get much small fish ?—We do not, because, from the size of the mesh, we could not take it.

58,848. What size sole will your meshes hold ?—A three-quarters of a pound sole will go through, they push as hard as anything I know of to get out through the mesh.

58,849. Do you believe, that if you used a net with a 3½-inch mesh, you could catch soles ?—No, a sole of 3 lbs. would go out through them.

58,850. Would a net of 3½-inch meshes be of any service whatever ?—None at all.

58,851. Might you as well give up fishing there altogether ?—We might as well knock up fishing altogether, and that is what brings us here. It was agreed at the meeting that it would be fair to all parties to have a smaller mesh.—(*Mr. Fernandez.*) If we could adopt one uniform mesh the men would use the same nets for the ordinary sea fishing which they use for the salmon-fishing, so as to wear out their old nets, for it is a great expense to put by a net which has been in use, and hang it up to rot all the winter while the seine net is in use, and which it would not be required to do if it were possible to have a net of one uniform size. It would be much better if that could be done.—(*Slade.*) At present we are bound to have a seine, and a salmon net.—(*Mr. Fernandez.*) They are obliged now to have two sets of nets, one for each boat.

58,852. Have you noticed whether you get any of the particular kind of salmon called sewin ?—(*Slade.*) No, they are called salmon peal there, but we have not caught any salmon peal for two years. I know where I could use to catch six or seven at a haul, but I do not think that there have been any caught for the last two years.

58,853. Would a 2-inch mesh suit you ? How large a fish would go through that ?—A salmon of 5½ lbs. would go through a 2-inch mesh.

58,854. What mesh are you restricted to by the Salmon Fisheries Act ?—We are restricted to using nets in which the mesh is two inches from knot to knot.

58,855. Two inches from knot to knot diagonally ?—No, on the square.

58,856. And yours is 1½ inches from knot to knot ?—Yes.

58,857. Suppose you were obliged to use a 2-inch mesh instead of 1½, would that suit you ?—That would be rather too large, we think, for our fishing. It is a matter which was put to the meeting.

58,858. Of course, it is easy to understand that a net with a mesh of 3½ inches would be perfectly useless to you, but we should like to know whether, if you were obliged to use a net with a mesh of two inches from knot to knot, the difference between such a net as that and the one you use being only half an inch, you could not catch soles in abundance ?—Mullet of 2½ lbs. would go right through, and soles of a very large size would get through, for they are a fish which presses itself twice as much as what its strength is when it is trying to get through the meshes.

58,859. But you would be able to catch fish with nets the meshes of which were two inches from knot to knot ?—We might, but they would be few and large. (*Mr. Fernandez.*) Great fish of 5 lbs. and more go through the salmon net easily.

58,860. Would that half an inch in the width of the mesh be so important that it would make all the difference between carrying on the fishing profitably or unprofitably ?—(*Slade.*) It would not be at all worth while to continue the fishing, for it would not answer to let soles of 2 and 2½ lbs. go through, and they would go through a net with a mesh of that size like nothing.

58,861. Have you ever tried sea-fishing with salmon nets ?—Yes, we always do.

58,862. I do not mean for salmon but for the other fishing ?—Yes, and we have never caught anything at all.—(*Mr. Fernandez.*) We have hauled in the same place as we have hauled with the other nets, but we have never caught anything.—(*Slade.*) I will leave you to judge, your honour, whether it is likely we could, when fish of 5 lbs. weight go through the salmon meshes.

58,863. Of course, the conservator's object is to prevent your getting salmon ?—But there is an Act in consequence of the operation of which we cannot catch salmon.

58,864. But, I suppose, if a salmon gets into your nets you keep it, you do not throw it into the sea again ?—Yes, I daresay that we should smuggle a little bit, if we could.

58,865. I suppose it not unfrequently happens that you do ?—Why, you see, your honour, the men are afraid, they are too well looked after to enable them to do it.

58,866. It would be too hazardous a process, and so you let them go ?—There is a man who goes alongside to look after them, and the police too are constantly on the look out, so that it would be rather too great a risk to run to attempt to smuggle the salmon.—(*Mr. Fernandez.*) There have been one or two of the men caught. There was one caught this year at Appledore, and fined 5*l.* The punishment is very heavy. Another man was fined 10*l.*, and if they do go out at all with an illegal net they are pretty sure to be fined there, and that is what makes them so afraid of going out after the notice.

58,867. How long has this police-watching been in operation ?—(*Slade.*) There are not policemen on the water, but two men who are employed by the conservators to come alongside and look after us.

58,868. Is that since the new Act passed ?—Yes.

58,869. Do they look very sharp after everything ?—They cannot look any sharper, for they stand alongside the boats to see that you do not put any in, and then the police overhaul the shore boats, so that it is not possible to smuggle anything.

58,870. Have you any knowledge of the extent to which the authority of the conservators extends under the Salmon Fisheries Act,—does it extend to the harbour ?—(*Mr. Fernandez.*) I presume it does to the harbour.

58,871. The grievance that you complain of cannot be touched without repealing the Act relating to the salmon fishery ?—(*Slade.*) If we had nets of what we consider a fit size, they might go out and watch as much as they pleased, but if we catch a salmon in a herring net now, we are obliged to let him go again.

58,872. Have you a copy of the Act with you ?—(*Mr. Fernandez.*) No, I have not, but it prohibits the catching of salmon in such nets.

58,873-4. The Salmon Fisheries Act prevents you from using your nets for catching salmon, but what construction would be put upon having salmon in your nets ? Would the fact of having salmon in your nets be taken to be evidence that you were fishing for salmon ?—Mr. Whyte puts all sorts of constructions upon it, and certainly constructions which cannot be found in any of the clauses of the Act. The men have gone out and thought it all right, because the Act says distinctly, that when salmon are taken in such nets they are to be returned to the water as quickly as possible.

54,875. (*Mr. Lefevre.*) There is no restriction, I suppose, in regard to these nets taking other descriptions of fish ?—(*Slade.*) No, neither is there any restriction with respect to taking salmon in such nets, except that we are bound to return them as quickly as possible to the water.

58,876. (*Professor Huxley.*) Then what is it that makes the conservators, for the purpose of preserving the salmon, interfere with this kind of net ?—(*Mr.*

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Fernandez.) I will tell you. Under the Salmon Fisheries Act, there is no power to raise any means to pay the constabulary and the watchers. It has always been done hitherto by voluntary subscription, but there has been a falling off in the subscription, because the people conceive that they have not received any, or at most very little benefit from the working of the Salmon Fisheries Act, consequently, the subscriptions having fallen off, they cannot afford to keep up the watchmen, and it is thought that they could do without them, if they can succeed in stopping every net from going out except such as salmon could not possibly be caught in.

58,877. Then this is an attempt, according to your theory, to put down all fishing, for the purpose of preserving the salmon fishery?—Yes, and there is another thing which operates very injuriously to us—the Act says that you may fish for salmon from the 2d of February to the last day in August, but the fact is, that we never get the salmon in our harbour till the middle of May, so that we have not four months' fishing, whereas the fish are in the best condition from June to October, and I have even known them to be good up to December, but at present we are not permitted to catch them, when they are more about than they are at any other time.

58,878. Do you know a good deal about the salmon fishery in Bideford Bay?—Yes.

58,879. Can you give us any notion of the yield of the salmon fishery there?—If I had known that you would have wanted that information, I could have given you the figures exactly, because one man buys all the fish that are caught there, all the salmon.

58,880. Perhaps you can give us a rough notion of the yield?—Last year it was a very poor one. We had 18 boats from Appledore, 2 from Bideford, 6 from Braunton, that would make 26, 5 from Barnstaple, and 3 from Instow, altogether there would be 34 nets, but it was a very poor year, and those nets did not yield more than about 25*l.* to 30*l.* worth of fish apiece.—(*Slade.*) One boat caught 70*l.* worth.

58,881. How many weeks were you fishing?—About 15.

58,882. And how much do you say each would get?—We always used, when we began in time, to be able to catch about 200*l.* worth a year each net, but now we are not able to catch more than 30*l.* or 40*l.* worth.

58,883. On account of the time being cut short?—Yes, and our river being so very late for salmon.

58,884. We do not wish to go into the question of salmon fishing, but we wish to know how much, under present circumstances, you consider a fair yield of salmon per net per week?—(*Mr. Fernandez.*) It is a subject about which I have written letters to the "Shipping Gazette." These men did not catch 25*l.* worth of salmon last year in each boat.

58,885. How long were they out?—15 weeks. That 25*l.* was to be shared among six persons.—(*Slade.*) It was a very bad year indeed.

58,886. We do not ask the question because we have anything to do with the salmon fishery, for we have not, but we ask it in order to compare the value of the yield of salmon with that of the yield of other kinds of fish. Which is the more profitable to the fishermen, supposing that they were allowed to do both?—They would sooner cut the salmon-fishing altogether than the smaller fishing, because the small fishing is the main support of the men for the whole winter season.

58,887. What is the value of the fishing with the sea nets, as compared with the value of the fishing with salmon nets?—I would sooner have the small fish catching than the salmon catching.

58,888. Does the salmon catching yield as much as the catching by the other nets?—I could not say but what it might.

58,889. Supposing that the alternative were put to you, would you rather have the salmon-fishing preserved in order that you might have the full advantage of it, or be allowed to fish in your old way of fishing?—We can only get a bit of bread when we are salmon-fishing, and the season is short. The smaller fishing is more valuable to us than the salmon-fishing.

58,890. Is there any other matter of complaint? You have mentioned the size of the mesh and the cutting of the sea-weed; we think you have said sufficient about that?—(*Mr. Fernandez.*) Yes, I think so, but we cannot speak too strongly about it, for it is taken up by all the principal people as well. It is not only an injury to the fishermen but to the harbour itself, because the sea runs in much heavier than it used to, and there was a much greater depth and calmer water in the harbour than there is now.

58,891. (*Mr. Lefevre.*) How many men are there employed in cutting this sea-weed?—It is all done in a very short time; they soon strip it off.

58,892. Is it used for manure?—(*Slade.*) Yes, it is run up the river in boats.—(*Mr. Fernandez.*) I have bought some myself, doing what everybody does. If all were restrained by Mrs. Cleveland or her tenants from doing it, the fishermen would not, but while everybody else cuts it, they do not see why they are not to earn an honest penny by doing it.

58,893. How long has this practice of cutting sea-weed existed?—(*Slade.*) About 15 years.—(*Mr. Fernandez.*) But it has been taken away more this year because Mrs. Cleveland took the matter up and other persons disputed her title.

58,894. Is it only taken at one period of the year?—Yes, that is all.

58,895. It is taken, I suppose, for manure for potatoes?—Yes, that is what it is taken for.

58,896. Your complaint is, that the fish do not come into the harbour so much as they did formerly, in consequence of the cutting of this sea-weed?—Yes, I have seen, I should think, hundreds of thousands of small fish of various descriptions taken up and thrown with the sea-weed into the boats, and they have been afterwards carted away into the country, and spread on the ground for manure.—(*Slade.*) Everything is cut away clean from the rock altogether.

58,897. (*Professor Huxley.*) Is there any other matter that you would like to bring before us?—The sea-weed is the main article,—that, and the size of the mesh.

58,898. (*Mr. Lefevre.*) Is the mesh which you have shown us the smallest that is used?—No, there are some people in the harbour that have got what we call wading nets, which are much smaller in the mesh.

58,899. Are there a good many of them used?—Yes, a good many. There are men at Instow, I think, who use them.

58,900. In what proportion are such nets used below the size you have mentioned?—Most of the Barnstaple men have them.

58,901. What is the average size of the meshes of those nets?—I believe some of them run down to a quarter of an inch, they range between that and three-quarters.

58,902. What size have you seen them, Dark?—(*Dark.*) I have seen them three-quarters.—(*Mr. Fernandez.*) I have stated in evidence that the average size of the nets used is 1½ inches from knot to knot, but, in my opinion, most of the Appledore men have nets with smaller meshes. I believe they have nets that will take fish of one pound weight.

58,903. (*Mr. Lefevre.*) Supposing that meshes the size you mention, 1½-inch meshes, were legalized, and it were made illegal to use smaller meshes, would it put a stop to a great many?—I should think it would stop the Barnstaple nets, most of them.

58,904. How many would it stop in the river, do you think?—Perhaps seven or eight.

58,905. I suppose we may take it that those nets take a very considerable number of the smaller fish in the river?—Yes.

58,906. Small soles and mullet, I suppose?—Yes.

58,907. Do they ever take any samlets?—I have seen a few caught, but very few.—(*Slade.*) They

wade in the river with them. I have myself caught a ton and a half of bass and mullet with such nets.

58,908. Where you are using a net of that kind 60 fathoms long, I suppose you would catch almost everything that was in the river?—Yes, no doubt.

58,909. (*Professor Huxley.*) Then would you not take a good many samlets?—No, the water would be too shallow for them, and if we did, we should be bound to take them out of the nets as quickly as possible, and throw them into the river again.—(*Mr. Fernandez.*) I have never seen any taken myself.

58,910. (*Mr. Lefevre.*) The men go out with the seines at night, I suppose?—(*Slade.*) Yes, that is the only time to catch soles.

58,911. If you were restricted from fishing during the night, it would be a considerable disadvantage to you?—Yes, the fishing that takes place in the daytime is considered very little good.

58,912. Do the men of whom you have spoken, the watchmen, go out at night to see that no salmon are caught?—Yes.

58,913. How many of them are employed?—Sometimes three or four. There are always two regularly employed. Last winter, when we have not been using these nets, one boat has been thought sufficient.

58,914. The winter before were there any watchers?—Yes, four or five.

58,915. Then the conservators of the river must have gone to considerable expense to ensure that the salmon should not be taken?—Yes.

58,916. Are the men employed during the open salmon-fishing season in fishing for salmon?—Yes.

58,917. They are all so employed?—Yes, they are all employed in that.

58,918. It is only during the close salmon time, then, that they are employed in fishing for these smaller fish?—(*Slade.*) Yes, and they use the smaller seines to get the smaller fish.

58,919. At night?—Yes, we go out at night.

58,920. Besides these seine boats, are there any trawling boats belonging to Bideford?—There are four or five.—(*Dark.*) Three at Bideford and one at Appledore.

58,921. Do they fish outside the bar?—(*Mr. Fernandez.*) Yes, but John Dark will speak more particularly in reference to the trawlers. There is another point that was mentioned at the meeting to which I have referred, and that is, that if the new Act was to be in operation, the fishermen thought it was but justice that they should not be treated in the same way as those engaged in the salmon fishery, that is, that if they were obliged to have new nets they should not be at the loss of the old ones.

58,921*a*. You think that the fishermen ought to be compensated for the loss of their old nets?—Yes, or else they ought to be allowed to use them till they are worn out. I may tell you that those which have been used in the sea-fishing will not last much more than one season.

58,922. It was, you say, the general opinion of the fishermen that there should be a legal size for the mesh, and that it should be $1\frac{1}{2}$ inches?—Yes, there is no doubt about that.

58,923. Is there any shrimping in this river?—There used to be, but it is mostly all gone since the sea-weed has been cut away. The hook and line fishermen were represented at the meeting, and one of them said, that up to the day when they commenced cutting the weed he used to catch 20 lbs. to 30 lbs. of fish a day with hook and line, but that directly the weed was cut and cleared up, he could not catch a couple of pounds.

58,924. (*Professor Huxley to Dark.*) Where is your residence?—I live at Bideford, and trawl for soles.

58,925. Have you ever been in the herring fishery?—Yes; line-fishing was what I was first brought up in, but for the last 15 years I have been at Bideford trawling in the bay constantly.

58,926. We have had it represented to us that there is a considerable number of trawlers working upon the south shore of the Bristol Channel, and that there are 17 or 18 in Barnstaple Bay?—About 18 properly. There are two or three from Appledore, four or five from Ilfracombe, four from over the bar, and six or seven from other places. Then there are pilot boats, which come in and trawl among us when they are looking out for vessels in the Channel, so that we generally muster in the bay about 20, 17 or 18 of which are regular trawlers.

58,927. Which is the trawling ground of these trawlers?—It is a very small ground, and very rough.

58,928. Do they work along the shore, or how far off the south shore do they work?—They lie rather on towards the north shore.

58,929. Quite in the bay?—Yes.—(*Mr. Fernandez.*) They are all in the bay.

58,930. You are all inside Lundy Island?—(*Dark.*) Yes, a great many miles.

58,931. You do not venture down to the Tenby trawlers' ground?—I have been out there.

58,932. But you do not work with them?—No; we are a great many miles apart.

58,933. Then you work through Barnstaple Bay, having your trawling ground to the southward?—We cannot go to the south, that would be Tenby men.

58,934. (*Mr. Lefevre.*) There is no ground south of Annisland Point?—No; there is nothing but a rough bottom.

58,935. How far north do you go?—Six or seven miles off land; there is no good ground after that, but rocks and rough bottom, and beyond that there is a very strong tide running there, which keeps the bottom quite clean.

58,936. (*Professor Huxley.*) You have not above seven miles to trawl?—We cannot have our trawl down more than half an hour, the wind hauls us up.

58,937. Is not the ground seven or eight miles across?—But we could not sail so long a distance as that; we could not drive a trawl beyond five miles.

58,938. How many miles do you actually trawl when you are out all together?—Not more than a mile or a mile and a half, and in some places not more than a quarter of a mile.

58,939. What size trawlers do you employ? What is their tonnage? You employ three men in one?—Yes; the boats measure six or seven tons.

58,940. Are they decked boats?—Yes, all decked boats.

58,941. What is the length of their beam?—About 33 feet; $32\frac{1}{2}$, that is the length of my beam.

58,942. Is that the general size for the trawlers?—No; there are not more than one or two of them of that size.

58,943. What would be the smallest size?—They may run down to 23 or 24 feet beam.

58,944. And they are all decked boats?—Yes.

58,945. Cutter rigged?—Yes, fore and aft.

58,946. How many years has trawling been going on there?—Ever since I was a boy; 35 years and more. There is a man living now who made the first trawl that was ever made in the bay, old John Whitefield.

58,947. Has the number of trawlers increased or diminished within the last few years?—They have increased within the last two or three years, but some of the boats have been sold lately.

58,948. At what place did that sale take place,—from what port?—At Ilfracombe; one of the boats has just been sold.

58,949. For what reason was it that the owner sold his boat?—Fish are very scarce in the bay; the water is shallow, and if we get a ground sea on, we can never get anything like good trawl-fishing. We cannot trawl in the winter for weeks together, and even in the summer we cannot trawl if the sea is at all disturbed. The water in the bay is so shallow, that when there is a sea on it is disturbed right to the bottom.

58,950. Apart from bad weather, has the quantity

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of fish in the bay remained the same, or has it diminished?—There were plenty of fish there last summer. I have trawled in the bay for 20 years, and they were as plentiful then as I have ever seen. We had finer weather, too, than what we have had for many years.

58,951. You think that, with reasonably fine weather, you could get as many now as ever you could?—Yes, as much as was ever known to be taken.—(*Mr. Fernandez.*) There was a man called Brown, who stated at the meeting that they made 5*l.*, 6*l.*, or 7*l.* a week.

58,952. Do you know Clovelly well?—(*Dark.*) Yes, very well.

58,953. How many years have you fished there?—Twenty years.

58,954. How many trawlers fished from Clovelly when you first knew it?—Five or six boats altogether.

58,955. How many 14 or 15 years ago?—There might have been then six or seven boats, of which two or three, perhaps, would be trawlers.

58,956. How many are there now?—There are eight at present.

58,957. Then has the number remained about the same all the time that you have known Clovelly?—It has rather increased than otherwise, but not much. They have not gone less, certainly.

58,958. I ask you the question particularly, because it has been stated to us that, 14 or 15 years ago, there were as many as 17 trawlers there?—(*Slade.*) That is in the whole bay. They all trawl off Clovelly; the trawling ground is just off Clovelly for nearly all of them, and the Clovelly men have got mixed up with the others.—(*Dark.*) You may depend upon it there were never more than eight or nine from Clovelly itself.

58,959. Do you think the number of trawlers in any one of the ports has increased or diminished?—Within the last 20 years they have increased.

58,960. Do your trawlers think that the seine men working in-shore do them any harm?—Not a bit, that I ever heard.

58,961. You never heard any grumbling by the Bideford men, that the seiners were destroying the fish?—Never.

58,962. You trawl through the middle of Barnstaple Bay, and get all you can there, and they work their seine in-shore?—Yes, they are in the harbour, and we are out in the bay.

58,963. (*Mr. Lefevre.*) They do not seine outside the bay?—No, in the harbour.—(*Mr. Fernandez.*) They go out just beyond Middle Ridge buoy.

58,964. Is there any seining beyond the bay?—(*Dark.*) No, the boats could not work there.

58,965. (*Professor Huxley.*) In working with your trawls, do you ever get up any considerable quantity of small unsaleable fish?—No, never.

58,966. Do you ever get up any fish spawn?—Yes, fish spawn, what we term squid. I have seen it all alive.

58,967. I mean the eggs of fish?—No; I never saw any fishermen who could describe the spawn. I think the water is too shallow and too much disturbed in the bay for any to lie there. I think the fish run out into deeper water to spawn,—perhaps 40 fathoms deep,—where the currents do not affect it.

58,968. At Clovelly, there is or used to be a great herring fishery?—Yes.

58,969. Is there much now?—Not so much as there used to be; we have had such a succession of rough weather there.

58,970. Do you think that the quantity of fish there has fallen off?—No, but the herring-fishing has not been so good since we have had such bad weather. Last season it was better again.

58,971. How many herring-boats are there now in the port of Clovelly?—I cannot say the number exactly. Some 10 or 15 years ago there were 70 or 80, but last year not above 30 or 40 put their nets in.

58,972. Is that because the supply of herrings has fallen off, or is it because of the bad weather?—The fish were plenty enough, but in bad weather they do not come into the bay. We have not had a good shoal of herrings in the bay for many years back till the last year, solely on account of the bad weather.

58,973. Clovelly is exceedingly exposed, is it not?—Yes, it is very shallow water there, with a ground sea. That has everything to do with fishing, because if there is a heavy ground sea we can get no fish whatever, but if we get fine weather then we can get fish of all sorts there.

58,974. The Clovelly fishermen, then, do not think that the quantity of fish has fallen off at Clovelly?—In my opinion, the fish there were more plentiful last year than ever they were before. We had a better shoal of whiting there than we have had for 13 years. The fish do not come into the bay as often as they used to, and so far they used to be more plentiful, but last summer and this winter they have been more plentiful than I have known them for several years.

58,975. Do you know Minehead?—Yes.

58,976. There used to be a considerable fishing and curing establishment there?—Yes, there used to be at the time when there was a good supply there.

58,977. How long ago is it since they have had a good supply?—Never since we have, because we always fish by them. All the fish we catch are going to the westward, and we fish at night right across their road.

58,978. Can you tell me how many years it is since they had a good supply?—They have never had a good supply of fish since the time when ours fell off.

58,979. How long ago is that?—Well, I might say 8 or ten years ago.

58,980. Then there has been no fishing at Minehead for the last 10 years?—No, not so much as there used to be.

58,981. Has there been any fishing there at all?—Oh, yes, there is fishing there, but the fish are not so plentiful as they used to be.

58,982. What is your great herring season at Clovelly?—We used to begin in August and to get what are called the summer shoals in the latter part of the summer.

58,983. How many years ago is that?—About 10 or 11 years ago.

58,984. Would they be in good season then? When would they become full?—They would become full of roe about Christmas.

58,985. As late as that?—Yes.

58,986. That would be then when you got the autumn fishing?—Yes.

58,987. But your general fishing now at Clovelly is in January or February?—Yes, in January and February. Long ago, we used to get the best fish in November. They were not quite so full after November as they were before.

58,988. What time do you commonly get fish full now at Clovelly?—About December.

58,989-90. But your regular fishing some years ago used to be in January, used it not?—No, we get no herring-fishing in January, all the fish then have shot their spawn and they get quite poor. We may get a little line-fishing. On towards Plymouth and the south side, that is the best time.

58,991. You never had a January fishing then?—No, it is so very rough then, and all the fish go out of the bay when the weather is rough. You may say that in January and February all the fish that we catch are caught by the hook and line, but for the most part the weather is so rough that the boats cannot go out.

58,992. When did you get your herring-fishing last year?—In September, October, and November. After that there were very few caught.—(*Mr. Fernandez.*) I think it was very bad during the last season, and the Clovelly people themselves had to buy fish.

58,993. Do you cure herrings at Clovelly?—(*Dark.*)

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Yes, for if the fishermen cannot salt a few herrings, it is as bad for them as it is for country people when they cannot put a pig into the salting tub for the winter.

58,994. Have you noticed any difference in the quality of the fish of late years?—No, a better shoal of fish or better sized fish never came in than came last year.

58,995. Have you much difficulty in sending away your fish from Clovelly?—No, but since Mr. Whyte stopped our fishing we have had no fish to send away.

58,996. What is the nearest railway station from Clovelly?—13 miles; it is at Bideford.

58,997. Have you found the railway station at Bideford of great use to you, in enabling you to send away your fish?—We have none to send away.

58,998. No herrings?—No, none come from there to London, and no other fish except salmon, and not many of them. You will find on inquiring that we have had rougher weather for seven or eight years than we had last summer, and more ground sea in our bay all the time I have worked at the fishing.

58,999. Then you ascribe the want of success in fishing to that, and not to any falling off in the quantity of fish?—The fish are as good as ever, and the fish are as plenty as ever, but as soon as the bad weather sets in they are gone, and all the fishing is over for the season.

59,000. (*Mr. Lefevre.*) What do you do with the fish which you catch by trawl-fishing?—They are mostly sold in Barnstaple and the neighbourhood.

59,001. Then it goes by the train?—Oh, yes, a long way by train.

59,002. What size mesh do you use?—I have the size with me, because here are pieces which I have cut off from my own trawl nets (*producing it*). They are of different sizes, but I have brought the largest and the smallest.

59,003. (*Professor Huxley, having measured them.*) The largest size is two inches from knot to knot, and the smallest will be 1¼ inch?—I think you will find that the general average is about two inches.

59,004. (*Mr. Lefevre.*) Did Captain Whyte threaten proceedings against the trawlers?—He did.

59,005. He considered that the trawlers' nets came within the restrictions of the Act as well as those of the seiners?—Some of the nets were sent to him, and at first he said that the meshes were not too small, because he thought they might be measured the short way, but afterwards he said that from knot to knot was only half the mesh.

59,006. (*Professor Huxley.*) From knot to knot is the square way?—Yes; but he would have it, at first, that it was the other way.

59,007. (*Mr. Lefevre.*) Did Captain Whyte threaten you with legal proceedings if you did not use a net three and a half inches the square way?—No; he said that he would write to your Honours about it.

59,008. Did he threaten you with legal proceedings if you continued to use nets with the kind of mesh which you have shown to us?—Yes.

59,009. And, in consequence of what he said about your nets, you have not been out since?—No; and the consequence is, that I have had to go about as I could, to pick up a living.

59,010. Have any of the trawlers been out since?—No, not any; because they are all afraid of this old Act being brought into operation. He threatened to fine us 20*l.* apiece, and there is no mitigation, so we should be sent to prison.

59,011. Then there has been no trawling at all in the bay this winter?—Not since this notice was issued, I believe.

59,012. And has there been much distress in consequence among the trawl fishermen?—Very great distress, because, if men are not allowed to work, and have nothing but what they work for, they must feel distress.

59,013. Are the trawl fishermen ever engaged in seining?—Sometimes they are employed in seining about Clovelly, but they never own seines.

59,014. What do they do at other times?—They are engaged in the herring-fishing, spilliard-fishing, and hook and line fishing.

59,015. You are an owner, I believe, yourself?—Yes, I own a boat called the "Wesleyana."

59,016. How do you pay the men?—They are paid by shares. The trawl gets a share, and each man a share. There are five shares.

59,017. Do the Tenby men ever come over your ground to trawl?—Very seldom.

59,018. You attended the meeting at Appledore yourself, and were deputed by that meeting, with the other witnesses, to give evidence before us, for the purpose of representing them?—Yes.

59,019. Have you any reason to believe that any number of fishermen engaged in seining or in the salmon-fishing approve of this proceeding of Captain Whyte?—I do not think that anyone agrees with it, neither the men themselves, nor the inhabitants of the towns and villages, because they have felt the loss of the fishing very much indeed.

59,020. Has there been any public meeting called by the conservators of the rivers Taw and Torridge, with reference to what sized meshes ought to be allowed to be used?—No, sir. I have been up to the magistrates, at the Townhall of Bideford, and they recommended me to write to the Deep Sea Fishery Commissioners. I did so, and had an answer from you.

59,021. (*Mr. Lefevre.*) In consequence of the meeting at Appledore you wrote a letter to the Commissioners?—Yes, I would have sent the letter to the Commissioners before, but I heard that Captain Whyte was appointing men to attend here.

59,021*a*. Your letter is as follows:—

Bideford, March 4th, 1865.

To the Honourable Sea Fishery Commissioners.

Honourable Sirs,—In October 1864, I transmitted to your Honours one of two printed bills which had been handed me by Captain Whyte, one of the Conservators of River Fisheries for the Taw and Torridge Rivers (Bideford being on the Torridge).

The printed bill recited an almost obsolete Act passed in the reign of 1st of Geo. 1., cap. 18, which is unrepealed and still the law of the land, and at the same time I craved your advice for my future guidance.

I am the owner of a small fishing craft, which I have used in Bideford Bay, and have been a fisherman for the last 20 years, using a trawl net with meshes from 3 to 4½ inches in length for catching soles, turbot, plaice, dabs, hake, gurnet, and abundance of thornback, and I was threatened by the said Conservator, that if I acted contrary to the provisions therein recited that he would prosecute me for the penalty of 20*l.*, or the alternative of 12 months' imprisonment. The intimidation, therefore, has had the effect of frightening your complrinant from pursuing his humble calling of fishing in the bay ever since, to the great privation of myself and family. I received an answer from your Honourable Board, dated the 15th of October last, wherein I was informed "that in the course of the "winter the Royal Commissioners will hold an inquiry at "Bideford (of which due notice would be given), for the pur-"pose of taking evidence on the subject of the Sea Fisheries in "that neighbourhood, and of hearing any complaint that may "be made in reference to them."

I omit the next passage. Your letter then goes on to say, that a meeting was held in consequence at Appledore, and proceeds as follows:—

The meeting was highly pleased to hear my correspondence read by the Chairman, and will anxiously await your reply to this letter, as, I humbly trust you will inform me the exact meaning of the Act 1st Geo. 1., cap. 18, with respect to the three inches and half from knot to knot, the knotty question which has laid up so many fishing crafts and nets, for so many months past; viz., "Wesleyana" (my vessel), "William and Jane," Prance, and "Gem," Prance, all of Bideford, and "Three Friends," of Appledore, principally belonging to their several masters. There has also been laid up 12 skiffs, with 36 men, at Ilfracombe and Clovelly, all through, I presume, the river Conservator's circulating the said handbill and misinterpreting the meaning of the dimensions of the mesh for trawling purposes, which he insisted that three inches and a half from knot to knot would be seven inches in length, although I carried a piece of net to his house at Instow and showed him; but the real meaning, as explained by old John Whitefield, of Clovelly, who knit the first trawl net ever known to be cast in Bideford Bay, is from

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knot to knot, the whole mesh, whilst the Conservator's mesh would let a 20-foot shark pass through it as clean as a whistle.

Thus, the poor fishermen's enemy has been condemning lawful nets, as are used at Plymouth and Bideford, of his own accord, without having, I suppose, been appointed Conservator of sea fisheries; and it would grieve your Honours to know the lamentation and starvation caused by an uncalled-for ignorant enthusiast, among so many fishermen, their wives and families; and who ought to be prosecuted for the injuries done to so many industrious men and deserving families.

59,022. The passages I have read from the letter represent your feeling and wishes on the subject?—I believe, if you go to Bideford Bay, you will find that every man interested in the fishery there will hold up his hand in support of what I have stated in the letter. At present, all are fearing the prospect of starvation and distress, both those who buy the fish and those who are employed in catching them.

The witnesses withdrew, and the inquiry was adjourned until the 11th March, at Brightlingsea.

Brightlingsea, Essex, Saturday, 11th March 1865.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

BRIGHTLINGSEA.

H. S. Goody.

11 March 1865.

HENRY SIDNEY GOODY called and examined.

59,023. (*Mr. Lefevre.*) You are clerk to the Corporation of Colchester?—No, I am not, but I am clerk to the Colne Fisheries Company.

59,024. The oyster grounds in the Colne have been vested in the Corporation of Colchester from time immemorial?—The soil has.

59,025. By virtue of a grant which goes back as far, I suppose, as Magna Charta?—It goes back a very long way, but I cannot say how far back. I think the original grants have been lost in some cases, but there is no doubt as to the Corporation being entitled to the soil of the river.

59,026. In addition to the Corporation, is there not a body called the Colne Fisheries Company?—Yes.

59,027. They were established here, I believe, by an Act of Parliament passed in the reign of George II.?—No; they were noticed by that Act, and, if anything, they were confirmed by it.

59,028. In 1827 they made rules for the purpose of carrying on the fisheries?—Yes, but they had rules previously. Those were the last rules that were made.

59,029. By virtue of those rules and of the Act of Parliament, the right of fishing in the Colne is limited to Colchester and eight parishes adjoining the river Colne?—No, I should hardly say that the right is given by that Act. The right goes far beyond that in date.

59,030. At all events, that Act of Parliament confirms the ancient charter?—I would rather not enter into a discussion with regard to the legal question.

59,031. We have no desire to enter into the questions which are in litigation between the Corporation of Colchester and the fishermen, but I presume we may take it as a fact that there are disputes between the Corporation and the dredgermen, as to the right of licensing the fishermen—is that not so?—Yes, there are disputes as to the question of licensing.

59,032. Can you tell us what number of men have been in the habit of receiving licences from the Corporation?—The number has varied from time to time. At present it is about 400.

59,033. Are those licences limited to men inhabiting Colchester and the eight parishes adjoining the river Colne?—Yes.

59,034. And those men who have been apprenticed to the work?—Yes.

59,035. For some time past there has been a sum of two guineas charged by the Corporation for each of those licences?—Yes.

59,036. Has it ever been the practice to grant licences to the public generally?—No.

59,037. It has not been the practice to grant licences to people living beyond Colchester and the eight parishes adjoining the river?—No, not to my knowledge.

59,038. Can you tell us what is the area of ground over which the right of the Corporation extends?—No, I only know that it is the river Colne.

59,039. From the mouth of the river Colne?—Yes, up to Westness.

59,040. Has the number of licences granted by the Corporation been increasing of late years?—Yes, the number has been gradually increasing.

59,041. Can you give us the comparative numbers,—say at the present time and 20 years ago?—I should imagine that during that time they have probably increased about 100. I am speaking, however, without anything like accurate data, but I think the increase would have been from 100 to 150.

59,042. I see that the rules which we have here before us, and which were set out in 1827, have not been altered since?—No.

59,043–6. The fisheries are now worked under those rules?—Yes.

59,047. How are the fisheries managed?—The fisheries have been managed by a jury of management.

59,048. How are the jurymen appointed?—They are appointed in the Admiralty Court.

59,049. By the dredgermen themselves?—They are appointed by a return of names, from which a number is selected by ballot.

59,050. And dredging is prohibited from the 1st of August until such a day as is appointed by the foreman and jury?—I daresay that is the fact; whatever is down there forms the rules in existence.

59,051. Is there a day fixed every year for the close of the fishery?—There is no certainty with regard to the day on which the fishery shall be closed, but there is a deed of arrangement entered into between the dredgermen and the Corporation.

59,052. Does the date at which the fishery closes vary from time to time?—Yes.

59,053. There are also other rules to prevent oysters below a certain size—$2\frac{1}{4}$ inches—from being taken. Is that not so?—Whatever it says there, is no doubt correct.

59,054. It says here $2\frac{1}{4}$ inches; oysters below $2\frac{1}{4}$ inches are not to be taken?—No.

59,055. There is also another rule to prevent culsh or spat from being carried away from the ground?—Yes.

59,056. And there is another rule, to the effect that all five-fingers and mussels caught in the water shall be destroyed?—Yes, these rules were made for the general protection of the fishery.

59,057. Is there an officer appointed by the Corporation or dredgermen to see that the rules are carried out?—There is a water bailiff appointed by the Corporation.

59,058. Has the water bailiff the power of seeing that the rules are properly carried out?—His powers, whatever they are, are mentioned there.

59,059. Are there any watchers appointed besides

the water bailiff?—There are watchers appointed, but they are appointed by the Company themselves.

59,060. Are there any statistics kept with regard to the quantity of oysters taken from the river?—There are accounts kept, I believe.

59,061. Can you supply us with them?—I have not got them, and I do not know if my knowledge on the subject would be sufficient to enable me to give you any information on that point. The Company, I believe, have books showing a debtor and creditor account, from which statistics might be obtained.

59,062. The rules give the dredgermen certain powers of borrowing money for the purpose of laying down spat?—Yes.

59,063. Have those powers been exercised?—Yes.

59,064. Do they lay down spat every year?—I hardly understand what laying down spat is.

59,065. Have they raised money under these rules?—Yes.

59,066. Do they do so every year?—No.

59,067. When was the last time that they raised money?—What I mean to say is, that they may raise money every year by overdrawing their banker's account. In one sense, that is, raising money, and they do that every year, I believe.

59,068. Then do they not carry on operations on the oyster ground as a company?—Yes, they carry on operations there as a company; but when you speak about depositing spat every year, I scarcely understand what you mean. That is a thing which we wish we could deposit.

59,069. What I mean is this,—do you buy spat every year, for the purpose of laying down on your oyster ground?—The oyster spat is a thing we could not buy. The spat itself is very small, but it goes from spat to brood.

59,070. Then take it as brood. Do you buy brood?—No, not every year. If the season does not happen to go against us, the oysters in the river will provide spat themselves.

59,071. But, in a season when there is not much brood in the river itself, do you buy it from other places, and lay it down?—No.

59,072. Have you done so sometimes?—They have bought some at times, but it has been a question whether, on the whole, it has proved profitable. I think it has not proved profitable.

59,073. How is the money repaid?—It is repaid when the river turns out favourable; that is to say, when the season improves.

59,074. How is the money raised,—is it done at the dredger's individual responsibility?—No.

59,075. Do they each contribute towards the whole?—No.

59,076. Then how is it raised?—By a certain number of them putting their names to a security.

59,077. Supposing that they borrow from their bankers 3,000*l.* or 4,000*l.*, how is the money recovered from the dredgermen, in order to repay the bankers?—When the money is received from the oysters, it is repaid.

59,078. Does each of the dredgermen contribute in proportion?—He does not do it so as to place himself under a responsibility.

59,079. Is there no legal means of raising money for the purpose of paying off advances?—Only as the money comes into the hands of the fishers.

59,080. Does the money received for licences go towards repaying advances made to the Company?—The money paid for licences goes to the Corporation.

59,081. Does each dredgerman have what he dredges up, for his own advantage?—No.

59,082. Does it go into a common stock?—It goes to the Company. The fisheries are under the management of a company, and every one participates equally, but every man does not dredge for himself, or take away oysters for himself.

59,083. The take of oysters is put into a common stock?—Yes.

59,084. And the profits are divided amongst the dredgermen?—Yes, they all share equally. But, in addition to the dredgermen, there are widows and others who have an interest in the profits.

59,085. (*Mr. Caird.*) As I understand, it is a common purse?—I do not know what you mean by that.

59,086. You said that they overdraw their banking account for the purpose of obtaining money to purchase brood. That is done, I suppose, on the general credit of the whole incorporated body of dredgers?—It is paid out of the proceeds, whenever there is a return.

59,087. Then there is a common purse, both for the expenditure and the receipts, and I presume that the whole of the dredgermen participate in the profits realized?—Yes.

59,088. Are the profits equally divided amongst the dredgermen?—Yes, equally.

59,089. Do you sell brood at all here?—No, never.

59,090. Does the Corporation of Colchester, in return for the licences, do anything in the way of preserving the oyster ground here, and of cultivating the oyster ground?—No, nothing.

59,091. They make no outlay whatever for the cultivation of oysters?—No.

59,092. Has the quantity of oysters increased on the oyster grounds in the Colne within the last ten years?—That is a matter which from year to year must vary. Some years there may probably be a large supply on the oyster ground, and before ten years shall have elapsed the supply will be greatly diminished. That, for instance, is the case at the present time.

59,093-4. But, taking the average of years, are you able to say whether the general supply of oysters to the public from the river Colne has been increasing, stationary, or decreasing? Can you say what has been the sale during the last ten years?—The supply has decreased for the last six years. But this is a question which the water bailiff would be able to answer better than myself.

The witness withdrew.

EDWARD STAMMERS called and examined.

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59,095. (*Mr. Caird.*) You are the water bailiff?—Yes.

59,096. How long have you been water bailiff?—I have been water bailiff 24 years.

59,097. Can you tell us whether the quantity of oysters taken here and supplied to the general market has increased in the period during which you have been water bailiff?—It has fluctuated. They have been decreasing during the last ten years.

59,098. Decreasing?—Yes, on account of the want of spat. We have had none for the last six years.

59,099. How has it been during 20 years? Can you give an average of the last 20 years without confining yourself to good or bad years? Would the general average supply of oysters from the oyster ground during that period show an increase or diminution?—In 1842 we were just about the same as we are now; we had none whatever.

59,100. You had no spat?—No, we had no spat.

59,101. That was in 1842?—Yes.

59,102. Can you tell us what the supply was in 1843?—I cannot say, my memory will not serve me.

59,103. What was it in 1852?—I cannot say, I have not kept any account of these matters, but I know that the supply has been decreasing for the last six years.

59,104. When was the last good spat year?—Six years ago.

59,105. In 1858?—Yes.

59,106. Had you a very good yield of oysters in 1858?—We had a large quantity of spat in that year.

59,107. What was the result of that?—The result

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has been that we have been selling the remains of that spat ever since, and we are selling it now.

59,108. Had you a good oyster season in the year following 1858—the year after that good spat?—I cannot say.

59,109. When did the advantage of the large spat in 1858 begin to manifest itself in an increased quantity of oysters supplied to the market?—About two years ago, and this year and last year also; we have since that time been receiving the profits of it.

59,110. Have the oyster grounds here, excluding this year, been yielding largely, as compared with the yield in previous years?—No, they have been decreasing in the quantity of oysters for the last two years.

59,111. Has the number of men engaged in the oyster fisheries—the dredgermen—increased or diminished since you became water bailiff?—It has increased very largely since I have been water bailiff. When I was first appointed there were only 280 dredgermen, and now there are 407; that was the number of licensed dredgermen last February.

59,112. Have they increased equally in their prosperity?—Are they making as good a trade of it as they did when you began your work as water bailiff?—I think the oyster trade is generally better now, on account of the higher prices which the oysters fetch.

59,113. But not on account of there being an increased quantity?—No, the quantity has fallen off.

59,114. Do you think that the river has been more carefully cultivated for oysters of recent years?—Yes, the ground of recent years has been well managed and well cultivated in every respect.

59,115. Have you any artificial system of cultivation here?—No, we are not so foolish as to attempt that.

59,116. What care do you employ in endeavouring to increase the yield of oysters?—We work the river and keep it clear by dredging.

59,117. Do you not lay down brood in certain places?—No, we have not bought any brood for 10 or 12 years.

59,118. Have you sold any?—No, we never sell brood here, in point of fact we are not allowed to do so, as we are obliged to keep up a certain size, which is two and a quarter inches in diameter. Any oysters below that size are not allowed to be taken at all.

59,119. Then you do not allow any fishing for brood in the river at all, or permit any to be taken from the river?—We have a preserve down the river, where we lay down the brood. We take them from one place and another and lay them down at Pipelet.

59,120. Is there any good spat ground outside the river, on the banks in the neighbourhood?—Yes, there is a very good spat ground outside the river.

59,121. Do you not take the brood from that ground and lay it down in the river?—Sometimes we have bought some, but not lately. People who have their private grounds buy it.

59,122. Has there been none to buy of late?—No.

59,123. Could you not have obtained it, even if you had had a desire to buy it?—No, we could only have got very little.

59,124. Is there plenty of room in the river to lay it down, if you were able to get it?—Yes, there is plenty of room in the river.

59,125. Then you might have increased the quantity of oysters materially, if you could have obtained brood for the purpose of laying down?—No, we should have done no good with it.

59,126. Would it not have been of advantage if you could have obtained the brood?—No, we could not get it; there was none to be had.

59,127. It was not to be had at all?—No, not anywhere.

59,128. Were you able to obtain none off the coast at all?—No, nowhere.

59,129. Not any from a distance?—No, it has been the same at Jersey, and everywhere else. There has been no brood anywhere.

59,130. Then you know of no means by which you can increase the quantity of oysters here, except nature gives you a good spat?—If nature will only give us a good spat, we have nature's carpet here spread out for it.

59,131. In the course of your experience, have you discovered any means by which you think it probable that an increase in the supply of oysters might be occasioned? Is there any means by which you can utilize the ground here and increase the supply?—I cannot tell of any means, except there is a good spat. Last year, unfortunately, the spring set in cold, and if we get cold weather in May and June it is fatal to the spat. That is my opinion about it.

59,132. In what months of the year do you generally look for spat?—At the latter end of June—in June or July.

59,133. Is it regular in June and July?—Yes, I have seen it on the 16th June; everything was covered with spat; it was just like pepper; every oyster was quite covered on the 16th June with very small spat.

59,134. Was that a good spat year?—Yes, splendid.

59,135. Is it generally a good spat year when you have an early spat?—Yes, I think so.

59,136. Is it at all attributable to warm weather or the state of the water?—Yes, we require to have the water at a certain heat in June.

59,137. The water?—Yes, it is necessary to have the water at a certain temperature, in order to mature the spat. The spawn floats about until it obtains a certain consistency, and then it sinks.

59,138. Is it generally the case that a warm season is the most favourable for spat?—Yes.

59,139. And if there is an early spat it is in consequence of a warm season?—Yes, but sometimes we have an autumn spat.

59,140. In what interval of years do you have a good spat, does it come regularly?—No, we have generally five, six, seven, or eight years between.

59,141. Does it sometimes come every year?—Yes.

59,142. In a good spat season will there be such a supply that there will be far more oysters than sufficient to stock all the grounds?—Yes.

59,143. Is there any means by which you can preserve that supply for years in which you have a deficient spat?—Yes, by care; we have to take care of it.

59,144. What care do you take?—Sometimes we put the oysters into pits on the marshes. We have pits dug for the oysters, and then we remove them to different places where we know they will live.

59,145. Where they live and gradually grow?—Yes.

59,146. Do you remove the brood in the next year?—No, not until they get to a certain state of maturity.

59,147. How long does it take before you think it safe to move them?—We lay the brood down in November, and take it up again in March, and put it on the oyster beds.

59,148. You spread it over the oyster beds?—Yes.

59,149. When you have a good spat year, do you prepare for a succeeding crop of oysters?—Yes.

59,150. You always have done so?—Yes, that has been the custom.

59,151. In other years which are unfavourable, does not the spat come to brood?—In some seasons there is no spat at all.

59,152. Do not the oysters spat every year?—Yes, I know they do. We can see it.

59,153. Then what becomes of the spat?—We can not tell,—no one can tell.

59,154. Does it disappear?—Yes. I was many years concerned with spat for Mr. Carlisle of Cambridge. There were several experiments made with it, until at last he said, he could not tell me anything at all about it. I tried various experiments by his advice, but nothing come of them.

59,155. It is only when the season is favourable for the growth of the spat into brood that you are able to

obtain it for your oyster beds?—We are entirely dependent upon nature.

59,156. Do you think that you cannot assist nature?—Yes, I think we cannot.

59,157. Except by laying down the brood in the way you have mentioned, in pits?—Yes, in order to preserve it.

59,158. You cannot do that if the spat does not come to brood at all?—No.

59,159. And in certain seasons it does not come to brood?—No, it does not live. I could give you several instances, if necessary.

59,160. It does not mature sufficiently to become brood?—No; in Horne Bay I have known many large spats, and we have taken a large quantity from there, and in the next spring all has been killed by the five-fingers. I have known, on three different occasions, three different spats served in that way.

59,161. Is there any ground on the coast here which is favourable for spat?—Yes.

59,162. Will you describe to us where it is?—It is in the Blackwater.

59,163. Then it is not in the open sea?—No, it is the river just off this.

59,164. Here (*pointing to the chart*) are the Dengie Flats; is there any of the ground there that is good ground for spat, or any of the grounds just outside the Blackwater?—There is spat there at times.

59,165. Is there any good spat ground in the open sea down east of Brightlingsea, taking it from the point of land?—No.

59,166. Do you find that the spat succeeds best when it is within the mouth of the river, and not in the open sea?—It will succeed anywhere. I have known spat all round this coast, and all down on the north coast.

59,167. Is there any part of the coast where spat or brood is taken up for sale at present?—No, there is none to be had. Six years ago we could buy very nice brood at 6*s.* a wash, and now we cannot buy it for a sovereign.

59,168. Will you describe the ground in the Colne where the oyster beds are now situated?—From Aldborough Point to Colne Point.

59,169. Is the ground all cultivated?—Yes, we remove our stock to Pipelet,—that is our preserve. The oysters are taken from there in the spring, and brought up here to be laid down. They are caught in the winter to supply the market with.

59,170. The red mark on the chart comes to where the oyster beds are, at Pipelet Channel?—Yes.

59,171. Are not the oysters cultivated further up than that?—No, there is only a narrow and muddy creek beyond that.

59,172. How do you keep the ground clean?—By working over it.

59,173. By dredging it?—Yes, there are 300 or 400 men at work there nearly every day in the season.

59,174. During the season you are dredging the oysters?—Yes.

59,175. During the close time for oysters do you work on that ground?—No, the fisheries are generally closed in July, and opened in August.

59,176. Do you fish the ground in all months of the year, except July and August?—No, we shall leave off fishing now very shortly. In the month of April they fish up there (*pointing to the chart*), and bring oysters from there to this place, where they leave them to mature until next season.

59,177. Are the oysters you get on that ground natives of the best quality?—Yes.

59,178. And they bring the best price in the London market?—Yes.

59,179. Have you ever brought oysters from a distance?—Yes.

59,180. From the Channel Islands, or outside the river here?—Yes, years ago.

59,181. Do you not do it now?—No, we have not done it for the last 10 years.

59,182. For what reason? Was it that it did not answer?—No; we always lost money by buying oysters.

59,183. Do you find that the oysters change their character at all,—I mean the oysters brought from the deep sea and laid down in the river?—If they fatten, they do improve and become better.

59,184. You have not found it profitable to continue that system?—No.

59,185. You do not do it at all now?—No.

59,186. (*Mr. Lefevre.*) Do you find oysters over the whole of that ground marked red on the chart?—Yes, all over there.

59,187. All over it?—Yes, we can get a few all over it.

59,188. Are there any portions of that ground on which you find them in great abundance?—They are taken from there and laid down at Pipelet.

59,189. Do you find that portion of ground far up the river the best for fattening?—No, Pipelet is the best place,—up as far as it is marked red.

59,190. In the good season for spat, do you find the spat all over the ground?—Yes, we find spat everywhere in large quantities.

59,191. Do you in some seasons find the spat laid lower down when you do not find it in the upper part of the river?—No, if we get it in one place, we get it in another.

59,192. In a good season for spat, do you ever have a good supply of spat outside and none in the river, or do you have a good supply of spat in the river and not outside?—It is generally the case that we get it in the river, and get it outside also.

59,193. Do you ever find the spat outside the river when there is none inside?—No.

59,194. You have never known that?—No.

59,195. I think you said that the close season began in May?—The oyster season closes on the 12th of May, but we do not often have sufficient to carry it on until that time.

59,196. How long do you go on generally?—We commence in the latter part of August, and leave off when we have sold the lot.

59,197. Is there much difference year by year as to the day on which you close the close season? Do the dredgermen fix the time every year?—No, the Corporation come down and close the fishing. They ask the Company first what day would suit them. It is a mere ceremony that is gone through.

59,198. Is there much difference in different years?—Sometimes it is in July, and sometimes I have known it take place in August.

59,199. What is it regulated by?—By a proclamation.

59,200. But is it with reference to the fatness of the oyster?—No, it is a mere ceremony, that is all.

59,201. It is a mere matter of convenience?—Yes.

59,202. What do the dredgermen do during the close season? Are they engaged in dredging elsewhere?—They have to do as they can. We have 110 smacks, and they are insured for half their value at 18,000*l.* All of them are employed in the deep-sea fisheries.

59,203. Are they all the property of the dredgermen?—Yes, they belong to this place. They are large smacks, that can go where they please. They are insured for 18,000*l.*, which represents 36,000*l.* as their full value. They go away at this time of the year; but if they were allowed to go out in May and June, I think it would decrease the price of oysters to the public, and be a great benefit to the fishermen.

59,204. What is the complaint? Is it that they are not allowed to dredge in the Channel in the summer?—Yes.

59,205. Is that on account of the Convention Act?—Yes.

59,206. Do not your dredgermen get a licence to dredge in the mouth of the Thames outside your grounds?—They do dredge.

59,207. During the close season?—Yes. I have

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been to the Board of Trade in reference to the matter, and they have drawn a line across from the North Foreland to Dunkirk. Upon the last occasion that I went to the Board of Trade, Mr. Henley, who was then President of the Board of Trade, told us that on this side we were free from the Convention.

59,208. Where does that line run from?—From the North Foreland to Dunkirk.

59,209–13. Do your men, in point of fact, dredge in the close season north of that line?—Yes, we consider that we have a right to do so, and we have an action in the matter pending now. We gave a challenge to the Government to send a vessel out against us.

59,214. I thought you said that they have power to dredge in the North Sea?—It has not been tried yet.

59,215. Is there not a form of licence granted by the Board of Trade or the Customs which enables the fishermen to dredge on the flats during the open season?—They always are licensed, but they are not allowed to dredge during those months.

59,216. Are they not allowed to dredge for spat on certain portions of ground called the flats?—Yes, all round the coast, within three miles of the coast.

59,217. But not outside the three-mile limit?—No.

59,218. During a good spat season, is a good deal of the time of the fishermen taken up in dredging for brood on this ground?—Yes, that is their sole employment.

59,219. That has fallen off during the last three years, in consequence of there being no spat?—Yes, there has been no spat for the last five years.

59,220. During the open season, is the whole of the time of the fishermen taken up in dredging in the Colne?—No.

59,221. How much of their time is so occupied?—There are only a small number of licensed men employed there. There are about 270 licensed dredgermen in this parish, and there is a population of upwards of 3,000.

59,222. I thought you said there were upwards of 400 licensed dredgermen?—So there are, but they do not all live in this parish.

59,223. Are they all engaged in dredging in the river Colne during the season?—Yes, all the men are; but there are some who receive a portion of the profits of the Company who are widows.

59,224. Is there any limit to the quantity of oysters that may be taken out of the river?—Yes.

59,225. How is that arranged?—It is done by stint.

59,226. What is that?—When they go to work, the foreman states the quantity of oysters he wants caught. He says, "catch so and so," one wash, two wash, or three wash, as the case may be.

59,227. Then is the catch regulated by the foreman and the jurymen?—Not by the jurymen, but by the foreman of the Company.

59,228. Is it done after a consultation with the jurymen?—If the trade sends an order for 300 or 400 bushels, the foreman will tell the men to catch two wash or more, according to the quantity required.

59,229. The oysters caught in that way go into a common stock, and are sold by the officers of the Company?—Yes, they are sold by the foreman.

59,230. He divides the produce among the fishermen?—Yes, so much a wash is paid, and the rest goes into the common exchequer to pay different expenses.

59,231. Is any surplus that may be left divided amongst the dredgermen?—Yes, when there is a profit.

59,232. I suppose the price paid for dredging each stint varies from year to year?—Yes.

59,233. According to the scarcity of oysters?—Yes, and the quantity caught.

59,234. I presume that the quantity of oysters which the foreman orders the dredgermen to dredge up is regulated by the quantity of oysters he knows to be in the river?—No, it is regulated by the demand.

59,235. Take the present year, when you have not had any spat for six years, I suppose the supply is rather small?—Yes.

59,236. Then would he not limit the quantity of oysters to be sent to the market?—They have to go three days now for a wash.

59,237. Does the foreman regulate the take with reference to the scarcity of the oysters with the view of keeping oysters for the purpose of breeding?—No.

59,238. You do not think it is necessary to keep a supply in the river for the purpose of breeding?—We always have a supply, if they will breed.

59,239. But could not they all be dredged up by the fishermen?—No, we are under certain rules. We dare not do that. We cannot take oysters below a certain size.

59,240. But after a want of spat extending over six years, I suppose the oysters are almost all of the same size?—Yes, nearly so.

59,241. What regulation have you to prevent all the oysters being dredged out of the river?—We have no wish to do it. We want some for another year.

59,242. How does the foreman regulate it?—He is bound by the jury. They give him certain orders to work in certain places. He is not allowed to go down below a certain place. All up here (*pointing to the chart*) is our stock ground. No one is allowed to go there.

59,243. Then may I take it that the jurymen regulate the quantity to be sent to the market, and to be dredged by the dredgermen, with reference to the supply that there is in the river?—No, it is not that.

59,244. Is it only regulated by the demand in the market?—Yes, it is according to the demand in the market. If you wanted a wash to be caught, he would order a wash, and if two were wanted, he would order two.

59,245. During the close season, you also employ men in removing oysters from one part of the river to another?—Yes. We commence in April, and we remove them from one part of the river to another.

59,246. How do you pay the men on that occasion?—About 5*s.* a day.

59,247. Do you pay them according to the work done?—Yes.

59,248. Do you pay any fishermen who choose to work at it?—No, only the licensed dredgermen or their apprentices.

59,249. How many apprentices is each dredgerman allowed to have, or is he limited at all as to number?—He is limited.

59,250. May each dredgerman have one?—Yes, if he is the owner of a boat.

59,251. How many dredger boats are there?—About 100.

59,252. So that the number of apprentices is somewhat limited in that respect, by each owner of a boat alone being able to have an apprentice?—Yes. There were 407 licensed dredgermen on the last court day.

59,253. During the close season, I think you said that the dredgermen go outside, and dredge for brood and spat within three miles of the coast?—Yes.

59,254. Do they take up in the dredges a considerable quantity of large oysters during that time?—No.

59,255. Has the ground been so cleaned of large oysters that there are none there at all?—No. The men often haul a dredge perhaps five times for oysters without finding a single one.

59,256. When there has been a good brood for two or three years, and the fishermen have been dredging on that ground for brood, do they take up any large oysters?—No, there are no large oysters at all.

59,257. From what oysters does the brood come? Is it from oysters that have been left on the ground?—I cannot tell.

59,258. Do you think it possible that the ground outside may have been so exhausted, that there have not been parent oysters enough left upon it to supply spat for brood?—It was always the case during my time. The supply of brood to be found there has always fluctuated. Sometimes there is a considerable quantity to be found, and sometimes none at all.

59,259. You say that the ground has been so cleared that there have been no large oysters left there. If that is so, where does the spat come from?—I cannot tell.

59,260. Do you think it impossible that the ground can have been so cleared of oysters as not to leave enough of the parent stock there to supply spat for brood?—My opinion is, that five oysters could stock our river with spat if all the spat from them was to live. I suppose they would yield eight or nine millions each.

59,261. Do you think that the spat found upon the flats outside is the produce of oysters laid down in your river which has drifted with the tide in that direction?—Yes, I have often thought so. It has always been my opinion that the common grounds have been stocked from the private grounds.

59,262. Or do you think that the brood which you have found there has at any time been the produce of a few oysters left on the ground which have escaped the dredging?—No, I think that it comes from the private grounds.

59,263. Is there a considerable extent of the ground outside on which the fishermen find the spat and brood?—Yes.

59,264. Where is it?—There is all the Blackwater. I have known a considerable quantity of spat found there, and also in the Swin.

59,265. Does this map now before us fairly represent the ground on which you find the spat and brood?—I think it does.

59,266. Is there any other ground besides that further out?—In some years we have the spat everywhere. We find it all along the coast, and all over the ground outside.

59,267. What is the nature of the bottom of the sea there; is it gravelly?—It is composed of shells and stones, and sand, and so on.

59,268. Is there any dredging carried on there for copperas stones?—They dredge lower down for copperas stones.

59,269. Do the fishermen ever find spat where the copperas stones are obtained?—Yes.

59,270. Does the spat adhere to the copperas stones?—Yes, it will adhere to anything.

59,271. Then do you think any damage has been done to the oysters by removing the copperas stones?—No, I think not.

59,272. Is there plenty of culsh to which the spat can adhere?—Yes, there is plenty of stuff for it to adhere to.

59,273. What is the nature of the bottom of your own river?—It is chiefly mud and clean shells.

59,274. Is the regulation about removing the culsh strictly observed?—We do not remove it, only for the purpose of making improvements. During this time of the year some of the larger culsh may be taken away and placed upon another part of the ground, in order to improve the ground itself.

59,275. Is the object of removing it, that it may receive the spat which is to come?—Yes.

59,276. Is there not a good deal of your ground that might be used for fattening oysters?—No, I think it is all used that can be used.

59,277. Then you do not think that any good could be done by vesting in the Company greater powers of borrowing money?—No, decidedly not.

59,278. Do you think that your ground is at the present moment turned to the greatest use that can be made of it?—Yes, we have at this place nature's carpet spread out for us, if a good spat only comes.

59,279. With the exception of the removal of the oysters from one part of the ground to another, is there no dredging carried on during the close season for the purpose of cleaning the ground?—No, there is no dredging after the close season once sets in, until the season becomes open again.

59,280. Would it not be of advantage to you to dredge for the purpose of cleaning the ground during the close season?—No, if it could be of any advantage to us we should have done so long before this.

59,281. At what time of the year is it that no dredging at all takes place on your ground?—Generally about the end of April, and from then to the latter part of August.

59,282. That is a period of nearly four months?—Yes.

59,283. Is there any deposit of mud or weeds on your beds?—Not during the summer season, but we get it after a hard winter.

59,284. You do not think any disadvantage arises to your ground in consequence of its not being dredged upon during those four months?—No.

59,285. You are aware that upon other private beds they are dredging all the year round?—No, I think they are not.

59,286. Take the Whitstable beds, for instance; they dredge there all the year round?—No, they do not.

59,287. They do not dredge for oysters, but they dredge for the purpose of cleaning the ground?—They are generally later than we are. I do not suppose that they finish shifting their stock until the end of June, or the beginning of July. Theirs is a more extensive business than ours.

59,288. They told us at Whitstable, that they are constantly dredging over the beds during the close season in order to clean the ground, and for the purpose of removing the oysters from one part to another?—Perhaps so; the same as I just described.

59,289. I understand that you only occupy a certain portion of the close months in doing that, while they go on dredging the whole of the year?—No, they do not.

59,290. (*Mr. Caird.*) Do I understand that during the close time you do work the grounds on which the oysters are?—No, we do not, as a general rule, but if they require it, then we do.

59,291. You do not find it necessary to work over the ground regularly during the close season?—If there are five-fingers, or anything of that kind, the watchmen who are employed to watch the grounds would at once go to work in clearing them away, and the foreman would have discretion to appoint other people to go to work, if necessary.

59,292. Is there no deposit of mud that makes it necessary that the ground should be constantly dredged during the summer season?—No, there is not.

59,293. (*Mr. Lefevre.*) If the foreman perceives five-fingers upon the ground, does he send out the dredgermen?—He can, if he likes.

59,294. Do you think that dredging during the spatting season is a bad thing for the young oysters, or not?—No; I think it is beneficial rather than injurious.

59,295. In what way is it beneficial?—By keeping them moving about.

59,296. Then you do not think that any harm is done to the young spat by the process?—No.

59,297. Do you think that the spat is so small that it practically escapes all injury?—No, I do not believe in that theory at all. The Blackwater is worked during the whole of the year round, and I have seen an enormous spat there.

59,298. Then do you not think that working on the ground when the spat has fallen has interfered with the supply of oysters afterwards?—No; I believe it is beneficial.

59,299. In what way is it beneficial?—It keeps the ground clean.

59,300. Then no harm would be done by allowing dredging to be carried on upon the open ground?—

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E. Stummers.

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No; on the contrary, I believe it would destroy the enemies of the oyster. For instance, the five-fingers will suck them off as fast as they come, if they are not destroyed.

59,301. What would be the effect if the provisions of the Convention Act were carried into force on the common grounds off this coast?—It would be beneficial, if we had two months more for dredging, namely, May and June.

59,302. What I mean is this, would it be detrimental to the interests of the dredgermen here, if the provision of the Convention Act was carried out, prohibiting dredging during the close time beyond three miles from the coast?—Yes, it would be fatal; we should be able, in that case, to get no stock at all. There would be no oysters to be got at all, if that regulation were carried out to the letter.

59,303. There would be no stock?—No; there would be no oysters whatever.

59,304. Will you explain that?—The oysters will not mature on the grounds outside. We have to get them, and place them on our private grounds.

59,305. The Colne Company does not buy any of the brood?—No; but it is sold to others who have private grounds.

59,306. Then may I take it that a great deal of your profit is made by selling the brood, which you get outside, to private companies?—Yes, and also to individuals.

59,307. Do you think that if the trade were interfered with it would be very detrimental to the interests of the fishermen here?—Yes, I am certain that it would.

59,308. You do not think that any prospect of an addition to the stock of oysters, by allowing the beds outside to remain unworked during the close time, will make up for the injury?—No, I do not.

59,309. Then will you explain to me why it is that you practically lay down a different rule for your own grounds from that which you lay down for the public grounds? Upon your own grounds you prohibit dredging, and do not allow the young oysters to be removed; but upon the open grounds you think it would be detrimental to the fishermen if they were prohibited from dredging during the close time?—It would not be detrimental to remove the young oysters from one place to another on our grounds during the close time. On the contrary, it is of benefit to our stock to remove them from the Colne up to Pipelet. If we did not buy our common stock during the summer months, we should not have any.

59,310. (*Mr. Caird.*) I thought you said, in answer to a question of mine, that you did not bring any stock from outside, to place upon your grounds?—The stock I refer to is laid down upon private grounds.

59,311. Then you make a distinction between private grounds and the Company's grounds?—Yes.

59,312. Where are the private grounds you allude to; will you point them out on the chart?—They lie here (*pointing to the chart*); these are all private grounds, belonging to the lords of the manor, and are in the hands of private individuals. They are about 80 yards each in extent.

59,313. Not more than that?—No.

59,314. And they obtain their stock from you?—Yes; they get the stock which we obtain on the outside during the summer months, and they deposit them there on those private beds. They take them up in November. They generally put them in pits on the marshes, in order that they may mature.

59,315. Is it a breeding ground?—No, a feeding ground.

59,316. Are oysters also got from those private grounds, and sent to the London market?—Yes.

59,317. There is a difference in the mode of managing those private grounds, as compared with that adopted upon the public grounds?—Each person manages his own ground as he pleases.

59,318. They adopt a different system to that which is adopted on the Company's ground? You say that they bring the brood from the outside, and lay it down upon the private grounds?—Yes.

59,319. But I understand that that is not done on the private grounds?—It is not done on the ground belonging to the Colne Company. We have done so in former years, but it is not the practice now.

59,320. If it is found profitable by private individuals to carry stock to these private grounds, would it not also be found profitable to do the same thing upon the ground belonging to the Colne Company?—No, it cannot be done there.

59,321. Will you explain the reason why it cannot be done?—On account of the expense.

59,322. Will you explain what you mean by that? Would it be of more expense to do it on the Colne ground than upon the private grounds?—Yes, the expense would be tenfold.

59,323. How does it arise?—The Colne Company is a very large body. Every man would expect a share of the money to be earned in that way, and it would involve a large expenditure of money; whereas in regard to the private grounds, an individual can obtain all that is necessary for them for laying upon his grounds by the expenditure of a very small sum of money.

59,324. Then am I to understand from that, that where individuals have their own interests to attend to they are able to adopt means for increasing the supply of oysters, but that in reference to the public grounds, the purse being a public purse, the same individual enterprise is not brought to bear?—Oh, yes, it is.

59,325. Is there anything in the nature of the ground belonging to the Colne Company which would make it different from the private grounds up St. Osyth's Channel, and render it less adapted for increasing the supply of oysters?—Yes, there is.

59,326. What is it?—We do not want to buy anything for stocking the Colne ground, because when there is a spat we always have the lion's share of it.

59,327. But those who have private grounds continue to supply their grounds with brood when you do not do it?—We cannot do so, because we cannot buy any.

59,328. But you have told us that those who are interested in the private grounds do buy brood from outside for the purpose of laying down on those grounds at the present moment?—Yes, they do so when they can, but there is none to be had now.

59,329. Would not the parties who are interested in the Colne grounds do so equally with those who have the private grounds?—Of course they would. There is nothing to prevent them, if they choose.

59,330. But at the same time they do not do it?—No, they do not.

59,331. Why do they not do it?—It would not pay them to do it.

59,332. Why would it not pay them?—Because the expense would be too much in moving the whole body of men belonging to the Company about, so that they should have their share of the money earned.

59,333. You mean that the body of men is so large that the collective interest would be difficult to meet?—Yes.

59,334. There is nothing in the character of the ground which prevents it from being done?—No.

59,335. It is quite practicable for the same plan to be carried out in reference to the ground belonging to the Colne Company, as in reference to the private grounds?—Yes, quite so.

59,336. (*Mr. Lefevre.*) Is it not to some extent the difficulty of raising money and repaying it that interferes in the matter?—Of course, that is the difficulty.

59,337. (*Mr. Caird.*) If the Colne grounds were in private hands, do you think you would be able to increase the supply of oysters more than you do at present?—No, we should not be able to do that.

59,338. Do you find that the private grounds are better adapted for laying down oysters ?—Yes.

59,339. Is there a greater depth of water on the Colne grounds than upon the private grounds to which you have referred ?—Yes, most of the grounds in the creek are dry at low water. We can walk over them.

59,340. Are grounds that are dry at low water more prolific of oysters than those which always have water upon them ?—No, they would not breed oysters, but we buy oysters for the purpose of laying down upon them.

59,341. The grounds that are dry at low water ?—Yes.

59,342. Then they are not breeding grounds at all ?—No.

59,343. Are you able to say whether they are profitable grounds ?—I cannot say that they do much.

59,344. I think you stated that you fish your grounds according as the order may be given by the foreman ?—Yes, we fish the Colne.

59,345. According to the order you get from the foreman ?—Yes, according to his order, and that depends upon the demand.

59,346. Has the demand for oysters upon this coast gone on increasing ?—Yes.

59,347. Has it increased in recent years ?—Yes.

59,348. Have you always been able to supply the demand as it increases ?—No, not this year; we cannot supply it now.

59,349. You stated, in answer to a question put to you, that whenever the foreman receives an order, you endeavour to fulfil that order by fishing the ground to the extent he desires ?—Yes.

59,350. Has it ever happened that you have not been able to fulfil an order ?—Yes.

59,351. At the present time ?—Yes, I have known it happen repeatedly, but sometimes we have more than is sufficient for the demand.

59,352. Have you always worked for them when you have had an order ?—Yes.

59,353. Has that been the case lately ?—It happened one season; it happened three years ago. It is when they are not fished.

59,354. What do you mean by not fished ?—They are not marketable or good.

59,355. You said that 110 smacks are engaged in the deep-sea fishing here ?—Yes.

59,356. What description of fish do they fish ?—Oysters and sprats.

59,357. Are the sprats caught by the stow-boats ?—Yes.

59,358. Are the stow-boats chiefly used in the sprat-fishing ?—They are for the sprat-fishing.

59,359. At what time of the year is the sprat-fishing followed ?—It commences in November.

59,360. How long is it continued ?—Up to now.

59,361. Has it increased or diminished of late years ?—This year has been the best I have ever known. I was stow-boating for 10 years, and there were no fish then.

59,362. How many boats are engaged here in stow-boating now ?—About 60, I think.

59,363. Is it a fishery that is increasing ?—It has increased this year.

59,364. Has it increased much ?—Yes to a very great extent.

59,365. You said it was a great hardship that the smacks could not go to the oyster-fishing in the deep sea in the quieter months of April and May, but that they were obliged to go in another season ?—They do not go in May and June.

59,366. That is the close time ?—Yes.

59,367. Do you think it would be a great advantage, if the boats were permitted to go then ?—Yes, decidedly.

59,368. Would you have a sale for the oysters then ?—Yes, they are in a better condition than they are in now.

59,369. The deep-sea oysters ?—Yes; they do not spawn until about July and August.

59,370. Would you put them on your grounds to feed, or send them direct to the market ?—We have a large quantity on our private beds.

59,371. Would you lay all those oysters on your private beds ?—Yes.

59,372. Would they then get into condition for the London market ?—Yes.

59,373. Would it contribute very much to the prosperity of the fishermen here, if such a licence were given ?—Yes.

59,374. That would be the case if the deep-sea fishing for oysters were extended to the months of May and June ?—Yes.

59,375. Do they not go out now ?—They go out somewhere, but they only get a few.

59,376. Do not some of the boats on this coast go off the French grounds opposite Shoreham, to fish during the summer season ?—I do not know.

59,377. Do none of your boats go to the south of the Foreland to fish for oysters during the summer season ?—I believe that some do so, because they have been taken by the cutters; that is evidence that some go, but I do not know where they go to.

59,378. (*Mr. Lefevre.*) What are the private beds you were speaking of just now ? Are they parts of the Colne ground ?—No, they belong to the lords of the manor and private individuals.

59,379. You do not allow members of your own body to mark out grounds for themselves ?—No, they are hired the same as a man hires a farm.

59,380. You do not set apart your ground for that purpose ?—No.

59,381. The dredgermen go into the Channel, dredge up oysters, bring them here, and lay them down for the purpose of supplying the London market during the close season in May, June, and July ?—Yes, but they are only allowed to go out until April.

59,382. They are only allowed to dredge the oysters during the open season ?—Yes.

59,383. They bring them in and lay them down to supply the London market during the close season ?—Yes.

59,384. How long does that supply to the London market go on,—does it go on during May, June, July and August ?—Yes, if they were allowed to go in May and June there would be a greater supply.

59,385. Is the stock they are able to lay in during the close season not sufficient to last throughout the whole of the open season ?—No.

59,386. Do you supply the market with an abundance during May and June at present ?—No, I believe there is not a supply at all of any kind of oysters.

59,387. (*Mr. Caird.*) What do you mean by that ? I mean that there is not a sufficient supply.

59,388. (*Mr. Lefevre.*) They do their best to supply the market by laying up a stock in the open season ?—Yes they do their best, it is to their advantage to do so, and to get a supply.

59,389. Have you known many other occasions when you have had bad spat seasons ?—Yes.

59,390. Have you had bad spat seasons for several years together ?—In 1842 it was as bad as it is now.

59,391. For how many years together did you have a bad spat ?—I have known it on several occasions.

59,392. For several successive years ?—Yes, but but not for so long as at present.

59,393. A good spat will last you three or four years ?—We have had to make this last five or six years.

59,394. Is this the first year you have found your beds beginning to be exhausted ?—No, for the last five years they have been exhausted, and we have had to make the best of them we could; we have collected the oysters together as much as possible.

59,395. When you have had a good spat, and the ground has been covered with brood, have you found it of advantage to remove the brood to other parts of your ground ?—If we find spat on places where it would not live in the winter, we remove it.

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E. Stammers.

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59,396. Does it ever happen that the brood is in such abundance that it lies too thick on the ground, and it is an advantage to thin it?—We do so.

59,397. You remove enough to supply the beds for fattening?—Yes.

59,398. Does that leave more room for others to grow into large oysters?—We remove them up to a certain size.

59,399. (*Mr. Caird.*) You say that if you have a good spat this year, the result would not tell on the supply of oysters for the next two years?—No, not for three years to come.

59,400–2. Then the prospect of a scarcity of oysters for the next two years seems imminent?—Yes, I am quite certain of that.

59,403. At what age do you consider the oysters are fit for the market?—They are better at five years than they are at three.

59,404. I suppose you use them at three years?—Occasionally we use the largest.

59,405. (*Mr. Lefevre.*) What is the age of the oysters you are taking up now?—They are six years old, I think.

59,406. Have they begun to fall off from age? Is there any age at which they begin to fall off?—Yes, some of the old ones decrease in size.

59,407. At what age do you consider that that takes place?—I do not know. We have got some six or eight years old, that were small things not more than two inches across.

59,408. (*Mr. Caird.*) Have you ever fished oysters in the deep sea?—Yes, in the English Channel and in Jersey too.

59,409. Have you found it the case, that when you have had a bad spat in the shallow waters, you have also had a bad spat in the deep sea?—I have never observed that.

59,410. You cannot say whether it is so or not?—No.

59,411. Do you think it possible, if the fishermen were permitted to fish for oysters in the deep sea during the summer months, they might supply the deficiency which results from the bad spat in shallow waters?—I think so.

59,412. Is there any other way in which you imagine the deficiency is likely to be supplied?—No, there is not.

59,413. Is there any suggestion you can make to us as the result of your experience?—No, I cannot entertain the idea of breeding oysters by artificial means.

59,414. Is there no suggestion you can offer to us, from your long experience in connexion with the oyster fisheries, by which you think the supply might be increased?—No, except by granting those two months; I think that would increase the supply.

59,415. Two months extra for fishing in the deep sea?—Yes.

59,416. To what market do your oysters chiefly go?—Most of them go to Ostend.

59,417. Do you send none to London?—We do not send them directly to London, but persons come here to buy them for London.

59,418. Oyster merchants?—Yes, ours is like a wholesale shop. Persons come and take them of us, and they do as they please with them, but there are vessels that take them direct to Ostend and Dunkirk.

59,419. Is the largest part of the oysters caught here sent to foreign markets?—Yes, the largest part is sent to Ostend.

59,420. Is that a trade which has sprung up of recent years?—No, it has been established as long as I can remember.

59,421. Then has the Colne never at any time sent many of its oysters to London?—Yes, we used to have a salesman at London, but that is done away with now.

59,422. Do you find a better market in Ostend?—Yes, that is our best market.

59,423. Do you get a better price there?—No, but they go in larger quantities, and the money is always safe. There is also less expense attending them.

59,424. (*Mr. Lefevre.*) Does the foreman of the Company sell all the oysters taken in the Colne?—He superintends the selling of them.

59,425. Does he fix the price?—No, that is done by the jury of twelve. They meet once a month and manage that business.

59,426. They fix the price?—Yes.

59,427. Are those jurymen chosen out of the body of the dredgermen?—Yes.

59,428. By election?—I make a panel as water baliff, and put down 30 or 40 names, which I present to the town clerk. The names are all put in a hat, and the number drawn by ballot.

59,429. You choose the most intelligent among the fishermen?—Yes.

59,430. You make a panel of 20?—Yes, 20 or 30.

59,431. And the Corporation take 12 of them?—Yes.

59,432. (*Mr. Caird.*) Do the oysters from the private beds, also, chiefly find a market at Ostend?—No, they are principally sold to the Kentish Companies, but they have been sent occasionally to Ostend from the private beds.

59,433. Then the Colchester oysters really go very little to London?—A good many go, but the largest quantity goes to Ostend.

59,434. Is there an increasing quantity compared with what used to be sent a number of years ago?—No, there is a decrease, I believe, in the London trade, but an increase in the foreign trade.

59,435. (*Mr. Lefevre.*) Is there not something given to the widows of dredgermen?—They are licensed the same as dredgermen. They each have what is called a half stint. If a dredgerman earns 15*s.*, a widow gets 7*s.* 6*d.*

59,436. Without going out?—Yes.

59,437. Then it amounts to this, that a widow has a pension after the death of her husband equal to half the wages he would have earned?—Yes.

59,438. Can you tell us what have been the average earnings of the dredgermen in this Company?—No, I cannot. I do not keep any accounts whatever.

59,439. Can you give us any notion of what a dredgerman will earn?—Not in the least.

59,440. How long is it since you were a dredgerman yourself?—I am one now.

59,441. Are you actively engaged in dredging?—Yes, but I keep no accounts whatever.

The witness withdrew.

J. Barber.

JOHN BARBER called and examined.

59,442. (*Mr. Caird.*) Have you been long acquainted with the oyster fisheries here?—Yes, for 30 years.

59,443. Are you engaged also in the stow-boat fishery?—Yes.

59,444. Is there any other fishing practised here?—No, only deep-sea fishing.

59,445. Deep-sea fishing for what?—For oysters.

59,446. There is no deep-sea fishing practised here for any other kind of fish?—No; I believe there is not a trawlerman out of this piece.

59,447. You have heard the evidence which has been given to us by the previous witnesses?—Yes.

59,448. Is there any suggestion you can make to us in addition to what they have already stated?—I think not.

59,449. I suppose you agree with the previous witnesses, that the oyster fisheries are all, at the present moment, suffering very much in consequence of the deficient spat of the last six years?—Yes, and I should like to make a strong remark in reference to the time at which we are prohibited from going out

with the dredges. I think that that regulation is one of the most ridiculous regulations that could be established, and the fishermen have suffered very much from it. Indeed, they have suffered more from the interference of the Government, with regard to the deep-sea fishing, than you can possibly imagine.

59,450. What have you suffered from their interference?—First of all, it seems to us that the Government, so far as we can understand the matter, have a wish to increase the quantity of oysters supplied to the public, but in order to do so, they have established a regulation which closes the dredging to us for four months in the year.

59,451. The object of the Government is of course to endeavour to increase the supply of oysters for the general consumption of the public?—Yes, but we do not think they take a proper course to accomplish that object. In two of the months which are closed to us, the want of dredging, instead of being beneficial to the fisheries, is most disadvantageous.

59,452. What months are those?—The months of May and June. During those months the bottom of the sea, like the land, is covered all over with grass. That is in the spring time of the year, and if we were allowed to work with our dredges at that time we should do a great amount of good. We ought to be able to work up to July, that being about the time when the spat begins to fall. If the ground were kept clean up to that time, I think it would be most beneficial to the fisheries and would increase the quantity of oysters.

59,453. Do you think the oysters are in as good a condition in the months of May and June as they are in the months previous to that?—Yes, I think they are, and better too.

59,454. You think they are in a better condition?—Yes, I think the deep-sea oysters are.

59,455. Have you any certain knowledge of the growth of grass at the bottom of the sea in the months of May and June, and of the fact that it injures the oyster-beds?—Yes.

59,456. How do you know that?—There is not a year in which the ground has not been tried, and the dredgermen have hauled up so much muck and slush in the entrance of the dredge that nothing could go into it.

59,457. Where have you been in the habit of fishing in the deep sea?—From here to the Dudgeon, and at Jersey, and all along as far as the Humber. I have fished in every part of the deep sea.

59,458. Have you not fished in May and June?—Yes, we have done it, but it is contrary to the law.

59,459. Who interferes with you?—We are interfered with in a thousand ways, notwithstanding that we had a guarantee from the Board of Trade that we should not be interfered with. We had a chart marked out, showing the line where we could fish, and we were told that we should not be interfered with anywhere north of that line.

59,460. Is that a line drawn between the Foreland and Dunkirk?—Yes.

59,461. You were told that you were not to be interfered with north of that line?—Yes; but directly we went out to fish, a French cruiser came to us and took our vessel into Dunkirk, and the fishermen were obliged to go into the Channel, or anywhere they could, and fish contrary to the law.

59,462. Were you yourself fishing at the time the French cruiser seized some of the English vessels?—Yes.

59,463. Where were you fishing?—Right off Dunkirk.

59,464. Outside the line?—Yes.

59,465. What distance from the shore?—I think, according to the evidence of the French pilot, that it would be about six miles from the shore.

59,466. Where are the best fishing grounds for oysters in the deep sea?—There are oysters to be got all up and down the Channel.

59,467. Anywhere you put the dredge down can you light upon oysters?—No, not always.

59,468. Are there any grounds which you have ascertained to be good, and which you can go to knowing them to be good oyster grounds?—Yes, there are very good grounds for oysters midway between Brighton and Dieppe and Havre.

59,469. South of the Foreland?—Yes.

59,470. Do the French fishing boats come on that ground along with you?—Yes.

59,471. Then do the English and French boats fish together?—Yes.

59,472. Have you ever found the French boats fishing in the months of May and June?—No, but there is a reason for that.

59,473. What is the reason?—The reason is this. Their boats are adapted for other kinds of work, which comes in about that time, and I think it is from that fact that our Government here have been induced to borrow their bad laws. The French have made a law which just suits their purposes, and we have copied it although it is very injurious to us.

59,474. What do the French boats do at that time?—They go long-line fishing, and mackerel-fishing, and after all sorts of things. We have endeavoured to follow in the wake of the French fishermen, although they know no more about oyster-fishing than a stone. English dredging and French dredging are two very different things.

59,475. Do you not adopt the same style of fishing?—Decidedly not. A Frenchman will leave his dredge out, and take up small and large oysters and soil, and everything else. He takes it all up together, turns it into his vessel, and carries it away with him to the harbour. Now the English cull the oysters they take up in their dredges, and the little ones they do not require they throw back again into the water. Their dredging, therefore, has a tendency to cleanse the ground and to make a regular nice soil of it. Yet, notwithstanding the advantage of our own system over that of the French, we are asked to try and imitate the French.

59,476. I think you said just now that you have fished on the Jersey grounds?—Yes.

59,477. Are you aware that those grounds do not yield so well as they did formerly?—Yes.

59,478. Have you been in the habit of fishing those grounds frequently?—Yes.

59,479. Then what do you imagine is the reason that they have ceased to be as productive as they were formerly?—I believe the French steamer being there was the great cause of it. Before that time the fishing vessels could go out and work upon that ground, notwithstanding all the cutters that might be sent after them, but as soon as the steamer came that was all put an end to, both to the injury of the fishermen and of the oysters.

59,480. Do you think that working on the ground is of advantage to the oysters?—Yes, decidedly; I am of opinion that the more the ground is worked, the more likely it is to produce oysters.

59,481. Do you think that the want of working the ground permits the accumulation of the grass and other stuff of which you spoke just now?—Yes; and it is quite feasible that it should be so. Then again, the style of dredging adopted by the French boats prevents the spat from coming to perfection on the ground. They take away all that their dredge brings up, and they take it all into harbour and destroy the whole, both small and large.

59,482. (*Mr. Lefevre.*) When did the falling off in the supply of oysters on the Jersey ground begin?—I think about eight or nine years ago.

59,483. Was it immediately after the enforcement of the Act to which you have referred?—I think it began directly after the close time began to be enforced. It lingered on for a little while after that, but now the supply has failed altogether.

59,484. Did the falling off begin about that time?—Yes. There was also a large hole of oysters found in the Channel about that time, and everybody went to it. That hole helped to put an end to working on the Jersey ground, and very much injured the oysters.

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59,485. Was it found more profitable to dredge in the Channel than on the Jersey beds?—Yes.

59,486. Then, in consequence of the dredging not being carried on so extensively, did the weeds begin to grow and the dirt to accumulate, until the ground became spoilt?—Yes. The ground ought to be as clean as possible in the month of July, when the spat is about to fall.

59,487. You have observed that the ground has become more dirty?—Yes, you can see in a minute that the ground has not been meddled with.

59,488. Do the Frenchmen dredge up both large and small oysters?—Yes, and the soil, and everything else.

59,489. They do not cull the oysters?—No, not on the spot.

59,490. Then is it disadvantageous to the beds to take them away without culling them?—Yes; sometimes it is nearly all small that they take away. Some of them are not bigger than the top of this inkstand.

59,491. Do they lay them down on beds for fattening?—No.

59,492. I suppose they could lay them down on beds for the purpose of increasing their size and fattening. If they did that, would it be of any advantage?—They do not take the trouble to do it. All the small they take up in that way are spoilt. They are turned out with the dirt, and lie in great heaps in the harbour as big as a house.

59,493. Have you ever observed them throwing the small oysters away at Dunkirk?—No.

59,494. Are you sure that they do not lay them down on beds, in order that they may fatten?—No, only what the women cull out. The women take out the oysters they require, and those they deposit on their beds.

59,495. Are they small oysters?—Yes; small and large too, or such as they require.

59,496. They lay them down on beds, in order that they may fatten?—Yes.

59,497. Is there any demand on this coast for small oysters from the Channel, to lay down on beds to fatten?—We never fatten the small oysters, that is, if they are very small.

59,498. Have you never tried to do so?—We should be glad to do so. They would be worth almost any money, if we could find them, but I never heard of any small brood being found there.

59,499. Have you heard of small brood being found lately in the Channel?—No, not for the last six years.

59,500. Has there been the same want of spat in the Channel as there has been in the mouth of the Thames?—I do not doubt it.

59,501. Before the last six years, were you in the habit of taking up a considerable quantity of small oysters, as well as of large, in the Channel?—Yes.

59,502. Have you found that there has been a falling off in that respect of late?—Very few have been got lately.

59,503. Have you found no small oysters in the Channel lately?—Only very few.

59,504. Then do you think that there is also a falling off of the oysters in the Channel?—I have no doubt of it.

59,505. I think you said, that if you could get small oysters now for laying down they would be worth any money?—Yes.

59,506. Would you permit the take of small oysters in the Channel?—Yes.

59,507. Would you allow small oysters, below an inch in diameter, to be taken?—Yes; I would allow anything to be taken which we could lay down here to cultivate.

59,508. It would be an advantage to permit oysters of that size to be taken?—Yes; they would then be in the best state for culture that they could be in.

59,509. Are any means adopted for enforcing the Convention Act in the Channel?—They do take means, but they do not know much about it. They get into a dreadful state of confusion. I never saw such a mess as they are in about it.

59,510. Will you describe it?—The commander of one cutter will come on board a vessel, and say, "You ought only to have oysters of such a size;" another will say, "You ought not to have a dredge on board;" a third, that we ought not to be here; and the next, that we ought not to be there. Another one says we have no business to go to Burnham for oysters; and what with all these different opinions, we never know what we ought to do. In point of fact, the interference to which we are subjected here has regularly paralyzed our trade.

59,511. Have you ever been boarded by the French and English cruisers, in order that your oysters may be investigated?—Yes.

59,512. Have they thrown overboard a good many, when they have found them below a certain size?—No, I never remember that.

59,513. Then what harm have they done to you?—They have stopped our dredging altogether.

59,514. I suppose the men that they have stopped were dredging in the close time?—Yes.

59,515. But during the open time have you been inconvenienced?—No, I never knew anything done in that way, except at Jersey, and the interference there did not seem to do much good.

59,516. Have you yourself dredged much for spat on ground off the coast within the three-mile line?—Yes.

59,517. Do you agree with what the last witness told us about the falling off of spat?—Yes.

59,518. I want to hear from you your views about it. Do you think that a stock of oysters has been left on the ground to supply the ground with brood?—What ground do you refer to?

59,519. The public grounds outside?—No; but that has nothing to do with it. The men will go out working as long as they can earn sufficient money to satisfy them. If a man goes out to work for 2*s.* 6*d.* a day, and he can only manage to get 2*s.*, in all probability he will go somewhere else where he can get 2*s.* 6*d.*

59,520. Do you think that the young oysters found outside are the produce of private grounds, or of oysters left on the public grounds?—I think it would be impossible to take all the oysters from any ground.

59,521. Do you think it would be impossible to take away the oysters so clean that there would not be sufficient left to supply the ground hereafter?—Yes, there will always be enough left for that purpose.

59,522. You think that is the case?—Yes; because there have been times and seasons when I have known heavy falls of spat in places where there were not supposed to be oysters to any extent. For instance, at the Dudgeon, 25 years ago, there was a heavy fall of spat. Where did that come from? We never knew. Previous to that time there were no oysters in any quantity in that neighbourhood that we had any knowledge of.

59,523. Where is that ground?—Off Foulness, on the Norfolk coast. No doubt, there were a few oysters on the ground. As I have said before, I do not think it possible to catch every one of the oysters.

59,524. Were you dredging last summer for brood on ground off this coast?—Yes.

59,525. Did you find any at all?—Very few indeed. They were very scarce indeed.

59,526. Were there any large oysters amongst them?—What we did dredge were large. They are all six years old.

59,527. But there are very few of them?—Yes.

59,528. Do you think there are enough there to stock the ground with spat, in the event of a good season for spat coming?—I do not see any ground for fear on that matter.

59,529. You think that if a good year for spat came, the oysters on the ground, even though they were very scarce, would be sufficient to supply spat for brood?—I think that would be the case.

59,530. Is there a considerable extent of ground off the coast here on which you find spat?—Yes, there is a very extensive piece of ground.

59,531. What extent is it? How many miles long?—I think it will be 10 or 15 miles; it extends up to Harwich.

59,532. What is the breadth?—About two or three miles.

59,533. Then, what extent of oyster ground is there further south?—Oysters are found nearly everywhere. It would be next to impossible to tell where they are not to be found. They are found in nearly every spot lying between here and the French coast. Occasionally a very good hole of oysters is found in the Channel, and then all the people flock there after them.

59,534. How many boats are employed from this place in the deep-sea fishing?—110.

59,535. Are they all smacks capable of going into the Channel?—Yes, they could go anywhere.

59,536. How many men do they carry in each?—Six men.

59,537. Are they all dredgermen belonging to the Company here?—Not all of them.

59,538. How many oyster dredgermen are there here who are not members of the Company?—500 or 600.

59,539. 500 or 600 besides the Company?—Yes, perhaps there may be more than 600. I should say that there would be 700 or 800 here.

59,540. Are those men engaged in dredging oysters all the year round?—Yes, outside here in the sea.

59,541. I suppose that during the open season they go into the Channel?—Yes.

59,542. During the close season they are engaged in dredging up brood off here?—We do the best we can to get a living, but unfortunately the Government have taken so much advantage of us that our business has been almost paralyzed. We are obliged to act contrary to the law. If we did not, we should starve, or should have to seek some other mode of gaining a living.

59,543. What would be the effect, upon the men who do not belong to the Company, of carrying out the Convention Act on the coast off here?—All of them would perish. They have caught no oysters at all up to this time, and they have only a piece of a month to go through and a whole month next month. That is all they have for the year. Then there is another thing. It would cost me 30*s.* for work now which I could do in the month of May for not more than 15*s.*

59,544. Have your men gone dredging off Weymouth on the oyster beds there?—Yes, and off Falmouth too.

59,545. Have you dredged in Portland Bay?—Yes.

59,546. Do you know that the people there complain that the oyster dredgermen from the Thames carry away their oysters?—I think there are hardly half a dozen to be found there.

59,547. How many boats went from here to dredge on that ground?—Only two or three.

59,548. Did they take up the small oysters as well as the large?—There are no small and no large either. There were very few indeed to be found.

59,549. Do you lay down on private beds here the oysters you dredge during the open season in the Channel?—Yes.

59,550. In order to supply the London markets during June and July?—Yes.

59,551. How long does the supply to the London market go on?—As long as the oysters continue to hold good. As soon as they begin to turn sick, it is of no use sending them to the London markets, and we have to discontinue them. It would not answer to send them then.

59,552. Do the oysters that are sick remain on the ground until the following year to supply the market?—No, the sickness only lasts about a month.

59,553. Do you find, in point of fact, that the moment the oysters become sick the people in London refuse to take them?—Yes. And there is also this fact, that they would not live if we sent them. We cannot send them away from one place to another, because they would die.

59,554. When you have a stock of oysters to supply the London market during the close season, and you find them become sick, do you leave them there until the next season?—No, only until they get over their sickness.

59,555. And then you send them to the market again?—Yes.

59,556. (*Mr. Caird.*) Do the oysters here, according to the season, sometimes spawn later than at others?—Yes.

59,557. Did you notice last year whether any of the oysters spawned in the months of August and September?—No, they did not.

59,558. We had very warm weather in August and September last?—Yes, but it is best for us when we have a warm July. It has always been a kind of byword amongst the fishermen here, that if we have a particularly fine warm July we shall have a particularly good spawning season afterwards. I have noticed myself that in seasons when we have had wind or rain in July the oysters have fallen short in the spawning season.

59,559. A warm August will not make up for the want of a warm July?—No.

59,560. Do you, as a practical fisherman, think that in the deep sea the oysters spawn later or earlier than in shallow water?—I think they spawn much later.

59,561. Then when you lose the spawn from the want of a good season in July, might there not be a good season for spawning in the month of September in the deep sea?—Yes, that might be the case.

59,562. Then it does not necessarily follow that if you have a bad spawning season in the shallow water you cannot have a good season in the deep sea?—No, I cannot say anything to the contrary.

59,563. Then may not nature keep the supply pretty equal in that way?—It may.

59,564. Have you observed, while fishing in the deep sea, that you cannot make as good a fishing as you could six years ago?—No, I do not see much difference in that.

59,565. In fishing in the deep sea, have you noticed any falling off, as compared with former years, in the number of oysters you can take, leaving out of consideration the Jersey banks?—The sea is so extensive that it is impossible to know what there is in it. At the present time, when they find any particular spot in the Channel where there is a good supply of oysters, they go on working it, and do not try anywhere else.

59,566. Do you occasionally find a place that is very prolific?—We occasionally find one place better than another. I do not see that there has been any increase.

59,567. Has the supply in the Channel been decreasing?—Occasionally they get increased catches, and then they go on fishing that particular spot until it does not answer their purpose to remain there.

59,568. Do they then shift their ground?—They are continually shifting their ground. Another hole may be found in another place, and then they leave the ground they have been working and go to that.

59,569. Then is it not from any deficiency of spat that there has been a falling off in the deep sea?—No; we have not found that to be the case.

59,570. (*Mr. Lefevre.*) I thought that you told me you have not observed small oysters in the deep sea?—For the last six years I have not seen any quantity.

59,571. (*Mr. Caird.*) I believe you always lay your Channel oysters on your own ground before sending them to market?—Yes.

59,572. You never send them direct to the market?—No.

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59,573. Do they improve in quality, and get a better price, after they have been laid on your ground?—Yes; it makes a difference of fully half.

59,574. At Jersey, you say, the oysters have fallen off, since the steam cruiser came on the ground?—Yes.

59,575. The steam cruiser, I suppose, was more effective in maintaining the close time?—Yes, and the Frenchmen monopolize the fishing. They not only take up the biggest half of the ground, but they intimidate our fishermen from going on the other half.

59,576. I suppose the French cruiser was impartial in his treatment of the fishermen?—No; he protected the French fishermen, but not us.

59,577. Was that on the Jersey coast?—Yes; it is close to the French coast, and the line has been so divided there that the Frenchmen get all the oysters.

59,578. Then did not the steam cruiser prevent the French fishermen from fishing within their own line?—No.

59,579. Do the oysters on that ground still yield well?—There are no oysters there now, and there never will be on the Jersey ground, the same as there was formerly.

59,580. You say that the French cruiser permitted the French boats to fish within their own limits at the time they prevented you from fishing on the Jersey ground?—There are three miles reserved for each country; the fishing in the middle is free, and is public ground. What I said is that the French fishermen would not allow the English fishermen to go over to their side, and they intimidated them so that they were afraid to be within two or three miles of the limits.

59,581. Was the result of that that the French boats fished the ground when you did not?—Yes.

59,582. But you also said, that it is because the ground has not been fished that the fish have ceased to be found there?—I did not say that. I think it may have tended to produce that result, and I said I thought that was the beginning of it.

59,583. Does the French ground continue to yield, being continually fished?—No.

59,584. How is that?—It cannot continue to yield oysters, because the French dredgermen take everything away.

59,585. Then do you consider that it is over fished?—Yes. There are three miles of the coast on that side reserved for the French, and three miles on this side reserved for the English. Then, between those two lines, all in the middle is common ground, and wherever spat or brood is to be found the Frenchmen go with their dredges and sweep the whole away. There is no hope of there being a good fishery there again.

59,586. (*Mr. Lefevre.*) But you do that here, do you not?—No; there is an Act of Parliament against it.

59,587. I mean on the public grounds?—No; we use a thing like a knife, by means of which we pick out what we want, and we throw the rest back again into the sea.

59,588. I understood you to say that you take the small oysters?—Yes; but the French fishermen take away the soil and those things which the oysters adhere to. Outside here, a dredgerman might get his dredge full of culsh, which is just the thing for the spat to fall on. If there were nothing to prevent that, people would go and gather it up and carry it away.

59,589. Are the dredgermen compelled, when they are dredging on the ground off this coast, to throw the culsh back again?—Yes.

59,590. A regulation of that kind is observed generally?—Yes.

59,591. On the other hand, the French dredgermen do not observe that regulation within three miles of their own coast?—No, nor when they are on the common ground.

59,592. Do you think a good deal of damage has resulted to the fishing in consequence?—Yes; a good deal of damage has been occasioned by the mode in which the French fishing has been conducted.

59,593. Do you ever take your oysters into Ostend or Dunkirk at once?—No.

59,594. Do you think it would be an advantage, if you were able to take them there as a cargo?—Sometimes it would, when the wind and weather are bad. At present, we are not allowed to sell there, and, if the vessels cannot get away, we cannot sell oysters, unless it is for the purpose of buying food.

59,595. Are all the Channel oysters sold in the London market, or are they exported to France?—There is a great demand for oysters in France, which causes the oysters to go up to a high price. The Frenchmen have taken to eating common oysters, which they get from Newhaven, Shoreham, and so on.

59,596. Do you sell them to the French?—No. They are entirely for London and other markets here.

59,597. All the Channel oysters are used in supplying the English demand?—Yes.

59,598. Do the French obtain any brood from here, for the purpose of laying down on their own beds?—No, they never get any.

59,599. Is all the brood taken in the sea off this coast laid down on private beds here?—Yes.

59,600. Sold to the Whitstable Company, the Faversham Company, and private companies on this and the Kentish Coast?—Yes.

59,601. What private companies are there here besides the Colne Company?—They are too numerous to name.

59,602. Are there a great number of them?—Yes; I should say there are 100 small landowners who have private beds.

59,603. Are they engaged in buying the small brood?—Yes, and in cultivating oysters from the brood, until they become oysters fit for the market.

59,604. Do any of them possess ground on which they find brood themselves?—No, there is no such thing; it is entirely a process of cultivation which is carried on here. They buy all the brood they have.

59,605. Then, with the exception of the Colne Company, do none of them have ground on which the oysters spat?—No.

59,606. Where do these companies buy their brood from now?—They are adrift now. They have hardly been able to obtain any for a considerable time. Those who have been accustomed to obtain 500 bushels in a season, have not been able to get 50, and some of the smaller ones have not been able to get any at all.

59,607. Do they buy it from Falmouth and other places on the south coast?—They would do so, if there was any to sell, but I do not think there is any to sell, even there.

59,608. Then, with reference to the Convention Act, the alteration you suggest would be that the open time should be extended for two months?—Yes, if possible, or I do not know what will be the consequence this summer.

59,609. You do not think it would be desirable to do away with the close time altogether?—I think it is impossible that people can live for four months away from their business.

59,610. But you would not wish to see the whole of the year open time?—No, of course not.

59,611. Upon what ground?—Because, in the spawning time, the oysters, if we were to catch them, would not be good, and they would fetch no money.

59,612. But could you not lay them down?—Half of them would die, if we were to lay them down. Even in September we have to be very careful in getting them.

59,613. They require to be carefully attended to, even as late as that?—Yes.

59,614. The removal of the oysters would be attended by danger to them?—Yes, at that time.

59,615. (*Mr. Caird.*) In what month do you fish the Channel oysters now?—In every month of the year, except in the close months.

59,616. You are acquainted with the stow-boat fishing ?—Yes.

59,617. In what months of the year is that fishing practised ?—From November until February.

59,618. Has the quantity of sprats taken by the stow-boats been increasing of late years?—There have been very few got for a good many years until this winter. This year there has been an abundance.

59,619. Are they ever caught in such an abundance here as to be unsaleable, except for manure ?—No, there were a great many carried to the London market this winter.

59,620. Were there any sold for manure that could not find a market ?—Yes, when there is a necessity for it.

59,621. Were they found in such abundance ?—It was not through that, but on account of the time and the weather, and the day on which they were caught. For instance, it would be of no use to go to London with them for the Sunday. All that come in at a time like that would have to be sold for manure.

59,622. Do you ever find young herrings mixed up with them ?—No, it is a very rare thing indeed.

59,623. Are they almost all exclusively sprats ?—Yes, they are sprats as near as they can be.

59,624. Are there any regulations as to the mode in which the sprat fishery is to be followed here ?—No, it is quite a matter of perfect liberty.

59,625. Do the whole of the fishermen who are not connected with the Colne fish for sprats in the fishing season ?—Yes, every one of them.

59,626. Is there a large number of boats engaged in the sprat-fishing ?—There are 50 or 60 vessels generally, and sometimes 70 or 80.

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59,627. Are they the same vessels that go to the deep-sea oyster-fishing ?—Yes.

59,628. Are they the same people ?—Yes.

59,629. Do they get a good return from the sprat-fishing as a whole ?—They do the best they can.

59,630. Is it a valuable fishery to the fishermen ?—Do you mean the stow-boat season.

59,631. Yes.—It has been very good this winter, but in other winters it has not been so good.

59,632. Then I suppose this year would compare favourably with any season in your recollection ?—Yes.

59,633. There is no sign that the sprats have been fished out in any way ?—No.

59,634. Have you noticed when you have had a good sprat-fishing, that the coast is frequented by any other description of fish in the same year ?—No, I never saw such a thing.

59,635. Are there any flat-fish caught here ?—No, there are very few of any kind of fish caught here, except sprats.

59,636. Is there any line-fishing carried on here ?—No.

59,637. Or any sole-fishing ?—No, but it is the wrong time of the year for soles.

59,638. Is there no fishing on the flat grounds off here ?—There is, but it is not carried on by Brightlingsea vessels ; one or two small boats go out trawling for soles, I believe.

59,639. Did you ever know a steam-vessel to be used for catching oysters ?—Yes, I have seen it done.

The witness withdrew.

HENRY SIDNEY GOODY recalled and examined.

H. S. Goody.

59,640. (*Mr. Caird.*) You wish to add something to your evidence in reference to some Acts of Parliaments for private fisheries ?—Yes. Of late two or three fisheries have been appropriated by the Government to other purposes than a public fishery, and they have been brought under the consideration of the dredgermen of this neighbourhood. I allude to the fishery in the river Stour.

59,641. Is that near Harwich ?—Yes.

59,642. Above Harwich ?—Yes. The fishery there has been appropriated to other than public purposes, and we hear that that has been done with the sanction of the Government. Private individuals have been allowed to take up a portion of the fishing grounds for private purposes.

59,643. Was the ground which has been so taken up a public fishery ?—Yes ; and our friends here are very much disturbed about it.

59,644. Are you aware of that fact ? Do you know anything of the facts of the case ? Do you imagine that the ground to which you refer, and which has been so appropriated, was at any time used and productive as a public fishery ?—I have known it used and dredged as a public fishery, before this appropriation to a private company, and there is living testimony of that. The same thing has been done with regard to the Herne Bay fishery. In that case an Act of Parliament has already been passed, and the whole matter may be said to be over. There is now in this Session a Bill before Parliament for a similar object in connexion with the Roach River fishery. We understand that a company is about to be sanctioned there, which will take possession of grounds which have hitherto been public grounds, and that too, without putting up the grounds to any public competition. The object of the Bill now before Parliament is to enable certain persons to form themselves into a company in order to work the Roach River grounds, and persons round that neighbourhood and here are of opinion that such a course will do them great injury, and will deprive the public of a considerable portion of their rights.

59,645. When you speak of the Government, I suppose you refer to the Woods and Forests ?—Yes.

59,646. If the Woods and Forests had put these fishing grounds up to public auction, do you think there would have been no opposition ? Do you object that the grounds are being disposed of privately, or to their being disposed of at all ?—We object to their being disposed of at all, but we say, that if they are to be disposed of, then it ought not to be done without giving an opportunity to the public of competing.

59,647. Has your experience led you to form any opinion as to whether grounds of that nature can be fished with a better prospect of success and a large return by private enterprise, or by allowing the public indiscriminately to take possession of them ?—The only ground for opposing the conversion of these fisheries into private fisheries is that they are at present public grounds, which are now about to be passed over to private individuals, by which means the public will be deprived of the means of dredging upon those grounds ; and that also will be done without giving the public an opportunity of competing for the possession of the grounds.

59,648. Your objection is, that the public do not get an opportunity of competing ?—Yes.

59,649. You do not suppose that the establishment of these private companies will diminish the supply to the public ?—It will have a tendency to diminish the public use of the fishing grounds.

59,650. But not the supply of oysters to the public ?—Yes, I think it will.

59,651. Are not private individuals as likely to turn this ground to a good advantage in increasing the supply of fish as the indiscriminate use of it by the public ?—In establishing a company of this sort, with limited liability, they only run the risk of losing the amount of their deposit, and it is comparatively a matter of no consequence to them whether they stop or not. The case would be very different with a body of fishermen who have to get their living by the fishery, and who have to spend their whole lives at it. What the fishermen say now is, "You are doing

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"us a great injury by letting these mere speculators "come in, and deprive us of grounds we have worked "upon all our lives." It does appear to me that their complaint, on the face of it, carries considerable weight with it.

59,652. (*Mr. Lefevre.*) Have you known cases in which the Government have granted a lease of ground on which the public have dredged for oysters?—I understand that the Stour is a case of that sort.

59,653, The Government have no right, without an Act of Parliament, to grant grounds where oysters have been dredged for by the public?—So I say.

59,654. Therefore, where the public have been in the habit of dredging oysters, they will still have a right to do so?—Yes.

59,655. It is a different matter where an Act of Parliament has been passed?—Yes. In that case we can only call attention to the matter, and express a hope that the practice will not be continued.

59,656. Do your remarks apply to cases where Parliament has stepped in and converted grounds into private property?—Yes.

59,657. Do you say that they would be more productive if they were left open, than if they were converted into private property, with the view of making them a nursery for oysters?—I say that they are doing away with public rights.

59,658. Might not that argument be used against the Colne Company itself? By throwing the beds here open to the public, might not more good be done than by confining it to a particular class of men?—No, my experience is that you will not find any body of men better able to conduct the fishing than those men.

59,659. Is that not because they have the rights of private individuals over these particular grounds?—Suppose the Government were to take it into their heads to let off the Blackwater, it would do an immense injury to the fishermen.

59,660. Do you think that more profit is to be derived by the public generally from leaving the ground open, than by placing it in the hands of a private company?—I look at the matter in a wider sense than the mere catching of oysters. I have regard also to the maritime interests that are mixed up in the question. I think that considerable injury would be done to the public, if anything were done to deprive those men of the means which they have hitherto enjoyed of earning a livelihood.

59,661. You think it would interfere with the profits of the dredgermen living here?—Yes.

59,662. But would it not increase the supply of oysters to the public?—No, not at all.

59,663. Why do you think so?—I think that, while a body of men would be deprived of their means of subsistence, the public would not obtain a better supply of oysters, because I am satisfied that no other body of men could conduct the fishery better than it is at present conducted.

59,664. We are talking now of the open grounds, and not of the Colne Company?—Yes.

59,665. By incorporating a body of fishermen as the Colne fishermen are incorporated, for the purpose of obtaining oysters from the Blackwater, do you think a further supply could be obtained?—I do not think that the public could be served better than it is at present. The corporation of Maldon at one time sought to appropriate the ground in the Blackwater to themselves, and we fought the battle with them. I was never more satisfied of anything than I was that it was of the greatest public advantage that that ground should be open ground for the supply of spat and brood.

59,666. Is the ground in the Blackwater on which you find this brood larger than the Colne ground?—Yes, it is twice or three times, or four times, as large.

59,667. I understand from you that you never found on that ground anything but brood and spat. You do not find large oysters?—There may be a few found, but not many.

59,668. Then it does not supply oysters fit for sale?—No.

59,669. It only supplies brood for fattening?—Yes.

59,670. Might not some advantage be gained by converting it into ground to supply the market with fat oysters?—No. It is of advantage to obtain young oysters there, which can be matured.

59,671. Could they not mature there?—Not very well.

59,672. Then your argument goes to this, that it is of no use to cultivate the oyster?—No. I think there is disadvantage in cultivating the oysters.

59,673. But you think you have sufficient nurseries already?—What I say is, that there must be common ground, and there must also be ground for the cultivation of oysters. Both of them must exist for the purpose of properly conducting the oyster business.

59,674. Could not the same argument be used against the Colne Company?—But why say the Colne Company? Why not say every company? If it is to apply to the Colne Company, it would apply to every company.

59,675. Take the Blackwater river. The space of ground over which the brood is found there appears but a small proportion to the whole space of ground over the sea surrounding the coast from which you gather spat and brood?—It is the principal place to which they send for brood. The Blackwater is the largest place on the coast for supplying brood. Indeed it is the mainstay of the fishery, and if the Government did anything to cut off that ground, then the other oyster grounds would suffer.

59,676. Do you think there is a considerable extent of ground that might be enclosed and used for fattening oysters, without doing harm to the public?—I am not aware of it.

59,677. Looking at the whole of the estuaries of these different rivers, are there not considerable plots of ground which might be enclosed?—I think not. I may say that I have been consulted professionally with regard to the Stour. The fishermen say that that is a public fishery, and that it ought not to be taken from them. I have given notice that we shall try the question with them.

59,678. The Blackwater you consider to be necessary as a nursery, in order to feed the other beds?—Yes.

59,679. The third case you mentioned is that of the River Roach?—Yes.

59,680. Have there been any brood and small oysters found in the Roach?—Yes, I understand so.

59,681. That question will come before Parliament shortly?—Yes, but I am afraid the Bill has already passed the House of Lords, so that whatever has to be done must be done in the House of Commons. I have been directed to go before the Board of Trade on the matter.

59,682. (*Mr. Caird.*) Do you think that very much of your objection would be removed if the Woods and Forests were to give a public intimation before making an arrangement with a company as to letting off part of the land privately in this way?—I think there ought to be a notice given before any public right of any sort is interfered with.

59,683. I suppose they hold that they have a right to dispose of this property as common property. I presume that the Woods and Forests believe they have a right to dispose of it, and in that case would your objection be met by their disposing of it by public auction, so that every one might have an opportunity of bidding for it?—My objection is that it should be disposed of at all.

59,684. You desire that it should not be converted into private property?—Yes.

59,685. Have you heard that a plan has been projected for bringing the whole sewage of London down here upon the Dengie Flats and Maplin Sands?—I have not been acquainted with it.

59,686. If the Dengie Flats were to be enclosed

from the sea, do you think it would be prejudical?—I cannot say.

59,687. (*Mr. Lefevre.*) Can you give us any idea of the extent of the fisheries on this coast?—No.

59,688. Do you think that the legal position of the Colne Company and their want of power to borrowing money interfere with the profitable use which they might otherwise make of the grounds here?—I should like to reserve an answer to that question until we get rid of the lawsuit we have here.

59,689. By the application of capital to the ground of the Colne Company, might not a good deal more be made out of it than at present?—I cannot say that that would be the case. It would hang upon a good many things which we hope will be settled when the lawsuit is over.

59,690. (*Mr. Caird.*) Is it the general feeling among the fishermen here, who number 600 or 700, that it would be of advantage to them if the deep-sea fishery were open in the months of May and June?—Yes, and there is also another point, viz., that if the Government granted that, the two close months following should be closed more effectually; it never has been the case hitherto; in reality, the close time has been a sham.

59,691. You allude to the remaining two months?—Yes; there are men who have been in the habit of going out, although it was contrary to the law, and I think they ought to be stopped. Of course, when they have come home and have earned a pound or thirty shillings, they have induced others to go out also.

59,692. (*Mr. Lefevre.*) Is there not considerable difficulty in removing the oysters at that time?—We should want the fishing stopped altogether in the month of August.

59,693. You propose that July and August should be close months?—Yes.

59,694. Is there a considerable fishing in those months?—Yes, some will go, even if the fish are spoilt.

59,695. (*Mr. Caird.*) You also added, that it was an injury to you that the Woods and Forests should let off to a private company the grounds you at present consider public?—Yes; the fishermen here consider it part of their rights. It is ground which has been fished on by their forefathers from time immemorial.

59,696. (*Mr. Lefevre.*) Has the appropriation of the Herne Bay ground been a disadvantage to you?—It will be.

59,697. In what way?—We shall not be allowed to go there in future.

59,698. Were you in the habit of dredging there?—Yes. It might be that a little spat would be found there when it would be found nowhere else, and the fishermen will now be deprived of that. Of course if they are to lose the ground piece by piece, they must, in the end, sustain very considerable injury.

59,699. And, on the other hand, they will be subjected to competition with other companies in buying spat from elsewhere?—Yes, but we think they cannot keep the spat alive on the Herne Bay ground.

The witness withdrew.

Frederick Wiseman called and examined.

59,700. (*Mr. Caird.*) To what fishery or to what river does the evidence, which you are about to give, refer?—To the River Roach, which is a branch of the River Crouch.

59,701. Is that off Burnham?—Yes.

59,702. Does your evidence relate to the Burnham fishery?—No, but my beds are in a branch of the same river.

59,703. Is the evidence which you are about to give applicable to all the fisheries in the River Crouch?—Yes. In the first place I will read a few observations, which I have written down. I say, in the first instance, "that the failure of spat is caused by "the cold springs and summers so prevalent for the "last five years. Of this we are certain; our river "police get the temperature of the water three times "a day, and once during the night. On the 11th of "May 1864, the water at the bottom of the River "Roach, in two fathoms at low water, was 52 degrees; "after that we had eight days of very hot weather, and "on the 20th of May, the water was 69 degrees, or "one degree more than on June the 28th, 1863; it "then fell to 58 degrees, and remained so for some "time. We expect to see spat from the 7th of June "to the 21st. I find that the highest temperature, "on June the 11th, 1864, was only 65 degrees, and "the average, from June the 20th to July the 18th, "was 61. On the same day, on August the 6th, it "was tried by friends of mine at the Isle de Re and "also on the west coast of Ireland; at the former it "was 74 degrees and 72 at the latter. That accounts "for the French and Irish getting spat, and we "none."

59,704. Are you aware of the fact that the French and Irish have got spat in those years when you say there has been no spat here?—I believe they have.

59,705. Do you know it as a fact?—Yes, from friends who have been there. In fact, I have seen the oysters with the spat upon them.

59,706. Go on with your paper.—"At the same "time, it is a well known fact that the French "grounds have failed or have had scarcely any for the "last three or four years."

59,707. How do you reconcile that with the fact you have just mentioned?—They get more than we do. We had very little or none. They had a little, and it was more than we had, but still they have had a scarcity as well as ourselves. Nevertheless, they had a little. "The comparative failure there ac-"counts for their purchasing so extensively on our "coast. In fact, they have been buying them up "everywhere, and the people who have been in the "habit of purchasing oysters about here have had to "give more money for them in consequence. There "never would have been this outcry about the "scarcity of oysters, if there had been a succession "of spat there. I attribute the cause to the cold "weather we have had during the last five years. "As regards the French system, I have tried it upon "my grounds, and others have done the same, but it "has proved a decided failure. I found that fascines "or faggots were fine things to collect a bank of "mud, but not for the spat to adhere to." I did not get one spat, and I believe Mr. Buckland will bear me out in that.

59,708. Have you ever been to the Isle of Re?—No.

59,709. Are you aware that there is a muddy deposit in the Isle of Re, the same as in the Crouch?—I believe it is a sandy soil there.

59,710. Then the circumstances which render the use of faggots and fascines applicable in the Isle of Re, and useful there, are not applicable here?—No, but they are not considered useful there now. They have all been given up completely, and also the use of boxes. Kemmerer's tiles also collect mud. A few spat adhere to them. I found just as much spat on the surrounding culsh or old oyster shells as there were on the tiles. I have laid down a good many tiles, and sometimes I have seen one or two young oysters on a tile, but not often. At Southend, I believe they laid down 10,000 tiles, and they only got one spat on the whole of the 10,000.

59,711. They laid down 10,000 tiles at Southend?—Yes, and we have had more than that. I have found spat now and then round the tiles. I also tried to get spat in a pit or tank. I had the bottom covered with culsh, tiles, faggots, cockle and mussel shells, broken bottles, &c., and I also put in a bushel

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of oysters to throw out spat or spawn. All this proved a failure. I could not find one, although I searched for them. I believe that Mr. Buckland will bear me out in that statement.

59,712. You have told us of your failures—have you had any successes?—No, for the last five years the spat has always been a failure.

59,713. You have not discovered any mode by which you can artificially preserve the spat?—If we can once get it to adhere, we can preserve it, but the difficulty is to get it to adhere.

59,714. You have not discovered any mode by which you can succeed in doing that?—The grand object is to have the water sufficiently warm.

59,715. You require to have the temperature of the water high in order to bring the spat to a state of brood, and to enable you to preserve them?—Yes.

59,716. That is the real secret of success in oyster culture?—Yes, and we shall never get spat until we can have the water warmer.

59,717. Do you imagine that on the more southerly coast of France, where they have warmer summers, they may have successful spat seasons, when you, with a colder temperature, have unsuccessful spat seasons?—Yes.

59,718. It is not a question of fascines or anything of that description?—Not at all. I do not believe that at the Isle of Re they have the small culsh we have here.

59,719. Do you find that the small culsh you have forms a good bed on which the spat can be brought forward, if the temperature is sufficiently high?—Yes.

59,720. (*Mr. Lefevre.*) What kind of culsh?—Principally old shells. I buy from other places just the shells alone.

59,721. Have you extended your beds in that way by making ground for the oysters to spat on?—I have merely thrown shells over the beds to catch the spat. I buy cockle and mussel shells and such things.

59,722. (*Mr. Caird.*) Have you increased the extent of your ground by doing so?—I believe that it is a very good thing to have clean culsh.

59,723–5. What is the extent of your ground?—I have a piece a mile and a half long, but I have not had any spat upon it for five years, although I have laid out 20*l.*, 30*l.*, and 40*l.* every year in purchasing all sorts of things to lay down—cockle shells, oyster shells, &c. I have also had a good many extra men to clean the ground, and yet I have not been successful.

59,726. (*Mr. Lefevre.*) Is the whole of the ground in the Burnham river in the hands of private companies?—Part of it belongs to a company, and the other part belongs to private persons.

59,727. So that practically the whole of the river is in private hands?—Yes, except a little piece of common ground which they are seeking to take away.

59,728. With that exception the whole is private ground?—Yes.

59,729. Does this small portion of the River Crouch provide a considerable quantity of brood?—A tremendous lot; thousands of washes in a year.

59,730. Is there more in proportion there than here?—About the same, I think.

59,731. Have you any idea whether places well adapted for the fattening of oysters are not good breeding places for oysters?—I do not know much about that. Upon our ground they do not fatten first rate. Our oysters are green finned, and they do not fatten so well, although there is no difference in their breeding.

59,732. Do you think that fat oysters will breed as well as others?—Yes.

59,733. (*Mr. Caird.*) Will you go on with your paper?—"I beg to claim your attention to some im-"portant facts connected with the common ground "in the River Roach. I must premise, for your "general observation, that the common grounds are "the breeding grounds from which the supply is "mainly obtained for the cultivated beds. If the "supply of young oysters be taken away and given "to other people, how will it be possible to stock the "beds which are at present cultivated? For the "last five years the stock of young oysters or spat "has been very deficient, and if the small supply be "again subdivided and given to a fresh lot of pro-"prietors, it will not pay any of us to carry on our "business, and the matter must end in the ruin of "everybody." You will see from the map that the piece of common ground is surrounded by private beds on all sides, so that the stock from the private grounds falls on to the commons. In fact, the oysters got there all belong to us.

59,734. How did that ground ever happen to become common?—I cannot inform you.

59,735. Does nobody claim any right of property upon it?—No, only over the little pieces taken out of it as it were. "It is quite evident that, in such a "river as the Roach, the young oysters found on the "commons must be the offspring of those on the "private beds, and it is a very hard case that our "young oysters, when they pass an imaginary line, at "once become the property of another person. We "do not want the ground for ourselves, but simply to "remain for the poor dredgermen to earn their liveli-"hood, as they have been in the habit of doing from "time immemorial, and to give us the opportunity of "purchasing our own property."

59,736. Is that all?—Yes.

59,737. Cannot you give us something about the practical management of the oysters?—I thought you wanted to know something about the scarcity of oysters.

59,738. So we do.—Then I say, that by taking these grounds in, the supply will not be any greater than it is at the present time.

59,739. Is there anything else you desire to mention to us upon this subject?—Experience has shown me that the spat and the young oysters on the common ground come up in the dredge. Those young oysters must come from somewhere, and the only place from which they can come is the cultivated beds. I have dredged on the commons, and I have found upon every shell taken up 5, 6, 8, or 10, and sometimes 20 and 40 spat on a shell. The contents of every haul we made was worth 1*l.*, and it would be so again if we had a spat.

59,740. (*Mr. Lefevre.*) There would be no loss to the public in consequence of this common ground being converted into private property? There would simply be a transfer of ownership?—Just so, but what are the dredgermen to do? What is to become of them?

59,741. I presume that the owners of the private fisheries employ a considerable number of men?—Of course they do. I used to employ a dozen, but now I have only six, because we have no oysters to catch.

59,742. How have you supplied your beds during the last three or four years, since the failure of the spat?—I have scarcely had any oysters. I have had very few indeed. If the spat had not adhered in 1858, we should have had none left.

59,743. Have you tried the plan of purchasing oysters from a distance, from Falmouth and Ireland?—No. They purchase here, but we do not, although there are persons at Burnham who purchase Channel oysters and lay them down. I do not, however.

59,744. (*Mr. Caird.*) You have nothing but oyster-fishing in the Crouch river?—There is trawling and shrimping. They catch dabs, plaice, and flounders.

59,745. Is that extensively practised?—No.

59,746. There is no important fishery of that kind there?—No; there are one or two fishermen in the river, but I believe that the dredgermen have trawls, and that they fish with the trawl when there is anything to be caught.

59,747. Is there any other point you desire to bring before us?—Well, I know a case in which a bed of

oysters was found in the Channel. It was at the end of the season, and they were very small, so the persons who found them thought they would not go for the purpose of catching them until the commencement of the following season; but when they went they found that they were all dead, having been killed by the five-fingers.

59,748. Where was that?—In the Channel. It was a bed of small oysters.

59,749. Could any means have been adopted by which those oysters could have been protected?—Yes, if the people had been allowed to work there.

59,750. Have you yourself fished oysters in the deep sea?—No.

59,751. Then you do not speak from any practical knowledge?—No; I have never dredged, only in the rivers.

59,752. (*Mr. Lefevre.*) Is there a considerable population at Burnham dependent upon the oyster-fishing?—I cannot say exactly.

59,753. Are there a considerable number of men employed by the different owners of beds in dredging?—There are a great many, but I cannot say how many. There are not as many, however, as there used to be.

59,754. Is the Burnham Company a corporation like the Colne Company?—No.

59,755. Is it private property?—Yes. They hire it of Sir Henry Mildmay.

59,756. Are they dredging all the year round to clean the beds?—Yes.

59,757. Do they consider that necessary?—Yes.

59,758. Do they think that, if they left off during a portion of the year, mud would accumulate?—It would make a great difference. In the first place, that river is always infested with five-fingers, and, unless it were continually worked, the five-fingers would kill the oysters. The same applies to our own river.

59,759. Do they attack the brood?—Yes, and the large oysters too. They attack both young and old.

59,760. Is that not the case also in the Roach river?—Yes, just the same. In working my ground, I generally leave off for one month in the year, having other things to do. I leave off working as soon as the spat begins to fall. I tell my man that as soon as he sees spat he is to leave off.

59,761. You leave off for a month?—Yes.

59,762. Is that generally done?—No. In one year in particular, I left off for a month, and when I went again I found the ground covered over with a sort of slimy weed. I did not get a spat that year, but there were several gentlemen in the immediate neighbourhood who worked all the year round, and they had a large spat.

59,763. Do you think that the interval during which you ceased dredging was detrimental to the ground?—Yes, I do, because weeds and mud collect so fast.

59,764. (*Mr. Caird.*) In what month was that?—In the middle of June. Sometimes it is July before we see spat.

59,765. (*Mr. Lefevre.*) Then it is of great advantage for the ground in the Roach river to be dredged all the year through?—Yes, there always is a great advantage in constant dredging.

59,766–7. (*Mr. Caird.*) The oysters in the River Roach have some peculiarity, have they not?—Yes, they are green, and, for that reason, are not saleable in the London market, but they find a very ready market in Ostend, which has been supplied with oysters from the River Roach for the last 70 years

59,768. Is the supply increasing or diminishing, or has it kept stationary?—There is a greater demand for them, but the supply is very bad.

59,769. What is the cause of the greenness?—I cannot account for it, unless it arises from a certain green weed that grows there.

59,770. Is there any mineral there which may occasion it?—No.

59,771. And in the River Crouch, close by, are the oysters always white?—Yes.

59,772. The oysters from the Roach find a ready sale in Ostend?—Yes.

59,773. Are the Burnham oysters white oysters?—Yes.

59,774. And the Roach river opposite produces a green oyster?—Yes, on account of the green weed that grows there.

59,775. Is that where the common ground is?—Yes.

The witness withdrew.

William Minter called and examined.

59,776. (*Mr. Lefevre.*) Are you a dredgerman?—Yes.

59,777. And a member of the Colne Company?—Yes.

59,778. How long have you been at work yourself?—As a dredgerman?

59,779. Yes.—Seventeen years.

59,780. Before that, you were an apprentice, I suppose?—During part of the time I was.

59,781. All the members of the Company are obliged to serve an apprenticeship?—Yes.

59,782. Have you got a smack of your own?—Yes.

59,783. Have you found that, during the last year or two, you have not made so much money, or has the increased price of oysters made up for the decreased quantity?—There has been an increase in the price of oysters, but it has barely made up for the decreased quantity.

59,784. Does dredging for the Company take up most of your time?—Not altogether.

59,785. During the open season, how long are you dredging for the Company? Do you dredge for them every day?—No, it depends on the weather.

59,786. Do you do anything else in the open season, except dredging for the Company?—Yes.

59,787. What else do you do?—I go out fishing.

59,788. Does dredging for the Company take up half of your time?—No, not always; sometimes it does.

59,789. During the close season, you do not do anything for the Company?—No, not for the Company.

59,790. Do the Company pay you wages, or so much for the oysters you dredge up?—Yes.

59,791. How is the price regulated?—The jury set the price at so much per wash.

59,792. How many wash are you able to take up during the season in a week?—I do not know; I have not kept an account of that.

59,793. What price do they pay you per wash?—I do not know the average price; it varies.

59,794. During this last month, what have they been paying you?—About 16*s.* for a wash. That will take three or four days to get. I think we well earn it.

59,795. Six years ago, what did you get for a wash, before the failure of the spat?—Oysters were cheaper then, and we did not expect to get more than 7*s.* or 8*s.* They were not above half the money they are now.

59,796. On the whole, do you make a pretty good thing out of the Company?—No, I do not think we do.

59,797. (*Mr. Caird.*) Are you any better off than the fishermen who are not connected with the Company?—There is very little difference.

59,798. Is it of any advantage to you, as a fisherman, to be a member of the Company?—Perhaps I might be able to earn a little more, if I were free to

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go anywhere else; but I have a little to look to besides, and I cannot speak of other people who have nothing but the fishing to depend upon.

59,799. Is there any suggestion you can offer to us for the improvement of the oyster fishery here, as the result of your experience?—I think that, if the fishermen were allowed to work a little longer in the spring time, and to leave off in July and August, it would be of advantage to them.

59,800. To work on the common ground?—Yes.

59,801. At present, I understand that you have very few oysters on the common ground?—We have very few oysters anywhere, but I am speaking of the Channel.

59,802. I thought you said the common ground here?—It is common ground in the Channel.

59,803. Then you did not refer to the company's ground?—We do not call that common ground.

59,804. (*Mr. Lefevre.*) Did you hear the evidence which has been given by the other witnesses?—Yes.

59,805. Do you agree with it?—Yes.

59,806. As to the extension of time?—Yes.

The witness withdrew.

J. Welhun.

JOHN WELHUN called and examined.

59,807. (*Mr. Caird.*) Are you engaged in the shrimp fishery?—I have not been engaged in it for seven years.

59,808. Then you cannot give us any information as to the present state of the shrimp fishery?—No, not for the last seven years.

59,809. Are the fishermen here allowed to fish on the Company's ground for shrimps?—No.

59,810. Does the Company have a right to fisheries of all kinds on their own grounds?—The right of fishing altogether is vested in the Company.

59,811. Do they not allow any other fishing except oyster dredging there?—No.

59,812. Is that the same with regard to the Burnham river?—I am a stranger there; I cannot say.

59,813. Is this a great shrimping place?—No, but there are a great many boats from Wivenhoe and Harwich.

59,814. Are they increasing in number?—Yes.

59,815. Is the shrimp-fishing increasing in productiveness?—Yes.

59,816. Then it has not been found that it has been fished out in any way?—No.

59,817. It has not been over fished?—No.

59,818. Is the shrimp net a trawl net?—Yes.

59,819. With a very small mesh?—Yes, quite a small mesh.

59,820. Do you catch any other kind of fish except shrimps?—Yes; all kinds of fish that lie on the ground.

59,821. And do you catch the brood of fish of various kinds?—Yes, of soles, skate, and so on.

59,822. Do you do much injury to the brood of other fish by dredging?—No, I think not.

59,823. Are the small fish you catch destroyed?—No; the small fish the fishermen throw overboard, and they live, and the large ones they take out and keep.

59,824. Are not many thrown overboard dead?—Not out of the shrimp nets. I have seen small soles caught, but they are always thrown overboard alive.

59,825. Is it not the fact that the shrimps have become scarce of late years?—I think not, on this coast.

59,826. What is the ground over which these men shrimp?—In the river, off Maldon.

59,827. On the ground between Gunfleet and the coast?—Yes.

59,828. From Harwich right down to the Blackwater?—Yes.

59,829. What number of shrimpers are there?—There are about 100 boats employed.

59,830. With two men in each?—Yes.

59,831. Have they altered their mode of fishing in the course of years?—No.

59,832. Have they adopted no improved modes of fishing, such as a larger net or boats?—No; it is all in the same style.

59,833. Is the fishery of shrimps increasing?—Yes.

59,834. Is it more remunerative to the fishermen?—Yes.

59,835. (*Mr. Lefevre.*) Is there any attempt made to separate the small fish from the shrimps?—They separate them as they catch them.

59,836. On the deck?—As the shrimps are turned out, they throw the small fish overboard with the rubbish, and the others are kept.

59,837. Are those that are thrown overboard thrown overboard alive?—The small shrimps that are thrown overboard are dead.

59,838. But I mean the small fish?—They are all alive.

59,839. Then no damage is done to fish at all?—No. There are only a few soles, which are very small, which are taken up. There are not many fish there at all.

The witness withdrew, and the inquiry was adjourned until the 16th March, at London.

London, Thursday, 16th March 1865.

PRESENT:

J. CAIRD, Esq., M.P. (Chairman). | Professor HUXLEY, F.R.S.
G. SHAW LEFEVRE, Esq., M.P.

LONDON.

Mr. F. Buckland, M.A., M.R.C.S.

16 March 1865.

Mr. FRANK BUCKLAND, M.A., M.R.C.S., late 2d Life Guards, called and examined.

59,840. (*Professor Huxley.*) You have interested yourself a good deal in fisheries, Mr. Buckland?—Yes, for the last three years I have hardly done anything else.

59,841. To what modes of fishing have you paid particular attention?—To the cultivation of salmon and oysters.

59,842. The cultivation of salmon does not fall within the province of our inquiry, but we shall be glad to have any information you can give us in reference to the cultivation of oysters. Have you visited France for the purpose of ascertaining the mode of cultivating oysters which is practised there?—I have. First of all I visited the east coast of England and examined the oyster fisheries in the mouth of the Thames, in order to make myself acquainted with our own mode of cultivation. Having done that, I went to the west coast of Ireland, and learned what was going on there, and then I went to France, to the Isle of Re, and stayed there until I imagined that I had exhausted the whole of the subject.

59,843-8. I believe there is a great difference between the English and the French mode of culture?—There is.

59,849. In the first place I will ask you if there

is any part of the English or Irish coasts where any method of breeding oysters is practised?—There is no part of the English or Irish coasts where the artificial mode of breeding oysters is resorted to at present, that I know of, on a large scale.

59,850. But upon the French coast there is?—Yes.

59,851. Have you made an investigation into that process as it is now practised in the Isle of Re?—Yes, I have.

59,852. I believe that that practice was set on foot upon a large scale in France some years ago, mainly through the agency of M. Coste?—Yes, but it was first discovered by M. Hyacinth Bœuf, a stone-mason, whom I visited at Rivedoux, a village in the Isle of Re, opposite La Rochelle, and with whom I had some four hours' conversation.

59,853-4. Will you shortly describe to us what the method adopted by M. Bœuf is?—Perhaps, in the first instance, I had better describe where the oyster beds are situated.

59,855. Are the principal breeding grounds on the in-shore side of the Isle of Re?—Yes.

59,856. On that side there is a long foreshore combined with very shallow water, and protected from the violence of the waves of the Atlantic to which the other side of the island is exposed?—Yes.

59,857. Will you now describe the method practised upon that particular ground? In the first place, how do they clear the ground?—The ground is not cleared at all except by nature. This (*producing a bottle*) contains a specimen of the best breeding ground on the Isle of Re, and it is what is called *sable vaseuse*, a kind of muddy sand with pebbles.

59,858. Is there much growth of corallines upon the surface of the ground?—No, there is none at all, that I saw.

59,859. And there are not many shells mixed up with it seemingly?—No.

59,860. It appears rather to be a kind of fine gravel?—It is rather a fineish gravel. This is a photograph of one of the best breeding places in the island, called "La Moulinade." It is one of a series of photographs taken at the instance and expense of my friend, Mr. Thomas Ashworth, who accompanied me to the Isle of Re.

59,861. Is the rise and fall of the tide very great there?—I cannot answer that question, but I believe it is from 10 to 15 feet.

59,862. Is this foreshore the main place for the cultivation of oysters?—Yes.

59,863-4. Is it between tide marks?—Yes, from there to there (*pointing to the photograph*) is where the tiles are laid down.

59,865. Is the ground not cleared at all?—A man just goes over it with a broom before he lays down the tiles; that is all.

59,866. Will you describe the process of laying down oysters for breeding?—They lay down comparatively few oysters for breeding purposes on the most successful breeding place in 1864, viz., Chanchardon, on the south side of the island. That is a most extraordinary thing, and I will explain why that is afterwards. They simply divide the foreshore into square portions or parks. Those parks vary in size, but the best proportions are those which have been adopted by Madame Sijourde, a peasant's wife, who makes a good deal of money out of her oysters.

59,867. What is the size of the ground that she occupies?—About 1,600 "*metres carrés*,"—a metre is about three inches more than a yard,—is about the size of her oyster parks, and it is considered that each park ought to produce from 17,000 to 20,000 oysters.

59,868. How does she mark out her particular area?—They take stones, piling them above each other, and making an embankment about a foot high.

59,869. Is it a kind of fence or boundary line?—Yes, it is both. It becomes both a fence and a boundary line.

59,870. How high will it be?—About a foot. It ought not to be higher, and that is a very important matter.

59,871. Is it made of large stones?—It is formed of the rubbish lying about, and occasionally stones, the size of dinner plates, brought from the shore.

59,872. Do they bank the interstices?—Just sufficiently to enable the park to hold water.

59,873. Then is it a kind of rough stone wall?—Yes, made water-tight.

59,874. Is it made square?—It is made of any shape, but generally square.

59,875. The first step is to enclose this area?—Yes.

59,876. What is done next?—The next thing is, after sweeping it clean, to put down things for the purpose of catching the young oysters. They put down such things as that broken piece of pottery, on which you will see there is a large number of young spat.

59,877. Is there any advantage in using any particular materials for that purpose;—formerly, for example, they used fascines and faggots?—These have been found to be of no use at all. When these failed, my friend, Dr. Kemmerer, the chief physician of St. Martin (the capital of the Isle of Re), invented a tile of which I will show you a specimen presently. In the first place, they put down broken pieces of pottery. Secondly, they lay down broken pieces of glazed crockery, such as this, upon which you will also observe a very large number of young oysters, and very fine specimens they are. You will see them almost of all sizes. They also lay down broken plates.

59,878. Do they dispose these things in any particular order?—No, they are all strewed over the park.

59,879. Will you tell us how much time it will take, or how many days' employment it will afford to a man to cover this area of 1,600 square metres properly?—It occupies hardly any time at all. All the work is done by people of the very poorest description, who work at it in their leisure time, and when the tide serves.

59,880. Then the process is a very cheap one?—Exactly so.

59,881. Can you give us any idea of the cost of preparing an area of 1,600 yards?—No, I cannot, but I can tell you how many parks there are in the Isle of Re. There are 2,000 parks already made, and there are licences granted for 4,340.

59,882. You do not happen to know what the cost is of preparing the ground for the oysters?—I cannot say, but the cost must be very trifling; it is done principally by women and children, and the wages of a labouring man in the island is from one franc to a franc and three-quarters per diem.

59,883. Then the prime cost of preparing the ground is very insignificant?—Yes, very.

59,884. What time of the year is that done?—Just before the oysters begin to spat.

59,885. And what do they reckon to be that time in France?—From June to September; but they do not give it up, and I beg you to mark that, until nearly the end of October. They do not give up the idea of spatting until then.

59,886. Having prepared the ground, and covered it with these broken pieces of pottery and other materials, how long do they leave it before they examine it to see the result?—They leave it alone with the exception of going upon it occasionally to see how matters are going on.

59,887. Is the space enclosed covered by every tide?—Yes.

59,888. Is it ever left completely uncovered by the tide?—Never. That is the great secret. There are always about six inches of water over the ground in each park.

59,889. Do they select for the oyster parks ground which is naturally covered at spring tides, or do they deepen the parks artificially?—The best parks

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are those which are least uncovered by water at any time.

59,890. Do they ever take a place for a park which is uncovered at lowest spring tides?—Yes, the best parks are situated as far out to sea as possible.

59,891. If they are obliged to go out as far as that, are they not liable to have their walls or enclosures washed away by the least gale of wind?—That would be the case if they were too high. I saw upwards of 3,000 tiles smashed all to pieces by one storm at La Moulinade. These tiles, contrary to Dr. Kemmerer's advice, had been built too high by somebody who knew better than the doctor. He called them "the Tower of Babel." The walls should never be more than a foot high.

59,892. Even at that height, would not a very small play of water wash the walls down?—They say not.

59,893. Practically they do not find that to be the case?—No.

59,894. In that depth of water will not a very slight breeze be sufficient to disperse the tiles altogether?—It does happen sometimes, but there is a great art in laying down the tiles—Dr. Kemmerer's tiles. They are always heavily weighted with stones.

59,895. Do they dispose the pottery in any way?—No, they are thrown all over the parks. Here is a piece of faggot, but faggots have been found worse than useless.

59,896. Do they not float?—They collect the mud, and what few little oysters are caught upon them very often die. If they do not die, the sea worms come in and eat the wood, and then away go all the oysters.

59,897. When they lay down faggots do they stick them in the ground?—They have discontinued the use of faggots for the last three years.

59,898. Did they, when they used them, stick them in the ground or lay a weight upon them to keep them down?—I do not know; their use has been long discontinued.

59,899. You say there is no particular method of disposing of the fragments of pottery?—No, they throw them all about, but the tiles are placed in regular order.

59,900. Is there any particular art in disposing of the tiles?—They are made like the segment of a drain tile. They are common house tiles, as used in France, and are not made for the purpose of oyster catching. This, for instance, is a common French house tile,—the common tile used in France for covering the roofs of houses.

59,901. How do they lay them down?—Suppose the sea is coming in here, they are laid in this way (*describing*). They must not be laid across the sea.

59,902. They are laid to the sea?—Yes.

59,903. Are they laid with the concave or convex side up?—The concave side is down always, and the reason of that, if you wish to have the reason, is, that the young oysters invariably, as the French say, *cherche l'abri;* they always go underneath everything. This tile has been turned so. You would never find an oyster upon the top of a tile when he can get underneath.

59,904. When they use house tiles, do they put them down in one tier only?—There must be only four of them. If you have a fifth, you will certainly come to grief, because the waves will knock them all over.

59,905. They are put crossways?—Yes.

59,906. So that the tiles in the successive layers are at right angles?—Yes, and they are weighted heavily with stones.

59,907. On the top?—Between the interstices and on the top.

59,908. Is that plan better than the system of laying down loose pottery ware?—The best order for apparatus to catch spat is this—first, tiles, secondly, broken pots, and thirdly, glazed earthenware.

59,909. The difference in cost must be very great indeed between putting down fragments of earthenware and these tiles?—Yes, there is a considerable difference in the cost.

59,910. Is that difference made up by the difference in the catch of spat?—I did not enter into the money part of the question when I was over there. I was very careful not to enter into that. I should certainly say, that the plan of laying down tiles is the most expensive they adopt, but it is much easier to get the oysters off from the cemented tiles than from the common pottery. About one-third of the young oysters are destroyed when knocked off the pottery, whereas they can be detached from the cemented tiles with hardly any loss.

59,911–12. Is this method of employing tiles largely practised?—Yes, among the richer people, especially at La Moulinade.

59,913. Then it is clear that tiles must be most advantageous, because they must cost a great deal more?—Yes, these tiles, delivered in England, cost about three halfpence each, and Dr. Kemmerer will supply them at that price.

59,914. Whereas the pottery is next to valueless?—Yes, comparatively speaking.

59,915. These tiles seem to have a kind of cement upon them?—That is the section of a tile, which I have broken on purpose to show the manner in which it is prepared. There is the tile itself. Then, next to the tile, comes a piece of paper, and then the cement, which is made of hydraulic lime and other materials for which a patent has been taken out by Dr. Kemmerer. The young oysters adhere to that. This piece of tile has no cement upon it, and by comparing it with the other you will see what I mean. The oysters always go underneath the tiles. They go and stick there underneath.

59,916. With their convex valves upwards?—Yes. The oysters, as I have explained, adhere there, and when they become of the right size a man goes with a knife and picks them off, separating the cement from the tile.

59,917. And being stuck upon that soft cement, he is able to remove the oysters without breaking their shells?—Yes.

59,918. (*Mr. Lefevre.*) Do they cover the tiles with cement before they lay them down again?—Yes, in the month of May, and they lay them down again in June.

59,919. (*Professor Huxley.*) That must increase the cost?—I think not much. The operation is very inexpensive.

59,920. Is the cost of labour inconsiderable?—Labour over there is not very dear.

59,921. Then we must conclude that there is considerable advantage derived from the adoption of that method?—Yes, in the Isle of Re, but I do not go further than that. There are doubtless many places in England and Ireland well adapted for tiles.

59,922. By the method you have described to us, the spat is collected to a very considerable amount on the tiles?—Yes.

59,923. Where is it supposed that the spat comes from? Are there large natural beds out at sea?—The spat comes from there, as well as from the oysters laid down to breed.

59,924. (*Mr. Lefevre.*) Are these (*pointing to the map*) natural oyster beds?—At the Bay of Chanchardon, facing the Atlantic, I was told by M. Simon Neauvau, Garde des Parks, that there was a large oyster bed out at sea, and the spat from that was washed on to the parks in the bay.

59,925. On the east side of the island are there any?—None are laid down.

59,926–9. But there is a great oyster bed out there, on the south side?—Yes, opposite Chanchardon.

59,930. (*Professor Huxley.*) You say there is a large natural bed somewhere about this region, (*pointing to the map*)?—Yes. The depth of water runs from 27 to 45 French feet.

59,931. Have you any reason to believe that there

are natural oyster beds in the inner Channel?—I believe there are, but I do not know.

59,932. In the channel called Pertuis Breton?—I believe so, but all the oysters on that side of the island have failed this year from ascertained causes.

59,933. In any case do the owners of the oyster parks trust to the natural drift of the spawn to cover the tiles?—As far as I could make out, a great deal of the spat comes from the open sea, and some from the oysters placed among the tiles to breed.

59,934. (*Mr. Lefevre.*) Do they not lay down oysters on the beds with the view of providing spat?—There are oysters left there, but the moment they are of a certain size off they go, to the *claires*, to be fatted.

59,935. They do not leave them to breed?—Some are left on the beds, and those, of course, breed. If I were making new parks, I would put down oysters to breed, and not trust to those drifted in from the sea; the best oysters to breed are those from two to four years old.

59,936. (*Professor Huxley.*) Are the natural beds worked at all?—By dredging?

59,937. Yes.—There is not such a thing as a dredge on the island, that I could hear of.

59,938. There are no dredges in the Isle of Re?—No.

59,939. So that they trust altogether to the natural collection of spat in the way you have mentioned?—Yes, the spat is brought in by the tide, and comes also from the oysters in the locality.

59,940. Is that the case all round the Isle of Re?—I do not know, but I think so.

59,941. Do you know if there are any artificial beds upon which young oysters brought from a distance are laid down?—They bring oysters from England, and lay them down to fat. I saw a large quantity of Falmouth oysters fatting in the *claires* at Loix.

59,942. Then is there no source for the supply of spat to these plantations, except that afforded by the natural oyster beds?—I think you may take that to be the fact, in many cases.

59,943. What do they do next after they have collected the spat? What length of time do they allow to elapse, before they examine the plantations for the purpose of collecting the young oysters?—Until they think the spat has fixed.

59,944. In what month is that?—Five or six months after the spawning season. They turn the tiles over then.

59,945. What size will the young spat be then?—There they are on that piece of glazed pottery. That one is about a month old; that is about a fortnight, and that is not a week old.

59,946. The largest will be from half to three-quarters of an inch in diameter?—Yes.

59,947. Would you consider than an oyster about three-quarters of an inch in diameter, would be half a year old?—I think so, at least in the Isle of Re.

59,948. Is this size,—namely, about three-quarters of an inch,—about the size they will get them at the end of September?—Those are early ones, I suspect that they were spatted in June. Here are some that have probably not been spatted more than a week.

59,949. At what size are they considered fit to be removed?—When they are about a year old, from three to four centimetres in size.

59,950-2. Do they not begin to remove the young oysters during the first year at all?—No, they leave them alone.

59,953. Do they do nothing at all with the bed during the first year?—They merely use it for collecting the young oysters, and when the oysters are grown they take them away. As the crop comes to perfection they remove it to the *claires*.

59,954. About the end of September they begin to look to their plantations?—Yes.

59,955. Then what do they do? Do they remove the oysters from the tiles?—They do nothing at the end of September. They wait until the oysters come to the proper size, whenever that may be, and they keep on picking them out. They take them off the tiles, where tiles are used, but where they are on crockery ware they smash the pieces up. They then put them upon a donkey in panniers, and take them to the *claires*.

59,956. Are the *claires* like the parks we have on different parts of the coast of England?—They are not quite the same.

59,957. The *claires* are a kind of pond, are they not?—I will describe how they are made. You will see upon the map here a small neck of land.

59,958. Where is that?—In the Isle of Re. That is the breeding place, and there is a sort of muddy lagoon, which they call the Fosse de Loix.

59,959, Is that lagoon enclosed?—No, it is open to the sea.

59,960. Does it become bare at low water?—Yes, but the *claires* are never empty.

59,961. Do they square it out?—Yes, and make ponds about three or four feet deep.

59,962. Do they deepen it artificially?—Yes, they pile up the mud on one side, so as to make a pond with water always in it.

59,963. What will be the superficial area of those ponds?—They are generally from 25 to 30 yards square, but they may be of any size.

59,964. By digging out the mud, they make a wall and a pond?—Yes.

59,965. Do they make the excavation sufficiently deep that the space within the pond is never absolutely bare?—Under no circumstances is it ever bare.

59,966. In those ponds they lay down the oysters?—Yes, the lean young oysters.

59,967. Do they put them down in any particular way?—No, they throw them down anyhow. One man may like to have them one way down, and another another. It would be too much trouble, as a general rule, to put them down in any particular way.

59,968-9. Do they put them down in one tier, or in a number of tiers?—They take care that there shall never be more than 100 oysters in a square metre.

59,970. Are they laid down in one layer or more?—They are never placed one over the other, and those oysters which at one year old are so placed on this ground, at three years old have attained this size (*showing an oyster*). They move some oysters when they are one year old, and some when they are two years old.

59,971. At one year old they are about an inch and a half across?—Yes, but the size varies in various places.

59,972. And at three years old they are about three inches in diameter, and from that to four inches?—Yes. They will have increased at the rate of about 30 per cent. a year in the *claires*.

59,973. They are laid down and left in those ponds?—Yes.

59,974. What happens then?—They are raked three or four times a year. A man goes over them with a rake, so as to prevent them from sinking into the mud.

59,975. Does any growth of corallines or the like take place?—No.

59,976. Is there any importation of annelides?—No.

59,977. Or of the *spirorbis*?—No.

59,978. The shell of this one is perfectly clean?—Yes.

59,979. Is there any fresh water at all upon this lagoon—the Fosse de Loix?—That again is very important. The oysters fatten best in wet weather, and that is because they get fresh water from the rain-fall.

59,980. There is no natural stream of fresh water?—That is the fault of the *claires*. There is no fresh water over them. This is a Falmouth oyster, which was brought by a Frenchman, and laid down on one of the *claires*, and see how fat it has got. There is a curious thing that seems to happen to the English oysters, which was pointed out to me by M. Coste himself. When they are thrown down upon the

claires on the French coast, they begin to throw off their English shell. You will see that in the oyster I produce. There is the Falmouth shell, and that is the French growth.

59,981. But in the process of natural growth, the oyster would always be adding a new shell as he got older?—True, but there is an alteration in the composition of the shell itself.

59,982. You think there is a broad line of demarcation?—Yes. After the oysters have been laid down on the *claires*, the shell begins to exfoliate, and as we medical men say, "slough off." You will see what I mean upon this, which is another specimen, but it is not quite so well marked.

59,983. Is that generally the case?—I am told that it is the case with more than a third of them. I could not get hold of any of the oysters; they would not give them to me. They are very careful of them. They leave the oysters on the *claires* until they are fit for the market.

59,984. Can you give us any idea of the cost of making a *claire*?—No.

59,985. How many times in the course of a year do they rake the oysters?—There is generally a man employed for that purpose—an old soldier, or person in that class of life—who goes to the bed and rakes it, whenever he sees the oysters getting too much covered.

59,986. How many times is that done in the course of a year?—Whenever he sees the oysters getting down into the mud. The oyster can feed with his mouth out of the ground, and can squirt away, but if he is getting too low, then the ground is raked over, and the oyster raised out of the mud.

59,987. You say that they are all scattered down anyhow?—Yes.

59,988. Are they found after a time to be lying in the ponds in any particular attitude, with one valve or the other valve down?—My answer to that question is, that an oyster will not move himself if you place him in a particular position; but the natural position of the oyster is twofold; when he is a young oyster, he invariably, without exception, fixes himself upon the point of his heel.

59,989. What do you call the heel of the oyster?—This (*pointing to a shell*) is what I mean.

59,990. Close to the umbo of the convex valve?—Yes.

59,991. So that if the thing he fixes himself to happens to be horizontal, he is inclined at an angle of 45 degrees?—Yes. I have taken a great deal of trouble in that matter, and I make out that, as the oyster grows, he tilts up so (*describing*).

59,992. He begins by fixing himself on the convex valve?—Yes, on the edge, and on the umbo. I think this is very important, and it really affords us one of the most beautiful studies in nature. This specimen is from M. Bœuf's park, and you will there see a group of oysters fixed as I have described. The reason that nature has made that provision or law is, that when the oysters get to a certain size, they press each other off, and get loose. That is the natural mode of "culling" oysters.

59,993–4. (*Mr. Lefevre.*) When they are very thick, I suppose?—When they are getting very thick, they separate themselves right off.

59,995. (*Professor Huxley.*) Is that not because the increasing weight of the oysters tears them from the original base of attachment?—They are fixed by a minute point, and the weight of the shell goes on increasing. As the shell grows, the oyster may possibly tumble off.

59,996. I take it that the oyster is fixed by a certain amount of base, and as long as he is very small, that is enough to hold him?—Yes.

59,997. And when he gets bigger, the weight becomes too much, and he tumbles off?—Yes. The natural position of the oyster when young, therefore, is as I have described; but when he becomes a wild oyster, in the sea, the natural position is that (*describing*).

59,998. With the flat valve down?—Yes, the flat valve down.

59,999. How does the oyster get in that position?—The waves turn him over.

60,000. The position with the flat valve down is a more stable position?—Yes. The reason why I come to that conclusion is this. If you will take a stone from the bottom of a river you will find that the clean side of the stone, is that which is down, and that the dirty side is that which is up. A friend of mine, Mr. Thomas, who owns vessels that go to the North Sea, brought me some oysters from the North Sea, every one of which were covered with weed, &c., on the convex side.

60,001. That is always the case. You always get the corallines on the dorsal surface?—On the scallops it is the other way. I think it is a beautiful provision of nature to prevent the pressure above from proving injurious.

60,002. The oysters, after they have resided on the *claires* for three years, are ready for the market?—Yes.

60,003. Or is it when they attain the age of three years? Suppose they were spatted in May 1860, when would they be ready for the market?—They would be ready in 1864, but they would be better in 1865. Mr. Wiseman tells me that he sends his oysters to the market when they are between four and six years old, but it all depends on the growth of the oysters. Some oysters will be fit for the market in three years, whereas some will not be fit for the market till four or six years old. An oyster of that size (*producing one*) is not marketable; but an oyster that size (*producing another*) is. Therefore you must send to the market as soon as you can. This is an oyster from the Isle of Re that will bear out my argument exactly. It is an oyster which I should calculate to be about 15 or 20 years old.

60,004. (*Mr. Lefevre.*) Can you tell the age of an oyster by the growth of the shell?—You may for three or four years, but not afterwards for certain; it is much the same as a horse's front teeth.

60,005. Is the addition every year distinctly marked?—No, not distinctly; it is indistinctly marked. If you take 50 oysters, you may trace it in some, not in others.

60,006. (*Professor Huxley.*) Have you any notion of what the price of French oysters is when they are ready for the market?—About five francs a hundred; some three or four years ago they were cheaper, two francs a hundred. Every year they are getting more and more dear.

60,007. So that we now understand that the whole capital required for setting up one of these oyster breeding places is so much as is required for clearing the ground in the first place; then so much as is expended in the purchase of tiles and in covering them with cement; and, finally, so much as is expended in labour for laying down the tiles, for collecting the oysters afterwards, and for raking over the beds on which the oysters are deposited?—Yes, and for watching.

60,008. Why is there any necessity for watching?—There are thieves everywhere.

60,009. Are you able to give us any notion of the proportion of cost per 100 or per 1,000 oysters, and the amount of capital required to be expended in that way in order to produce 10,000 oysters?—I cannot, but this diagram will give you the result of my labours over in France.

60,010. It shows the product of the parks in the Isle of Re and their value?—Yes.

60,011. Will you read it?—Total area of the island, 8,512 hectares, or 20,942 acres. Inhabitants, 18,000. Value of products in oysters, 113,382 francs, or 4,535*l*.

60,012. Is that the value per annum?—It is the value of the export of oysters for one year from the Isle of Re. I called at the office of M. Tayeau, Chief Commissioner of Marine. He told me that it is very difficult to get any satisfactory returns from the oyster

proprietors, as they were afraid of showing their profits. The following is the return sent in to the French Government by M. Tayeau for the year 1863. It was obtained with great difficulty, and even now is not exact. From this return, we learn that in 1863 there were exported oysters from the Isle de Re to the value of 113,382 francs, or 4,535*l.*

60,013. What would you consider an average produce?—That I do not know.

60,014. The figures you have given us are for a good year?—Yes.

60,015. The value of the annual produce of oysters in a good year is 4,535*l.*?—Yes, 113,382 francs, or 4,535*l.*

60,016. How many beds did you say there were there?—There are 2,000 parks.

60,017. Are they collecting parks or *claires*?—Collecting parks.

60,018. How many *claires* will there be?—I do not know exactly, but I believe about 600.

60,019. How many persons are there possessing those *claires* and collecting places?—I am told over 1,200 persons.

60,020. (*Mr. Lefevre.*) Is the sum of 4,535*l.* the whole value of the produce of oysters from 2,000 parks?—Yes.

60,021. That appears to be a very small amount for 2,000 of these parks. I think there must be some error there. Would not 2*l.* be a very small return from each of the parks?—2*l.* would not be a small sum considering that there is very little expended for labour.

60,022. Do you not think that the sum of 4,535*l.* rather represents the net profit of the parks after paying all the expenses?—It represents only the value of oysters born and fatted in the island and exported.

60,023. But the produce of those parks, if your figures are correct, compared with the sum received by the Whitstable Company from their grounds is a mere song.—There is no company there.

60,024. If these parks only produce a little more than 4,000*l.* a year, it is a mere trifle compared with the produce of the beds belonging to the Whitstable Company.—The following table has been published in a pamphlet by M. Coste and Dr. Kemmerer. It gives the following:—

Park generators - -	2,424	
Mud ponds for fattening -	839	
Average number of oysters in the mud ponds - -	1,026,282	
Average number of oysters in the parks - -	74,242,038	
Average revenue of the parks	1,086,230	francs.
Average revenue of the mud ponds - - -	40,015	„
Hectares of ground in the parks	140	
Ditto on mud ponds	6	
Proprietors of oyster beds -	1,700	

60,025. (*Professor Huxley.*) Is there any other place which is used for the purpose of forming *claires* in the Isle of Re, except at Loix?—Yes; the principal place is Loix, but there are other *claires* at Ars.

60,026. How long has this system been going on in the Isle of Re?—Since 1858, I believe.

60,027. Were there, before that time, no artificial means of collecting brood or *claires* on the island?—I believe not, until they were laid down by M. Bœuf. He was the first who hit upon the idea, but it would never have come to anything, if the learned Professor Coste had not taken the matter up, and worked it scientifically, and the public are under great obligations to him.

60,028. Did it first occur to him to collect the oysters in that way?—They collected themselves when M. Bœuf was making a new park, and he caught at the idea, and formed a park for them to breed upon. I believe he was building a new sea wall, and that the young oysters collected upon it. The fact became impressed upon the mind of M. Bœuf, and he subsequently turned it to account.

60,029. Since that time, has the process been found to be profitable?—Yes.

60,030. And the system has increased to a very great extent?—Yes.

60,031. So that, at present, the oyster parks laid down upon that plan are said to yield between 4,000*l.* and 5,000*l.* a year?—Yes, according to the only return I could get.

60,032. Is there found to be any practical limit to the number of oysters which can be laid down upon the *claires?* Is it found that the system will not answer, if they go beyond 100 oysters to the square metre?—They have large open pits, where they used to make salt, but the salt trade has been comparatively abandoned, and they use the old salt pits for *claires*, so that they are already made.

60,033. (*Mr. Lefevre.*) Do they purchase any oysters from a distance, for laying down on the *claires?*—Yes, when they can get them.

60,034. Have they been purchasing any during the last two or three years?—I cannot say, but I believe that, at one time and another, they have had a good many oysters from Falmouth.

60,035. Has that been in consequence of the failure of the brood on their own banks?—I do not know. It was the Mayor of Ars who had them.

60,036. What kind of persons have a property in the oyster parks and *claires?*—They are all obliged to obtain a licence.

60,037-8. Are they the peasantry who have them?—Yes, generally; but that is not always the case. For instance, in one place, I found M. Louis Perier, curate of Ars, working upon them, and his brother, a respectable town councillor, was also working upon them.

60,039. Is there any considerable number of the population supported by these parks and *claires?*—I do not think so.

60,040. Then do they occupy themselves in working upon them in the intervals of agricultural labour?—Yes.

60,041. (*Professor Huxley.*) How do they acquire a right of property in the brood grounds and *claires?*—They apply to the Government for permission to cultivate so much ground.

60,042. And obtain a licence?—Yes.

60,043-4. Do they apply for a particular area?—Yes; they go to the office of M. Tayeau, Commissioner of Marine, who has all the charts and plans, and say they want a certain ground marked out.

60,045. Then does the Government claim an absolute right over the foreshore?—Yes.

60,046. Under what conditions are licences granted?—They are granted under very bad conditions indeed.

60,047. What are they?—The Government can take them away again, if they choose, and that is a great obstacle to the proper development of the system; in fact, the owners are "tenants at will." Many people will not go on with oyster culture there on that account. The Government claim, for instance, every drop of sea water; and although a man may be getting on very well with his park, the Government can step in at any time, and dry it for a dock or anything of that kind.

60,048. Do they make them pay anything considerable for the licences?—I do not think they pay anything. The "Inscrits de la Marine" have the preference in choosing parks.

60,049. They are very much like our Coast volunteers?—Yes; they have the preference.

60,050. How does the granting of licences for the parks and so forth affect the rights of the fishermen? Is any one allowed to put a stake-net over one of the parks?—There are no fish to catch there.

60,051. There is no trawling carried on there?—No, nothing of the sort.

60,052. Are there no fish of any kind?—No; there are sardines, but they are some distance out at sea. I saw no trawlers or other fishing boats in the port of St. Martin.

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60,053. Then there is never any collision there between the rights of the oyster men and the other fishermen?—No.

60,054. With respect to the inland lagoon, are there no collisions there?—No.

60,055. No question ever arises which is calculated to produce a collision?—No, not that I ever heard of.

60,056. Can you inform us if there is any difference in any other parts of France in the mode of oyster culture adopted?—No; that is the only part of France I have been to. I have some of the tiles that were brought over to England by way of experiment, to see if they would answer. Mr. Wiseman had them laid down at Paglesham, and this (*producing a tile*) was the result. He also found that they collected the mud. The tile is one solid mass of barnacles from end to end.

60,057. Were there any natural oyster beds in the neighbourhood, from which he expected to get spat?—Plenty; but the barnacles you see upon the tile took up the place where the oysters ought to go.

60,058. How long did it take to collect these?—About two months.

60,059. Is not all the coast about the Isle of Re covered with barnacles also?—No; there are very few.

60,060. Not upon the rocks?—No.

60,061. (*Mr. Lefevre.*) I think you told us that one of the oyster breeding places was on the outside of the Island of Re?—Yes.

60,062. Is that very different from the grounds inside?—This year it is.

60,063. Is it different in its conditions? Is it much more exposed than the others?—Yes, it is, and I will give an explanation of that. This year the oyster spat has entirely failed on this, the east side of the island (*pointing to the map*), but upon the west side of the island there has been more spat than on the east.

60,063*a*. How is that?—I had a great deal of difficulty in finding out why it was, but I did succeed in finding it out.

60,064. To what do you attribute it?—To the wind. The winds blow there pretty hard, and, unless the surface of the ground is perfectly clean, the oysters will not adhere to it. If there is the least bit of mud upon a surface to which an oyster is about to attach himself, he will not adhere. Now, this year the wind has blown from the northward towards the land, and the consequence is that the oyster parks on the east side of the island La Moulinade have been covered up with mud, and the oyster breeding places also have been covered up with mud. But "it is an ill wind that blows nobody good," and the same wind that brought the mud here (*pointing*) took it away from the west coast at Chanchardon, as the island is very narrow.

60,065. Are not the parks on the outside much exposed to the waves?—Yes; frequently the great big rattling Atlantic waves come in; but the place where the parks are laid down is partially defended by a point of land.

60,066. Are there any beds covered with pottery there?—Yes.

60,067. Is it found that the oysters breed there?—Yes.

60,068. To any extent?—Yes, in quantities, in good years.

60,069. Are the beds covered at high-water?—Yes, about the same as the beds in the interior.

60,070. Have you made any inquiries at the Isle of Re, about the breeding season and the success of the different seasons there?—Yes, I have.

60,071. With what result? Can you give any information upon the subject?—In 1858 there was a good spat of oysters; in 1859 it was also good; in 1860, good; in 1861, good; in 1862, bad; in 1863, bad; and in 1864, bad.

60,072. So that there has been a failure during the last three years?—Yes.

60,073. Was there a good spatting season outside in the summer of 1864?—Yes; comparatively so.

60,074. But it was not so good in the interior?—No; the general spatting season was bad.

60,075–7. Then there was the same deficiency of oysters there for fattening purposes as there was in the mouth of the Thames?—Yes, there was just the same deficiency.

60,078. (*Professor Huxley.*) There has been no good spat in the Thames since 1858, and in the Isle of Re there seems to have been the same deficiency during the last three years as there has been in the Thames?—Yes, and they give several reasons for the deficiency of spat. I have inquired into the matter, both at the mouth of the Thames, and also in Ireland and at the Isle of Re, and I believe that the whole question turns upon the temperature. There are other things, no doubt, which have a tendency to destroy the spat. Indeed, there are nine or ten enemies of the oyster altogether, but the principal thing, in my opinion, is the temperature.

60,079. We should like to have from you an enumeration of the enemies of the oyster?—That is a very important consideration. The enemies of the oyster I divide into two classes, the living and the dead, but first of all among the enemies is the temperature, the cold water.

60,080. A low temperature?—Yes.

60,081. What is the lowest temperature the oyster can bear without injury?—I have made a series of experiments on that matter, and I could tell you to a degree. You must excuse me, however, if, at present, I refrain from answering the question. I can, however, tell to a degree when the oysters will live and when they will die. A high temperature is favourable to them.

60,082. What is the next enemy after a low temperature?—Cold water.

60,083. What do you mean by "cold water"? Is not that part of the temperature?—I mean the effect of snow water coming down from the hills on to the oyster beds.

60,084. Cold fresh water?—Yes, or cold salt water either.

60,085. Apart from the coldness of the water, will not a sudden flush of fresh water on the beds expose them to great damage?—Yes, and it will make the oysters very thin. Upon one of the oyster banks at Galway, the Galway river comes down, and at a distance of 200 yards from the mouth of the river there are plenty of oyster beds, but the oysters are wretched things, as you will see from the specimen I produce.

60,086. Be so good as to go on with your enumeration of the enemies of the oyster?—The first enemy is too low a temperature; secondly, the currents.

60,087. When the currents are too strong?—Yes. When the spat of the oyster is being deposited, too great a current running over the beds would sweep it all away.

60,088. It would disperse the spat?—Yes.

60,089. What is the next thing?—Thirdly, mud; an invasion of mud is fatal. Fourthly, a sand storm; the way that the sand kills the oyster is by getting inside. He can stand a certain amount of it, but if it gets between the hinges of his shell he is not able to shut his mouth and he is soon killed.

60,090. You mean a sudden drift of sand in the water?—Yes. The oyster beds in the mouth of the Thames are very liable to that, particularly at Southend. Then we come to the living enemies, and the principal one is the five-fingers.

60,091. The star-fish?—Yes. The second is the whelk tingle.

60,092. The *Purpura*?—Yes.

60,093. Do you find that the *Purpura* pierces the shells?—Yes.

60,094. Or do they get between the valves?—They cannot do that.

60,095. Do you find that they commonly perforate the shells?—In all cases they do so; it is their mode

of killing oysters. Mr. Wiseman collects them and paves his garden with them.

60,096. Do you find the large whelk—the *buccinum*—injurious?—Not at all; he is carnivorous, however, and will go in and eat the oyster when the shell is open. Mussels are very injurious. If the spat of the mussel comes and falls upon the oyster beds, it will spin ropes and collect mud, and the oysters are done for; it will also knit the oyster all together, like a spider winding his net around a fly. Then comes a very important enemy, but one which has not hitherto had much notice taken of it, namely, the mullet.

60,097. The red mullet?—No, the little grey mullet. I am talking of the oysters beds in France now, in particular.

60,098. Do they eat the spat?—Yes, so it is said; you may see whole beds marked out where the mullet has been grubbing for his food.

60,099. Is the spat found in the stomachs of the mullet?—I believe so; there were no nets there, however, and I was not able to catch a mullet.

60,100. Is that a well established fact?—Not well established, but I believe it is the fact. The bird called oyster-catcher is also said to be an enemy. The men at the Red Bank Burren bed, in Ireland, go out and fire guns, in order to frighten away the oyster-catchers. I examined the stomachs of some oyster-catchers, but I only found in them some perriwinkles and the valves of perriwinkles.

60,101. It would only be a very small oyster the oyster-catcher could take?—They say he opens it with his bill, but I do not believe it is possible.

60,102. Are there any other enemies?—I believe that cinders from the steam-boats are injurious; I fancy so, because oysters are not found in the tracks of the steam-boats running up and down the mouth of the Thames.

60,103. Might not that arise, to a certain extent, from currents created by the steam-boats in working up and down?—It might be, but at other places on the west coast, Milford and Swansea, where the steam-boats were accustomed to run, the same thing is observable. There is no spat to be found there where the steam-boats have dropped the cinders.

60,104. (*Mr. Lefevre.*) Will not the spat adhere to the cinders?—I believe it will, but there is something in the dropping of the cinders which interferes with the ground. Then, again, there are the waves.

60,105. (*Professor Huxley.*) Do the *Serpulæ* do much harm?—Yes, they take up good places where the oysters ought to fix.

60,106. Do you find that they accumulate very much on the ground, and block it up?—In certain years they do.

60,107. Then there is another marine worm that makes a sand tube, the *Hermella*?—That is what is apt to smother the oysters.

60,108. It makes a sandy tube?—Yes, and it is injurious. I mean those which build up a lot of sand into heaps.

60,109. The *Hermella* is a marine worm, which builds up sand tubes; does that occur on the English beds?—If it does, it must be injurious.

60,110. It is said to occur on the French beds?—Yes.

60,111. All these things are injurious to oysters?—Yes; and here is one that is a great enemy. Would you not think, upon looking at it, that it was a young oyster?

60,112. It looks very like one. Is it an *Anomia*?—Yes, it is the *Anomia*, or the crow, or saddle-back oyster. Mr. Ffennell would hardly believe that they would grow up to be an old oyster, but here is one.

60,113. You showed us just now some tiles covered with barnacles?—Yes.

60,114–6. Is that a common case?—Yes.

60,117. In what depth of water was that tile placed which is now covered with barnacles?—I believe it was dry at low-water at spring ebbs, but not at neap ebbs.

60,118. Do you find these barnacles on the natural beds?—Yes, all over the river.

60,119. In what depth of water?—From two to three fathoms.

60,120–4. And on the oyster beds at sea, with six or seven fathoms of water over them?—Yes, just the same, as I can show from oysters caught near the Dogger Bank. Mud is also injurious, inasmuch as it does not allow the oysters to stick. Here is a crab covered with oysters. It had a clean shell, and the oysters stuck upon it. That is very common with crabs, but they are generally *anomias* which are found adhering in that way. Here is a curious preparation for oysters. It is a piece of a fisherman's boot from the North Sea, with oysters stuck upon it. I am writing a book about oysters, and all the particulars about the enemies will be given there.

60,125. M. Coste has published a pamphlet, in which he expresses most sanguine views with regard to oyster culture. Have those expectations been borne out by actual practice?—No. M. Coste did not know that the failure had been so universal when I saw him in September. For the last three years the failure has been general everywhere.

60,126. M. Coste did not take into his calculations that practical difficulty?—No, it never entered his head, at least, I imagine so, though he is a most learned and scientific man.

60,127. Have you been at Cancale?—No.

60,128. That is merely a fattening ground?—Yes, I believe so.

60,129. There are a number of breeding places on the French coast?—There are some in the Isle of Re, and others up here at St. Brieuc, at Belle Isle, the Isle of Oleron, and other places. M. Tayeau marked all these places on the map himself for me.

60,130. With regard to the English grounds, are you aware that any system similar to that pursued by the French is adopted in England or Ireland?—I know only of the experiments of Mr. Wiseman, at Paglesham, and the experiments at Southend, conducted by Mr. Mitchell, Secretary to an Oyster Company, lately established under excellent auspices. I believe that at Southend they caught but a dozen or so of spat on 1,000 tiles. But, of course, if you have not got any babies it is of no use providing cradles. It does not follow that the system has proved to be a failure, because there are no oysters to catch. Near Exeter, some tiles have been laid down by Mr. Ellis, and my friend, E. Power, Esq., of Tramore, county Waterford, has also tried the experiment this last season.

60,131–4. It is obvious that the first thing to do, in establishing one of these beds, is to see that the subordinate conditions are such as to allow the spat to grow?—It is necessary to think the matter over carefully at first, in order to ascertain if all the conditions combine. That is the first question that ought to be settled. Unless the natural advantages greatly outbalance the natural disadvantages there would be no use in making any preparations.

60,135. Supposing that it would be an advantageous process, are you aware of anything in the state of the English law, with regard to foreshores, which throws an impediment in the way?—I am not a lawyer, but I believe that the English Government would make you pay rent for the use of the foreshore.

60,136. Are you acquainted with the attempts which have been made for some years past to establish oyster parks here?—I only know of the places I have mentioned, and, in all instances, the oysters have been deposited upon private grounds. They were only experiments.

60,137. Do you suppose, from your examination of the English coast, that it would be practicable to establish, on different parts of the coast, oyster beds or oyster parks, or the like, on a sufficiently large scale to supply the country with oysters?—Yes, there are, doubtless, many places in England which are admirably suited for the purpose; but it is not advisable to in-

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stitute any experiments, unless the place has been thoroughly examined by a scientific person well acquainted with the process. In Ireland the question would be easy, but in England, I am inclined to think, they would make you pay rent. In the Herne Bay Company, in which I am much interested, the Government wished to charge us for the use of the bed of the sea a long way from the foreshore. Of course we say, "We will pay you for the foreshore," and if we lay down oyster parks we are to pay them; but what we object to is to be called upon to pay for the use of the bed of the sea.

60,138. In the case of the Herne Bay Company, is it quite clear who has the right to the foreshores?—The Crown claims the right, but it is also, I believe, claimed by other persons.

60,139. (*Mr. Lefevre.*) You have obtained an Act of Parliament enabling you to have the exclusive right to the fisheries on that foreshore?—Yes.

60,140. Then the Crown comes in and wishes you to pay something for the ground?—Yes, after all the question is settled, the Crown comes in and says, "You must pay us for the use of the bed of the sea."

60,141. They claim the ground, Parliament having given you the exclusive right to the fishing?—Yes; they want to charge us a heavy rent for the bed of the sea.

60,142. What do they want to charge?—They talk of something like 700*l.* a year, but nothing is yet settled.

60,143. (*Professor Huxley.*) You are in the estuary of the Thames?—Yes, we are.

60,144. (*Mr. Lefevre.*) Will you tell me roughly what the extent of the ground is you have there?—It is marked down upon the map. Here (*pointing to the map*) is the Herne Bay Fishery, and here is the mouth of the Thames. That is Whitstable, and that is Faversham. This (*pointing to the map*) marks out our ground. The area is 9 miles 90 acres.

60,145. (*Mr. Lefevre.*) What is the breadth?—About one mile—eight furlongs, I think.

60,146. (*Professor Huxley.*) You obtained an Act of Parliament giving you the exclusive right of fishery over that area?—Yes.

60,147. The Crown now wants to make you pay a rent for the use of the ground?—Yes. The Crown says, in point of fact, "Pay us 1,000*l.* a year for "putting your oysters down in the deep sea." We object to that, and we ask what right they have to make such a charge.

60,148. You never proposed to catch oysters on this particular ground?—Oh yes, we expect to do so.

60,149. Is it ground covered with oysters?—No, it is an uncultivated ground.

60,150–3. What have you obtained the right to catch?—We have obtained a general right to catch anything there may be there. We have obtained a right to the exclusive use of this ground. We have a right to cultivate it and to lay down oysters, and we have a right to catch all the oysters that may be found there.

60,154. Then how could the Crown afterwards ask you to pay rent for that ground?—The rights of the Crown were reserved. The Crown claims the right to the foreshore, and it is also claimed by private persons.

60,155. (*Mr. Lefevre.*) Is it the case that the Lords of the Manor claim rights over a certain portion of the foreshore, and that you expect they will claim rent also?—Yes.

60,156. (*Professor Huxley.*) Then all you have secured to you at present is the concession of the exclusive right of fishing?—We have absolute rights to the use of the ground.

60,157. But you must not exercise them without paying for them?—So the Crown says.

60,158. Do you propose to carry out the French system upon that ground?—We shall try it, certainly.

60,159. You propose to lay down tiles and other things, and to get oysters from such sources as are afforded by the surrounding waters?—Certainly.

60,160. Do you propose to bring oysters there to breed?—We have brought them there in considerable quantities.

60,161–3. For the purpose of feeding or breeding?—For the purpose of fattening and breeding too, of course. We are going to work hard at the French system, and we intend to lay down parks and possibly *claires*. We also intend to keep up a system of dredging so that the ground may always be clean.

60,164. (*Mr. Lefevre.*) When there was a good spat upon the flats in the neighbourhood of the Herne Bay ground, was there a considerable amount of spat found upon this very ground?—Yes, upon the lower part of it.

60,165. Was not that spat supposed by the Whitstable people to come from their oysters?—Yes. I will now place before you what I have observed with regard to the Thames. This is a map which I have made with the assistance of Mr. Wiseman, and it shows you the character of the ground in the whole of the mouth of the Thames. This (*pointing to the map*) is the mouth of the Thames, and these are the Maplin Sands.

60,166. (*Professor Huxley.*) You call the mouth of the Thames a line drawn between Shoeburyness and Sheerness?—Yes. In the first place, I have been down the Thames, and I have taken the specific gravity of the water all the way down. That, I think, is a very important matter.

60,167. As indicating the quantity of fresh water in the river?—Yes.

60,168. When was it?—In July.

60,169. What was the result?—The result was as follows: a little below Woolwich I found the specific gravity of the water to be 1004; off the Dartford Marshes, 1010; at Gravesend, 1014; Lower Hope, 1016; Blyth Beacon, opposite Halstow Marshes, 1018; Fairway Channel, 1021; the Nore, 1024; a little further on, at East Cant, 1024; and when we got round the North Foreland it gradually got to 1026.

60,170. At what times of the tide were those specific gravities taken?—The tide was going down the whole way. I was upon a steamer at the time, and the temperature was 59.

60,171. You took the whole in one tide?—Yes, the tide was going down the whole of the way.

60,172. How many series of observations were taken?—Only one.

60,173. With one ebb tide?—Yes.

60,174. Surely the amount of water would affect the question very much?—No doubt.

60,175. You would have to take a good many observations to be safe?—I only took my observations upon that one occasion. I will now point out where the chief grounds are situated. Beginning on the north side, all you see coloured red on the map is private ground. First of all, we have the Ipswich river, the Orwell. The ground there belongs to the Ipswich people, but they do not make as much use of it as they might. I believe the reason is that they have no money. Next to Ipswich river, we have the River Colne. That is cultivated by a company on the parts marked red; that marked blue is common ground, which is free for any one to dredge. All out here (*pointing to the map*) is public ground, where young oysters are caught.

60,176. Where oysters naturally occur?—Yes; and the young ones are caught. The river Stour, I believe, has no oysters in it at all,—not naturally; but Mr. Wills has laid down oysters there, but I have heard they proved a failure, on account of the mud. Lower down, at Handford, we find a public ground. Then we come to a great tract of country, from the Naze, stretching all the way down from the mouth of the Colne and the Blackwater to the Thames. All that is public ground, where they collect spat.

60,177. Is that ground largely covered with oysters?—They collect the spat there. For the last

three years there has been nothing to catch, but when there is a good spat, it is found there.

60,178. They are allowed to dredge that ground in the dredging season?—Yes.

60,179. Is it open to everybody?—Yes. That (*pointing to the map*) is where the Commissioners were the other day, at Brightlingsea. Every inch of that is private property. We then come to the Blackwater. That is all public property.

60,180–2. Any one may dredge there?—Yes. "Commons" is the local expression applied to that ground. All that is "commons." Then we come down to the River Crouch, and there again we find a great quantity of private ground. Then we come to Paglesham Creek. The ground there is used as a spatting ground, and oysters are laid down there ready to transport and send away. Then, between that red mark on the map and the next red mark (on the River Roach), there is a great quantity of "commons." It is proposed, by a bill now before Parliament, to take in that common ground, and my opinion is that that ought not to be done, because it is evident that the oysters found there must be the lambs that get over the fold here (*pointing to the map*).

60,183. (*Mr. Lefevre.*) That same argument was used against you in the Herne Bay case?—I know it was; but the Herne Bay ground is situated in the open sea.

60,184. You cannot quite trace the oysters on the Herne Bay ground to the parent oysters, as you can on the ground you refer to on the Essex coast?—No; on the Herne Bay ground they may be wild oysters, coming from anywhere, but on the Essex coast they can come from nowhere else. Then, outside the Maplin Sands, you have a few public oyster grounds, and then you come to the ground that is called "the flats."

60,185. What is the extent of the flats?—I have not got the measurement, but it is a great open space, where the oysters are found upon public ground.

60,186. (*Professor Huxley.*) It is from those flats that the Whitstable beds have been primarily supplied?—Yes; and they also buy young oysters from the Essex side, and lay them down on the Kentish beds.

60,187. You propose to do at Herne Bay what the Whitstable people have been doing in reference to their ground?—Yes.

60,188. Do you take oysters from the same locality?—Whenever we could, we have brought large quantities from the west of England.

60,189. Then your special object is not the promotion of the French plan of oyster culture?—We shall try it. We shall do our best to make the same or an analogous system of artificial cultivation answer here; but we shall do something else, and keep the ground clean by constant dredging. The oysters found here (*pointing to the map*)—at the Flats, in the mouth of the Thames, are found because there is no mud. And why is there no mud? Because dredging has been perpetually going on there. The ground has been dredged for other things.

60,190. Not for oysters particularly?—No; people have been engaged in working there for cement stone, and by that means the ground has been kept clean. The consequence has been that the oysters, instead of falling into mud and being destroyed, were able to adhere.

60,191. You speak of the dredging of the ground. What is your opinion as to the effect of the present law upon that subject?—The law prohibiting dredging during the close time?

60,192. Yes. Suppose that dredging were prohibited during the close time, what would be the effect?—The close time is now, I believe, according to the Convention Act, the months of May, June, July, and August.

60,193. Yes. From your practical knowledge of oysters, supposing that all dredging were prohibited on those beds and upon the Herne Bay ground, for example, during May, June, July, and August, what, in your opinion, would be the effect upon the oysters?—They would be ruined.

60,194. In consequence of what?—In consequence of there not being a clean surface for the oysters to adhere to. If there is the least mud, the least coating or trace of mud, the little oysters cannot adhere. Therefore, before the oysters spat, the ground ought to be made as clean as it can possibly be.

60,195. Have you had anything to do with the deep sea oyster beds?—No.

60,196. Does the Herne Bay Company propose to get any supply for its parks from the deep sea oyster beds in the Channel?—No; they would be of no use. We cannot sell an oyster any bigger than that (*producing an oyster*).

60,197. Could you not get small oysters from the deep-sea beds?—These are native Herne Bay oysters, that live naturally on the Pansand. They are a fine class of oyster, with a deep shell. They are, indeed, a beautiful oyster. It is these creatures, I believe, which deposit the spat out here, which is driven by the tide upon the Herne Bay beds.

60,198. Would it not be worth while to get small oysters from the deep sea, and bring them in?—The further you go from the shore, the coarser the oysters become.

60,199. If you get a young oyster and bring him in, will you not make a fine oyster of him?—Yes, but he must be very small.

60,200. (*Mr. Lefevre.*) You are not allowed to bring in oysters from the Channel of less than $2\frac{1}{2}$ inches in diameter?—No, I believe not.

60,201. So that you cannot get him until he is of an age that renders it no longer worth while to attempt to convert him into a good oyster?—We buy them as half-ware when they are about $2\frac{1}{2}$ inches across. That will be about the size you mention. In fact, here is one, and it is about that size.

60,202. (*Professor Huxley.*) I suppose that will be about $2\frac{1}{2}$ inches?—Yes; and that is about the size of those which are laid down.

60,203. You bring them in of that size, but not smaller?—Yes.

60,204. If you get them of that size, do you train them up into natives afterwards?—I do not think they would ever become altogether natives, but you can train up the young of them.

60,205. If you could dredge up oysters of a smaller description, could you improve them into good oysters?—I believe they might grow up, and might assume something of that character. Here is a Milford oyster, which was brought in and laid down for two months in Herne Bay, and which increased between 30 and 40 per cent. in that time.

60,206. That is only $2\frac{1}{2}$ inches across?—Yes.

60,207. At present there is a restriction as to the size of the oysters to be taken from the natural oyster beds?—Yes.

60,208. They are not to be less than $2\frac{1}{2}$ inches in diameter?—No.

60,209. In your opinion, does that restriction operate injuriously upon the trade of oysters, that is to say, that if you are only allowed to catch them of that size, are they then small enough to enable you to convert them into good oysters?—Yes, certainly.

60,210. You do not want them less?—We would not take them, if you would give them to us; they would die.

60,211. Why would they die?—They would not be strong enough to carry long distances.

60,212. They would not bear the transport?—No. This oyster I hold in my hand shows how oysters will increase by fattening in Herne Bay.

60,213. Would it be worth while to bring in large oysters from the deep sea, and to lay them down for breeding purposes only?—No, I think not. Each oyster will give you a very large number of young ones, but that number has been very greatly exaggerated. It has been said to be 1,500,000.

60,214. How many young do you think one oyster will produce?—I do not know exactly. I have

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weighed them. I find that the produce of one oyster will go from 400,000 up to 800,000.

60,215. 400,000 is the lowest?—Yes, that is the lowest, 424,000, and the highest was 829,000.

60,216. If you were to import deep-sea oysters in the breeding time, just ready to spat, and lay them down in the immediate vicinity of an oyster park, so that the spat when it fell would be distributed chiefly over the park, and if you were also to take proper means for collecting the spat, what would the result be? Has that experiment been tried?—No; people do not care about those oysters; they are nasty coarse things.

60,217. But could you not improve them?—The answer to your question is, that when there is a fall of spat there are so many young oysters floating naturally in the water that it would not be worth while to bring in coarse oysters to spawn.

60,218–9. When there is no spat, would it not be worth while?—But at such a time the young deep-sea oysters would die equally. I think that an oyster, like a salmon, must produce its eggs, and when the proper time comes the young oysters are thrown out like a cloud of smoke. Then, if the proper conditions be there simultaneously, the oysters fix themselves, but if one of the conditions be wanting, then they die. That, I believe, is what happened this year.

60,220. The failure of the spat is not due to the infertility of the oysters, but to the destruction of the young?—Yes, by natural causes.

60,221. If you were to take the trouble to import breeding oysters, you are of opinion that the young would be destroyed by the same causes?—Yes, equally.

60,222. And in that case you would only lose your labour?—Just so. The great thing is to have the ground clean, and, therefore, you ought to dredge before the young oysters are born, and the young oysters are spatted principally in June and July. Therefore, the ground ought to be allowed to be dredged a little before that time, and you cannot dredge over the oyster beds too much.

60,223. Is there anything in the state of the law that interferes with what you consider to be the beneficial working of the oyster beds?—I believe that the months of May and June ought to be given up to the people, so that they may be able to dredge in the open sea, because it is about July and August that the oysters are principally spatting in the open sea. Then I would take care of the oysters in the months of August and September, because they are weak then.

60,224. You would allow the fishermen to dredge in May and June, before the oysters are spatting?—Yes.

60,225. For what purpose?—To clean the ground for the young oysters.

60,226. They are not fit for eating at that time?—No.

60,227. Then they would dredge merely for the purpose of cleaning the ground?—Yes, previous to spatting. The moment I saw an oyster come up in a spatting state I would put a stop to dredging; but I would go on cleaning the ground until the first spat is seen; then I would leave off directly.

60,228. Would not the people bring in the oysters they dredged up and sell them?—They would have no business to do so.

60,229. How would you prevent them, if you allowed them to dredge? You think it would be injurious?—It would be good for the beds outside.

60,230. Even if the oysters were taken?—Yes, because they cannot take all. If there is a good spat, you may clean, as you imagine, every oyster off the ground, and yet there will be plenty of spat left.

60,231. Have you positive facts tending to show that?—I have positive facts showing that if you do not dredge before the oyster throws its spat, there will be no place for the spat to fix itself and it will all die.

60,232. Can you give us a case in point?—Here is a sample from Rossmuck Bay, on the west coast of Ireland. There, I believe, they dredged in the early months, and the consequence was that the ground was clean for the spat. The oysters are taken from that ground, which is a beautiful breeding ground, and laid down on another ground that is good as a fattening ground. That is one of the reasons why they have always oysters on those grounds on the west coast of Ireland. There are a lot of little bays, and the oysters cannot get out.

60,233. What you speak of rather interferes with the deep-sea fishing, and not with persons possessing private parks. Is there anything that interferes with the working of the grounds belonging to private companies?—There is nothing to interfere with the working of the ground at Herne Bay, I believe; and I shall strongly advise the Directors of the Herne Bay Company to have boats hard at work at the beginning of May and throughout the month of June, in order that the ground may be made ready for the spat when it falls.

60,234. (*Mr. Lefevre.*) You are aware that the Whitstable Company dredge their ground all the year round, except when they see that spat has fallen upon the ground?—Yes, and that is quite right.

60,235. (*Professor Huxley.*) Is there any good reason for leaving off dredging them?—I would not leave it off too long.

60,236. Do you think that the passing of the dredge over the ground, when the young spat is falling, would injure the spat?—Mr. Wiseman can, perhaps, answer that question. (*Mr. Wiseman.*) I think not.

60,237. Is it likely to do harm to the thin shell of the young oysters?—I think not. We find that the more we work the ground when the spat is falling, the more spat we have. I do not think that any injury is ever done to my grounds by dredging.

60,238. Even when you have observed that the spat has actually been deposited, and that it is adhering to the stones?—I lay by for a month, but there is a friend of mine who works all the year round, and he has more spat than I have.

60,239. Then you are of opinion that it is advisable to go on dredging all the year round?—Yes.

60,240. Do you think that raking up the ground when the spat is just adhering to stones and culch is not injurious to the young shell of the oyster?—I do not think it is injurious. I left a piece of my ground unworked for a month, and the consequence was, as I told you at Brightlingsea, that it become covered all over with a green weed.

60,241. Are you aware that the Whitstable Company cease dredging during that month in which they observe by the microscope that the spat is being deposited?—I was not aware of that circumstance.

60,242–3. (*To Mr. Buckland.*) Do you think that the system of oyster culture which you have described to us is capable of being developed upon the Essex coast?—I think there are many places fit for it, but I think that our culch found at the bottom of the sea is a very much better thing. The natural culch found here will outweigh all the French tiles and those other things which I have described, by a long way. There is no culch in the Isle of Re.

60,244. None at all?—There is no good natural culch in the Isle of Re. It is either sand and mud or else pure mud, and if they did not lay down something for the oysters to adhere to they would not catch them at all. They look mainly to an artificial culch.

60,245. (*Mr. Lefevre.*) Then oyster breeding in the Isle of Re amounts to this, that they provide artificial culch?—Just so.

60,246. In the mouth of the Thames they have that culch naturally?—Yes.

60,247. There is no necessity then for the artificial breeding of oysters there?—Yes, there is.

60,248. Why?—It is very true that there may be culch in one place, but there may be none in another,

and in that case I would say, lay down your tiles. Yet within six yards of where you put down the tiles, there may be plenty of culch. To illustrate the matter in another way, I may say that the French system might be well adopted for this street, Adelphi Terrace, but not for John Street, close at hand.

60,249. Do you think that the natural culch in the mouth of the Thames is better than the artificial culch in the Isle of Re ?—Yes.

60,250. Besides that, there is a certain portion of the ground which has no culch at present, but which ought to be provided with it ?—Yes, exactly.

60,251. Are you aware that there has been no spat for the last six years on the ground in the mouth of the Thames ?—Yes.

60,252. Have you formed any opinion as to the reason of that ?—It is simply a matter of temperature, I think. I cannot trace it to anything else. The ground has been ready to some extent, and the oysters have given up their young, but the spat has not fixed itself.

60,253. There has been dredging carried on all over this ground in the close season ?—Yes, just the same. But it is exactly as it is sometimes with the blossoms of the peach or apricot. They come out, but they are killed the next morning by the frost.

60,254. (*Professor Huxley.*) You think that the system of the artificial multiplication of oysters does not go back as far as the artificial propagation of fish ? The artificial propagation of oysters is the same sort of thing as if you were to set nets to catch the young parr of the salmon and then simply feed them ?—Yes.

60,255. The artificial propagation of oysters does not go as far as to catch the breeding oysters and breed from them ? That is not done anywhere ?—No.

60,256. Is there no trade in the taking up of breeding oysters, and supplying oyster parks with them ?—It would be of no use.

60,257. The experiment has not been tried ?—They have tried, as an experiment, the placing of one oyster on one tile and two oysters on two tiles, but they do not catch anything under.

60,258. They have tried the experiment of placing breeding oysters under the tiles ?—Yes. M. Coste had the same idea that you have. He thought the young oysters would come from the old oyster, and stick upon the tiles, but it has been found that they do not do so.

60,259. What has happened ?—They swim about, and I say it advisedly, for from 22 to 27 days. They do not fix themselves as soon as they come out from the parent oyster. The idea of many persons is that they attach themselves as soon as they come out, but it is no such thing.

60,260. Have you seen them swimming by means of the cilia ?—Yes, thousands of them.

60,261. Do they come to the surface of the water ?—They have the power to do so if they choose, but as a rule they keep close to the bottom.

60,262. Have you seen them forming a kind of scum on the top of the water ?—I have had pointed out to me what was said to be oyster spat forming a scum on the top, but it was nothing of the kind ; it was the young *Medusa*.

60,263. Are you fully satisfied as to their power of being able to move about from place to place in calm water ?—Yes, but blow the water with your breath, and they go along with it, and at night they are all down at the bottom. In the morning they are going up and down, exactly the same as a shower of snow.

60,264. They never congregate at the top but always at the bottom ?—Yes.

60,265. Has anybody tried the experiment of breeding oysters in a close pool of water ?—The experiment has not been tried, but the oysters have spatted in the *claires*.

60,266. What has been the result ?—Nothing.

60,267. In the *claires* the water will be shallow ?—Not so shallow.

60,268. How deep ?—From one to two feet.

60,269. Does the spat never fasten itself within the *claires* ?—They have put in tiles, but they have never caught anything. I can lay down as a rule, that oysters will not breed on artificial ponds, and that may save millions of money to people who are anxious to try the experiment.

60,270. They will not breed ?—They will breed, but the spat will not fix itself in the ponds. Mr. Wiseman tried the experiment at my instance last year.

60,271. Did all the spat drift out to sea ?—It vanished before one of its enemies.

60,272. (*Mr. Lefevre.*) Although you can collect the young of the oysters in a bottle like this I have in my hand, and they will live, there are no means of making them fix themselves on beds or anything else ?—No. If you find out a means of accomplishing that object, you might make 10,000*l.* a year with the greatest ease.

60,273. There are no means of making the young oyster fix himself when you have got him in a bottle ?—No, but I am anxious that you should not press me upon that question. I believe that one of these days the difficulty may be solved, and that some one will be able to take these creatures when alive under their care, and to provide for them the conditions which will enable them to fix. That is where I think that man, one of these days, will be able to step in; but it is a very difficult question and there are many things involved in it.

60,274. (*Professor Huxley.*) At present there is this great distinction between salmon breeding and oyster breeding,—the salmon you breed from the egg, and can save all the young, and stock a river with them, while in the case of the oyster you are obliged to trust to chance for getting what corresponds with the parr of the salmon ?—Yes.

60,275. You do not think that there are any means of solving that problem ?—I think there are.

60,276. At any rate it has not yet been solved ?—No. I wish I could solve it.

60,277. (*Mr. Lefevre.*) If so, you would breed against nature ?—That is what I want to do. I have now in my kitchen 30,000 salmon, and if I could take these 800,000 oysters and bring them up to a size that would ensure their living I should be able to sell them for any money. If I could only get them to live, and stick to something, it would be enough. It is not a question of space. I could turn them out afterwards. And he would be a bold man who would say that that will not be done some day. At the same time, I am not able to do it.

60,278–9. You are aware that the Colchester men dredge up all the brood they can find ?—Yes.

60,280. Do you think that they have left sufficient parent oysters to breed ?—Yes, plenty of them.

60,281. They have not taken all, so that it is impossible to have a brood ?—I think not. In the Isle of Re the oysters came from the sea beds outside. On the Essex coast it is the same. The oysters are born in various places, and they find their way upon the beds where they can be dredged. I am quite positive and certain that all the little oysters found on the common ground, marked blue on the map, come from there and there (*pointing to the map*). There are sundry oysters lying about, and if one of them spats and throws out 800,000 young oysters, there is no knowing where they will go.

60,282. Is it possible to dredge the ground so completely as not to leave an oyster for breeding purposes ?—Yes, where there is no spat.

60,283. But if there is spat ?—They cannot dredge it too much then. But if there is no spat, it is possible to take almost every oyster out of the place.

60,284. There has been no spat for the last six years. Do you think that, in consequence, the grounds have become so denuded that no parent oysters have been left for breeding purposes ?—No, the space is too large.

60,285. You think that there is still a sufficient number of oysters left to supply the ground with spat

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in a good season?—Yes; and not only that, but they are vagabonds, and swim about for 27 days wherever the tide takes them.

60,286. (*Professor Huxley.*) The failure of the spat, you say, never arises from the actual failure of the brood, but from the destruction of the brood?—Yes, by natural causes.

60,287. That makes the remedy so much more difficult?—Yes. If you could alter the Gulf Stream, I think you might do good. I think that is the great mischief. I do not know what other cause there can be that can simultaneously affect the whole of the coast of the west of Ireland, the west coast of France, and the Channel. I cannot conceive that there is anything else.

60,288. (*Mr. Lefevre.*) Is it the result of your observation that there has been a failure of spat everywhere for the last three years?—Yes.

60,289. And for a longer period than that round the English coast?—My knowledge does not extend further than that. There has been a comparative failure all along the west coast of Ireland, and there has been only a very poor spatting up the Channel. Then, if you go down to the Bay of Biscay and the Isle of Re, you will find that there has been a failure there, and a failure here (*pointing to the map*). I know pretty well that the Gulf Stream comes up to about there. Indeed, Admiral Fitzroy told me so himself. What else can it be that causes the failure, except the Gulf Stream?

60,290. Do you think there has been a deficient supply?—I think there has been something wrong in the temperature.

60,291. (*Professor Huxley.*) Is the brood so very sensitive?—Yes.

60,292. More than the full-grown oyster itself?—Yes.

60,293. (*Mr. Lefevre.*) Where do you get the oysters from for the Herne Bay beds?—From the west coast of England, and other places.

60,294. What sized oysters are they?—They are oysters of all sizes.

60,295. Under $2\frac{1}{2}$ inches?—I don't know. This (*showing an oyster*) is about the average size of them. That is the size we like.

60,296. Is that the smallest you are able to get?—Yes.

60,297. (*Professor Huxley.*) I understand, from what you say, that when there is anything like a spat, you are content to depend entirely on the oysters on your beds?—Perfectly.

60,298. Then it does not matter to you what goes on in the deep sea?—No.

60,299. Not if the spat were dredged up altogether?—No; but we are not all the world. The common oysters eaten by the people do not come from our beds at all. The produce of the oysters eaten by the poor is about 124,000,000. They are sold for about four a penny,—that makes 125,000*l.* I give these figures on the authority of Mr. Mayhew's "London Labour and London Poor." They are nearly all Channel oysters. Whereas natives are taken to London, Paris, Berlin, St. Petersburgh, and other large continental cities.

60,300. In a good spat year, there is enough to supply that vast demand?—Yes.

60,301. (*Mr. Lefevre.*) Do not these remarks you have made with regard to the better description of oysters apply also to the Channel oysters, because, if there are beds where they can be laid down for fattening, there is the same relation between the Channel oysters and the beds on the coast as between the native oysters on the flats and the beds in-shore?—You ought to keep the beds in the Channel dredged, and not move the oysters when they are weak, in August and September.

60,302. If there were beds close at hand to which they could be moved without danger, would not the same reasoning apply as to the oyster beds here?—If you will look at the penny oyster shops, you will see, in the months of June, July, and August, that the oysters are spatting. They ought not to be allowed to be sent into the market then, and they are sometimes found in spat as late as September.

60,303. (*Professor Huxley.*) It has been mentioned to us that the deep-sea oysters do not spat as early as the other oysters. Some years ago, a deputation waited upon the Board of Trade, when I was present, and the fishermen affirmed that the spatting time was two months later?—The Shoreham people say so.

60,304. (*Mr. Caird.*) Do you think there is no difference, as to the spatting season, between the oysters in the deep sea and those deposited in more shallow water?—The deep-sea oysters spat later than the natives. The native oysters this year spatted up to Lord Mayor's Day, the 9th of November. They were very late, and be it remarked that the autumn was very hot.

60,305. (*Mr. Lefevre.*) Dredging for brood goes on on the flats and the ground off Colchester all the year round. I suppose they take a certain number of large oysters fit for consumption?—I think if you said dredging for cement stone you would be right. They go dredging for cement stone, but not for spat, because there is no spat to catch. But if a spat did come, there would be thousands got there.

60,306. But they would take the large oysters as well?—To be sure.

60,307. What do they do with them in the summer months?—Eat them, I think, or place them on the private beds.

60,308. Will they not fetch a good price in the market?—No.

60,309. The public will not take them when they are sick?—Not if they know it.

60,310. Will they eat Channel oysters when they are sick?—No.

60,311. Then there is no necessity for a regulation to prevent them from being taken?—There may be three sick out of a dozen. Some will have just done spatting; others will be half sick, and some three quarters.

60,312. (*Professor Huxley.*) Would you stop the sale of oysters because three out of 100 were sick?—Not if only three out of 100 were sick. The question, however, is a very difficult one to deal with, and what is wanted is some one to record daily, in an official manner, the condition of oysters, as regards their holding spat, from the month of May to the end of October, and oysters, both deep and shallow water, should be sent from different parts of the kingdom, for careful examination; upon facts thus ascertained, legislation might be founded. Some years the oysters spat very early, and some years very late. Last year they spatted early in May and June, and the young brood all died, for the reasons which I have given. But there was a second edition of spatting. The hot weather of July, August, and September caused another spat to come. I paid a man 3*d.* a-piece for sending me oysters ready to spat late in the season, and the last oyster I got in spat was on the 9th of November, Lord Mayor's Day. Mr. Wiseman's oysters were in spat in May, but I recollect that we had a cold spring, except ten days very hot weather in May, and a warm autumn last year.

60,313. (*Mr. Lefevre.*) What is the price of the Isle of Re oysters when fat?—Five francs a hundred. I believe that the price is rising.

60,314. Do you know whether any of the spat from the Isle of Re has been imported into this country?—No; I would not have it, if you were to give it to me. I am glad you have asked me that question. The oysters there have a vulgar bad shell, and they would be of no use to us at all.

60,315. Then you do not think that we are likely to have any supply for our native beds from France?—I would not have them, if they were given to me.

60,316. Are they not worth laying down?—Certainly not. In order to ascertain the money value of different descriptions of oysters, I made a rule to weigh the shells and to weigh the meat of every

oyster I could get hold of. I have now weighed upwards of 50 kinds of oysters from every part of the world, weighing a dozen oysters and taking the weight of the shells and of the meat. At the head of the list is the Whitstable oyster, which bears a proportion of meat and shell of one-fourth.

60,317. (*Professor Huxley.*) One-fourth meat as compared with the weight of shell?—Yes. Next came the Colchester oyster with a beautiful clean shell, one-fourth again. Then Mr. Wiseman's oysters, from Paglesham, one-fifth. They were green, I am sorry to say, from causes which I am now investigating. Next were the natural Herne Bay oysters, one-fifth, and these were not cultivated; Falmouth, one-sixth; Isle of Re, one-fifteenth. Like the French pig, they are very lean.

60,318. (*Mr. Lefevre.*) They are a very inferior article, as compared with the native oyster?—Yes. Look at the size of this one by the side of that.

60,319–22. Are you aware whether any spat from the mouth of the Thames has been exported to any part of France, for the purpose of being laid down?—No, but they buy all the oysters they can from the west of England, when there are any to buy, but there have been none to buy for a few years.

60,323. (*Mr. Lefevre.*) From your observations we are not likely to have cheap oysters for the next three years?—I think the time may come when an oyster may be a curiosity and be put under a glass case, if these things go on much longer.

60,324. But we are not likely to have cheap oysters of a large size for the next three years, even if a spat does come?—No. The markets are now being supplied from the spat of four years ago. That is gradually being drawn away, and there has been nothing since to take its place.

60,325. (*Professor Huxley.*) If this depends entirely upon the operation of natural causes, it does not appear clear that anything can be done to remedy the evil?—You can do a great deal in the way of preparing beds.

60,326. But as to making rules and regulations for securing a supply?—You can do nothing at all in that way.

60,327. Can anything be done by private enterprise in setting up parks and cultivating oysters?—Yes, if there is a spat. There are hundreds and thousands of places where the only thing required is knowledge and capital to carry the work out, in order to make it profitable. I am certain of that. If I went to one place probably I should say, "You have got culch; therefore you don't want tiles," whereas within two miles of the same spot, I might feel called upon to say, "You have got no culch; you must have tiles." It is ignorance and want of capital that keep these things back.

60,328. (*Mr. Lefevre.*) Are the fishermen generally in the habit of throwing the culch away into the Channel when they dredge it up?—Yes, they are very careful in that respect, I believe.

60,329. They are quite aware of the importance of leaving the culch upon the ground?—Yes; but I have heard that the Frenchmen carry it all away.

60,330. Does the carrying away of the copperas stones do any injury to the beds?—It does the greatest good in the world. It prepares the beds for the oysters.

60,331. They do not carry away enough copperas stones to injure the culch?—No, and they clean the beds.

60,332. (*Mr. Caird.*) The great point seems to be to preserve the spat in a good spat year by making due preparation for its reception beforehand?—Yes.

60,333. So that in a good year you may take advantage of the good spat and stock the beds for future years?—You must open your mouth and see what nature will send you, but you must prepare for a good spat.

60,334. The only remedy you can see for the present deficiency in the supply of oysters is the hope of a good spat, and when it comes the utmost means should be taken to secure and preserve it?—Yes, but that should be done before it comes.

60,335. There is no other remedy for the present deficiency that you see?—No. I wish I did.

The witness withdrew.

Daniel Russell called and examined.

60,336. (*Mr. Caird.*) You are well acquainted with the state of the oyster fisheries on the coasts of Great Britain?—At the present moment, I cannot say that I am well acquainted with them; I only know that there is a scarcity of oysters. I have had nothing to do with the oyster fisheries for the last five or six years.

60,337. I believe that in your early life you had considerable experience in connexion with the oyster fisheries?—I was brought up in connexion with them from my infancy.

60,338. To what part of the coast particularly has your experience been directed?—To the south coast of England, the French coast, the Bristol Channel, and the coast of Ireland.

60,339. In the course of your experience, what information have you gleaned as to the cause of a plentiful supply of oysters, or a gradual decrease and falling off in that supply?—In my opinion, legislation has been a most powerful agent in destroying the supply of oysters.

60,340. What do you mean by that?—I think that steam has had a great deal to do with it.

60,341. Steam?—Yes; steam has had a very great deal to do with it.

60,342. In what way has steam affected it?—It has enabled the French and British Governments to carry out laws, which, I am of opinion, have done much injury to the oysters.

60,343. Do you think that the law itself has been injurious?—Yes; it has been destructive, I think. That is the opinion which I have long entertained, but, of course, it is only a matter of opinion.

60,344. In what way has the law been injurious to the fisheries?—Perhaps, I had better tell you what my experience has been in the matter.

60,345. We should be glad to hear what your experience has been?—I am now more than 50 years of age, and I was in the oyster business when I was only seven or eight. I had a little to do with it even then, and at that time there were plenty of oysters on the south coast of England. I will not say to a year or two, because I have no documents to substantiate my statement, but up to 1838 or 1840 there were plenty of oysters; indeed, they were in great abundance all along the south coast. I think it was in 1823 or 1824 that a very large stock was found off Shoreham; it extended from above Shoreham Harbour to below Littlehampton.

60,346. Was that bed of oysters discovered then for the first time?—It was worked about that time for the first time.

60,347. Were the oysters diligently fished then?—Yes, and that lasted for several years. There was no restriction enforced in reference to the working of the oysters; they worked them in the summer months, and they continued working them in the winter also.

60,348. Were the fish found in a good condition for the market?—They were not fit for the market when they were first got up.

60,349. Then in that case, were they all carried and laid down upon private beds, in order that they might improve?—Yes.

60,350. How long did that continue to be a successful fishery?—It continued to be a successful

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fishery up to the time that the fishing was prohibited in the summer months.

60,351. Had not the fishery declined before then?—It had not declined generally. In different spots there were plenty of oysters to be found at that time. There were also plenty of people to catch them, and all the people who were engaged in the oyster fishery, if they chose to work at it, were doing well.

60,352. What occurred after the prohibition took place?—The consequence of prohibiting dredging in the summer months was that a great many fishermen had to leave off altogether.

60,353. Naturally, the supply of oysters would decrease if the oysters were not fished?—The people could not live by working in the few months which were marked out for them. They, therefore, thought that it was better to give up the oyster fishery, and to seek something else by which they could make a more profitable livelihood. Some of them went coasting. Some of them entered into the fruit trade, and in one way or another many of the best of the fishermen went away altogether.

60,354. How did the oyster bed itself continue to progress during that time?—My father was an oyster merchant for 40 years, and I was a fisherman for a part of that time. Sometimes I went to Jersey; sometimes to the French coast; sometimes to the coast of Ireland; sometimes to Falmouth, and to every place where we expected to obtain a supply of oysters.

60,355. Did anything occur upon the oyster bed itself from the fact of its not being worked, or in any other way, to affect the production of oysters in consequence of the fishermen being prohibited from dredging upon the ground in the summer months?—Yes, the ground all along the coast of England became smothered up with slob, and although the oysters continued to spat, there was nothing for the spat to settle upon, and in that way the bed became destroyed.

60,356. Are these oyster beds no longer fished at all?—No, there is nothing to be got there now.

60,357. They are not fished?—No.

60,358. Are there no oysters there at all now?—There may be a stray one or two, but nothing to make it worth while fishing.

60,359. Do you attribute that falling off in the supply of oysters to the fact that the ground was not worked in the summer months, and that, therefore, the slob had an opportunity of growing?—Yes.

60,360. The consequence then of prohibiting dredging during the summer months was that the ground became smothered up, and the oysters disappeared?—Exactly so.

60,361. Had the bed itself not began in any way to show signs of being over-fished before this took place?—The quantity of oysters obtained upon it was not as great as when the bed was first discovered. The supply decreased after the fishing had been carried on but, after being left alone in the winter time, it recovered itself. The fishermen were obliged to leave it alone in the winter time as they were unable to work it then.

60,362. Was that on account of the bad weather?—Yes.

60,363. In the spring you found plenty of oysters again?—Yes. The supply in the spring had so increased from what it was before the winter set in, that one boat was able to get 40 or 50 bushels of oysters in the course of three or four days' dredging.

60,364. Did you observe, then, that in different years the quantity of spat varied very much? For instance, was there a good spat in one year, and a bad one in another?—No doubt in some places that would be the case; but there were always plenty of oysters to be got.

60,365. Are we to take it that the whole quantity fished at that time was as great as now?—Yes, and very much greater.

60,366. Are you able to say whether there were as many boats then employed in the oyster fishery on the coast of England as there are now?—I think twice as many, and I do not think I should be far wrong, if I said five times as many.

60,367. Then do you think that the English market at the time to which you refer was supplied with a much larger quantity of oysters than it is now?—I think the market at that time was supplied with a much greater quantity of oysters than now. Of oysters of a good quality there was certainly a much larger supply, and the private grounds were stocked to a much greater extent.

60,368. Do you mean that the private grounds were stocked with fish brought from the deep sea, or do you refer to private grounds where oysters were in the habit of breeding?—They were not breeding grounds.

60,369. They were feeding grounds chiefly?—Yes. The benefit obtained by those who had the private grounds arose chiefly from the growth of the oysters.

60,370. They were laid down there when young, and left to improve?—Yes.

60,371. Were you acquainted with the oyster fishery in the Channel Islands?—Yes; I was well acquainted with it.

60,372. Are you aware whether that fishery continues to be productive or otherwise?—I think not.

60,373. Can you give us any reason which has led to its becoming less productive?—I think the cause has been the Convention between this country and France, and the steam together.

60,374. How has steam affected it?—The steamers are able now to carry out the provisions of the Convention Act more effectually than they would otherwise do. They are able now to drive the vessels away which used to work over the ground, and by constantly dredging, keep it clean.

60,375. No doubt the object both of the French and English Governments in entering into that Convention was to increase the supply of oysters by such arrangements as they considered it most advisable to make?—No doubt that was the object; but I think they took a wrong course in the measures they adopted. They did not properly understand the question, and they made a great mistake.

60,376. You believe that they were in error in the course they adopted?—I have not the slightest doubt of it.

60,377. Will you state shortly what you consider to be the erroneous principle they adopted?—The great error they committed was in prohibiting the dredging in the summer time, or even at all.

60,378. Was there not a risk that, if some measure of that kind had not been adopted, the fish might have been entirely fished out?—I do not think there was any fear of that.

60,379. Have you ever seen any oyster banks fished out in consequence of the continuous fishing of them?—No; I never knew a fishing ground destroyed by that means, except it was a private ground, where there was only a small quantity of oysters laid down. In that case, the ground might be so nearly destroyed by over-fishing as to become worth nothing. In point of fact, I have seen private grounds broken into by a lot of boats, and so much injured and destroyed, that no stock was left.

60,380. The same principle you would apply to the fisheries in the Channel Islands as to those on the south coast of England?—I consider that the beds in both cases have been destroyed entirely by the protection which has been given to them by the French and English Governments.

60,381. Have you had any experience of the oyster fisheries on any other coast?—Yes, I have had experience of the oyster fisheries on the Irish coast.

60,382. What has been the case there?—I do not think that the same result has been produced there exactly. There are still many oysters to be found there in certain places; but the ground is of a different nature there; it is not so liable to choke up as the ground in England.

60,383. Is the ground which is situated in shallow water more likely to be choked up by slob than that which is in deep water?—Yes, it is far more likely to become choked up, and in the harbours round our coast, the mud has the same effect as slob at sea.

60,384. Does that also destroy the oysters?—Yes, it destroys both the oysters and the ground too, where the ground has been protected. I know many places now where nothing but mud is to be found, but which were good oyster grounds formerly.

60,385. Mud and sea-weed have choked up and destroyed the oysters?—Yes.

60,386. Do you think if such a ground had been regularly dredged over, that that operation would have prevented the deposit of mud, and that the result would have been that the ground would have continued to be a good ground?—Yes, and I can give an instance that came immediately under my notice.

60,387. What is it?—It is the case of Langston Harbour and Chichester Harbour. Up to the time of the French Convention, it used to be the rule not to work all the summer through; but the fishermen began on the 5th of August. That was supposed to be the first day of the season. It was always the custom amongst the fishermen themselves, when there was no law to regulate the dredging for oysters, to begin on the 5th August; but they used to steal in upon the ground, probably, all through the month of July, and there would be boats working upon it during the night time, and so on. During the time the ground was worked in that way, there was a vast amount of oysters obtained there. The supply, indeed, was unaccountably large. There were so many oysters that one man with a small boat could go out and get seven or eight bushels in the course of three hours.

60,388. What is the case now?—There are none to be got there at all, nor is there any oyster ground.

60,389. Is that because it has become choked up with mud?—Yes, the oysters have been buried in mud.

60,390. Do you think that has arisen in consequence of the ground having been left unworked?—Yes.

60,391. Then what remedy would you, from your experience, suggest for the evil of which you complain?—I would clear away the law, and burn all the Acts of Parliament. We should be right enough then.

60,392. Would you leave the fishing entirely free?—Yes, and I am satisfied that, in that case, there would be plenty of oysters again.

60,393. Do you think that the oysters would return to those banks?—No, I cannot say that. They might not return to those particular banks which have been destroyed already, but other places would be found which would become worth working, and the supply, by that means, would increase.

60,394. Do you think that no legal restrictions are requisite in order to increase the supply from the oyster fisheries?—I believe that, in places like the grounds in rivers and harbours, it would be just as well to keep a close time in the summer months, say, between the latter end of May and the 1st of August. Perhaps, in part of the month of July, and certainly in August, the ground should be worked.

60,395. You would leave that, of course, to the self-interest of the people to whom the grounds belong?—It is the public grounds I am speaking of now, not the private grounds. The private grounds are in a totally different position. Upon the private grounds, as a general rule, there is no natural spat, such as there may be at the mouth of the Thames. There, there is a great deal of natural spat; but, as a rule, private grounds are only grounds where oysters are deposited for the purpose of improving and getting fat, and not of breeding. The spat that falls upon such grounds is not sufficient for any person to rely upon it, and take steps for collecting it. My father was in the trade for 40 years, and I was in it myself for many years, and I can say that we never benefited from the spat upon the private grounds, although it may have contributed to the supply of oysters upon the public grounds.

60,396. Upon the public grounds you think there should be some regulation for working the ground during August?—I believe that, in the rivers and harbours, the spat does not fix itself until August. I believe that early in August is about the time that it fixes itself, and if the ground were worked up to that time, it would then be clean for the reception of the spat. Ever since the month of August has been shut up to the fishermen there has been a scarcity of oysters, which has been gradually becoming greater ever since, and there have been no more great spats in the harbours. Formerly, the spat from the harbours mainly supplied the London markets.

60,397. Would you recommend that the month of August should be an open month?—I have no doubt that it ought to be, and the month of May also.

60,398. Are you in favour of having any close time at all?—I should not be in favour of a close time, if I had my own will. I think we should be better without any; but, if there was any at all, certainly the month of August ought to be free.

60,399. And you say that the month of May should be free?—Yes, May also.

60,400. Would it be of great advantage to deep-sea oysters that there should be no close time?—Yes; but I am speaking now of the grounds in harbours and rivers. I think that, in connexion with those grounds, there might be a restriction enforced in the summer months, but more for the purpose of driving the fishermen to sea at that time than anything else.

60,401. Have you had any experience of the oyster fisheries in the North American Provinces?—I have been in a great many places in the North American Provinces where there are oyster fisheries, but there is no dredging there; they only pick them and rake them up.

60,402. Has your experience in those provinces afforded you any further knowledge of the question that you desire to communicate to us?—There is one thing, namely, that the frost in the American waters does not kill them, although it does here.

60,403. How do you account for that?—Because the oyster ground is sealed up with ice. When the ice once becomes fixed there, it does not remove any more for some considerable time.

60,404. The oysters are covered in with ice?—Yes.

60,405. They are not so much exposed to the air?—No, and the water is not so cold at the bottom as it is in England. I have known them freeze in five fathoms of water in England. I do not agree in what has been stated as to the amount of temperature that would kill an oyster. Out of a thousand bushels there may be such a thing as 10 die.

60,406. (*Professor Huxley.*) Is there much oyster-fishing carried on in the winter time?—No; in the winter time the fishermen cannot work profitably.

60,407. Do you think that in the summer time there is likely to be enough bad weather to prevent over-fishing?—Yes.

60,408. Are you acquainted with the operation of the steam dredge?—No; I never saw one.

60,409. It is used on some parts of our coast?—I never saw it. My opinion is, that if the harbours in America were dredged, there are plenty of oysters to be found at the bottom.

60,410. Do you think it may be from the absence of sudden changes that the oysters are not so much injured in cold weather in America as here? The winter there, you are aware, sets in more steadily and regularly than it does here?—I do not think that has much effect. I have always found in England that if a hard frost comes on, whether it comes on gradually or suddenly the oysters will die.

60,411. In what depth of water?—They will die in five fathoms. They are far more likely to die in less than five fathoms, and more still when they are dry.

60,412. You say that you would leave the fishing

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open?—Yes, I would have it absolutely free. I believe it would be better then for everybody, and there would be plenty of oysters.

60,413. As soon as the oysters became scarce on a bed, do you think the people engaged in dredging would find it too costly to work there, and that they would go somewhere else?—Yes, but I think that if there is to be any restriction at all, it should refer only to oysters in rivers and harbours. It might do some good in the harbours, to prevent the boats from working when the oysters are not in season.

60,414. In that case, the boats would be obliged to go out to sea?—They would not, if they could get a bit of a crust in the harbour, go to sea to get beefsteaks. I, therefore, think it would be good to shut up the dredging in harbours for a few months in the summer time when the boats can go to sea, but I would have the restriction apply merely to the in-shore grounds, such as those inside the Isle of Wight.

60,415. (*Mr. Lefevre.*) When did you observe the falling off commence?—Directly the law was passed.

60,416. That was in 1843?—I think it was. In 1840 and 1841, there were plenty of oysters.

60,417. The law was not carried out strictly for some time after it passed?—No, I think not.

60,418. Were your smacks able to evade the cruisers?—They used to steal out and leave their dredges out in the sea with buoys attached to them, so that they knew where to find them again. They would then pick them up, and the Coastguard did not take any notice of the oysters they brought in, provided they had no dredge on board.

60,419. You have been on the French coast for oysters?—Yes, I have been to Cancale, Granville, and other places, and I know how the oyster fisheries are carried on there. The quantity obtained there was immense at one time. A vessel might go out at night and catch 250 bushels before morning.

60,420. Has the supply fallen off of late years?—Yes, it is all mud now.

60,421. The oyster smacks have now to go out into deeper water for their fish?—They have to go now into the Channel, and there are only a few of the best boats that can do that.

60,422. Twenty years ago were those beds in the deep water not worked at all?—I think they were discovered about 22 years ago.

60,423. Are the vessels that are employed now in oyster dredging larger than they were?—Yes.

60,424. Are they better adapted for the work than they were?—Yes.

60,425. What number of smacks were there 20 years ago?—I have seen as many as 300 in one fleet, at Jersey.

60,426. Were they mostly Jersey men?—No, there were very few Jersey men amongst them.

60,427. Then were they mostly English boats?—Yes, they used at that time to go from every part of England.

60,428-31. We were told at Shoreham that there are now 300 large smacks bringing in oysters to Shoreham and Newhaven?—There was not one when I first went to Shoreham.

60,432. When you talk of a falling off in the number of fishermen and smacks, one would like to know what the number was in former years, and what the number is now?—There are not 300 boats, I am satisfied, belonging to Shoreham and Newhaven that go dredging. I think, if you make inquiries, you will find that is a mistake. There may be about 300 altogether fishing in the Channel, but they principally go from Colchester, and Whitstable, and other places.

60,433. Was there any considerable quantity of small oysters brought in by the smacks fishing in the deep Channel?—Yes.

60,434. Were they smaller than $2\frac{1}{2}$ inches in diameter?—They would be about $2\frac{1}{2}$ inches across.

60,435. Then has that trade been done away with altogether?—Yes, as near as possible.

60,436. Was it for the laying down of those oysters that the beds off Langston Harbour were adapted?—Yes.

60,437. Have those beds been discontinued altogether now?—Yes, because they could not get a supply of oysters.

60,438. Was that a very profitable business while it was carried on?—It is only carried on in a very small way now, as compared to what it was then.

60,439. Was it a profitable business to take small oysters and lay them down, in order that they might grow into large ones?—Yes, it was profitable when well managed, but there have been a great many people who have become bankrupt by it.

60,440. Was the great bulk of the oysters taken on the ground you speak of a small class of oysters?—If we could avoid it we never had any larger than that (*showing an oyster*).

60,441. That is about an inch and a half across?—Yes, and if we get them smaller, so much the better.

60,442. Did you find any difficulty in removing oysters of that size to the beds?—No; they would keep for three or four days.

60,443. Even in the summer time?—Yes. In the winter time we had them in once a week and in the summer time twice.

60,444. How long did you keep them on the beds?—They were allowed to remain on the beds for two years before they were sent to the market.

60,445. Then is the trade now on the south coast solely confined to keeping the oysters on beds so long only as to keep up a regular supply to the market?—There are only large oysters to be got now, and it is simply a deposit for the market that they can get now.

60,446. What was the difference in the price of oysters grown on those beds and the large oysters as they came out of the Channel?—There was a great difference.

60,447. What was the difference?—We used to get coarse Channel oysters from Jersey, and they would fetch about half-a-crown a bushel.

60,448. What would be the price of the others?—They would bring in as high as 4*s.* a bushel—between 3*s.* 6*d.* and 4*s.* That is the price we should pay for them at Jersey.

60,449. What price would they fetch after they had been laid down for two years?—5*s.* 6*d.* and 6*s.* a bushel. But a bushel then would not contain two-thirds as many oysters.

60,450-1. Then the price would be about double?—Yes, the oysters would increase fully one-third, so that the increase in the price sometimes amounted to one-half or two-fifths simply by growth alone.

60,452. Used you to find in the summer season, when dredging took place on the grounds, and the oysters were brought in in a spawning state, that they fetched any price?—They always could be sold.

60,453. Was there any demand for them?—Yes, always. They were sold at fairs and to poor people generally. Of course the better class of people would not eat them in the summer months, but in the worst spawning time you would not find more than six or twelve out of a hundred in that state.

60,454. The others would be good wholesome oysters?—Yes.

60,455. Was the best part of the take of the small oysters for the purpose of laying down?—Yes, they were always got in the summer and laid down.

60,456. In fact, the operation in the Channel at that time was very much what the operation in the estuary of the Thames is now?—Yes, only in the winter months the oysters were practically protected in the Channel, because the boats were not able to work there on account of the weather. But they had then the harbours along the coast and inside the Isle of Wight, which were comparatively sheltered to fall back upon.

60,457. In point of fact, the process in the Channel was very much what it is now in the estuary of the

Thames? The public beds were dredged regularly, and the supply was taken from them for the private beds?—Yes. There was always more or less scarcity of oysters at the mouth of the Thames. They might get a few or none, whereas in the Channel it was always different.

60,458. Were any of them taken from the Channel and laid down on private beds?—I never knew small oysters to be taken in the Channel. They were generally got from the beds along the shore at Shoreham, Bognor, Littlehampton, and the oyster beds about the Nab Light. Before the Shoreham ground was discovered, we used to get a great number there.

60,459. What distance from the shore?—They were got in about 7 or 8 fathoms of water, about two or three miles from the shore.

60,460. How far is the Shoreham ground from the shore?—From four to seven miles from the shore.

60,461. Have all the grounds in-shore decreased in their supply?—Yes; as nearly as possible, they have been altogether destroyed. There may be a place or two where a few oysters can be found, but, as near as possible, the beds in-shore have entirely failed. No one could get a living from them now.

60,462. (*Professor Huxley.*) You stated just now, that, at any given time of the year, the number of oysters actually spawning out of a hundred would not be found to be more than 12 or 14?—No, never more than that.

60,463. Is that the result of your own observation?—Yes; I have observed that, year after year.

60,464. There were not more than a dozen or so, even in the height of the spawning time?—No; and I find that the coarser the oysters are,—for instance, the Channel oysters and those from Jersey,—the more freely they spawn than those obtained along the shore.

60,465. Then, in the fullest spawning time, there would be 80 per cent. of the oysters fit to eat?—Yes, and they would be very bad when there were only as few as that.

60,466. That is a very important statement indeed, because it goes to the whole bottom of the question of the establishment of a close time and the prohibition of dredging?—My opinion is, that a close time and the prohibition of dredging during the summer months are a mistake; there is nothing like free trade.

60,467. You say the circumstance you have mentioned was a matter of notoriety?—Yes; it was known to all who had anything to do with the oyster trade. But legislation altogether has had a bad effect. The provision requiring us to mark our sails was very much objected to. We were determined that we never would be marked up as the Frenchmen were, and I can assure you that we were as particular in regard to our vessels and our sails as a gentleman is of his yacht.

60,468. This question of the per-centage of oysters actually in spawn at the spawning time is very important; and I should be glad to know if it is a matter of notoriety that, at no time of the year, you would get more than 12 or 14 out of a hundred that were sick?—That is a well known fact.

60,469. (*To Mr. Buckland.*) You stated, I think, that you had made an investigation of that kind?—Yes, to some extent.

60,470. What was the result of your observation?—I can quite understand what Mr. Russell says, but I presume that he would not know that the oysters he found fit for food had not spawned.

60,471. Do you agree with him as to the matter of fact? Did you find, from your own observation, that, taking a hundred oysters at any time of the year, you would not find more than 12, 14, or 20 actually spawning?—I think that is very possible.

60,472. Was that the result of your own observation?—Yes, it was; but I found also that there were other oysters which had spawned, and others that would spawn.

60,473. That is a perfectly distinct matter?—Yes.

60,474. (*Mr. Caird, to Mr. Russell.*) With regard to the 12 or 20 oysters which would be in a bad condition, could anything be done with them?—No, nothing at all.

60,475. Then they would be lost?—Yes; they would be wasted if they came to the market.

60,476. Was there any means by which you were enabled to discover whether oysters were actually spawning before you sent them to the market?—It might be detected beforehand,—before they were actually sold; but if they once got to the market, there would be no chance of their going back again.

60,477. Would they present such an appearance as would enable an oyster fisherman to distinguish them, and not take them to the market at all?—No; he would not be able to discover that fact unless he had kept them for a day or two.

60,478. (*Professor Huxley.*) They would then gape, and show the spat?—Yes; but we were obliged to carry to market the sick and the well together. I was in the oyster trade myself, from 1851 to 1854, at Liverpool. We had oyster beds in the Menai Straits, and we did a very large business there, until our beds were broken in upon by the Welshmen and destroyed. We used to take, on the average, about 200*l.* a week, both summer and winter, and sometimes we took 100*l.* a day.

60,479. (*Mr. Lefevre.*) How was it that your oyster beds were broken in upon?—We laid down 3,000*l.* or 4,000*l.* worth in the deep water, and they broke in upon them and stole them, and took them all away.

60,480. (*Mr. Caird.*) Were you in the habit of fishing those oysters every day in the year?—Not in the Menai Straits. We laid them down there all the summer months, and we did not touch them until they were fit to be taken to the market. We used occasionally to overhaul them, in order to see if the ground were clean or not.

60,481. Were those oysters brought from the Arklow Coast?—Yes.

60,482. Were they small oysters, that were laid down in order that they might grow into big ones, or were they simply laid down until they could be sent to the market?—They were generally small oysters. Sometimes we bought as many as 400 or 500 bushels a week, and we were able to dispose of that quantity throughout the year almost. We culled the oysters, however, taking the large from the small, and all the small ones we put back again into the deep water. Four or five bushels of small oysters were thrown into the deep water in a day, culled from those which were fit for the market, and if we could get a cargo of small oysters we threw them in also, but we never threw the large ones in.

60,483. Was that a private bed?—Yes.

60,484. Was there any difficulty then in enforcing the law for the protection of private property?—Yes, we had a great deal of difficulty in the matter; and we took every step to make ourselves secure. In the first place, we had a lease from the Bishop of Bangor, who claimed the ground that was dry at the ebb of the tide; his rights were supposed to extend to low-water mark, but he claimed beyond that.

60,485. But could he not enforce his claim?—He was not able to establish his claim beyond low-water mark. We also took a lease from the Woods and Forests of the ground in deep water; and from Sir Richard Bulkeley of the ground on the Anglesea side. Under these circumstances, we considered ourselves perfectly safe, as we had leases embracing the Bangor side, the Beaumaris side, and the water in the middle of the strait; nevertheless, the beds were broken in upon, and the oysters taken away.

60,486. Did you not prosecute the offenders?—Yes, we proceeded against several persons, and one or two of them were sentenced to six months imprisonment, but after that they came in upon us by hundreds.

60,487. Was it the ground they had been in the

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habit of fishing upon before?—No, it was all clean ground until we laid the oysters down there.

60,488. Then they were oysters which you had brought there, and which were your own private property?—Yes.

60,489. (*Professor Huxley.*) Would it have cost you too much to have enforced the law?—It cost us 3,000*l.* as it was. We lost 3,000*l.* worth of stock, and we thought it was time to get out of it.

60,490. (*Mr. Lefevre.*) Then, are the Beaumaris beds confined to beds now above the low-water level?—Since then, I believe, there has been a Company started upon our rights, and shares have been allotted, but we never looked after the beds since. I believe they have been doing little at them, and that they have been paying so much a bushel for what they got.

60,491. Is not the principal market for the Beaumaris oysters during the summer months?—The oysters are sold in the country towns round about, but they do not care where the oysters come from.

60,492-3. Are the Beaumaris oysters more for the supply of the market in the summer than in the winter?—Yes.

60,494. Your trade was to buy oysters when they were in season, and lay them down for supplying the market in the close time?—Yes.

60,495. Did not that operate very much as if you had been allowed to take oysters during the close season?—It was very much the same thing, because they were marketed during the close season. But the same thing is done now; the Channel oysters come to London all the year round.

60,496. They are laid down on beds at Shoreham and Colchester to supply the London market during the summer months?—Yes; I believe that my father was the first who ever laid down an oyster at Shoreham, and my brother was the person who discovered the oysters in the Channel.

60,497. The operation now is to work the oysters in the open season, to lay them down in beds at Shoreham and Colchester, and to supply the market during the close season?—Yes.

60,498. Then the effect is much the same as if the oysters were allowed to be taken all the year round?—Yes.

60,499. (*Professor Huxley.*) Then, in that case, it comes practically to the same thing as if you took the oysters from the deep sea during the close time?—Yes, it comes to the same thing.

60,500. The same quantity of oysters are taken from the sea, and the same quantity are prevented from breeding?—Yes; some of the stocks may run out before the season is entirely over, and then there would not be as many sold; but there used to be enough got when I was in the trade.

60,501. It would be practicable to provide a sufficient supply of oysters during the whole of the close time?—Yes, we always endeavoured to do that.

60,502. If any person attempted to provide fully for the close time by sending out steam vessels and dredges, would he not be able to get as many as he pleased from the deep-sea fisheries?—Yes.

60,503. There would be nothing to stop him?—No.

60,504. Then, in that case, the result in the long run would be the same?—Yes.

60,505. And it would be just the same as far as the prevention of breeding is concerned?—Yes.

60,506. (*Mr. Lefevre.*) You spoke of the operation of the Act on the fishermen themselves, by stopping their fishing during a portion of the year?—Yes, of course, they want to be able to obtain a living all the year round, and not to lay up their vessels. When the law came into force it was necessary to lay up the vessels, because the fishing was not allowed, and the result was that many persons were obliged to sell and get rid of their boats. It was not worth their while to keep them laying up all through the summer months.

60,507. What do the larger smacks which are employed from Shoreham do in the close season?—Some of them go coasting, but they are larger boats than those of which I have been speaking, and they can make more use of them than the fishermen were able to do in former times. They are engaged in the close season in carrying stone and different things.

60,508. Then in your opinion the operation of the close time is to prevent the economical fishing of oysters in one instance, and to prevent the profitable employment of the boats during the close season?—Yes, and the people about Essex have other chances of earning a livelihood, when they are not engaged in oyster-fishing, for instance, they can look out for salvage and wrecks, and so on. They go sprat-catching in the winter, and they can go to different kinds of work, so that they can employ their time and manage to get on; but on the south coast the fishermen have nothing but the oyster-fishing to depend upon.

60,509. How many smacks had you of your own, employed in the Channel?—Amongst our family we had about six.

60,510. Was it in consequence of your inability to employ your capital during the close season that you were obliged to give the oyster-fishing up?—Yes. We found that it would not pay to catch them.

60,511. Other people found the same result?—Yes, and the consequence has been that almost all of the boats which were employed on the south coast have been given up.

60,512. Were they not adapted for any other kind of fishing?—No, they were fit for nothing else except the oyster-fishing.

60,513. Then have the beds been discontinued?—They have to a great extent; there are still some, but they are merely deposit beds, upon which the stock is placed in the season, in order that it may be sold in the summer. The beds are used, in point of fact, for enabling the oysters to grow and improve until they become marketable stuff. At one time, we never used to think about selling oysters in the summer at all.

60,514. You simply laid down everything you took?—We used to lay down all the small oysters. We would only buy small oysters then. We did not require anything large. It could not be too small for us. There were always other merchants who would take the large oysters, but we only took the small. We cultivated them, and we were always enabled to obtain one-third clear profit, besides the difference in price realized from the improved quality of the oysters.

60,515. Where are your beds?—In Langston Harbour.

60,516. Do you carry them on now?—My brother does.

60,517. Were a considerable quantity of oysters sent to the Thames?—Yes, the greater part of them,—nearly all.

60,518. There was nothing to prevent the small oysters from being removed in safety?—No, but we generally kept them for two years on the beds.

60,519. You found it more profitable to do so?—Yes.

60,520. But did the journey to the mouth of the Thames make no difference?—Some of them would die on the passage. They could not be brought to the mouth of the Thames from the Isle of Wight in the summer months.

60,521. Was that too long a journey?—Yes, but they could be carried down to the Isle of Wight from Shoreham, Langston, and other places, because the distance is only short. The boats used to deliver what they had got on the Wednesday, and then go out for the remainder of the week. On the Saturday, however, they would only go to the beds that were near at hand, and for years the new ground was only worked on a Saturday for that reason. It was worked by the boats, which during the rest of the week had been dredging for oysters further away.

60,522. What is the extent of the ground which

you speak of, and which has gone out of working?—I could not give you the acreage, but the extent is very considerable.

60,523. How many miles long, should you say?—The Shoreham ground was 14 or 15 miles from one end to the other.

60,524. And what was the breadth?—The breadth of the ground varied from one mile to four.

60,525. Might not the silting up of the beds with mud be due to natural causes, and not to the want of dredging?—It is owing to natural causes, no doubt. It is the tide that does it.

60,526. Then might it not have accumulated under any circumstances?—Not if the ground had been properly worked. If it had been worked, the tide would have carried it away, without allowing it to accumulate. For instance, on the ground in Langston Harbour and Chichester Harbour, there are now miles of mud that the tide only goes over at high water. In a gale of wind that mud is stirred up, and the water becomes thick, and the mud settles. If there was nothing to disturb it, it would remain, and gradually form a coating over the bottom; but if it is disturbed, then the tide carries it away, and the ground becomes clean again.

60,527-31. The dredging in the winter months is not sufficient to carry it away?—No, because it settles more in the summer than the winter.

60,532. (*Mr. Caird.*) I think you said you never found any small oysters in the deep sea?—There might be some, but we did not generally get them from the deep sea.

60,533. Have you never, in dredging in the deep sea, brought up small oysters?—A few, but not many.

60,534. (*Mr. Lefevre.*) Do the fishermen use too large a ring?—That might have something to do with it.

60,535. (*Mr. Caird.*) Is it possible that there might be in the Channel a large quantity of small oysters, that might be with profit dredged up and laid down upon feeding grounds?—That is very possible, as all the oysters must have been small before they became large.

60,536. But small oysters have never been obtained, as a general rule, whilst you have been fishing in the deep sea?—Not in deep water.

60,537. Not in the Channel?—No.

60,538. But most likely they may be there?—Possibly they may be. There are not any where they were. It is not general for the fishermen to work where they do not know the oysters are. They generally go where they do know they are. Of course, if they do not find them, then they try some other place, but it is only by mere accident that a new spot is found out.

60,539. Is it not usually the case that you find large and small oysters together?—Not often, but sometimes it is the case.

60,540. What months of the year are most favourable for the growth of slob at the bottom of the sea?—It depends altogether on the season. At the latter end of April and the beginning of May it begins to show itself.

60,541. Just as the grass grows on the land?—Yes, and the growth of barnacles is just the same; they spat at that time by millions.

60,542. If permission were given to work the ground in May, would the slob you speak of be destroyed to a great extent?—Yes, that would do a great deal of good; in the latter part of the summer it turns almost black, and becomes converted into a kind of mud in July and August. There have not been a great quantity of oysters caught in July and August on the public grounds at the mouth of the Thames, between the Foreland and Orfordness.

60,543. Within that limit?—Yes.

60,544. Within your experience, have any new oyster beds been found quite outside in the deep water, outside that limit?—I do not know of any; some have been said to have been found off Dover.

60,545. But towards the north, in the North Sea, to the Dudgeon?—I am not acquainted with any other oyster beds in the North Sea.

60,546. You do not know of any?—No.

60,547. Have you any experience of the oyster fisheries along the coast of Norway?—No, but I know there are oyster fisheries in Denmark.

60,548. Where?—There is an oyster fishery in the Cattegat.

60,549. In the Cattegat?—Yes.

60,550. That is not outside?—No.

60,551. Does that oyster fishery continue to yield well?—I think not.

60,552. (*Mr. Lefevre.*) What was the size of your boats?—I have had them of different sizes, running from 25 to 60 tons.

60,553. How many men are there in each?—There are six men in each boat.

60,554. Was your head-quarters at Langston Harbour?—Yes.

60,555. Is it within your knowledge that the men who were formerly engaged in the oyster fishery have gone off to other trades?—I do not think you would find six of them engaged in oyster-fishing now.

60,556. Not in dredging for oysters?—No. Not at Langston, Chichester, or Portsmouth.

60,557. Then the trade has been literally done away with?—I do not believe there is one of them left.

60,558. What are the boats that dredge in the Channel?—The dredging in the Channel is chiefly carried on by the Essex people.

60,559. And by the Shoreham people?—The boats go to Shoreham, but they do not belong to there. They harbour there because it is handy.

60,560. Then are they merely Essex people who carry on the dredging?—Yes, and they only harbour at Shoreham. As to Newhaven, I do not believe there is a boat belonging to the place. If there is, it is a stranger.

The witness withdrew.

WILLIAM J. FFENNELL, Esq., called and examined.

W. J. Ffennell, Esq.

60,561. (*Mr. Caird.*) You are a salmon fishery Commissioner?—Yes.

60,562. And you were previously a sea fishery Commissioner in Ireland?—Yes, for many years.

60,563. You have had a long experience of the sea fisheries in Ireland?—Yes, and I have paid particular attention to the oyster fisheries of Ireland.

60,564. Can you, from the knowledge you have obtained as to the Irish oyster fisheries, give us any information regarding the present supply of oysters compared with what it was some 10 or 15 years ago?—Yes, and I may attribute to steam, as the last witness did, the cause of the deficiency in the supply of oysters, but not for the same reason that he assigns. I do not think that it has anything to do with that, but the introduction of steam, by distributing the oysters through all the arteries of the United Kingdom, has occasioned an immensely increased demand.

60,565. By steam do you mean the introduction of railways?—Yes, both steam-boats and railways.

60,566. You mean the increased facilities of communication?—Yes, the means of transit have become extended and facilitated; that has induced a much larger amount of capital to be invested in the trade, and the appliances for carrying it on are improved; more men have gone into it, and there has been a great amount of over-capture of oysters, which, in my mind, has been the cause of all the evil.

60,567. Do you think that the grounds have been over-fished?—Yes, the over-fishing, which has oc-

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curred in every place, has in my opinion been the cause of the decrease.

60,568. Can you state to us the various fishing grounds that exist on the coast of Ireland?—Yes, I will begin with Lough Foyle. The fishery there some 20 years ago was most prolific in oysters. It belongs to the Irish Society, that great Corporation which is here in London. They took no care of it, however, and did not restrict any one from going on the beds. 20 years ago, or say 25 years ago, there were a vast number of oysters there for a while, but when steam was introduced the demand for oysters became very great, and the whole of the country set to to fish the ground, and they dredged it without any limit. There were no laws then to restrain them. It can be proved by documentary evidence, that in those days in Derry there was more paid for the freight of oysters in one week,—ten times over,—than is paid for the whole oyster produce of Loch Foyle now in the course of a year. I look at that as a very strong case. The people were allowed to go to the fishery at all times and to dredge as they liked, and for a while there was an enormous produce. So great was it, that, for a short time, the freight, as I have already said, amounted in a week to more than the whole amount taken in a year now.

60,569. When were restrictive laws applied?—The Act which imposed the first restriction was passed in 1842. A year or two elapsed before it was brought fairly into operation, but in 1843 or 1844 it was carried into effect, and since that time, I should say, that it has been rigorously carried out. In Ireland we have the Coastguard to look after these matters and I believe that many of the officers are very attentive to them. There is another very strong case which I may give, in reference to the Carlingford beds, where the oysters were abundant and of very fine quality.

60,570. We will turn to the Carlingford beds presently. Are we to understand that in 1842 the oyster fishery rapidly fell off in Lough Foyle?—It had fallen off exceedingly at the time the Act passed.

60,571. What has been the consequence of the passing of the Act; has the fishery ever recovered itself?—Not altogether in Lough Foyle. In point of fact, it was dredged out before the Act passed.

60,572. What is the next fishery of any importance?—The next was the Carlingford fishery.

60,573. Was there no oyster fishery in Lough Swilly?—Yes, there are oysters there.

60,574. How was it in that case?—The results were very similar to those in Lough Foyle. It was a very prolific place for oysters naturally, and there are a good many oysters produced there still, and they are sent over to this country by steamers from Derry. Those beds have been improved greatly since the passing of the Act, although they have recovered from the over-dredging to which they were subjected prior to the passing of this Act.

60,575. The next place will be Belfast Lough?—There is a large description of oyster found there. There are a few got outside Belfast Lough, but they are very inconsiderable. There never was a large oyster fishery there in my time.

60,576. Then going south, what is the next fishery?—Going south, I come to Carlingford Lough, which is the next public oyster fishery.

60,577. Is there nothing in Strangford Lough?—There are not many there, but there was a large and abundant bed at Carlingford. There the oysters were of a very superior quality. When the supply became short here, down the coast of Kent, one of the first places the public went to for oysters was Carlingford. They employed the people there before there was any restriction imposed by the law, and in the course of two or three years Carlingford Lough was dredged out, the oysters being carried over. Within the last eight or ten years there has been some improvement, but the fishery altogether has been immensely deteriorated, and has never possessed a large quantity since. So much was that the case, that people there, for their own local demand, have for years been getting a supply of oysters from the Arklow coast, the banks there having never become entirely exhausted. The oysters thus obtained were laid down at Carlingford in order to feed. Two or three years before I left Ireland, which was in 1840, the dredgermen of Carlingford Lough sought for aid from us to restrict the fishing of the beds. They are a provident, sensible set of people there, and they entered into a convention amongst themselves to shorten the open season still more than we have done, until we could perfect a law to make it so. The people there had experienced the evils resulting from the over-working and the over-dredging of the oysters, and they were, therefore, anxious to keep that down, and sensibly entered into a convention until we ratified it for them, and I believe that the oysters have since rallied.

60,578. Where is the next important oyster fishery?—The next important beds are on the Wexford and Wicklow coast. I never separate those beds because they really join. They are very extensive public beds, and produce great quantities of oysters. The oysters themselves are naturally of a bad quality, and they had partly fallen off. There were very great complaints as to the number of fishermen thrown out of employment at the time when the Act of 1842 passed. The restrictions imposed by that Act, in the course of a few years, caused a considerable increase in the oysters, but as they were of a very bad quality, if consumed when they were taken from the bed, they memorialized us to allow them to dredge in the month of May, for the purpose of enabling them to supply the Englishmen who went over there to look for them in consequence of their own supply having fallen short. After a careful inquiry, we thought fit to comply with their wishes, and, after that was done, I have known as much as 12,000*l.* paid to the Arklow fishermen in the month of May by Englishmen.

60,579. You extended the open time by a month, namely, the month of May?—Yes.

60,580. In this special instance?—Yes, under the powers we have under the Act of Parliament. I have gone down to Arklow frequently to settle disputes between the oyster fishermen and the Englishmen, who send over, beforehand, some weeks' notice of the quantity of oysters they require, in order that the fishermen may collect them. The oysters collected by the fishermen are brought into the pool and deposited, until they gather a sufficient number to freight the vessels that come over. The disputes arose in consequence of the Arklow men trying to make the English take all the large and the small. The Englishmen only wished to have the small ones. I went down several times to settle disputes of that nature.

60,581. They caught both large and small?—Yes; but the Englishmen refused to take the large ones.

60,582. Was it chiefly a fishery of small oysters in the month of May?—Yes, I believe it was.

60,583. What was the effect of extending the open fishery by a month? Had it the effect of reducing the quantity of oysters or otherwise?—It fluctuated to a certain extent. It lessened the supply sometimes, but it depended, in a great measure, upon the number of persons who came from England requiring oysters. There were also the Bangor men, to whom the last witness has referred. Sometimes the draw upon the beds was too large, and occasioned them to fall off again, but, on the whole, the Arklow beds well sustained themselves. During the last two or three years, I have learned, and, I have no doubt, it is correct, that several French vessels have been over there, which have taken a large supply. I was speaking, some time ago, to a Wexford man who has paid some attention to the matter, and he told me that he was afraid the draw was again becoming too heavy.

60,584. Then it would appear that the fact of extending the fishing season for a month lessened the

supply of oysters on the whole ?—Not very materially, I should say. But then there is one thing to be considered about that, viz., that part of the coast where the oysters are is a very open and wild coast. There is much less dredging there in the winter, because the oysters are very valueless for eating. They are of a remarkably bad quality there, and they do not seek them much in the winter.

60,585. Would not that fact rather strengthen the idea that, inasmuch as previously, during the winter, they were not much fished, the fishery being increased by an additional month, viz., the month of May, would result in a very large additional quantity oysters being taken off the ground during that additional month, it being a good month for fishing there ?—A great many oysters were taken off in that good month, no doubt.

60,586. The fact of allowing the fishermen to fish in the month of May led to a greater quantity of oysters being taken than if they had been fished in December and January, for instance ?—Yes.

60,587. The extension for a month in May led to more being taken than would be taken in the winter months ?—Yes. On some of the banks there is a very coarse description of oysters, for which there has been a great commerce from time to time between Wexford and Liverpool. Those are eaten by the men employed in the dockyards. They would not sell here at all. They are immense, flavourless, bad oysters, very large and coarse, but they meet with a ready market in Liverpool.

60,588. Have you any knowledge of the kind of ground on which the oysters are obtained on that coast ? Is it a ground that would be productive of slob or of a grassy growth at the bottom of the sea ?—No, there is not much slob there, and not much mud. I attribute the abundance of oysters to that fact. There are pools or eddies there formed by the tide, but there is no sweeping current to take away the spat. Wherever I have paid attention to the oyster beds, I have found that there is no such thing as a natural prolific oyster bed where there is what is called a race of tide over it. Where there are eddies or currents it allows the spat to fall, but where there is a great race of tide it carries it away.

60,589. Then, leaving that ground, the next oyster ground would be in Waterford Harbour ?—Waterford Harbour contains a very large and well-flavoured oyster, of a very good size, yet it fell off to nothing almost, in consequence of over-dredging, and for some years, perhaps, three dredges would not go out for a whole year, and those would catch only a small quantity. Within the last week, I met a gentleman from Waterford, who is very active with regard to the sea fishery, and he told me that he had equipped, the year before last, two good dredgers, and that he is doing very well in the harbour off Waterford, so that there has, evidently, been a rally there, but I think it has arisen from the absence of dredging. I believe that the fishery there had become so valueless that the people did not find it pay to go after it; but, after two years' rest, it has rallied, and the gentleman to whom I refer is now doing well with his two dredgers.

60,590. The next place is Cork Harbour ?—Yes. In Cork Harbour the oysters are very fine, and they have been sustained because they are upon private ground. Mr. Smith Barry has beds there, and he looks very carefully after them. I believe that onslaughts have been attempted to be made upon them, but we have prohibited dredging by night, in order to protect them. They had somewhat fallen off before then, but they have since rallied again. They had been plundered to such an extent that they were nearly exhausted, but they are now recovering themselves.

60,591. Where is the next fishery ?—In Kinsale harbour.

60,592. How are the oysters there ?—The fishery has greatly fallen off there in consequence of over-dredging.

60,593. Do you go on from there to Dingle Bay ?—There was nothing, in my time, of any importance between those places, except on the Kerry and Kenmare Bay beds. There is a gentleman there of the name of Bland, who has private beds; he has not over-dredged them, and the result has been that they have proved very valuable private beds. The public beds are not at all in the same position; by some means or other they have been dredged out. But Bland's Bank, as it is called, is still a valuable bank, and it has been so for some time, but it is carefully preserved by him. There are some beds outside the mouth of the Shannon, and in the Shannon there are grounds which, no doubt, might be made very valuable grounds if converted into private property, but they have been dredged out for the market of Limerick, so that the oysters have not been allowed to get up as far as there.

60,594. Has that been the result of constant dredging ?—Yes, it has arisen from over-dredging, just the same as in Lough Foyle.

60,595. In the shallow water ?—It is shallow water; at low water there are not more than two or three feet. There are parts of the ground upon which there are seven or eight feet of water. The next important beds are the oyster beds on the Clare side of the Bay of Galway. There are many exceedingly valuable banks there, but they are entirely feeding grounds. The oysters do not fructify, except to a slight extent. The oysters are brought from the opposite side of the bay, and they are planted on the Clare side, and become the sole, or rather the principal, supply to the Dublin market.

60,596. It is a very extensive oyster fishery, is it not ?—It is not so very extensive. The principal person engaged there in the trade to Dublin has made money, and, I believe, is still doing so; but the whole extent of his oyster ground is but four acres. They are, however, merely laid down there; they never breed there.

60,597. It is simply a feeding ground ?—Yes.

60,598. Is there a breeding ground on the opposite side ?—No.

60,599. Then where are they brought from ?—From the Connemara coast, from Rossmuck and Kilkerran; that affords the principal supply, because it is the nearest, and when they get short there, they get large supplies from Clew Bay.

60,600. Do they bring in small oysters, and lay them down in order that they may grow ?—They are not very small.

60,601. Proceeding northwards, where do you come to next ?—To Clew Bay, Achil Sound, and Blacksod Bay. There are very large and very productive natural beds in all that region, and they are in the same position. The time has been when there was such a demand from other places, that they became worked out, to a great extent, so that it would not pay for men to attend to the fishery. The result has been, that very few have gone there, and in the course of two or three years the beds have rallied again, and there has been a large supply. Under a system of licences established in Ireland, there have been some private beds made there, and licences have been granted to various persons to plant and cultivate oysters. I believe that those beds have thriven very well. I was conversing with a Kent man some time ago, who took one of these beds from a Mrs. Garvey. He told me that last summer he brought successfully, without any loss, two cargoes from Clew Bay, and planted them on the Kent coast. He said that the people laughed at him when he was going there, and told him that he had better take some salt to preserve them, but, nevertheless, he succeeded, and he sent me up some of the oysters last year, and they were most excellent. He got them over in the spring and the summer, and they were capital oysters in the winter.

60,602–3. Did they become good by being planted on the coast ?—Yes.

60,604. Do you think that the oyster beds in

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Clew Bay are likely to afford a supply for the Kentish coast and the London market?—I believe that this is the first time that any one has tried to bring them so far. Mr. Gann told me that he sent one lot to the nearest part of the railway on the coast, which, I believe, is Castlebar, and that the others he sent by boat. Those which he sent by railway came quite safe, but he told me that it was really more expensive than sending them by vessel.

60,605. (*Mr. Lefevre.*) What sized oysters were they?—They were not a very small oyster.

60,606. They were not below two and a half inches across?—No. A few years ago there was a man engaged in making up oysters in tin cases in that locality, and he obtained oysters as small as he could. Attention was called to the fearful destruction of oyster spat, by the fishermen themselves, in order to obtain small oysters. I read them a lecture myself, and I got the Catholic priest to assist me. He told them how injurious it was to destroy their own means of livelihood. It appeared that they had brought in millions of oysters, not much larger than my nail, which they had sold to a person who was engaged in curing them. They took away everything they got up in the dredge,—culch, and the spat of oysters, and everything. They brought everything to the shore, and shovelled it out of the boats; they then picked out what they wanted, and left the rest to perish. So negligent were they of their own interest, that that practice was allowed to prevail for some years.

60,607. Were those small oysters of no use for laying down?—No.

60,608. Were there no beds where they could have been laid down?—There were no beds there.

60,609. Then they were valueless?—Yes. Where that was done was in the Island of Achil, where the beds naturally are exceedingly prolific.

60,610. (*Mr. Caird.*) Have you now exhausted your description of the oyster beds of Ireland?—Yes; but of course there are a multitude of small beds which supply a small local demand, but it would be too tedious to go through them. For instance, there is a place in Donegal Bay, at Brooklus, where very nice oysters are obtained by chiselling them off the rocks. That is also done in Kenmare Bay. They have grown up to a good size, fast upon the rocks. But that is not a very large or important business, although there are very nice oysters got in Kenmare Bay and at Brooklus.

60,611. Having described the various oyster beds all round the coast of Ireland, you lead us to understand that some 20 or 25 years ago, before there were any restrictive laws, the supply was very abundant?—It was very abundant for a while.

60,612. And then, in consequence of the great facilities afforded by railways and steam-vessels to get to the inland markets of the country, the demand for oysters became very great?—Yes, quite so.

60,613. The result of that was that the different fishing grounds became zealously fished, and, in your opinion, over-fished?—Yes.

60,614. That being so, the Legislature stepped in and adopted restrictive laws for the purpose of preventing those beds from becoming exhausted,—is that so?—Quite so.

60,615. When was the Act passed?—In 1842, but it did not get vigorously to work till 1843 or 1844, when we began to work it by means of the Coast-guard.

60,616. What was the nature of the restrictions then enforced?—Principally a close season in May, June, July, and August.

60,617. Had there been none before that?—There had not been any observed. There might have been a close season laid down in the old statutes, but no attention had been paid to it, not in the least.

60,618. What were the months fixed as a close season?—May, June, July, and August. In fact, there were some people who already, by a kind of custom among themselves, kept those four months as a close season. It was said the oysters were only in season in those months which had an R in them.

60,619. But that was a mere understanding?—Yes.

60,620. It became a legal restriction in 1842 and 1843?—Yes.

60,621. What was the effect on the general supply of oysters?—Wherever that restriction has been carried out it has been of great use.

60,622. I think you stated that certain beds, when they became over-fished, were abandoned?—Yes, to some extent.

60,623. The very fact that they ceased to be profitable would, of course, lead to their being abandoned?—Quite so.

60,624. And then they rallied and became good again?—Yes.

60,625. That was a natural effect that would follow without any legal restrictions?—Just so, but where there was any facility for disposing even of the smallest quantity of oysters they were not allowed to rally. For instance, in Lough Foyle and Lough Swilly there were small steamers from Derry, one of which went every day for Liverpool and the other for Glasgow. Before then, it was necessary that a man should have a large quantity of oysters before he could transport them by a sailing vessel, but when the steamers began to run a fishmonger was enabled to send out an order for only a small basket of oysters, and the Lough Swilly people could catch a great many oysters that were left dry at spring tides at low water. Every person who could get a basket of them was able then to send them to a fishmonger's, so that the facilities thus afforded of disposing of the oysters in small quantities told upon the beds.

60,626. The restriction imposed was only, as I understand, by fixing certain close months?—Yes, that was the only restriction.

60,627. Was there no restriction as to fishing the beds during the open months?—Not the public beds.

60,628. Then, in consequence of the great increase in the demand for oysters, and in the facilities afforded for getting them to market, the fact of there being certain close months scarcely prevented the over-fishing of the beds, so long as the people in the locality were permitted to fish them without restriction in the other months of the year?—It did, to a great extent. They can dredge with much more effect in many parts of the Irish coast in those four months of the year which have been made close months than at any other time. There are a great many impediments to oyster-fishing in the winter time.

60,629. From bad weather, and so on?—Yes.

60,630. But I take it from that that the law operated in preventing the fishermen from fishing at the time of the year that was most favourable for fishing?—Yes, but the fish were not good then. There is no doubt that they could have caught more in those months.

60,631. Is it not the object of fishing to catch as many fish as you can?—Yes, provided that you do not exhaust the stock.

60,632. But with regard to the Wexford and Wicklow banks, you told us that you yourselves, namely, the Commissioners of Fisheries, permitted the month of May to be an open month for fishing?—Quite so.

60,633. That does not appear to have caused any considerable exhaustion?—Yes, it did, from time to time, and so much so that some of the people occasionally come to us on behalf of the fishermen and said, "These beds are becoming exhausted; you will have to stop the fishing."

60,634. The policy pursued in Ireland seems to have been to shut up the fishing for a certain number of months, and in that way to prevent the beds from being exhausted,—did that policy arise from any notion in reference to spawning time?—Those are the months in which the fish spawn.

60,635. Have you had your attention so drawn to the subject as to be able to tell us what time the oysters do spawn?—In Ireland, the months of June and July are the greatest spawning months. To some extent, the spawning of oysters seems to be analogous to the spawning of salmon. December and January are the greatest spawning months for salmon. Some begin in October, and the spawning goes on until February, but the spawning that takes place in October and February is very inconsiderable. The bulk of the spatting of oysters takes place in June and July, and in a portion of the month of August.

60,636. Is the spawning in any way affected by the state of the season,—for instance, by there being a very warm June?—I cannot speak to that exactly.

60,637. Has the temperature of the water any effect upon the oyster spawn?—I think that is very likely, but I never investigated the subject in so close a manner.

60,638. Is there a great difference in certain years of spawning, some years being very good and others very defective?—Yes, I am sure there is a difference. In some years the spawning is much better than others; but, as far as I have been able to make an investigation into the matter, I am not at all satisfied with the result. For instance, in the mouth of the Thames here, for the last seven years, there has hardly been any spat at all, I believe.

60,639. Has that been the case at all, within your knowledge, in Ireland. We have never had anything like that. For a year or two the spawning may be defective, but it never came to my knowledge that there was any deficiency like that. If you will allow me, I should like to say a word about that question now.

60,640. The question of spawning?—Yes, and over-dredging. The French Convention Act generally prohibits dredging in the summer months, but it allowed an order to be made in Council to take off that restriction. Immediately that was done, the people all round about here availed themselves of the relaxation. A great deal has been said as to perpetual dredging being necessary, in order to keep off the mud. I am free to admit that there may be a good deal in that, but I say openly that the great cause of the desire to continue dredging is not that which has been assigned. The cause is this. Every one of them, whether belonging to a company or a private individual,—the Whitstable Company or Mr. Wiseman himself, who is now present—dredges all the year round, for two reasons, the principal of which is to lay hold of all the spat he can upon the ground, because there are many customers for it. I have no hesitation in saying that every one of the dredgers, whether from Whitstable, or the Island of Sheppey, or the Essex coast, and even Mr. Wiseman himself, when he is dredging, kills all the whelks and five-fingers, and takes every oyster he can lay hold of. The reason they are so anxious here to continue dredging, and that they were so anxious to obtain the permission to dredge all the year round, is not so much to keep the ground clean, with a view to the future supply of oysters, as to obtain possession of the half-ware. I do not think they are ever actuated in dredging by a desire to keep off the mud.

60,641. But may it not, at the same time, have that useful effect?—No doubt it may.

60,642. Would you acknowledge that to be a useful effect?—Yes, in some places; but my opinion is that, taking it as a whole, it would be far better for them all to confine themselves to dredging during the eight months of the year which are open months, and not to dredging in those four months which the law says shall be close months. If they are dredging constantly and carefully for eight months in the year, I do not believe that the absence of dredging during the remaining four months will materially injure the oyster grounds.

60,643. Have you had any experience of grounds on which the grass or slob which Mr. Russell spoke of grows rapidly in the month of June?—I cannot say that I have.

60,644. A good deal of the evidence we have heard applies to such grounds, and to the injury sustained by permitting the slob to grow unchecked?—I think it would be very well to dredge in the summer months, in order to destroy it; but then the fishermen ought to be required to throw overboard every oyster that came up. I do not see the necessity of taking the oysters away in order to destroy the grass.

60,645. But suppose you allow the fishermen to take them to fishing grounds and to deposit them there, what harm would you do then?—I think if they were left until later in the season they would become better oysters, and I believe also that dredging in that season of the year is very injurious to the spatting, when the oysters are in a spatting state. I believe the oysters would be much more productive if they were left alone, but if it be necessary to dredge where there is likely to be an accumulation of mud or weeds, then I would allow them to dredge, but they should throw all the oysters they got overboard.

60,646. (*Mr. Lefevre.*) But supposing it is open ground, what inducement can there be to the fishermen to dredge, unless they are to have the oysters they get?—I think they would have a great deal more oysters to get, if they would refrain from dredging during those four months.

60,647. But if they were prohibited from taking the oysters, they would not dredge,—there would be nobody to pay them for doing so?—No. I have heard the statements which the fishermen have made themselves before the Committee on the Herne Bay Bill and elsewhere. I was down three or four times at Herne Bay, and I heard the question very much discussed. The ground put forward for dredging all the year round is that it is necessary to keep the ground clean; they never tell us that it is in order that they may take the oysters.

60,648. But how would you induce them to dredge, unless you allow them to take the oysters?—There would be nothing easier than for them to throw the oysters overboard.

60,649. But what inducement would there be for the fishermen to dredge, if they were not to take the oysters?—I think eight months in the year is quite enough for dredging.

60,650. Do you think that dredging during eight months of the year is quite enough to keep down the weeds?—Yes.

60,651. (*Professor Huxley.*) You desire four months close time, on the ground that it will prevent the exhaustion of the beds?—Yes.

60,652. Now how does that work out in practice,—supposing you allow the catching of oysters for eight months in the year, what is there to prevent any quantity of oysters from being obtained in those months? Suppose, for instance, that an oyster merchant desires to get everything he can, and that he sends a steam dredge down, with directions to dredge up every oyster that can be found, do you not think that the scraping of a steam dredge in that manner would do more injury than the ordinary fishing, if it were allowed to be carried on during the four months that are fixed as close time?—I think that the disturbance of the oysters in the months when they are spatting would be very injurious.

60,653. Then would you lead us to the conclusion that it is more the disturbance of the spatting than the actual getting of the oysters that does the harm?—I think also that there would be too many oysters taken.

60,654. But if you have an open season at all, unless you pass some kind of sumptuary law by which you prevent the catching of more than a certain quantity of oysters, you still leave it practicable for the dredgers to double or quadruple the quantity of fish caught?—Yes, but I think it would be impossible to exhaust the beds to the same degree if the fishermen are pro-

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hibited from dredging during those four months, because they can do a great deal more in the way of dredging oysters in those four months than they can in the winter months. It would be impossible by any dredging at any other time of the year to exhaust the beds to the same degree as by dredging in the four months which are now close months.

60,655. (*Mr. Lefevre.*) Taking a small ground, like that in Lough Swilly or Lough Foyle, could it not be over-dredged in the open months?—The fishing in Lough Foyle is very bad at present.

60,656. (*Professor Huxley.*) Could not the fishermen, by putting on an increased power of dredging, do as much mischief in the eight open months of the year as they could do ordinarily by continuing dredging during the four close months?—Yes, no doubt they could, in some positions, annihilate the oysters altogether.

60,657. Then, if you are to allow dredging to go on with perfect freedom in the open months, what is the use of the close months?—I think there would still be a certain quantity of oysters left to spat in those months.

60,658. But that would not be the case if the fishermen took them all away in the other months?—If they did that then they would be ruined, and I think that over-dredging has been the ruin of the fisheries so far.

60,659-61. What seems to me to be the difficulty in the case, and one which your reply does not meet, is, that if you are to have any open time at all, it is quite possible for those who desire to obtain oysters to send out such a force of dredgers that they would be able to scrape almost everything up?—They would not take those that were upon the culch and pebbles; they would throw those out.

60,662. If you allow an indefinite amount of dredging, I do not see how you are to prevent the exhaustion of the beds?—Certainly not, if there is to be too much dredging.

60,663. No law has yet contemplated the restriction as to the number of dredges that may be used upon the fishing grounds?—No.

60,664. We have had it stated in evidence that steam dredges have been sent out which clear away everything?—The steam dredging is quite a new thing to me. By the ordinary system of dredging I think it would be impossible, upon a large bed, to exhaust the oysters in the same degree by dredging them for eight months as would be done if they were allowed to be dredged all the year round, and then it should be borne in mind that in those four months which are now close months the dredging might be much more effectually carried on than is possible in the other months.

60,665. That would depend to a great extent upon the part of the coast on which the oyster beds are situated?—Yes.

60,666. There is no practical limit to the amount of dredging that can be carried on in February, March, and April on many parts of the English coast?—No, and in those parts of Ireland where the oysters fell off from over-dredging the grounds became so denuded that the fishermen would not go to work for oysters at all.

60,667. That was the result of over-dredging?—Yes.

60,668. So that, in point of fact, the enactment of a close time does not prevent the exhaustion of the beds?—It does not prevent it to the extent that would be advisable in many places.

60,669. Then what regulation would you recommend, in order to prevent the exhaustion of the beds?—I think that the best regulation, if it were well carried out, is that which is the law of the land at the present time.

60,670. What is that?—Not to allow oysters under $2\frac{1}{2}$ inches in diameter to be taken at any time.

60,671. You would leave the small oysters on the beds?—Yes, oysters under that size.

60,672. Have you heard that there is a demand for oysters of a smaller size than that?—Yes, I believe that for some years millions have been obtained from Ireland and from Jersey. Sometimes a vessel has been overhauled, and the oysters put through a ring. Occasionally, they have been thrown out, and sometimes not.

60,673. Suppose the law were to allow you to take oysters of $2\frac{1}{2}$ inches in diameter,—they do not breed at that time, do they?—I believe they do.

60,674. Do oysters under $2\frac{1}{2}$ inches across breed?—I think that an oyster of $2\frac{1}{2}$ inches in April will spat before the summer is over.

60,675. (*To Mr. Buckland.*) What do you think, Mr. Buckland?—I do not think it would.

60,676. (*Mr. Lefevre.*) That will, to some extent, depend upon the size to which the oyster grows when it is a full grown oyster?—Certainly.

60,677. (*Professor Huxley, to Mr. Ffennell.*) You think that oysters of $2\frac{1}{2}$ inches will spat?—Yes, under some circumstances. That one, for instance (*showing an oyster*), would spat. Those delicious little oysters that you get here would spat when of that size. There are many oysters which are not as large as that at all which are full of spawn, and would certainly spat. Talking of the over-dredging, Mr. Buckland stated in his evidence that he conceives if there was a good spatting an abundance of oysters would be produced, sufficient for all purposes, on the large area marked blue on the map. But how has it been for the last 30 years, and particularly for the last 15, during which there have been good years of spatting? Why, there have been nothing like the quantities which the grounds required, which is shown by the fact that enormous quantities of oysters have been brought from Jersey, and immense quantities have been brought from the coast of Ireland, and yet there are not nearly enough, even in the best spatting years, to supply the demand here. For the last 15 years the supply has not been equal to the demand, or anything like it, otherwise the people interested in the fisheries in the Thames would not have gone to Ireland, or brought such large quantities from Jersey.

60,678-80. I apprehend that Mr. Buckland's remark applied to what might be done if the cultivation of oysters on the oyster ground was sufficiently developed?—I understood him to say, that if there was a good year of spatting, there would be an abundant supply of oysters for Whitstable and for all other places. (*Mr. Buckland.*) What I said was, that there would be sufficient to stock the grounds for the next six or seven years. (*Mr. Ffennell.*) I think that Mr. Buckland is mistaken, and I take this fact as a proof, namely, that for the last six or seven years it has been found necessary to bring such an enormous supply from other places.

60,681. (*Mr. Lefevre.*) Do you think that that supply bears any proportion to the quantity of genuine natives that have been produced?—It bears a very large proportion to the oysters produced here for the London markets from the feeding beds.

60,682. Taking the Whitstable oyster fishery, we were informed, when we were there the other day, that the total quantity of young oysters taken from the flats amounts to a very great supply indeed. The average sum paid for brood obtained from the flats and off the Essex grounds was stated to us to be something like 15,000*l.* a year.—Has it been ascertained how much spat has been brought to the grounds in the Thames from Jersey and Ireland?

60,683. Do you suppose that the quantity brought from a distance bears any relation to the quantity obtained in the manner I have stated?—15,000*l.* a year?

60,684. Yes.—A very short time before I left Ireland, perhaps some six years ago, a person came to me who was seeking for oysters, to aid him in getting them, and he told me that his Company paid more than 40,000*l.* a year for oyster spat, which was put upon the beds here in Kent.

60,685, What beds were those?—I think he was a Whitstable man.

60,686. (*Professor Huxley.*) We have here the returns of the Faversham Company, and the whole sale of oysters from its beds is not equal to that.—I believe his statement had reference to Whitstable.

60,687. (*Mr. Lefevre.*) The Whitstable Company, I take it, is by far the largest Company?—Yes.

60,688. (*Professor Huxley.*) The utmost sales of the Faversham Company amount to 15,000*l.* a year?—I am not much acquainted with those details.

60,689. (*Mr. Lefevre.*) 15,000*l.* a year has been paid for the last seven years by the Whitstable Company for brood taken from the flats, and from the Colchester ground?—I have known, in the month of May, as much as 12,000*l.* to be paid to the Arklow fishermen for oysters for the English grounds.

60,690. But were not those oysters required for the Beaumaris ground?—No, I believe they were taken for Kent. A most intelligent man came over there with four vessels from Queenborough. For years the Queenborough men came to the Wexford coast, and they appeared to be most intelligent men, with regard to their knowledge of oysters. The person to whom I refer gave me a great deal of information. He came year after year for a supply for Queenborough, and others came from Whitstable and elsewhere. And then, in addition to the supply obtained in that way from Ireland, you must also take into account the supply which has been got from Jersey.

60,691. We should like to ascertain what quantity of oysters has been brought into the Thames from Ireland and other places. According to the account of the Whitstable people, the quantity has not been large. They say that they do not like the Channel or the Irish oysters, because they do not bring them in the same profit.—I think you could easily obtain information as to the immense supply which for years has been coming into the Thames from Jersey.

60,692. I suppose you are aware that the Jersey beds have nearly disappeared during the last four or five years?—I would go back 12 or 15 years, and I think you could easily obtain reliable information of the enormous quantity in money value which has come from Jersey.

60,693. Are there any means of ascertaining the quantity brought from Ireland?—I should think it will be very difficult to ascertain that, because they have come from parts upon the Irish coast where there has not been a register kept.

60,694. You say that the oysters from Arklow are very large ones?—Yes, very.

60,695. And the great demand here is for small oysters?—Quite so.

60,696. Is not the demand here for oysters less than 2½ inches in diameter?—There is a demand for small oysters, but there is also a demand for large oysters; of course they prefer them small, if they can get them.

60,697. I think the Irish Fishery Commissioners permit the taking of oysters of less than 2½ inches across?—That has been since I left Ireland. It was not done when I was there.

60,698. Do you know what the date of the bye-law was?—The date of the Arklow bye-law must have been about 1848 or 1849.

60,699-706. Then, within your knowledge, was that bye-law observed?—Yes, they have been very strict in observing it, and we had the aid of the Coast-guard in enforcing it. I have more than once caused oysters to be seized upon the quays at Dublin, which have been brought in to be sold to a man who was engaged during May in packing them up in tin cases. That was illegal, because we prohibited them from being brought upon the shore. Seven or eight years ago, a large cargo was taken over to Beaumaris, in the month of May, when it was legitimate to take them, but the people there did not like it. They alleged that they were thrown out upon the public ground, so near a private bed that it would induce the people to encroach upon private property. In that case, the Coastguard came and poured gas tar upon them, in order to destroy them, but we made them refund to the men who took the oysters over something like 80*l.* for the cargo.

60,707. We had a complaint at Carlingford, from some of the women of the place, that they were prohibited in the summer during the close season from gathering the oysters, although that was the only time at which they could take them. They were oysters that were above the level of low water at spring tides?—I can easily understand that.

60,708. Do you think it ought to be allowed?—No, it ought not to be allowed.

60,709. On what ground; they are not oysters that could be taken by the dredgers?—But they would fructify and add to the spat. I do not agree with Mr. Buckland as to the quantity of oysters necessary to supply spat. I think that the great proportion of the spat will escape. There is no doubt that an oyster produces some millions of spat, but I believe that that is necessary, just as it is with the salmon, on account of the destruction that takes place. For instance, a 20-lb. salmon will produce 20,000 young, but it is necessary, in order to stock a large river, that there should be thousands of salmon in it. The great Tay has thousands of salmon in it, and an enormous quantity is obtained for food, but I think that all the ova that come to perfection would be not more than would be produced by five or six pair of salmon. In the Galway river the same thing happens.

60,710. (*Mr. Caird.*) If they were all brought to perfection, or one-half of them, the supply would be enormous?—Yes, but I say that is impossible in the operation of nature. The Galway fishery has been a great success; it has been brought up from 300*l.* a year to 4,000*l.*; but if you come to look at the number of salmon obtained there, you will easily see that they might only be the produce of one 15-lb. or 16-lb. salmon.

60,711-12. (*Mr. Lefevre.*) Do you think that the ground can be so cleaned of oysters, as not to leave a sufficient number to act as parent oysters, and to supply the brood?—Yes, quite so; and I think it essentially necessary that there should be a considerable number of parent oysters left, especially when it is considered that millions of spat will only produce tens of oysters.

60,713. Looking, however, at the estuary of the Thames, it is to be observed, that the spat of the private beds bears a relation to the spat upon the public grounds. On the private beds at Whitstable, there are plenty of oysters, and they say that they seldom find a good spat upon the public grounds when they do not find a good spat upon the private grounds?—There are many private grounds on the Thames which get no spat at all; the oysters are said not to spat there; and there is the Clare coast, which I have already mentioned to you, where they never get any spat.

60,714. Quite so; there are private grounds where there is no spat, but there are other grounds where they do spat?—I believe they do spat, but by the race of the tide it is all carried away. They all spat, but the spat itself is carried clean off. There is another question upon which I will take the liberty of saying a few words to the Commission, and that is with regard to legislation, to enable grounds, such as Herne Bay grounds, to be taken up and converted into private property. I think that is advantageous, not only for the purpose of increasing the supply of oysters, and for enabling a large supply of food to be obtained for the country, but also for affording employment to the people. It is quite impossible, in my mind, that a common oyster ground can come to much good for anybody. The Herne Bay Company have obtained their Bill, which places in their possession ground upon which they propose to cultivate oysters. I took an active part in trying to obtain

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that Bill for them. I believe it was a very right step to take, and I hope there will be legislation to enable similar measures to be taken. I do not say exactly in the same way, but to enable parties to obtain possession of grounds for the cultivation of oysters, which are now comparatively, if not altogether, profitless. I am always an out-spoken man, and do not hesitate to express my own opinions, and with respect to the Herne Bay Company, I must say that the course now being pursued by the Woods and Forests is highly objectionable, and altogether unwarrantable.

60,715. (*Mr. Caird.*) In what way?—In charging rent for the ground. I think it about the most unwarrantable thing which could be thought of. The Legislature has given the Herne Bay Company these banks for the cultivation of oysters, and now the Woods and Forests step in and want to charge them a heavy rent for them.

60,716. (*Mr. Lefevre.*) I understood it was intended by the Committee of the House of Commons to reserve the question of rent?—No, not at all. Words were introduced into the Act, which are the ordinary words, saving all rights the Government may possess, but the Crown had no right whatever to take oysters off the grounds, under the provisions of Magna Charta.

60,717. (*Mr. Caird.*) The Crown had no exclusive right?—It had no right except in the water. The Herne Bay Company have obtained their Bill, and power to lay down oysters there, and now the Woods and Forests step in and say, you shall not lay down any oysters there, unless you pay us an enormous rent for doing so. The Herne Bay Company are consequently in a state of suspense about the matter. I believe the Woods and Forests talked about some enormous sum, either for the purchase of the ground or in the shape of rent. Something like 3,000*l.* or 2,000*l.* a year, or something of that sort.

60,718. (*Mr. Lefevre.*) The exclusive right of fishing upon a coast of that kind must be a very valuable matter?—Yes.

60,719. The right belonged originally to the public, and, if it is granted to a Corporation, it is not unreasonable to suppose that they should pay something for the privilege?—But to whom should they pay it?

60,720. To the public.—But it is the Crown that claims it in this case.

60,721. That is the same thing.—The Prince of Wales, if he comes to the throne, may say, "instead of this money, I will take the Crown lands."

60,722. I imagine that the foreshore of this ground belongs to the public, or to the Crown as representing the public, and any rent obtained for it would go into the public purse.—Virtually, it is the Crown all the time, and not the public. The reason I was anxious to submit this question to you was this,—I feel anxious to promote this movement as much as possible, because I hope that it will have the effect, eventually, of turning the coast to a profit, but the course which has been taken by the Woods and Forests is a downright obstacle to that.

60,723. But, if the exclusive right of fishing is worth a considerable sum of money, surely the public ought to receive some benefit from it. Take the Whitstable ground, for instance, that would sell for a very large sum of money, would it not?—Very probably it would.

60,724. It is of very great value indeed, and the land adjoining that ground may be of equal value.—But I have no doubt that no Company can take up ground of this sort, and convert it into a good fishing ground, without conferring immense advantages upon the public.

60,725. Would it not answer your purpose if such grounds were required to be put up to competition?—I think that would be a fair principle, but I do not see how you could carry it out in this case, after an Act has been passed.

60,726. This is an individual case.—There are other Bills now before the House seeking to do similar acts. I have in my possession one of them, in which clauses are proposed by the Woods and Forests which would leave the promoters entirely at their mercy.

60,727. I believe that one of these Bills proposes to appropriate a portion of the River Crouch,—a considerable portion of it?—Yes.

60,728. But supposing that the soil of the river, both above and below the place sought to be taken, lets for a considerable sum. Then should not a Company seeking to appropriate that ground be called upon to pay an equivalent rent to the public for it?—If it were put up to competition, there would be something paid for it; but I do not think the Woods and Forests ought to claim the rent for the Crown. I am decidedly of opinion that, in the case of the River Crouch, if the exclusive right to the ground is to be given to any person at all, those persons who have the beds above and below should have the preference, and should have an offer made to them to take it at a fair valuation. I think that, in justice to them, that ought to be done.

60,729. If you were to carry out your theory, and were to prohibit the taking of oysters below $2\frac{1}{2}$ inches in diameter, would you not take away very much from the value of those private beds?—No, I think not.

60,730. Does not the value consist in the power of obtaining small oysters and laying them down upon those private beds, in order that they may grow into bigger ones?—My idea of state economy is to do that which would produce the greatest source of revenue to the country.

60,731. Is it not the object of those private beds to grow small oysters into big ones?—Yes, it is.

60,732. But if you prevent oysters below $2\frac{1}{2}$ inches from being taken altogether, will you not prevent those private beds from making a profit?—I think oysters of $2\frac{1}{2}$ inches are quite small enough to take.

60,733. Do you think so because that is an eatable size?—Yes, I think so. You might reduce the size a little, but it is only a question of degree. I think there ought to be some limit as to the take of small oysters, and I do not think that would eventually injure the trade of those people. When everybody is made to do the same thing, a restriction of this kind does not press so hardly upon individuals as they think at first.

60,734. Then you do not agree with the Whitstable and Colchester people, that to lay down that restriction would be ruin to them?—On the contrary, I think that a vast deal more food would be produced to the country, and that the fishermen would not be injured by it.

60,735. (*Professor Huxley.*) With your knowledge or belief that the supply of oysters is falling off now, what practical measure would you suggest as a remedy? I understand you to say that you would keep up the close time as at present?—Yes.

60,736. Also the restriction as to the size of the oysters to be taken?—Yes.

60,737. You would maintain those regulations as they exist at present?—Yes, as they are at present. But I do not say whether for those particular places where the taste is so much for small oysters, and where the oysters, being a bit too large, have their value deteriorated, the size might not be reduced by a quarter of an inch, or something of that kind. I think, however, that there ought to be some rule carried out as to the size of the oysters which are to be taken, and if the size of $2\frac{1}{2}$ inches was diminished at all, it should be only very little.

60,738. Would you simply enforce what are strictly the present provisions of the law?—Yes.

60,739. (*Mr. Caird.*) Do you think it very essential to the success of the oyster fisheries that there should be any restrictions at all?—I do; and there is another thing I would suggest as essential in keeping up the supply of oysters for the great demand that has arisen, and for developing that resource

of the country, and that is, that the close time should be strictly carried out.

60,740. You yourself, I believe, recommended that the month of May should be made an open time upon parts of the Irish coast?—Yes.

60,741. Then would you have May an open time here?—Yes, under certain circumstances. In such cases, for instance, as where the oysters were not fit to eat. I would then allow the fishermen facilities for obtaining them in the month of May in order to take elsewhere, but I would have that privilege a limited and exceptional thing. The third thing which I consider essential is, that there should be suitable legislation to enable banks and portions of the coast to be taken by private parties for the purpose of cultivating as oyster beds, as in the case of the Herne Bay Company. I think that is the most essential thing of all.

60,742. But cannot that be done at present, under the system of private bill legislation?—I think it can.

60,743. There is nothing to prevent it, in the present state of the law?—The only thing is, the terrible expense that it is to individuals to come before Parliament for every bill. I think there might be some general legislation, by which power might be given to some department of the State to confer the right of establishing such companies, without obliging every company to come before Parliament, at an enormous expense.

60,744. (*Mr. Lefevre.*) Under the Irish law, you have the means of giving licences of that kind?—Yes.

60,745. That has not produced any great result at present?—No; but I believe that in a few cases it has answered well.

60,746. What is the reason that it has not worked more satisfactorily?—I think that one cause is the want of knowledge upon the subject. There has been great difficulty in seeking out suitable places. People went at random, quite in the dark, and asked for licences for establishing oyster fisheries on parts of the coast which no one could tell were suitable.

60,747–8. Do you think the restriction as to the take of small oysters in Ireland may have had anything to do with the fact that these beds have not been worked to a profit?—They have not restricted the take of small oysters at all, unless it is since I left Ireland. That was a part of the law which I never saw carried out.

60,749. (*Professor Huxley.*) Can you suggest to us any mode of preventing the exhaustion of the beds by over-fishing them in the open season?—No; that is a very difficult question to deal with.

60,750. Is it at all practicable?—I think that legislation enabling the grounds on the coasts to be converted into private property, as in the case of Herne Bay, would do some good, because private persons would not exhaust the beds for their own sakes.

60,751. But that would not affect the deep-sea beds?—No, not the public grounds.

60,752. Is there any measure practicable to prevent the over-fishing of the public grounds by persons who might find it expedient to take up everything they could?—There is nothing, except a limit as to the size. That would go a very great way, I think, and it ought to be strictly enforced.

60,753. (*Mr. Lefevre.*) Do you think it advisable to permit the sale of oysters during the close season?—No, certainly not; and every day in the year, from all places where they can be obtained, there are oysters selling in London.

60,754. There are oysters selling in the London market constantly?—Yes, every day in the year, whether they have a licence or not.

60,755. You would put a stop to that?—Yes; a restriction of that kind has done an immense amount of good in Ireland. There, no person can offer an oyster for sale after the close time comes in.

60,756. (*Mr. Caird.*) How has it done an immense deal of good, when you tell us that the quantity of oysters is not increasing?—It rallied when the close time was in force.

60,757. (*Mr. Lefevre.*) Take the Arklow and Wexford beds. Those are the principal places from which oysters are sent over to Beaumaris, where they are laid down for a month or two, and kept to feed the market in the close season?—I believe there has been a good deal of that.

60,758. You would put a stop to that?—Yes, certainly, everywhere.

60,759. (*Professor Huxley*). Would you prevent oysters from being taken for the purpose of being laid down elsewhere?—The Act in Ireland provided for that. We had no power under the Act to permit the sale of oysters during the month of May, otherwise than for laying down. It was penal for them to be brought ashore at all for the purpose of sale. They were only allowed to be taken for the purpose of transplanting. Upon the Clare and the Arklow coasts, when they got them, they could not sell them for consumption until September.

60,760. But they could be sent over to Beaumaris, and sold there during the close season?—Yes, they could be sold there the day after they arrived.

60,761. Is that not, in fact, the principal demand for those oysters?—Beaumaris is a great place for taking those oysters.

60,762. The principal demand for Arklow oysters is for sale during the close season?—Yes, but there has been a large demand in the close season for oysters for the coast of Kent, and latterly for France.

60,763. (*Mr. Caird.*) Your recommendation for increasing the probable future supply of oysters is to increase the number of private beds on which oysters may be cultivated and fed?—That is the main thing.

60,764. You think that is the best remedy?—Yes, by far the most important; but I also think that the Woods and Forests should be restrained from being an obstacle.

60,765. (*Mr. Lefevre.*) I imagine that the Arklow beds provide by far the largest quantity of oysters sent from Ireland?—Yes, by far the largest quantity in the way of export.

60,766. And also the supply to the market in Ireland itself?—No, they are not eatable, and they are not sought for for consumption there. The export trade is their best trade. I believe they take a good many from Arklow and plant them at Malahide, and they take a great number and plant them on the good Carlingford grounds, but the main trade from Arklow has been for England.

60,767. It was stated to us the other day by Mr. Wiseman that there has been the same scarcity of oysters on the private beds as upon the public grounds, and that cannot be from over-working, because the private interests of the owners would prevent that?—I take it that that applies to the oysters on that great area at the mouth of the Thames. I think the reason of the falling off of the supply is because too many oysters have been taken and sold, and the spat has not been allowed to accumulate.

60,768. Then how is it that there never was a scarcity until within the last five years?—Because the demand has been getting greater, and the supply from Jersey has fallen off. I should like to say a word, before you finish my examination, as to trawling.

60,769. Your experience of trawling applies to the Irish coast?—Yes, entirely to Ireland. I think trawling a most useful mode of fishing, and that it should not at all be stopped; but at the same time I am of opinion that trawling should not be allowed inside the headlands in shallow water. I think it is better for the trawlers themselves that they should be kept out in the deeper water. I believe that will serve their purpose much better than fishing within the headlands.

The witness withdrew.

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HENRY WYRILL called and examined.

60,770. (*Mr. Caird.*) You have been a fisherman, and are a fish salesman at Scarborough ?—Yes.

60,771. And you have had a long experience of the state of the fishery at that place ?—Yes, I have been 20 years there as a fisherman, and 10 years as a salesman, altogether I have been 30 years connected with the business.

60,772. During those 30 years has there been a marked increase or decrease in the general supply of fish there ?—Taking the period of 30 years during which I have been connected with the business up to the present time, I should say there has been an increase of above one half in the quantity we send at present compared with what we sent formerly.

60,773. There has been an increase of one half in the fish sent to the market ?—Yes.

60,774. Of all kinds of fish caught off that coast ?—Yes; during that time there may have been a falling off of one class of fish for a year or two perhaps.

60,775. But at this moment, compared with 30 years ago, there is double the quantity of fish now caught ?—Yes.

60,776. Has there been an increase in the number of men and boats engaged in fishing ?—Yes, about one half.

60,777. Then the increase in the number of men and boats will bear a fair proportion to the increased quantity of fish taken ?—Yes, I think so.

60,778. What are the different kinds of fish caught at Scarborough ?—Sole, turbot, flounders, haddock, cod, brill, and plaice.

60,779. Are they caught by the trawl net ?—Yes.

60,780. They are trawled fish ?—Yes.

60,781. Has the system of trawling been long carried on upon the coasts adjoining Scarborough ?—About 30 years ago, I believe, there were only two trawl vessels—I mean large deep-sea trawlers there, but since that time they have increased out of Scarborough, until they now number about 35 trawlers, leaving the Hull and Grimsby vessels out of the question.

60,782. Is trawling at this moment at Scarborough a profitable business ?—Yes.

60,783. Do trawl-vessels frequent ground which has been trawled over for many years in succession ?—That will depend upon the winds. Sometimes they would wish to go upon other grounds, and the winds will prevent them. They then try upon the ground nearer the land, but as a whole they do not extend 15 miles east and west more than ever they have done since they first commenced. It is about on the same ground that they trawl.

60,784. They have not been obliged to go to a greater distance, and seek new ground in consequence of the old ground having been fished out ?—Not at all.

60,785. Is there any long-line fishing practised at Scarborough ?—Yes.

60,786. What kind of fish are caught ?—Cod, ling, skate, haddock, and halibut.

60,787. Do the long-line fishermen and the trawl-net fishermen fish on the same ground ?—Yes, nearly so.

60,788. They do not come into collision or injurious contact with each other ?—Sometimes they do, but not often. The long-line men invariably stop inside the trawlers; that is generally the case.

60,789. So that the trawlers do not come into contact with the long-lines ?—I do not think that I have heard of a single case of that sort during the whole of last season.

60,790. Has the long-line fishing been as successful and prosperous as the trawl-fishing in the course of the last 20 years ?—The long-line fishing has varied. In 1845 and 1846 there was an abundance of fish, so much so, that I myself bought at one time 1,000 codfish and ling, as the result of one day's work. I sent them into the English market.

60,791. Were they caught by the long-lines ?—Yes; but three years after that, the fishing came down greatly, until, in 1859, the long-line fishing became hardly worth looking after. In fact, there was not a living to be had from it.

60,792. During that time, was the trawl-fishing prosperous ?—Yes.

60,793. And, at the same time, the long-line fishing was not ?—Yes; but having so many men, and so much capital invested in it it was persevered in, and the cod-fishing has been found very profitable for the last three years. Indeed, I never knew the cod season to be better than it has been during the last two seasons.

60,794. Do you think that has anything to do with the quantity of herrings that frequent the coast ?—Yes, I believe it has, because we have observed that there are herrings on the ground the whole of the year round.

60,795. Do you find that when you have a good herring year, you have also a good cod year ?—Not as a general rule, because sometimes the herrings overswim the codfish, and become masters of the field, driving all the cod away. As a general rule, we find that the codfish are outside a shoal of herrings, and not in the centre, and when the herrings are very thick they take the ascendancy, and the cod have to retreat.

60,796. The fact that the cod have become very plentiful would show that no permanent injury could have been done by the trawl-fishing ?—Not the least.

60,797. Although in 1859 the cod very much fell off, they have now become more plentiful than ever ?—Yes, that is the case.

60,798. The trawl-fishing has been continued during all the time ?—Yes.

60,799. What kind of bait do you use for your line-fishing ?—Herrings, if we can possibly get them. We use herrings for cod-fishing.

60,800. Do you find that the most deadly bait ?—Yes.

60,801. Are there many haddock taken by line ?—There are not a great many haddock taken by line.

60,802. Are they chiefly taken by the trawl ?—Yes.

60,803. Are they sent fresh to the market ?—The chief of them are sent fresh.

60,804. Is there a large drift-net herring-fishing off Scarborough ?—Yes, it is very extensive indeed.

60,805. Is it carried on during all seasons of the year ?—We commence in July, and continue it until we finish in November.

60,806. Is there no fishing in the months of January and February?—Not in the shape of a herring season.

60,807. There is no herring season then ?—No; but we have been making more progress with our herring-fishing for the last four or five years than we did formerly. We have commenced as early as the fore part of June, and have gone on until November.

60,808. You never fish in the spring months ?—No.

60,809. Has the take of herrings been on the increase of recent years, as compared with what it used to be ?—It has been on the increase as regards the supply to the English markets; but I do not think that it has increased on the whole. It has increased in consequence of having so much extra tonnage and superior nets.

60,810. By means of superior tonnage and nets, have you had a larger catch of fish ?—Yes, by one half.

60,811. Has that been a progressive increase ?—It has been stationary for the last seven or eight years, except from local causes, such as gales of wind.

60,812. There has been no marked falling off in the herring fishery ?—No, on the whole it has been progressively increasing, inasmuch as we have had, for the last two or three years, a considerable increase

in the takes. In 1861, 1862, and 1863, I sold hundreds and hundreds of lasts of herrings for the small sum of 3*l.* 10*s.* a last.

60,813. Did that arise from their extreme plentifulness?—Yes, they were so plentiful, that I have seen them stacked upon our beach like haystacks; there were from 700 to 800 and 900 tons laid up in one day at our station, and there would be as many left behind.

60,814. Would there be as many as from 700 to 800 and 900 tons of herrings sent away in one day?—Yes.

60,815. Sent away to the interior of the country fresh?—Yes, fresh and salted.

60,816. Would that continue for several days in succession, or was that large quantity quite exceptional?—It would continue for a whole week, or perhaps ten days sometimes.

60,817. Then the herring-fishing must bring in a good deal of money to Scarborough?—Yes, a great deal.

60,818. Have you any idea how much?—I could not say exactly. It would take me a little time to arrive at anything accurate.

60,819. Does it produce as much as all the other kinds of fishing put together?—Yes, and more.

60,820. Then it is a more profitable fishing than all the rest?—Yes.

60,821. (*Professor Huxley.*) How many boats would there be?—We have as many as 400 boats.

60,822. Would they all go in full of herrings on those great occasions?—Yes.

60,823. (*Mr. Caird.*) What would be the weight of a full fishing in one boat?—Perhaps 400 boats might come in with one last each.

60,824. (*Professor Huxley.*) That would be 10,000 herrings each?—Yes. There you would have the weight I mention, as each last would weigh two and a half tons.

60,825. Is it not uncommon for them to come in with one last a-piece?—Some of them would have one last, and some as many as three or four lasts. Sometimes we have as many as 400 boats in one day, and if they get 10,000 herrings each, you would have the weight I have mentioned at once.

60,826. You never have a winter herring-fishing?—No.

60,827. Have you never thought of looking for them in the winter time?—We, as practical fishermen, say that it is better to leave them alone, although we might catch them in the winter. We think it is more advantageous for us to wait until the proper time.

60,828. Are you aware that other people do catch them, both north and south of you?—I think they may suffer in their regular fishing in consequence.

60,829. Where do the herrings come from which come upon your coast?—I have studied the subject for some years, and my opinion is that they are in the deep water now, or inside and north of the Dogger Bank; they are lying on the soft ground now.

60,830. What makes you think so?—Because we can take them out of the codfish, which are taken up in the trawl nets. One of my captains told me the other day, that he opened one codfish, and there were 13 herrings that came out of its gut, as if they had never been touched. I think that the herrings are lying there at the bottom, and as the warm weather comes in they will come in closer to the shore to spawn. We follow them from the outside to the inside, and from the inside to the outside, as regularly as a shepherd following a flock of sheep.

60,831. What time do you get herrings full?—In the month of August especially they are in the most healthy condition. They come into our shores then as a healthy fish with a small hard roe.

60,832. They are about eight or nine inches long then?—Yes.

60,833. What month is that?—In the month of August, and as the season approaches we see that they get full, and the common opinion is, that they deposit their spawn soon after.

60,834. Do they spawn about the beginning of September?—Yes, in that month, and as soon as they have done that they commence to go to sea again, as the weather becomes cold.

60,835. By what month do they disappear again?—In the latter part of September they begin to go off, but we follow them off, and we fish among them until November.

60,836. Do you find full fish up to November?—Yes, but generally they are a mixed fish in November.

60,837. When do you get the greatest portion of spent fish?—In the middle of September in-shore, but there have not been as many spent fish on our coast for the last year or two as we had previously.

60,838. You do not remember any winter fishing at all in January or February?—No.

60,839. Are not herrings taken then sometimes?—Only in the cod; they are not taken by any other means.

60,840. Are those which you find in the cod full fish?—No, they are spent.

60,841. In February?—Yes; they are spent now.

60,842. By spent do you mean shotten?—Yes, shotten.

60,843. Have they recently become shotten?—I cannot say whether they have been shotten five days or five weeks; all I know is that they are shotten.

60,844. Might they be fish that were shotten in November?—They might.

60,845. Do they come full again in February? Have you any reason to believe that?—No, I believe not. I believe they lie in the deep water until the warm months come in.

60,846. Have you much of a haddock-fishing?—We have not a great deal of haddocks caught in our part, although we practise long-line fishing very extensively. Nevertheless, the quantity of haddocks is as great as might be expected.

60,847. Has it fallen off of late years?—No, our long-line fishing is purely adapted for the cod, ling, and skate, and not for catching haddocks.

60,848. Then you cannot say whether the quantity of haddocks has fallen off of late years or not?—I should say that it is about the same as it was.

60,849. Are there many haddocks trawled?—Yes.

60,850. Are they good haddocks?—Yes.

60,851. Do people eat them readily?—Yes.

60,852. They do not find that they fall ill after eating them?—No.

60,853. We have had remarkable statements from your part of the world as to that?—What I am speaking of is from my own knowledge, and I give it to you as an honest Englishman. I have sold this year at Scarborough haddocks as high as 2*s.* per stone for the purpose of being sent to the metropolis, and I have been applied to for them from Dan to Beersheba.

60,854. For trawled haddocks?—Yes.

60,855. Are line haddocks used much as bait?—When we cannot get herrings we fly to a second bait, and we obtain that by cutting haddocks up and putting them on the hooks.

60,856. Would not the market for line haddocks be better than for the trawled haddocks that are sold?—I have been astonished and provoked at it.

60,857. At what?—Why, that our line haddocks in the London markets do not fetch any higher price than the trawled haddocks. We send them up to the market almost as if they were alive, with every scale upon them, and they get into London the next morning after they are caught, yet when they get up to Billingsgate they realize no more per basket than the trawled haddocks.

60,858. Would not that go to show that there is not much difference between them, because the Londoners know what is good to eat?—They show that they have not a proper sense of what we term the best fish. The haddock caught by the hook and

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line has not a scale off it, and looks as bright as if it were alive.

60,859. But you could not tell one from the other when they are both cooked ?—I do not think there is much difference then.

60,860. I presume that is what the Londoners care the most for ?—Perhaps so.

60,861. (*Mr. Caird.*) It has been stated to us that the haddocks caught by the line are got on the rough ground, and that they are as fine fish as those which are caught by the trawl ?—There is a certain time of the year when, if we were to put a piece of cow's liver on the hook, we should catch a certain class of haddock that would be nothing but skin and bone. Of course, that class is nothing to compare with trawled haddocks, but as a general rule they are as good fish which we catch in the trawl net as those which we catch by the hook, and frequently they are a higher fed fish.

60,862. A better fed fish ?—Yes, as a whole.

60,863. (*Professor Huxley.*) You have a large number of herring-boats going out from Scarborough ?—Yes.

60,864. I think you said 400 ?—No ; there are many of those strange boats, that visit the place.

60,865. How many have you at Scarborough ?—We average about 60, of from 30 to 40 tons register ; and then we have 40 of a smaller class, making a fleet of about 100 altogether.

60,866. Are your smaller boats undecked ?—Yes.

60,867. The larger boats are decked ?—Yes.

60,868. Do the decked boats and the undecked boats fish together ?—Yes, in the inside fishing, at the first commencement of the season, from July until September. The big boats then go outside, and the small boats give up altogether.

60,869. Is any practical inconvenience found to arise from the two classes of boats fishing together ?—Sometimes there are rows among them.

60,870. Is there more disturbance than if the decked boats fished by themselves, and the undecked boats by themselves ?—It would not be possible to do that. Of course, if the fishermen have any idea where the shoal of herrings is, they will be there, whether their boats are decked or undecked.

60,871. Have you ever found any objection made to the decked and undecked boats fishing together ?—No.

60,872. Would you like to have any regulation made, requiring the decked boats to keep outside the undecked boats, or *vice versâ* ?—No.

60,873. Do foreigners come to fish off Scarborough ?—Yes, the Frenchmen are a great nuisance.

60,874. Has anybody pretended to carry out the Convention Act there ?—No. I have been astonished and indignant at the way in which the Frenchmen have come and usurped authority over the fishing grounds. They come there, and altogether defy our British fishermen. They have generally a much larger class of vessels, and as soon as we get our nets laid down, extending out for perhaps a mile and a quarter, they will put their heavy nets right on the top of them, and sink them to the bottom.

60,875. Does no cruiser interfere ?—There has been a French cruiser, but, instead of cruising where the fishing has been going on, they have been carousing at our hotels for a week and a fortnight together.

60,876. Do they come and fish within the three miles limit ?—Yes. That Act has never been put in force at all.

60,877. Would you like to have it put in force ?—Yes.

60,878. But if you have one part of it put in force, you must have another ; and there is one provision which states that, whenever decked and undecked boats are fishing together, the two shall keep apart, and shall not fish upon the same ground ?—Yes, I believe there is a regulation of that kind.

60,879. Do you think that it would be of any use to enforce that provision ?—I am acquainted with the Act, but I really think that that part of it would be an injury rather than advantageous.

60,880. The part relating to the decked and undecked boats ?—Yes ; it would be a great injury if the undecked or the decked boats were compelled to go beyond a certain limit, where there was really no fish. The result would be that the owners' capital, invested in fishing, would suffer, and likewise the people of the country, because there would not be the same supply of fish.

60,881. Would it not practically give the decked boats the command of the sea, they being able to keep the sea and take up their ground ?—This is my position. It would not be worth my while to go and fish where I know there are no herrings, and many times the herrings are within a certain distance of the shore,—sometimes half a mile,—in about four or five fathoms of water.

60,882. But if the decked boats are occupying the ground, the regulation is that the undecked boats shall not fish within a certain distance of them, would not that give the decked boats the command of the fishing, as they can keep the sea better than the undecked boats ?—If they were bound to go half a mile outside the smaller boats it would not be so.

60,883. But if they got on the ground first, then the smaller boats must go outside them ?—I have examined the business part of the question on both sides, and, as regards our British fishermen, I think that that provision of the Act would be better left out.

60,884. What do you think of that part of it which relates to the lighting of the boats. One of the regulations of the Convention Act is that herring-boats, while fishing, shall have two lights, one 6 feet above another ?—That is not at all practicable. In our large decked boats we have a mast 50 feet long, and the Act requires that the lights shall be shown on the mast, but we invariably lower our mast down within four or five feet of the deck, or we should not be able to fish at all.

60,885. You do not lower the mizen ?—No.

60,886. Then why not hoist the lights on that ?—We generally hoist the lights on a six feet staff in the boat, and there is an understanding that, in case of a collision or accident, or any mishap, a signal is to be hoisted in the shape of a flambeau torch.

60,887. There would be no practicable difficulty in having two lights. You have an upright for one ?—Yes.

60,888. Then why not have a second one ?—We should require to have it six feet above the other.

60,889. The Act requires that you shall have two lights, one above the other, in order to distinguish a herring-boat fishing from one under way ?—Yes ; but if we were required to have lights up on the mast-head, we should be compelled to keep the mast continually up.

60,890. Is there anybody who troubles himself about the Convention Act at Scarborough ?—No.

60,891. You do as you like ?—Yes, pretty much.

60,892. Does anybody trouble himself about the vane he carries on the mast ?—No, not at present.

60,893–4. That has been a dead letter, in fact ?—Yes.

60,895. How do you contrive to work one with another when you are trawling ? Do the trawlers interfere with the herring fishermen ?—Sometimes.

60,896. Is there anybody to enforce the regulation that trawling shall not take place within three miles of the drift-net fishing for herrings ?—No.

60,897. Do they trawl within three miles ?—Yes.

60,898. Is any mischief done in consequence ?—Yes, sometimes.

60,899. Then would it be better if that regulation were enforced ?—Yes.

60,900. How could it be enforced ?—Some such regulation should be attended to wherever practicable. It would be of no use to carry out the law as it is altogether. Unfortunately, the smacks as a whole are too reckless. They know that they are the strongest, and I have seen them go right over a fleet of drift-

nets in broad daylight, and cut the warps right in the middle.

60,901. How are they to be identified when they are fishing at night. If, for instance, a trawler comes and cuts off the tail of a fleet of nets, how is he to be identified?—That is one difficulty, but we have, in many instances, taken steps to find out who did it. I myself and other people have actually left the remainder of the nets in the sea, when an injury of that nature has been done, and have gone in search of the persons who did it. Two years ago I had a master who chased a smack for two days and nights and lost him after all.

60,902. Then he would lose his nets as well?—Yes, he lost the nets also; he lost me altogether something like 400*l.*

60,903. I presume that is a kind of zeal you do not approve?—No; but if he could have caught the vessel who did the damage, we could have obtained compensation for the loss.

60,904. Are there any provisions in the Convention Act which you would like to see carried out?—The system of lighting, as a whole, I think, would be a benefit, and the vane system would be no injury.

60,905. What is the practical good of the vane system?—I do not know; but with regard to the lighting of the boats, that is quite necessary, and I think that the French vessels ought to be kept a certain distance outside of the British waters.

60,906. Would that be necessary if you had an active cruiser working about and ready to take cognizance of any injury that might be done?—But that is not the case.

60,907. Do the French fishermen compete with you in your own markets?—No.

60,908. I presume, then, you would not mind their fishing near you, if they behaved themselves properly?—No, if they did that, we should not object, but we know perfectly well what a Frenchman is.

60,909. How is it that you put up with that? Are you under-manned?—They generally have larger vessels, and they have more men than we have. I recollect, in one instance, a fellow got up a musket from the deck, in order to shoot me. We came into collision, and I suffered 20*l.* or 30*l.* damage in consequence. Had I been as stubborn as he was, there would have been life sacrificed.

60,910. Have you any regulation as to the size of the mesh of the herring nets?—We have none enforced by any Fishery Board.

60,911. Do you make the mesh of any size you like?—Yes.

60,912. Is there no one to interfere with you?—No.

60,913. You know what the inch mesh is?—Yes.

60,914. Do you think it would be of any advantage to enforce that?—Our meshes are above that.

60,915. You use a larger mesh of your own free will?—Yes, we have large quantities of nets coming from Scotland, and never have any that run less than 30 meshes to the yard.

60,916. Are you a trawler?—I have capital invested in trawling now, and in the long-line fishing, and in the herring department as well.

60,917. You are aware that, in the Convention Act, there are a good many regulations as to trawling, and the size of the beam?—Yes. I see nothing objectionable in the Act in that respect.

60,918. Do you think there is any necessity for those regulations? Do you not think that your own interests would make you adopt all the regulations that are requisite?—Yes. It would not do for us to have a beam too long, because we should be the losers, by having them broken.

60,919. Is there anybody who troubles himself to see whether the beam is of a certain length or not?—No.

60,920. Are there many trawlers out of the port of Scarborough?—We have now from 28 to 30 out of the port of Scarborough.

60,921. How many were there 15 years ago?—Perhaps there were only two or three engaged in trawling in the deep sea.

60,922. Has the capital which has been employed in building the trawlers which have been established since come out of the pockets of the fishermen and of those who have been engaged in fishing?—Yes, there has been a great deal of *bonâ fide* capital of that sort invested. There are exceptions, but, as a rule, the business has been lucrative to the fishermen, and they are in a better position than they were 15 years ago.

60,923. Then may we take it that, on the whole, trawling has paid?—Yes, it has.

60,924. Have you invested money in it?—Yes.

60,925. And you do not find any reason to repent having done so?—Not at all.

60,926. Is it reasonable to suppose from that, that the supply of fish by trawling has not fallen off?—We have got more for the last two or three years than ever we did.

60,927. (*Mr. Lefevre.*) Are the trawlers at work all the year round?—Some of them, and some of them we rig up with the herring rig when the herring season comes on. We have two sets of masts for them.

60,928. You take out one set and put in the other?—Yes, we put in fresh masts.

60,929. What is the tonnage of those boats?—They average from 35 to 40 tons.

60,930. Are the same boats used sometimes in long-line fishing?—Yes, the same class of boats.

60,931. What is your season for the cod?—We commence in the latter part of January.

60,932. How long does it go on?—Until May.

60,933. Where do you get herring bait from?—From Scotland, but we shall now have to go to Yarmouth, if they have done fishing in the Forth. They are about to commence at Lowestoft what they call the spring fishing.

60,934. Would it be of any disadvantage to you, if you were not able to get spring herrings from Lowestoft and Yarmouth?—Yes, there is nothing like herring bait.

60,935. Do you get a considerable quantity from the middle of March to the end of May?—Yes.

60,936. Do the Frenchmen bring their herrings to your shore at all?—No, not at all.

60,937. How many hands do they have on board?—From 22 to 24.

60,938. What do they do with the herrings they get?—They salt them in barrels.

60,939. Would you object to their bringing them into Scarborough?—Not if they allowed us to go to their ports.

60,940. Then if you had an opportunity of taking your fish to France, you would give them the same liberty of taking theirs to Scarborough?—Yes, and I wish that was done. Where the Frenchmen, with 24 men, can catch one last of herrings, we can catch five with 10 men. We have a better method of fishing, and finer materials.

60,941. Your nets are better?—Yes.

60,942. Do you think that your men could make a profit by taking fish over to the French ports and selling them there?—Yes, if they were admitted entirely free, or only upon payment of a nominal duty.

60,943. The fishermen of Scarborough would not object to see the Frenchmen come in with their fish there, if they had the same privilege of taking their fish to France?—No.

60,944. Would it be of advantage to them to go and sell their fish there?—Yes, it would be of great advantage.

60,945. What number of French vessels come off your coast during the season?—They come down in a fleet, to the number of 150. They commence fishing in Scotland first, and then they fish all the way down the coast until they reach us.

60,946. When they fill their boats, do they go

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home and come back again ?—Yes, I have known them make two voyages off our ground.

60,947. What number of fishermen are there belonging to Scarborough ?—I do not know exactly, we have 50 boats, with 10 men each, in one department ; that would be 500. I should say there would be 600 altogether.

60,948. Six hundred ?—Yes, or a few more than that.

60,949. Have they been doing well, generally, for the last few years ?—Yes, as to fishing on the whole, Scarborough has no reason to complain, but rather the contrary.

60,950. Where does the other portion of the 400 boats you have mentioned, as fishing off that place, come from ?—From Yarmouth and Lowestoft.

60,951. Do they bring the herrings into your port ? —Yes.

60,952. Are there many trawlers that do not belong to the port that bring their fish there ?—Yes, a good many Hull and Grimsby vessels do; we had five in the other morning.

60,953. Are the fishermen generally paid by shares ?—They are paid by shares in the smack department.

60,954. But not in the herring fishery ? — We generally have about four leading men who are paid by shares. Perhaps they will have a portion of the nets at the same time, and that gives an impetus to their energy.

60,955. The others are paid by wages ?—Yes, including the shell fishermen we have a larger number of men than I mentioned.

60,956. How many ?—Perhaps 1,000.

60,957. You have 1,000 fishermen altogether, including the crab and lobster department ?—Yes.

60,958. Is that a considerable fishery ?—Yes, there is a good deal done in it.

60,959. Has there been any falling off of late years ?—There has been no falling off in the quantity, but there has been in the quality. Since they have introduced a pot instead of a trunk, they have brought a great deal more smaller fish to the shore than they ought to do.

60,960. Do you think, as a rule, that they make less than they did by it ?—I believe they make more, but whether the crabs and lobsters will continue to supply this sort of catching or not, I do not know.

60,961. What is the difference ?—One mode of fishing is purely by a hoop and a net, with a piece of bait put in it, and in the other they use a machine like a bird-cage, or a rat-trap with a hole to go in at, and when the crabs and lobsters go in they cannot get out again.

60,962. (*Mr. Caird.*) Is it a more killing mode of fishing ?—Yes, very small crabs creep into these small pots, and they cannot get out again.

60,963. How long has that mode of fishing been adopted ?—Five or six years.

60,964. Is there no falling off in the supply at present ?—No, only there is a great quantity of small crabs brought into the market, and ultimately it may have a tendency to injury the supply.

60,965. (*Mr. Lefevre.*) How many men are employed in that business ?—About 200.

60,966. What extent of ground do they go over ?—A distance of about 14 miles.

60,967. Is that seven miles on each side of Scarborough ?—Yes, each side of Scarborough Castle.

60,968. Is the crab and lobster fishing carried on all over the coast ?—Yes, at Whitby, Filey, Staithes, Flamborough, and all along the coast.

60,969. Do they go now and catch crabs ?—Not at this time.

60,970. What is the season ?—They commence it in the month of May or the latter part of April.

60,971. How long does it go on ?—It goes on up to August.

60,972. Do they take the crabs and lobsters when they are in spawn, with the pea in them ?—Yes ; but generally, when they are soft, they cast them away again.

60,973. That is when they are casting their shells ? —Yes.

60,974. They bring them to land when they have the pea in them ?—Yes.

60,975. (*Mr. Caird.*) Is it only to the herring-fishing that the boats from other parts of the coast come to your place ?—They come to no other fishing than the herring-fishing, except the Hull and Grimsby smacks, which give us a call if the wind is contrary. In that case, they call into our port, and sell their fish there.

60,976. The French, Yarmouth, and Lowestoft boats fish exclusively during the herring fishery ? —Yes, but the English boats fishing then sell at Scarborough, unless they think they can realize a higher price by running away with a fair wind.

60,977. They do not come on the coast for any fishery except the herring fishery ?—No.

60,978. (*Mr. Lefevre.*) Are lobsters found all the year round on your coast ?—There are a few at this time of the year, but only very few.

60,979. Do they go into deep water ?—I believe they do.

60,980. Do they come in-shore to breed ? — I believe they do.

60,981. Would it interfere with the business very much, if taking lobsters with the pea in them were prohibited ?—Yes, it would interfere with it very much.

60,982. Would it be practicable to carry out such a regulation ?—It would be practicable to carry it out, but it would require some one to see that it was carried out.

60,983. Is not a very considerable portion of their profit derived from the lobsters with the pea in them ? —Yes.

60,984. There is a very great demand for them ?— Yes ; what we call a berry hen will always fetch sixpence more.

60,985. Have any complaints been made by the fishermen of the practice of catching the lobsters with the pea in them ?—No, not by the fishermen.

60,986. They have no regulation themselves about it ?—No ; and they take them irrespective of size. All are fish that come to the net.

60,987. The lobster fishermen make no complaint about catching small lobsters ?—No.

60,988. Is there a better price for the small than for the large lobsters ?—No, the large ones fetch the most. The pea lobsters bring in the most money.

60,989. Taking the lobsters generally, are the small ones more sought after in the market ?—No, the large lobsters are the best.

The witness withdrew.

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WILLIAM WYRILL called and examined.

60,990. (*Mr. Lefevre.*) Are you brother of the last witness ?—I am.

60,991. How long have you been a fisherman at Scarborough ?—I have been a fisherman there for 55 years.

60,992. Have you been engaged in all kinds of fishing ?—I have been engaged in all kinds of fishing.

60,993. During that time has the fishing at Scarborough very much increased ?—During that time the fishing has increased beyond any calculation that at the present time I am able to make.

60,994. Can you give us any idea of the number of fishermen there were at Scarborough 55 years ago ? —At the commencement of my career ?

60,995. Yes.—The number of fishermen ?

60,996. Yes.—I should think that the number of fishermen in Scarborough when I commenced fishing would be between 30 and 40 at the outside.

60,997. It has increased from that number to nearly 1,000 ?—Yes, from that up to 1,000, according to the statement my brother made.

60,998. You agree with his statement generally ?—I agree with his statement generally. I do not know that there is any defect whatever in any statement he has made.

60,999. Do you agree with him, that if the fishermen of Scarborough had liberty to take their fish to France, they would be ready to concede to the Frenchmen the right of taking their fish into the port of Scarborough ?—I think, with the facilities the Scarborough fishermen have now, that it would be one of the greatest boons to them which they ever yet realized.

61,000. It would be throwing open a fresh market to them ?—It would be throwing open a fresh market, and there are facilities of carriage of a nature which they did not possess a few years ago.

61,001. In what way ?—The boats we used to have were very small. I know the time when there were only one or two large boats of the same tonnage belonging to Scarborough, as there is now such an immense number of. Hence you will perceive from that, that the facilities for the conveyance of fish to the foreign markets, even in the same vessels that are catching them, would be a boon the extent of which I cannot fathom or describe.

61,002-3. Are there cargoes of fish ever sent from Scarborough to France now ?—No. (*Henry Wyrill.*) I have sent three or four cargoes of fish to Dieppe and other places, as a speculation, but what with the local duties and the high commissions I could not make it pay. It would be necessary for them to realize a very high price, or there would be considerable loss on the transaction. I lost 250*l.* by it.

61,004. Have you tried it since the French Treaty?—Yes.

61,005. And have not found that it has paid ?—No, in consequence of the high charges. There is a town's duty, as well as one in connexion with the Customs. It is a duty of something like ninepence a hundred.

61,006. Is that duty paid by the French boats also ?—No, they do not pay it.

61,007. So that the Customs duty at present charged, together with the town's duty, amounts almost to a prohibition ?—Yes.

61,008. (*To William Wyrill.*) Do you think that the French boats would bring any considerable quantity of fish to Scarborough, if they had the liberty to do so ?—They might bring a certain quantity, but their facilities for catching herrings are nothing as compared with ours.

61,009. Would you concede to them the liberty of fishing within three miles of the shore, if you had the liberty of taking fish to their markets ?—I do not say that, and for this reason, the Frenchmen, place them where you will, are not what we call fair fishermen. They will take an undue advantage, if they can, not only in getting what we call a berth, which is in laying their nets too close to ours, and in many cases right on them, but, in addition, they are not honest. I have known instances in which they have taken away the nets altogether.

61,010. But that is a question of police. I believe that you said you suffer from that already, beyond the three-mile limit ?—Yes, we suffer from them in that way now. My view of the question is simply this, that they ought to be prohibited from coming among us, on the certain tenor of the law as it now stands. But you ask if I would allow them to come and fish among us, if we had the privilege of taking fish to their markets ?

61,011. Yes, and making it a free ground for everybody ?—I cannot exactly answer that question. It is a difficult point at present. If the Frenchmen would do as the English do, and act fairly one towards another, there might be no objection to that.

61,012. What part of your herring fishery is carried on within the three-mile limit ?—That portion which we call our home fishing.

61,013. How much of your fishing would you say is carried on within the three-mile limit ?—From the time that the boats commence in the latter part or the middle of July until September.

61,014. The fishing during that time is within the three-mile limit ?—Yes.

61,015. And after that you go further off ?—Yes; after that the herrings begin to get out again, and we have to follow them. The sea is then open to every one.

61,016. What time do the Frenchmen generally make their appearance off your coast ?—They generally come there about August. They go down to Scotland, in the first instance, and work their way up to Scarborough. As they find the Scotch fishing fall off, they come further south, to meet the Yorkshire fishing, as we term it.

61,017. Do they now fish to some extent within the three-mile limit ?—I have not been to sea myself for the last few years, and am not prepared to answer that question, but from what I have heard, there have been several complaints against the Frenchmen in reference to the injury they have done.

61,018. Do you think that trawling does any harm to the herring fishery ?—No, no more then my laying this pen upon the table.

61,019. With the exception that they sometimes cut through the nets ?—Yes, they may do injury to the property of the fishermen in that way.

61,020. Do you think there is any mode by which that may be prevented ?—Yes, there is a law now in existence, and, I expect, if it were carried out, that these men would not be able to come within a certain distance of the herring-boats. I am sorry to say, however, that that law has not been carried out, and that very serious injury has been done to the property of the herring fishermen by the mode of procedure adopted by the trawl vessels, and in some instances certain poor men have been almost beggared by it.

61,021. Have you any interest in any trawlers yourself ?—No, not now; I am a fishmonger and game-dealer by trade, but I go out catching crabs and lobsters in the summer time.

61,022. Do you think it would be possible to carry out the law prohibiting trawlers from coming within three miles of the herring-boats ?—It would be possible.

61,023. How would it be possible ?—It would be possible; but then, before it could be made possible, the men going in the trawling vessels would have to become men of principle, acting upon the maxim, "Do to others as you would wish to be done by." You cannot follow a man in a black dark night when he has cut your nets asunder, and, in many cases, you would not know until the next morning that you had lost them, and by that time the person who did the injury might be 20 miles away from you.

61,024. Have you observed any falling off in the haddocks of late years ?—I cannot say that I have exactly observed any falling off in the haddocks, and if there was a falling off, I am one of those men who believe that there are things which take place in the sea that have a tendency to interfere with the progress and increase of fish.

61,025. You think there are natural causes at work ?—There are natural causes to which you might attribute the falling off of fish in the sea, even if it was the case, but I am not prepared to say that it is the case generally. There may be a falling off for one, two, or three years, but it generally recovers itself. What have we seen in the last few years ? The last year or two has proved more prolific in the produce of the sea than any previous years; under these circumstances I do not know what conclusion we ought to arrive at.

61,026. You have noticed, then, a variation in different seasons ?—Yes.

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61,027. You cannot say that there has been any general falling off?—No, nothing of the kind.

61,028. Was the last year a very prolific one for fish?—Yes.

61,029. What kind of fish?—The last season was a very good season for herrings.

61,030. And for haddocks, too?—There were more caught this winter than I have known to be caught for a number of years.

61,031. How was it with regard to cod?—They also were very good. Even our small boats have done remarkably well this winter, and as for the haddocks, the smacks have caught a very great abundance.

61,032. (*To William Wyrill.*) Do you agree generally with your brother in the evidence which he has given to us?—I agree generally in what he has stated.

61,033. Do you represent generally the views of the Scarborough fishermen?—Yes, I believe that what we have said here is the opinion of the fishermen generally in Scarborough.

61,034. Have you ascertained their views?—Yes, we have had the subject talked over *pro* and *con*, a great many times, when it was expected that the Commissioners would go to Scarborough. What I have expressed here is the general opinion of the fishermen with regard to the fishing interest in Scarborough. There may be exceptions, but not many.

61,035. Is it the general idea and wish not to have any fresh laws on the subject, and no interference with the fishery there? Is that the general desire?—Yes, I believe that is the general desire, unless something may be done as regards the French question, and the light signals.

61,036. I do not know whether the question was put to you as clearly as it has been to your brother, and therefore I will put it again. Would the fishermen of Scarborough, in your opinion, be ready to concede to the French the privilege of fishing within the three-mile limit, if you were allowed to go there?—I think I can state what the universal opinion is on that point. If the French would concede to us the same privilege that we concede to them, as regards the fishing grounds on their coasts and their markets, it would be a very great advantage to us as fishermen. We could doubly outfish them. We would, as far as we are concerned, give them anything and everything. We would let them come right alongside of us, so long as they did not commit any depredation.

61,037. (*Mr. Caird.*) You would allow both Frenchmen and Englishmen to fish where they pleased, and take their fish to whatever market they considered best?—Yes, we would have a fair field and no favour.

61,038. (*Mr. Lefevre.*) Have you known any application made to the magistrates against the trawlers under the Convention Act?—No, not one.

61,039. Nor against the Frenchmen?—No, not one.

61,040. During all the years you have been at Scarborough you have not known any fines imposed under the Convention Act?—No, not one.

61,041. Then the provisions of that Act do not appear to be of much benefit?—No; we have not moved a great deal in the matter.

The witness withdrew, and the inquiry was adjourned until the 25th of March.

London, Saturday, 25th March 1865.

PRESENT:

Professor HUXLEY, F.R.S. (Chairman). | G. SHAW LEFEVRE, Esq., M.P.

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THOMAS TURNNIDGE called and examined.

61,042. (*Professor Huxley.*) You hold an office under the Thames Conservancy?—Yes.

61,043. What is the nature of that office?—I am assistant river-keeper; that is the nature of my occupation.

61,044. What are your duties?—My duties are to see after the fisheries from Crowstone up to Thames Haven, in the mouth of the River Thames. At that part of the river the jurisdiction of the Conservancy extends to both sides of the river.

61,045. To both sides of the river?—Yes, to the Kentish as well as to the Essex side, but it does not run as far as across to the Medway. I have a book of byelaws to go by, and I am required to obey all the instructions I find there. That book touches that part of the river on which I am placed. I believe that the rules of the Conservancy apply to the whole of the river running from Crowstone up to Staines Bridge, but that part of the book I do not study. The part of the fisheries that lies within my jurisdiction is the only part I attend to.

61,046. Have you that book here?—No.

61,047–53. Can you give us a general idea of the nature of your duties as defined by the book?—Yes, I can as near as possible. In the first place I am required to board the boats and examine the nets. If I find the meshes are under the proper size then it is my duty to seize the nets, or otherwise to report the name of the person using them, and his place of residence to the Thames Conservancy. Then, if they choose to take steps in the matter, well and good. I have no power to summon an offender until I am requested to do so by the Board; they give me my instructions.

61,054. What is the legal size of the mesh of the flounder-net?—Two and a half inches.

61,055. Is that $2\frac{1}{2}$ inches from knot to knot, or the extreme length of the mesh when pulled out?—From knot to knot. We measure it in this way (*describing*).

61,056. That is the extreme length of the mesh when pulled out and is equivalent to $1\frac{1}{4}$ from knot to knot?—Yes, but we do not measure our nets in that way.

61,057. I have measured this net, and I find it is $1\frac{1}{2}$ inches from knot to knot?—Perhaps so.

61,058. That would be three inches pulled out?—Yes.

61,059. Is that the legal size?—Two and a half inches is the legal size; they must not be under $2\frac{1}{2}$ for catching dabs and flounders.

61,060. Are the nets you speak of nets used for dab and flounder-fishing?—Yes.

61,061. Is there any other net employed by the fishermen in the Thames?—Yes.

61,062. What is it used for?—It is a smelt-net.

61,063. That is a seine-net, is it not?—It is netted in a similar manner to this one, and runs out to 16 fathoms in length.

61,064. Has the flounder-net the mesh of a seine-net?—No, it is a straight net, netted three score over.

61,065. In fact, it is what we call a seine-net?—Perhaps so; I do not understand seine-nets.

61,066. Is it drawn ashore?—Yes.

61,067. The general length of the seine-net is 16 fathoms?—Yes.

61,068. What is the depth of the net from the head-rope to the foot?—I can hardly say.

61,069. How many meshes is it?—I do not know.

61,070. Then is the smelt-net of the same kind of construction?—The mesh of the smelt-net is $1\frac{1}{2}$ inches.

61,071. Is it of the same construction?—Yes, measured in this way. It will not be quite so much the other way; but measured in this way, when it was netted, it should be $1\frac{1}{2}$ inches.

61,072. The only difference between a smelt-net and a flounder-net is that the smelt-net has the smaller mesh?—Yes.

61,073. Measured the diagonal way, the one is not more than $1\frac{1}{2}$ inches, the other being $2\frac{1}{2}$?—Yes.

61,074. Are there any other nets used?—Yes, trawl-nets.

61,075. What kind of trawl-nets are used; of what size are they?—Some are 16 and some 18 score in the head, and then down to about 50 at the bottom of each side.

61,076. What is the length of the beam of the trawl?—From 16 to 18 and 20 feet.

61,077. Are the boats used in working them decked or undecked?—They are decked boats.

61,078. Are the trawls of the ordinary construction?—They run about five fathoms long, with a three-inch mesh at the head and a mesh of $2\frac{1}{2}$ inches down at the cod end.

61,079. Is that the regular legal size?—Yes, it is the legal size according to my rules.

61,080–1. You have instructions to report such nets as are below that size?—Yes.

61,082. Are there any stow-nets used?—Yes, at Leigh.

61,083. What is the size of the mesh?—I cannot find any instructions about that in my byelaws at all.

61,084. Then can they use meshes of any size they like?—I believe they have them netted of one regular size. I do not see that there has been any difference in them from the time I was a boy until now.

61,085. What is the regular size?—I think it runs from about half to three-quarters of an inch from knot to knot.

61,086. On the diagonal?—Yes, that is as near as I can come to it.

61,087. Is there any other kind of net used?—Yes, shrimp-nets.

61,088. Are they the ordinary hand shrimping nets?—No.

61,089. Are they shrimp-trawls?—We do not call them trawls. There are shrimp-trawls in Leigh as well as fish-trawls.

61,090. Will you explain the mode of catching shrimps; what is the size of the shrimp-net?—From three-quarters of an inch in the cod end, down to one half.

61,091. Three-quarters of an inch on the diagonal?—Yes, in the cod of the net.

61,092. That is the same size as in the stow-nets?—Yes, as nearly as possible.

61,093. Are there several kinds of those shrimp nets?—No, they are all the same, only one will have four rands, and another six, according to the size of the boats. The smaller boats will have two rands, those that are a little bigger will have three, and the larger boats will have four or six.

61,094. How are those shrimp-nets fitted to the boats; and in what way are they worked?—They have a piece of oak about $2\frac{1}{2}$ inches deep and $3\frac{1}{2}$ inches wide; they have a staple fixed into that piece of oak standing out for a foot and a half, then they have two holes chiselled and filled up with a certain quantity of lead, perhaps 25 or 26 lbs.; at the end a screw or staple is fixed to which a rope is attached; in the middle an upright stick is fastened and a line leads from that to the bridle; the warp is made fast to the bridle and extended to the boat.

61,095. It is like a kind of little trawl?—Yes, only that a trawl is worked with a ground rope.

61,096. You pay out the warp until the net reaches the ground, and when you find it working hard you consider that you have sufficient warp out?—Yes.

61,097. The beam goes along the ground?—Yes.

61,098. Are there any hand shrimp-nets in Leigh worked by men wading near the shore?—Yes, at the back end of the year; at the end of the summer there are a few who do that for the home market; they go into the creeks and get the shrimps there, but they are principally the same persons; their nets are made in the same form but they do not require any lead upon them. There is no difference in the size of the mesh but there is in the size of the nets. Two rands of twine would be sufficient to make the nets they use for that purpose.

61,099. What other methods of fishing are practised at Leigh over which you have to exercise supervision?—My principal business is to look after the shrimping.

61,100. We have spoken now of the trawlers, of people who catch flounders with nets, and of the shrimp-fishing, and of the stow-boat fishing?—Yes, and trawling.

61,101. Is there any line-fishing?—Yes.

61,102. Is it your business to inspect the line-fishing at all, or do you allow the line fishermen to do as they like?—The only business I have with the line fishermen is when they are catching bait within my limits; they catch plaice, and bullrights for bait, but if they do not make a sale of any of them I have no right to interfere with them or to seize the fish; they can catch fish and bring it for bait right up to the shore, or they can go away with it. If I board their boat and find that they have fish seven inches long I have no power over them, but if I catch them bringing small fish ashore then I can seize the fish.

61,103–5. Have you ever done so?—No, never.

61,106. They are allowed to catch fish when small for the purpose of bait?—Yes, but there are not many fishermen who follow that business.

61,107. About how many boats are there engaged in shrimping?—I can give you a list of the lot that there is in the town. I believe this list (*handing in a document*) is a correct statement of every one; I think there are 114 altogether, and 11 row-boats.

61,108. What are those boats used for?—They are used by people who go out and get a few cockles and mussels.

61,109. Are there 80 or 90 shrimpers?—There are more than 100 when they are all at it. I think I can account for about eight boats from Leigh that never go out shrimping.

61,110. Eight out of 114?—Yes.

61,111. What do they employ themselves in?—Five belong to Mr. Alston, and they go dredging sometimes at Cheiney Rock, and sometimes they are laid up; then there are three that belong to Mr. Plum, and one out of those three goes stow-boating, and the other two work for mussels in the winter.

61,112. How many trawlers are there?—There are about six when they are in full work that go out trawling.

61,113. How many line-boats are there?—Sometimes there are eight, and sometimes 10, and I have known as many as a dozen, but this year there were not more than six that went to it.

61,114. Do the boats off here which are employed sometimes in shrimping at other times go lining?—Yes.

61,115. But the trawlers require heavier boats do they not?—No.

61,116–7. Do they work with the same boats that go shrimping?—Yes. Perhaps they will work the trawl for a week, and then they will go shrimping. It is just for about one month in the spring of the year, and two months at the fall of the leaf that they go trawling.

61,118. On the average how many men are employed in each boat?—There are about 60 boats in which there are two men to a boat. We call them men from about 18 years of age to about 50 or so, some of them may be a little older; then the remainder of the

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boats have a man and a boy in them except one or two which go out with one man alone.

61,119. Do those people employ themselves solely in fishing ?—Yes.

61,120. They are not occupied in any other way?—No.

61,121. They are fishing all the year round ?—There are between 40 and 50 who never go out for anything else but shrimping.

61,122. Is there any trotting for whelks, or how do do you catch whelks ?—Our people do not go trotting; I went once myself for a fortnight or three weeks, but did nothing at it.

61,123. Is there no considerable whelk-catching of any kind ?—No.

61,124. Is there any mussel-fishing ?—Yes, there is a little mussel-fishing, but it is only very little now. A man of the name of Plum stocks his ground with them.

61,125. Have you any control over the mussel fishery ?—No.

61,126. Is there any considerable cockle fishery ?—Yes, there are a great many cockles.

61,127. Does that fishery provide employment for many persons ?—Yes, there are about 11 small boats that practise that almost every day.

61,128. Are they people who form part of the 114 you include in the return here ?—No ; if you look at it you will find that there are 11 row-boats put down ; they are the boats that principally go cockling.

61,129. How many persons are employed in each of the row-boats ?—Not more than one.

61,130. One man in each ?—Yes.

61,131. Do they go out on the flats when the tide is out and dig the cockles up ?—Yes ; they are generally men who have been fishermen all their lives but who are getting old, and are not fit to go out to any other description of fishing. If it happens to be a fine day they will go out among the ships and see if they can sell a few cockles or fish.

61,132. Is there any restriction as to the take of cockles ?—They are not allowed to take any brood within the jurisdiction of the Conservancy. They must not take cockles until they are fit for the market.

61,133-4. At what size do you consider cockles fit for the market ?—About an inch and a quarter from the front of the shell to the nib athwart the back of it.

61,135. Could you seize a cargo of cockles if you found small ones among them ?—If I were to find them getting cockles upon the ground that were of a small size I should go out to them and tell them not to take them. I should tell them that they were doing wrong, and perhaps I might seize a sample of the brood and make the Conservancy Board acquainted with the fact. In that case they would send me instructions down what to do. If they require me to proceed any further in the matter they send me a letter and a notice to serve on the men, but generally no further steps have been taken. In receiving an intimation from me that they were doing wrong the men have left off, and have not committed the same breach of our regulations for years.

61,136. Is there any considerable oyster fishery at Leigh ?—There is no oyster brood that falls about the Leigh.

61,137. Are there any oysters laid down there ?—Yes, a few.

61,138. Are they public or private grounds upon which the oysters are laid down ?—They are private grounds.

61,139. Then have you no jurisdiction over any oyster fishery there ?—No, unless there was a spat of oysters to fall within my jurisdiction ; then I should have power.

61,140. Has that never been the case ?—Not since I have been concerned in the river Leigh.

61,141. How far does your jurisdiction extend inland ? Supposing for instance you were to see a cartload of undersized cockles some distance inshore, would you have any right to interfere ?—I have just as much right to interfere with any man who has undersized fish ashore adjoining the River Thames as I would have to interfere with the boats themselves.

61,142. What do you call adjoining the River Thames ; how far from the river ?—I should say the shores of the Leigh.

61,143. Does your jurisdiction extend 10 miles inland ?—No.

61,144. How far does it extend inland ?—I do not know.

61,145. Have you any power to seize or interfere with a person having undersized fish in his possession unless you could prove that such fish came out of the Thames ?—That is a question I cannot answer.

61,146. Practically, has such a case ever arisen ?—If I catch a person with fish in his possession in my jurisdiction, and I find that those fish are undersized, I consider that I have a right to seize them.

61,147. Whether on the land or in the boats ?—Yes, either on land or on the water.

61,148. But you do not know how far inland your jurisdiction extends ?—No, but I act in this way : sometimes it blows so hard that I cannot go on board the boats, and then I go to the shores—to the boiling houses close to the edge of the water. My instructions tell me that I am able to board any boat, vessel, or craft, and there to take and seize all unsizeable, unseasonable, and unwholesome fish. I can always seize all nets that are under size, and the instructions go on to say that I may do that on the shore adjoining to the said River Thames. So that I have as much power in the case of a man bringing his fish out of a boat to the land as I have if I find them in the boat.

61,149-50. Are you not aware what the precise meaning of the words "adjoining the River Thames" is ?—No, I do not know how far the power would extend.

61,151. Have you ever found a costermonger's cart two miles from the shore with undersized cockles in it ?—No.

61,152. No case of that kind has arisen ?—No, not in my time.

61,153. You take it for granted that if you find fish in the boiling houses along the River Thames that they came out of the Thames ?—That is a question that might want explanation before a bench of magistrates. I believe it would be legal to seize them if they were specimens of fish such as are always caught in the Thames.

61,153. But suppose the cockles were brought from some other place into Leigh, would you have any authority over them ?—I do not think I should interfere in such a case.

61,155. Would you not have the power ?—I think not ; but there is one thing I should do. If they were getting cockles that were not fit for the market I should stop them, or at any rate attempt to do so; and if they declined to stop, then I should report them.

61,156. If the cockles had been taken from the bed of the Thames ?—Yes.

61,157. Do you consider that your jurisdiction extends only to Thames fish, or to any other kind of fish, so long as they are brought ashore within the limits of your jurisdiction ?—That would be a question for the law to decide. I do not know how that would be.

61,158. You do not know ?—No.

61,159. You are not aware whether a case has ever been tried ?—I had a case at Rochford once which was argued.

61,160. What was the precise nature of that case ?—A man who had in his possession undersized fish obstructed me in the execution of my duty.

61,161. Where were they obtained ?—From the Thames.

61,162. That is not a case in point. The case I want to put is this : Did you ever find it your duty to interfere where the fish had not been taken out of the Thames ?—No.

61,163. That does not seem to have occurred ?—No, it never has occurred.

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61,164. How long have you known the fishing at Leigh ?—I have lived in Leigh all my lifetime.

61,165. Then for the last 40 years or so you have paid attention to the fishing ?—Yes.

61,166. Have you noticed any remarkable increase or diminution in the quantity of fish which has been yielded by the fisheries there ?—I believe that during the last seven or eight years there have been more floating fish and more shrimps, but there have not been so many shell-fish, such as oysters and so on. I think so because there have not been so many brought there to be laid down.

61,167. But apart from that description of fish, do you think there are as many cockles, for example, as there were ?—Yes, I believe there are as many cockles as ever.

61,168. Within your recollection, has the number of fishermen increased ?—Yes.

61,169. And has the number of boats also increased ?—Yes.

61,170. Are the boats of the same construction now as they were formerly, or are they better boats ?—They are now a great deal better and larger.

61,171. They cost more money ?—Yes, they cost a great deal more money.

61,172. Have you any reason to think that the money invested in the boats in this way has all come out of the pockets of the fishermen ? — Yes, I believe so.

61,173. At any rate it has been worth somebody's while to put money into the fishing ?—I think that the whole of it has been earned by the fishermen. Mostly all the boat owners are fishermen.

61,174. Is it a common thing for a man to begin by working in a boat and then gradually to acquire a boat himself ?—A young man may save up a few pounds, and then get a friend to lend him money, and by that means obtain a boat. His circumstances go on improving, and he has another boat built. I have known several men who originally had no boat, but who have now got two or three, and some of them four boats.

61,175. So that on the whole there has been no falling off in the supply of fish ?—No, I think not. I think that shrimping and the fisheries of all kind at Leigh are better now than ever they were, and that there is more money earned.

61,176. Is there any restriction as to the time of year when shrimps are to be taken ?—I think there is in the byelaws. There is a time at which they are to be taken, but that regulation has never been enforced since I have been here.

61,177. Have they shrimped all the year round ?—Yes.

61,178. I suppose there is a very great demand for shrimps ?—Yes.

61,179. They catch as many as they can ?—Yes, that are fit for the market.

61,180. What is your regulation with regard to shrimps fit for the market ; what is the size at which they are allowed to be taken ? Have you any regulation at all upon the subject ?—There is no specific size mentioned.

61,181-2. Then what do you mean by shrimps fit for the market ?—They ought not to be taken when they are small, as they are nothing but brood.

61,183. Can they catch very small shrimps in a common shrimp-net ?—Yes.

61,184. What regulation is there affecting that practice ?—I have to go on board and see that they sift the small ones out, and that they throw them into the sea alive.

61,185. Can they save them alive in that way ?—Yes, but not the whole of them. There must be some destroyed. That is safe to be the case in all fisheries.

61,186. Do they use a kind of sieve, or what ?—Yes.

61,187. A sieve ?—Yes.

61,188-93. Will you explain to us what the construction of it is ; what sort of a sieve is it ?—It is a piece of hoop run athwart with iron bars, and bound round with copper. It is simply formed of bars running across the sieve. Two halfpennies put together would drop through the straight bars of the sieve. They use various kinds of sieves ; there is one they call the penny sieve, and another the halfpenny sieve. In the winter time it is just so that two halfpennies will drop through ; the next size is a sieve that will allow an old pennypiece and a halfpenny to drop through.

61,194. When they get up their shrimp-nets do they put all the contents into the sieve ?—Yes ; they cull out the dirt, and sift the shrimps in a sieve, and the small ones are thrown overboard ; or they sift them on deck and throw them over at once, washing the deck down with buckets of water.

61,195. When was that regulation introduced ?—That has been a regulation carried out for the last 50 years, I should say, at Leigh.

61,196. Has it been effectual in preventing small shrimps from being destroyed ?—Yes ; it tends to save the life of the brood. That, I believe, has resulted in increasing the supply of shrimps. There was a great quantity of shrimps last summer.

61,197. Do the fishermen complain much of the delay caused by the sifting of the shrimps ?—No.

61,198. Does it take them very long ?—No.

61,199. (*Mr. Lefevre.*) Is it done on the ground when they take up the trawl ?—Yes.

61,200. Immediately ?—Yes.

61,201. Do they shrimp all the year round ?—Some boats do.

61,202. But only a few ?—There are from 40 to 50 sail that keep fishing all the year round.

61,203. At what time of the year do they find any great quantity of small shrimps ?—In August, September, October, and so on.

61,204. Do they fish mostly outside the boundaries of the Thames ?—No ; some of the largest boats may be a week and not shoot in the boundaries, and sometimes they may shoot every day in the boundaries.

61,205. Is the greatest quantity of fishing at Leigh carried on within the boundaries or without ?—I believe there are as many fish caught without the boundaries as there are within.

61,206. Is there also a considerable quantity of shrimping carried on from Gravesend ?—Yes.

61,207. And from Southend ?—No.

61,208. From Thames Haven ?—No, there is not there.

61,209. What number of boats is there from Gravesend ?—I do not know.

61,210. Is there an inspector for the Conservancy Board also there ?—I do not know if they have a river-keeper there or not, but there is a harbour-master ; and I suppose he looks after that matter, but I do not know.

61,211. Were you inspector of Leigh before the notice with regard to the fisheries was issued ?—No.

61,212. In 1859 ?—No.

61,213. You cannot tell us then when it was that this notice was issued ?—No.

61,214. Do the shrimpers bring in any quantity of small fish of any other kinds ?—I never saw any bring in undersized fish.

61,215. I do not mean undersized shrimps, but small flounders and so forth ?—Not undersized, but they are allowed to bring them in under 7 inches.

61,216. They pick out the small fish which they take on board and throw them overboard ?—Yes.

61,217. Do you think the regulation with regard to the size of the fish is observed, and that no fish below the size here mentioned are really brought in ?—I never found on board the boats any undersized fish.

61,218. Are these the regulations of the Board with regard to the size of the fish :—

" No flounder under 7 inches, from the eye to the " end of the tail."

" No sole under 7 inches, from the eye to the end " of the tail."

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"No plaice or dab under 7 inches, from the eye to "the end of the tail."

"No smelt under 6 inches, from the eye to the end "of the tail."

"No whiting under 6 inches, from the eye to the "end of the tail, under pain to forfeit and pay "5*l.* for every such offence?—Yes."

61,218*a*. Have you since you have been inspector prosecuted any men for a breach of these regulations?—No.

61,219. You have not found it necessary to do so?—No; I never found a net so small as the size allowed, and I never found more than one lot of fish under size since I began to board the boats.

61,220. Do the shrimpers and trawlers fish on the same ground?—Not exactly; but sometimes they do.

61,221. Then the shrimp trawlers must occasionally take considerable quantities of fish of other kinds?—The shrimp trawlers?

61,222. Yes.—They catch small fish in the nets at times as well as shrimps. If they catch any big ones along with them they save the big ones, but they throw the small ones away.

61,223. Are the small fish they throw overboard alive?—Yes, they put them overboard directly.

61,224. Are they any the worse for having been taken up?—Some of them will die; there is no doubt of that. No matter what kind of net is put into the sea, it will catch and destroy some small fish.

61,225. Do you know whether the trawlers complain of the destruction of small fish by the shrimpers?—I have not heard anyone complain of it.

61,226. They do not say that the shrimpers kill the small fish they take up in this way?—I have not heard them say so.

61,227. Have you heard no complaint?—No.

61,228. What is the extent of your jurisdiction; what is the distance over which your jurisdiction extends east and west?—Well, I do not know, but about six miles, I think.

61,229. Do you think there are as many boats belonging to the south of the Thames as to Leigh in your jurisdiction?—To the south side?

61,230. Yes.—No, there are hardly any that ever work in my jurisdiction.

61,231. Are there none from Gravesend?—They come down sometimes; but they are principally up the river.

61,232. Not on the ground within your jurisdiction?—Sometimes they come there.

61,233. (*Professor Huxley.*) Do the 114 boats you spoke of work constantly over one space?—No.

61,234. Do they stretch out beyond your jurisdiction?—Yes, for many miles.

61,235. How many miles will they go away from Leigh?—They go down to Redstone sometimes, and nearly down to Sheerness.

61,236. Is there a shrimping ground all that way?—Yes.

61,237. Can you give us any sort of notion of the number of miles over which these 114 Leigh boats fish? How many miles up and down the river, on the average, do they fish?—I cannot tell.

61,238. They are obliged to get their fishing near the shore in consequence of being obliged to get back soon?—They do get back if they can; but sometimes they stop out all night. They do not always go home the same day.

61,239. How far down the river will be the furthest that they stretch?—I have known them to be nearly down to Herne Bay.

61,240. Not further than that?—No, not shrimping.

61,241. How many miles is that from Leigh?—I am sure I do not know, but I should say about 18 or 20 miles.

61,242. Then it is within a limited area that these 114 boats work?—Yes.

61,243-4. They do not work over any great space?—No.

61,245. How far up the river will they go from Leigh?—Some of them as high up as Gravesend; but it is not right for them to go there.

61,246. Why not?—Up to Hope Point is where I have told them, but I know they have gone higher.

61,247. Is there any rule to prevent them from going higher?—I do not know that there is any rule, but I have been told not to let them go higher than Hope Point.

61,248. What is the motive for that?—I do not know.

61,249. Do these people on the whole fish over 35 miles of the length of the river?—They fish up as high as Hope Point, and from there nearly to Herne Bay or thereabouts.

61,250. That would be about 35 miles?—Yes.

61,251. (*Mr. Lefevre.*) Is there any whitebait fishing at Leigh?—No.

61,252. How far down the river does the whitebait fishing extend?—I do not know.

61,253. You know nothing about it?—No.

61,254. (*Professor Huxley.*) Have you heard any complaint on the part of the trawlers of the fish falling off since you have known the river?—No.

61,255. Yet they fish over the ground the shrimp men work over?—Yes.

61,256. All over the same general space?—Not exactly.

61,257. But over the same region of the river?—The shrimpers shrimp sometimes in one part of the river and sometimes in another, whereas the trawlers go from the lighthouse down to deep water. Very often they do not shrimp there at all. The shrimps lie more upon the shoal ground; therefore the shrimpers take the shore more than the trawlers.

61,258-9. From what you tell us it appears clear that the shrimpers have not, so far as you know, affected the supply of other fish in any way?—I never heard that they did or found out that they did. There were as many fish last year obtained at Leigh as ever the oldest man can remember.

61,260. What kind of fish?—Such fish as dabs, plaice, and flounders.

61,261. (*Mr. Lefevre.*) Were there any soles?—Not many soles.

61,262. They were mainly dabs and flounders?—Yes; there are not many soles about our place.

61,263. (*Professor Huxley.*) Were there ever many soles there?—I never knew many.

61,264. What is the condition of the water about there?—It is quite salt.

61,265. Thoroughly salt?—Yes.

61,266. How long is the shrimp-trawl allowed to be down at a time?—That depends upon circumstances.

61,267. How long is the longest time it will be down?—Sometimes they have it down for an hour and a half.

61,268. Not more than that?—No, and sometimes not more than 10 minutes; very often as soon as they get it down they have to get it up again.

61,269. (*Mr. Lefevre.*) What is the spratting season in the Thames? Do they come up as far as Leigh?—Yes, sometimes.

61,270. Do the fishermen during the spratting season devote themselves to it?—Yes, I believe there are 11 or 12 boats that do.

61,271. Do they fish with a stow-net?—Yes.

61,272. There are only about 12 of them?—I believe that is all.

61,273. (*Professor Huxley.*) Do the stow-net people catch small fish of other kinds in their nets?—Yes.

61,274. Do they catch small flounders and small fish of any kind?—Yes.

61,275. Is there any other matter we have not mentioned that you would like to bring before us?—No, I do not know of anything. I think you have asked me all I know about the Thames.

61,276. (*Mr. Lefevre.*) Do the Conservators issue any regulation with regard to the size of the nets, or

do they leave the matter within your discretion ?—I have a book of byelaws.

61,277. Is the size of the nets mentioned in the byelaws ?—Yes.

61,278. And the size of the nets varies according to the different kinds of fishing ?—Yes.

61,279. Is there a regulated size with regard to the shrimpers ?—I never knew of any.

61,280. Are they allowed to use what nets they like ?—I never found any laid down for shrimp-nets or stow-boat nets.

61,281. Is there a regulation with regard to the size of the shrimp-nets laid down by the shrimpers themselves. Is the size of the shrimps to be taken enforced by the Conservators ?—I do not believe there is any regular size for the shrimps at all, but any person can see whether they are taking brood or shrimps fit for the market.

61,282. Then their not taking small shrimps is a rule observed by the fishermen themselves, and not one laid down by the Conservators. Is that so ?—I do not know what you mean.

61,283. You say the shrimpers observe a regulation as to the size of the fish they bring ashore ?—Yes.

61,284. Is that a rule laid down by the Conservators ?—Yes ; but it was always the practice of Mr. Green, my predecessor, and it has always been my own, to go on board the boats whenever it was possible, and see that they did not bring brood ashore. They have a gauge through which they sift them, and generally they only bring ashore those that are fit for the market, but there are a few who want a good deal of looking after.

61,285. Is the regulation of the Conservators simply that no brood or small fish shall be brought ashore, or is there any regulated size as to the shrimps ?—I do not know that any size is mentioned in my instructions with regard to the length of the shrimps.

61,286. How was the sieve regulated. Was it by the men themselves or by the Conservancy Board ?—There have been shrimp-sieves as long as I can remember.

61,287. Is there any demand for small shrimps for potting ?—I do not know that any person sends any from Leigh now, but they did some years ago.

61,288. Is it now prohibited altogether ?—I do not know of any being sold for potting except what a man named Hayes buys regularly in the market.

61,289. What market ?—Billingsgate.

61,290. Then there is a quantity of small shrimps sent to Billingsgate ?—No, the small shrimps got in that way are picked out from the large ones ; they are not sent specially.

The witness withdrew.

JOHN SMITH called and examined.

J. Smith.

61,291. (*Mr. Lefevre.*) I believe you are the owner of some oyster fisheries in the Burnham river ?—Yes.

61,292. You were unable to attend our meeting the other day at Brightlingsea ?—Yes, I did not know of it.

61,293. You are anxious, I believe, to give us some evidence arising out of that meeting ?—Yes, I think there are a few facts which you ought to know in reference to the manner of taking the brood from the free ground.

61,294. Is your ground at the mouth of the Burnham river ?—I have oyster grounds in the River Crouch. I have also some near the village of Burnham, some four miles up the river, and some 10 miles from Burnham.

61,295. Between these grounds is there ground open to the public ?—No, not there, but if you will consult the map you will find a piece of ground leading from the River Crouch down to a village called Paglesham.

61,296. Is that the free ground ?—Yes.

61,297. What is the extent of that ground ?—About four miles.

61,298. It is in reference to that free ground that you wish to give us some information ?—Yes, in reference to taking young spat or spawn from it. My idea is that the present method of taking young spat or spawn is destructive to the production of oysters, from the fact that the taking away of the parent oyster prevents the reproduction.

61,299. Is that ground fished to a considerable extent by the oyster dredgers in that neighbourhood ?—There is a great amount of oyster dredging on the part of dredgers employed by private owners. The beds in the River Crouch are private beds belonging to Sir Henry Mildmay, and let to a company, but the great majority of dredgers employed are employed by private owners.

61,300. When there is any spat on the ground are they all sent to dredge that open ground ?—Yes.

61,301. Then do you think it would be of advantage if that ground were converted into private beds ?—I believe it would be much more productive as the season requires that we must work in order to be prepared for the spawn from the present time until Midsummer. If the beds are not worked it causes an accumulation of silt and mud upon the beds, and the difficulty is to get men to work when they cannot get remuneration for their labour. Of course they do not care to work under such circumstances, and the consequence is that the public ground is not properly cleaned for the reception of the spat.

61,302. In a good season for spat does the dredging take place all the year round upon that open ground or only during a particular portion of the year ?—In a good season dredging would continue to some extent all the year round.

61,303. Would that not be sufficient to clean the bed of the river ?—Yes, but generally they do not work in the spring season of the year.

61,304. What are the regulations you observe yourself on your private grounds with regard to dredging ? Do you dredge all the year round to clean the bed of the river ?—We dredge in the winter months to protect the ground from vermin, and to clear away the freshets. At that time there is a great deal of fresh water coming from both sides of the river, and it is necessary to keep the ground clean in order to keep the young brood on the top of the beds, and to prevent the silt from smothering it. In the spring of the year we continue to work the ground for the reception of spawn.

61,305. During what period of the year is there no dredging going on over the ground ?—The plan I adopt is to leave it from Midsummer to Michaelmas for two or three months.

61,306. On what ground do you leave off dredging ?—On the brood ground. The producing ground.

61,307. Is that in order that the young brood shall not be injured by dredging ?—Yes.

61,308. You think that during two or three months of the autumn it is desirable there should be no dredging ?—Rather in two or three months of the summer between Midsummer and Michaelmas quarters.

61,309. Have you observed that you often get spat on your own ground when there has been none to be found on the open ground you have been speaking of ?—Yes, I have observed that.

61,310. Have you had good spat on your own ground for the last two or three years ?—I have had some spat but not an abundant spat.

61,311. Have you had any good spat since 1858 ?—No.

61,312. Have you observed any spat on the open ground since 1858 ?—Only very little.

61,313. During the last two or three years has there been any at all ?—Very little.

61,314. Do you think that if this open ground had

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been in point of fact private ground like your own there would have been spat on it?—I have no doubt that there would have been more than there has been.

61,315. Do you think it would be of any advantage to the open ground if during the same two months of the summer in which you leave off dredging your own ground there should be no dredging on that ground?—I do.

61,316. On the ground that the small brood might be injured by dredging?—Yes, but I think there would be a greater advantage in allowing a certain proportion of the old stock to remain on the ground.

61,317. Do you think the ground has been so completely cleared by dredging for spat that there are not sufficient parent oysters left on the ground?—Yes, exactly so.

61,318. (*Professor Huxley.*) That is what you mean by saying the mode of taking spat has been injurious?—Yes.

61,319. (*Mr. Lefevre.*) The open ground you spoke of is in the Roach River?—Yes.

61,320. Are there private beds immediately above that?—Yes.

61,321. We have been told that the spat in the private beds will float down from the upper beds and settle on the public beds?—It may be so, but I do not think it is capable of proof.

61,322. The same might be said in regard to the spat from the free ground to the private ground?—Yes.

61,323. The soil is all of the same character?—Yes.

61,324. Do you not think the upper ground is sufficient to stock the open ground as well as the private ground?—No I do not.

61,325. Do you think it is possible so completely to dredge the bottom of the river as not to leave a sufficient number of oysters for breeding?—I do certainly. I do not mean to say that there would not be any spawn deposited, but the supply would be very different from what it would be if the ground were properly cultivated.

61,326. Do your remarks relate only to the open ground in the Roach River, or to the open ground generally on the coast of Essex?—My remarks apply to a river called Pont, and to the Blackwater River also.

61,327. What is the size of the open ground in the Blackwater River; what is the length of it?—I do not know but I think about nine miles.

61,328–32. Are there any private grounds in the Blackwater River?—No, not in the Blackwater River, but there are just off it—off Mersea Island.

61,333. You are aware that there would be considerable difficulty in converting into a private ground grounds which have been extensively fished by the public?—Yes, I see that difficulty.

61,334. Supposing that such grounds were still left open to the public generally do you think that by the adoption of any regulation the fishing might be improved?—Yes I think it might.

61,335. What regulation would you propose?—I would compel the men to cull the oysters and only take those that are of a certain size.

61,336. You would not allow brood below a certain size to be taken?—No.

61,337. For what reason?—On the ground of reproduction.

61,338. To what size would you limit them?—Nothing ought to be taken less than two years of age.

61,339. Do you think that the oyster breeds within two years?—Yes, I believe it does.

61,340. Is it on the ground that it would supply a certain amount of spawn that you would leave the oysters until they were two years old?—Yes.

61,341. It would be possible to clear away the brood beyond two years old just as completely as to clear it away below that age would it not?—Yes, but you would still have the stock up to two years old remaining.

61,342. And you think that it would supply spawn for the beds?—Yes; but it would be impossible to clear away all the old ones.

61,343. You think there would always be a few?—Yes.

61,344. Even if there were only very few on the ground?—Yes.

61,345–6. But you told us you thought that the old oysters would not be sufficient to supply the brood?—I do not think they would. Will you allow me to show you a few specimens?

61,347. (*Professor Huxley.*) What age do you consider the smallest of those oysters to be?—That is one year old, or rather would be one year old next June.

61,348. The diameter of the shell, measuring it longways, is an inch and a half?—Yes.

61,349. Do you judge the age by the diameter of the shell?—No, we can tell by the appearance.

61,350. The thickness of the shell?—No, the general form of it. Here is one of the same age although it is a little larger.

61,351. On what ground do you consider that to be of the same age; is it the delicacy of the shell?—It is from the thinness of the oyster, not the thinness of the shell, but of the oyster itself.

61,352. The thinness of the oyster from one shell to the other?—Yes.

61,353. Is that a mark you can always judge by?—Yes; but that one is considerably older, although it is of the same diameter.

61,354. What age do you say this is?—Three years.

61,355. Three years?—Yes, I believe that to be three years old.

61,356. And this one you say is not more than one year old?—Yes, it is not more than one year old.

61,357. In point of fact, the one-year old oyster in this case is rather larger than the other, but it is not above two-thirds as thick?—Yes.

61,358. Do you think that an oyster of this size ever breeds?—No.

61,359. What do you consider to be the smallest size that do breed?—I do not think it depends upon the size; it rather depends upon the age.

61,360. But you judge of the age to a certain extent by the thickness?—Yes.

61,361. What is the smallest thickness of oyster that breeds?—I cannot speak as to that, but I think that an oyster of two years old will breed.

61,362. You form your judgment of the age by the thickness?—Yes.

61,363. Therefore there must be a certain thickness?—Yes, five-eighths of an inch. I should think say from half an inch to five-eighths.

61,364. Then none of the ordinary gauges for measuring oysters would be of any use in preventing oysters fit to breed from passing through?—It would depend upon the ground from which they come. Some grounds produce oysters much larger than others of the same age.

61,365. Then would you require a different gauge for different grounds?—Yes, I think so.

61,366. Then what you say now has special reference to your particular ground at Burnham?—Yes.

61,367. And what would you fix the minimum size at, because the judgment of the age depends on the thickness?—I think if they would not take smaller than that (*exhibiting an oyster*) the quantity would be much larger.

61,368. This oyster is two inches measured the longest way, and half an inch thick as nearly as possible?—Yes.

61,369. Then you think that the oysters under half an inch in thickness ought to be left, and not taken?—Yes.

61,370. On the ground that when they are larger than that they are fit to breed?—Yes. I am not speaking of the free rights, or anything of that sort, but merely of production for the benefit of the public.

61,371. Are the brood beds at Burnham artificial, or are they supplied naturally?—They are supplied naturally.

61,372. You simply prepare the ground, and let the spat drop upon it ?—Yes.

61,373–4. How do you prepare the ground ?—We dredge it in the spring ; we clean the culsh, and get fresh culsh, and lay it down upon the beds.

61,375. Where do you get it from ?—From all places in the Blackwater where we can get it from without any injury to the fishery. It is washed up from the banks.

61,376. Is it a kind of gravel ?—No, this is what we call culsh.

61,377. Old oyster-shells ?—Yes, you will notice two spat upon that.

61,378. Do you think oyster-shells better than anything else ?—Yes, we cannot get anything better.

61,379. Have you thought of adopting the French plan of laying down tiles and broken pottery for collecting spat ?—No, but we adopt the plan of oyster beds or pits, where we stock the oysters in the winter. We close them up with water, about half full, and lay down a number of young oysters. Last year I had some 20 of these pits, 60 feet long and 30 feet wide. I had them formed privately to make an experiment, but they entirely failed. I got no spat. I attribute the result to this, that in still water there will always be a little settlement. If you lay down a clean shell to-day, you will find a slight settlement on it to-morrow, and that will be injurious to the spawn, if it is allowed to accumulate.

61,380. Did the oysters live, and do well in the beds ?—Yes ; when we took them out again there might be one in a hundred dead.

61,381. Were they there all the summer ?—Yes.

61,382. Did they spawn ?—I have no doubt of it.

61,383. Did you open them to see if they contained brood ?—Yes, they were black-sick just before they shot the spawn. I was particular in putting them in at the right time, and in preparing the bottom of my beds.

61,384. You are aware that the oysters leave the shells of the parent oysters at a certain stage of their development ?—Yes.

61,385. Is it not possible that the oyster brood may have drifted away altogether ?—Not out of these ponds, because they were banked up with earth all round.

61,386. Was there any running water through them ?—There was no tidal way.

61,387. It was all still water ?—Yes.

61,388. Under those circumstances is it not possible that the brood could not live in consequence of not being sufficiently ærated, and that it suffered from the want of a tidal way ? —It is certain that where you have a tidal way it is better for them.

61,389. They came to nothing at all ?—No.

61,390–2. How many years is it that the practice of preparing beds for receiving the spat naturally has been carried on at Burnham ?—I can hardly say.

61,393. For the last 20 or 30 years ?—Yes, ever since I have been born.

61,394. That is to say, that the mode of preparing a certain space of ground by laying down culch has been carried on there as long as you can remember ? —Yes.

61,395. And you trust to the drift of the tide for bringing spat there ?—Yes.

61,396. Has that plan been practised there from time immemorial ?—Yes.

61,397. Have you ever found any advantage in using artificial means to receive the spat like tiles, or twigs, or fascines, or anything of that kind ?—No, we have used nothing but ordinary culch.

61,398. You are aware that artificial means have been resorted to largely in France ?—Yes, and to some extent also in England.

61,399. Have you thought it worth your while to try the same experiment ?—No.

61,400. You think that the ordinary culch is better? —Yes, but where there are many parent oysters there is more spat.

61,401. Have you any record of how long this mode of preparing beds for receiving spat has been carried on at Burnham ?—It may be said to have been done for centuries ; ever since the system of dredging oysters was adopted.

61,402–3. Was it carried on in your father's time, if your father happened to be employed in the oyster fishery ?—Yes.

61,404. (*Mr. Lefevre.*) Do you separate your beds for fattening and breeding, or are the oysters laid indiscriminately upon both ?—We have certain pits which we call oyster pits where we lay down oysters for the next year's market.

61,405. And you have separate beds for breeding ? —Yes. Still we get spat on the oyster ground where the stock of oysters has been laid for the next year's market. We find spat on those beds.

61,406. (*Professor Huxley.*) I suppose that in making a brood bed you must be guided very much by the drift of the tide ?—Yes, the tide is a very essential thing. We want a good tide to go over the ground. If we get into eddies we get a disappointment.

61,407. In what depth of water do you have your brood laid down ?—I do not think that that is an important point so long as we get a good tide.

61,408. You must not have the bed laid bare at low water ?—It is at spring tides. The part of the ground between low water neap tides and low water spring tides is very good ground for producing oysters.

61,409. That is only a ground that is laid bare once in the course of a month or so ?—It is bare every fortnight at every spring-tide, but not for long.

61,410. Only between tide marks ?—Yes.

61,411. (*Mr. Lefevre.*) At what age do you remove brood from the breeding to the fattening beds ?— We remove them so that they should be fit for the market next season. Some may be three years old, and some four.

61,412. So that the oysters are from four to five years old when they go to the market ?—Yes.

61,413. Do you only remove oysters of a certain size from the breeding ground to the other beds ?— Yes, we remove oysters of a certain size and age ; but they are of the same age frequently, although not of the same size.

61,414. Do you also leave any older oysters on the breeding beds ?—There will be a few left. All we get in the dredge we cull. We do not designedly leave a large stock of old oysters ; that is to say, oysters more than three years old.

61,415. Do you think that the spat on the breeding beds is the produce of the older or the younger oysters ?—The spat of all of them comes from oysters about three years old.

61,416. Do you think that the spat on your beds is the produce of oysters on your own ground, or has it been drifted down from the higher parts of the river ? —I have no doubt it is mainly from the spat on the ground, but not altogether.

61,417. Have you ever found that you have spat on your ground when the private beds higher up have none ?—I have. Last year was a very scarce year of spat, but I fortunately obtained some.

61,418. Do you find that you have spat in the lower part of the river when the ground in the upper part has none ?—My grounds are situated in three separate parts of the river.

61,419. But have you sometimes had spat on the lower grounds when you have not had it on the upper grounds ?—That has been the case occasionally, but it is not always alike.

61,420. Do you think that that occurs in consequence of the spat from the upper part of the grounds drifting down upon your lower grounds, while the spat from the lower grounds goes off on to some other part still lower ?—It may be from that cause.

61,421. You cannot form any conclusion from the observations you have personally made on the subject ?—No, but the more stock there is in the river

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the more likely we are to have spat whether upon the private or the public beds.

61,422. (*Professor Huxley.*) Have you ever found it worth while to lay down breeding stock and take the chance of getting spat?—I do that.

61,423–4. Will you describe how you do it a little in detail?—Well, suppose, in the first instance, that we had a severe winter, and that the freshets and frost killed all the stock on the ground, my object in the spring of the year would be to clean that ground thoroughly, and then to lay down some large oysters obtained from some other place. If I could get them I should deposit them upon my beds.

61,425. Do you care where you get them?—Of course I prefer native oysters.

61,426. But suppose that you got coarse sea oysters, could you make anything of their brood by your mode of culture?—I should prefer the others; I do not like sea oysters at all.

61,427. Then you would lay down those large oysters you obtained in that way upon your breeding ground?—Yes; that is supposing that by any means there were no oysters left upon my ground.

61,428. Would you lay them down in that case absolutely upon the breeding ground?—Yes.

61,429. Then you would not be afraid of the brood drifting away to the free ground?—No, but that might be so.

61,430. Have you ever tried the experiment you are now describing?—Yes.

61,431. Have you had frequent occasion to try it?—I have tried it in more years than one.

61,432. And have you found it answer?—Yes.

61,433. So that although a portion of the brood may drift away enough will remain to make it worth your while to take all that trouble?—Yes; but I do not mean to say that the experiment is always attended by the like results.

61,434. But on the whole it is worth doing?—I have no doubt at all that it is satisfactory.

61,435. (*Mr. Lefevre.*) What sized oysters would you lay down?—Do you mean for procreation.

61,436. Yes.—Oysters of from three to four and five years of age.

61,437. Would you lay down oysters as small as two inches across?—I should prefer them larger.

61,438. Would you lay down any as young as two years old?—I should do so if I could not get them larger.

61,439. But if you could get them larger you would not lay them down of that age?—I should prefer larger oysters.

61,440. On the ground that the larger oysters produce more spawn?—Yes.

61,441. You do not think that small two-year old oysters produce any great quantity of spawn?—Certainly not so much as the larger oysters.

61,442. What quantity of oysters do you lay down on the beds with reference to the size of the beds? For instance, take the case you have supposed where a bed is free from any oysters whatever, what number of oysters would you lay down in proportion to the size of the bed for breeding purposes?—I should lay down about 20 tubs to the acre.

61,443. (*Professor Huxley.*) There being how many oysters in a tub?—That depends on the size. Sometimes there are 1,600, and sometimes 2,200. You must recollect that I am now speaking of native oysters.

61,444. What would be the average number in a tub?—In the London market from 1,600 to 2,000; and in the foreign market 2,200.

61,445. Then we may call it 2,000?—Yes, that would be about the average.

61,446. And how many tubs do you lay down to the acre?—I consider that 20 tubs are sufficient.

61,447. That would be 40,000 oysters?—Yes.

61,448. That would be as nearly as may be an oyster to every square foot?—That may be so, but I am not aware of it. It has been said that an oyster will stock a very large space, but that has not been borne out by my experience.

61,449. Do you lay down the oysters indiscriminately?—They spread them out of the boat, I believe.

61,450. (*Mr. Lefevre.*) Do you think there may be so many oysters on the ground and yet that it would be hardly worth while to dredge over it?—No, I do not. It would always answer to dredge if persons had liberty to dredge there when the oysters were of a proper age to take.

61,451. Is it possible so to dredge a public bed as really to leave no oysters at all there; that is to say, none of the parent oysters?—I do not think it would be possible to get the last oyster.

61,452. Yet it might be possible to dredge the ground so completely as not to leave enough oysters for breeding purposes?—Yes.

61,453. Are your beds your own property, or do you hire them?—One is my own property, and two I hire.

61,454. Can you give us any notion of the value of the beds. What rent do you pay for them?—That depends upon the quality of the ground.

61,455. Take the best ground you have in the Burnham River. Do you rent it by the acre?—No, it is generally so much for the property irrespective of its area.

61,456. Do you pay a very high rent?—I pay a much larger rent than I did formerly.

61,457. There is a bill before Parliament now, is there not, for converting this public ground in the Roach River into private ground?—Yes, there is.

61,458. Do you know whether it is proposed to charge any rent for it?—I believe it will be hired of the Woods and Forests.

61,459. Do you know whether it is proposed to put it up for public bidding, or is it some company that proposes to appropriate it and pay rent?—It is to be taken by a company.

61,460. (*Professor Huxley.*) Do you find that attempts are ever made to plunder your private beds, and do you find any difficulty in protecting them?—I employ watchmen. Do you refer to my own private beds, or to the beds generally?

61,461. To your own beds?—I do not make any special provision when I have my oyster stocks on the beds. I have men who are working there all the week, and on the Saturday night I leave a man there, and also a man all day on Sunday. I believe that one man takes his turn one week, and another another.

61,462. You have watchers?—Yes.

61,463. If that were not done would attempts be made to rob you?—I have no doubt of it.

61,464. Just as in the case of an orchard or any other private property?—Yes, I believe that the Burnham Oyster Company incur great expense in that respect. They have what they term a rural police.

61,465. Do you think there is any greater difficulty in protecting oyster property than there is in protecting other property?—Yes.

61,466. Why so?—Because it is so difficult to identify the offenders.

61,467. The attempts to plunder are made principally in the night-time, I presume?—Yes, I think so, generally.

61,468. During the daytime it would be very easy to see a man dredging upon the ground?—Yes, but it would not be easy to tell exactly whether he was within or without the boundary.

61,469. (*Mr. Lefevre.*) What is the nature of your remedy if you found a man dredging upon your ground? Have there been any prosecutions?—Yes, there have been many cases of prosecution at Burnham, but the difficulty is to prove that the man was dredging on the ground.

61,470. Do you prosecute them for trespassing upon the ground, or for taking your property?—We prosecute them for felony.

61,471. But supposing a man is dredging up spat,

is it considered that you have a property in that?—Yes, certainly, on the private grounds.

61,472. (*Professor Huxley.*) But if a man were merely dredging and you found no oysters in his dredge?—He has no right to heave a dredge over.

61,473. But you could not prosecute him for felony for heaving a dredge over?—If he pulled up anything then we should.

61,474. Would you not have to prosecute him for trespass?—Perhaps so; but there is a clause in the Act which provides for that, and says he may be prosecuted for disturbing private beds.

61,475. Is that a special Act?—No; it is a general Act. It is the statute law, I believe.

61,476. What redress have you if dredger-men go over your beds conceiving they have public rights?—If the Roach River were made private property there would only be private rights.

61,477. But I understand from you that those grounds are the property of the Crown?—Yes.

61,478. Then is there an Act of Parliament required to secure that property for the Crown?—That is a question.

61,479. On the plea of attempting to exercise a public right have the dredger-men committed depredations upon private property?—There has been a large number of oysters taken away from certain grounds.

61,480. Do you think under the present state of the law sufficient protection is given to the owners of private beds as against the public claiming a supposed right of fishery there?—I am not sufficiently acquainted with the law to understand how to answer that question. All I know is that we are put to considerable expense in protecting our property.

61,481. Have you, as the owner of private beds, found any difficulty in maintaining your rights and keeping the public out?—No; oysters have been stolen from me, and I have been unable from want of sufficient evidence to convict the offenders, but that has generally arisen from the want of proof of identity.

61,482. But where you have had evidence have you found any difficulty under the law as it stands?—No.

61,483–5. Have you known of any case in which such a difficulty has arisen?—No.

61,486. Have you had one watchman for each of your grounds?—Yes.

61,487. And, so far, you have found one sufficient?—Yes.

61,488. (*Mr. Lefevre.*) Are you not one of the promoters of the new company for appropriating this public ground and converting it into a private ground?—Yes.

61,489. Can you tell us what is the rent proposed, or rather, is there any rent mentioned in the bill for this ground?—Yes, there is.

61,490. What is the rent you propose to pay?—115*l.* a-year.

61,491. For how great an extent of the river?—The ground is four miles in extent.

61,492. What is the breadth of the river?—I cannot tell exactly; but it is narrow.

61,493. There have been two or three of those bills before Parliament for converting public into private grounds?—Yes.

61,494. Do you think that there is a considerable extent of open ground in the rivers on the Essex coast that might be converted into private grounds?—There is in the River Roach.

61,495. But not in the other rivers?—There is ground that might be converted in the other rivers.

61,496. Ground that you think might be properly converted into private ground?—Yes, in the Roach River.

61,497. Only in the Roach River?—I only speak of the Roach.

61,498. Considering the fact that these public grounds have been fished by the public from time immemorial, might there not be a fairer mode of meeting the question than converting them into private grounds?—There might be.

61,499. What regulation could be carried out on these open grounds so as to give them the same advantages as are possessed by private grounds?—There might be a regulation as to the size of the oyster that is to be taken. They should be required to cull the oysters.

61,500. Would you also impose any limit as to the time of dredging?—I think I have already answered that question in reference to the months during which dredging should not be carried on.

61,501. You think there ought to be two months of close-time?—Yes.

61,502. In what two months would you prohibit dredging?—July and August.

61,503. Do you think that these regulations would be sufficient?—I have no doubt that they would tend to increase the supply of oysters.

61,504. Would the same advantage be obtained by the public generally with regard to the supply of oysters by the imposition of regulations of that sort as by converting the public beds into private beds?—Yes, I think so.

The witness withdrew.

Captain George Austin called and examined.

61,505–8. (*Professor Huxley.*) You are engaged, I believe, Mr. Austin, in the oyster business at Whitstable?—Yes, and I wish to make a few observations to you upon that subject. Some years ago, before M. Coste published his experiments, I was engaged for some time in making experiments both on the coast of Kent and in Ireland. I knew that if I could produce the brood of oysters by artificial means, it would be worth to me a sum of 10,000*l.* or 20,000*l.* and I naturally paid great attention to the subject. I do not wish to trouble you with anything as to the mode in which the oysters breed, because you know how that is done, and all that kind of thing, as well as I could tell you, but I think my best course will be to give you as clearly as I can the results of the experiments which I have made. I wish to show you also what those experiments prove, and I shall lay before you such facts as will, I think, prove the truth of what I am about to say. In the first place, with regard to the brood, you are aware that the oyster in the first place, before emitting its spat, becomes what the fishermen call "white sick." That is the egg when it is first matured, and when it is quite white. Afterwards the oyster becomes what is called "black sick," and the spat is then ready to go out of the mouth of the oyster. As far as I have inquired into the subject, I find that the oyster always breeds. That is invariably the case, whatever the weather may be—whether it is cold, dry, or stormy, or anything else. During the season the oyster invariably breeds.

61,509. Is the period of breeding delayed or retarded by the temperature of the water?—Very slightly. I never noticed a difference of more than a week or ten days, but some of the oysters, as Mr. Smith has already told you, spat as late as the end of September. The general time of spatting, however, is much earlier.

61,510. Does your remark apply to oysters in the same depth of water—to oysters in deep water as well as in shallow water?—I think there is no difference. As far as the microscope enables one to observe, the oysters are from about six to eight weeks propagating. The spawn, or spat, of the oyster is never emitted when the water is in a state of commotion, and it may be detained for several days after it has arrived at maturity and is quite ready to be emitted. The parent oyster keeps the shell closed and thus detains it. When the weather is at all rough

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the oyster will sink down in the water and stand upright with its mouth partly open. That is one source of the injury done to the brood, namely the rough weather.

61,511. In what way is it injured?—The brood die in the mouth of the oyster. I have proved that by means of observations with the microscope. I have taken oysters from the ground, in a spawning state, and placed them under the microscope, and I have found that portion of the spat which has been less matured quite lively, while all the rest of the brood were evidently dead or dying. They were so far injured, that when they were put into water they could not swim. The spawn comes to maturity by degrees.

61,512. Have you found, when you have examined them under the microscope, that those which were unable to move in the way which you have described had more shell than the rest?—Yes; the shell was both darker and thicker.

61,513. Those which were not able to swim about had more shell?—Yes, they had more shell. The darker colour of the spat shows, I think, the greater maturity. The colour in fact is occasioned by the shell.

61,514. You know the ciliated *vela*?—Yes.

61,515. Those that are able to swim are provided with those appendages; but I presume that those which cannot swim show no trace of them?—You see them with cilia under the shell.

61,516. Upon those that are active?—Upon those which have been confined too long in the shell of the parent oyster. If you put the others in a drop of water they will swim about at once.

61,517. Do you think that that is because those which are less active have really been injured by the retention, or is it simply that in the course of development they have begun to lose the ciliated *vela*?—I think they are something like May-flies. They have just a certain time to come to maturity, and unless they emerge at that particular time they die. I have seen them when the oyster has been fit and ready to spawn. You will see the oysters lying quietly, and a little stream issuing forth, rising and falling in succession.

61,518. Passing through the valves of the shell?—Yes, and the spawn rising and swimming about.

61,519–20. You know that in the living oyster there is a current or stream passing out from the branchial aperture?—Yes.

61,521. The young oysters float in that stream?—Yes, and they come out in succession and circulate about; but I never observed them rise to the surface.

61,522. Still they swim about?—Yes. As regards the duration of life in the young oyster, I believe that it attaches itself as soon as possible, that is, as soon as it meets with a proper object.

61,523. You are not of opinion that it remains for some time without attaching itself?—No.

61,524. We have had evidence brought before us to show that the young fry keep floating about in a free ciliated condition for three weeks?—I am coming to that question. It does not live long, as far as I have been able to ascertain. I have never been able to keep it more than 10 or 12 hours in its best condition. I have kept it in fresh water alive as long as that, but I have not been able to keep it alive in a bottle for more than four or five hours. I believe it is an error that it lives anything like approaching the time you have mentioned. Indeed the growth of the shell would become too heavy for the swimming apparatus, and would prevent it from keeping afloat. In the next place I believe that many persons have been deceived by the continuous succession. In one of my experiments I caused a boat to be sunk and placed spawning oysters in it. If I dipped a wine glass into the water at any hour of the day I always found some spawn there; but the question was when were they born? Were they born then or some hours before? I have never been able to keep any of the spat alive in a vessel for more than four or five hours. I have observed that its vitality and activity continually decrease until at last it will only move slightly upon being shaken up.

61,525. Did you use, in those experiments, a vessel through which renewed water was continually passing?—When it has been in a large bottle, I have poured off the water on the top, and added fresh water, and in an aquarium I have had a stream of fresh water passing continually through.

61,526. Did you find that the result was the same in the aquarium, and that they did not live there?—Yes, they did not live longer than 12 hours. I proved that by having the aquarium filled with nice cool water, and placing the oyster at once into the aquarium. After the oyster had been in about four hours it began slowly to open its mouth, and the birth began to take place. Sometimes the process of emitting the spat lasted for an hour and a half, and sometimes only for half an hour. I suppose it depended upon the amount of spawn that was sufficiently matured and ready to come forth. When you were at Whitstable, you asked some questions as to the absence of spat upon the beds in certain years. I can give you the result of my experience, and how it bears upon the matter. The necessary conditions for having a good spat of brood are, in the first place, quiet weather and clear water. That was proved in this way. First of all, by the gales of wind which have occurred off the shore at the spatting time. The winds that have visited our shores have caused the washing down of deposits from the muddy coast, so that all around the water of the Thames has of late years gradually got worse and worse. Sometimes it is quite of the colour of chocolate, but if you fill a wine glass with it, all the impurities will be deposited at the bottom of the glass. Now, that dirty, cloudy stuff, in my opinion, hampers the swimming-apparatus of the young oyster, and causes the brood to fall in places where it cannot attach itself, and where it dies. That that also has the effect of stopping the oysters from spawning I have proved in this way: by experiments with an aquarium, and by sinking a boat. First of all, I had an aquarium put down close to the shore, and I had a constant succession of cool water passed through by means of an apparatus above. I kept the aquarium in a cool shady spot, and let the water flow to the surface. In the next place, in order to test the different conditions, I had a large boat sunk very near the flat-shore, where the tide came through at every change of the tide, and left the boat with a certain amount of water in it when the tide went down. As soon as it flowed again it went through the boat, and thus kept up a continuous supply of fresh water. That was done to imitate the action of a pool along the shore. During that time the oysters had ceased spawning, and had buried themselves and got down under the mud. The oysters outside did not spawn, but those in the aquarium kept continuously spawning, and so did those in the boat. There was no cessation at all, as far as I could ascertain, but outside there was, although the oysters were lying thick upon the ground. If there had been any spawn I must have got some, because it comes out in such myriads. That proves, I think, that the oysters do close their shells, and that that is one reason why we lose the spat. That the oysters are able to move is a fact well known, because you will always find that if you throw out oysters upon the grounds one day, and examine them, you will find them lying with the wrong side up; but if you examine them on the following day, you will find that they have all turned over.

61,527. They turn over so as to bring the convex shell upwards?—Yes, and they must do that in consequence of possessing some means of locomotion or other. Then again when on shore you will occasionally see them emit a spurt of water which is followed by a slight movement of the oyster. Then again that they do bury themselves is perfectly certain. For instance at Whitstable and on the flats all down along Herne Bay the sailors can predict an east wind, which is the most violent wind we get,

by the simple fact that they cannot catch oysters. The men will go out for instance to-day, when there is an east wind coming on, and they will catch nothing at all. It will take them six hours to catch what they call their stint, and very hard work it will be for them too. As soon as the east wind is gone they will go on the same spot and catch their stint in half an hour. I think that is pretty clear proof. I know that upon my own ground it is of no use attempting to fish in an east wind. These are facts, or common things not generally known. The oysters will move 24 hours before the east wind comes on. The next great cause of injury to the spat is the muddy water which has the effect of entangling the delicate swimming apparatus of the oysters, and of producing its death. Turbulent water also rolls the oyster over and over again, so that it has no chance of attaching itself. The water comes in on the long low flat shore on the Kentish coast with such a sweep that there is not only great violence on the top of the water, but there is an under current produced which is sufficient to carry out heavy objects to sea. I have known places where a boat has been sunk within 100 yards of high-water mark, and where with a heavy east wind blowing on the shore the boat has been found when the tide has gone down 400 or 500 yards further out. That has occurred more than once or twice. There is another thing also which proves that the violence of the water, and the mud produced in consequence, act injuriously upon the spawning of the oysters. When in an aquarium the oysters spat upon a clean surface. If there is a clean surface even though the spat falls to the bottom it will rapidly rise again, but let there be the slightest atom of mud, if the spat falls it will settle ; if it once touches it never rises again. I have also noticed the same thing when a piece of cloth has been placed at the bottom or in fact any substance whatever. One great necessity in order to ensure the well doing of the brood is that it shall meet as soon as possible after it falls with a bright clear surface, such as a polished shell which is by far the best thing, or the side of a small pebble. I have tried both bricks and tiles, but I believe that the oysters never will attach themselves to them if they can obtain their natural habitat. To prove that, I tried in the first place the experiments which were recommended by M. Coste, I had known something of Lake Fusaro when in Naples, and I tried fish weirs, wattle fences, floating fascines above the oysters ; floating planks with bushes, and I have also laid down tiles. In the first place I will say a few words with regard to weirs. There are three weirs on the Pollard ground, but I never saw a bit of brood upon them yet, nor do I believe that the oldest fisherman in the neighbourhood ever did, yet there are plenty of oysters to be found in the vicinity although there are none on these weirs, and nothing upon the fences. We have had them put in in all ways, in lines and diagonally to catch the tide and the run of the water, so that the brood would strain as it were through them, but in the course of two seasons during which that plan was tried there was not a single bit of brood obtained. The Whitstable company had an idea that their oysters in consequence of the rough winds would be carried to the Pollard Ground, and they put up an immense long wattled fence. I have examined that fence, but I never succeeded in finding one single brood there, and the men who have had weirs on the ground towards Reculvers never saw oyster spat there in their lives, and upon floating fascines there was never any brood that I could see, and in a similar manner tiles have also been unsuccessful. There might be one or two spat found upon them but nothing more.

61,528-30. Did you lay down tiles extensively?—No, not very extensively, but I laid them down in patches as big as this room. I put them on the best part of the bed, and the parent oysters were all lying round so that it was almost impossible for the spat to miss the tiles ; yet they were altogether unsuccessful. The fact is, that the tile is of a porous nature and the sediment that falls from day to day, falls upon that porous surface and is not washed away by the current. After all they have failed. There were certain places close to the place where the tiles were laid, where little ridges had been formed showing where the currents ran. There were found the shells of a fish that lives in the mud. The remains of those shells were very thick in some places and wherever they stood, there I found the brood of the oysters. I found it also on the shell of the cockle, and in some few places on stones ; that shows I think conclusively than an oyster naturally knows its best *habitat*, and that you cannot induce it to attach itself to these artificial things all the time it has a natural bottom to go to. On the contrary wherever there is natural culsh it will make use of it.

61,531. Did you find spat deposited in the immediate neighbourhood of these tiles, &c. on which you found nothing ?—Yes, all round. For instance, there would be in one place a gravel bank or certain little channels through the sand. In that case I should put my fence across in this way (*describing*) and another one so. I should then take another one so and I should place a whole lot of breeding oysters there although there were plenty lying all round upon the ground. I did that to give the experiment a fair trial. I put down two fences so and placed oysters on both sides. Here (*describing*) I laid down a lot of tiles ; there some floating fascines and faggots and all over the ground in the vicinity. There were not only natural oyster beds but oysters which were specially placed there. In point of fact, to give the experiments fair play I tried them in every way I thought likely to ensure the catching of spat.

61,532. Was the ground on which you tried the experiments a plot of ground upon which you were in the habit of finding spat naturally ?—Yes.

61,533. What was the result of the experiments ?—The result of my experiments was that I continued to find spat on the natural beds, but not upon any of the artificial means I had provided for catching spat. From that and from other experiments which I made in different years, I came to the conclusion that the young oyster—the tiny spawn or spat—as soon as it leaves the shell of the mother oyster has but one purpose in existence; and that is to attach itself as soon as possible to some object to which it may permanently adhere.

61,534. Is there such a difference in the quality of the tiles you laid down and the ordinary culsh as to make the oyster unwilling to attach itself to the former ?—I think that it has no chance of attaching itself to the tiles. The eddy is too great ; where there is a real obstacle like that the tide makes an eddy and the oyster spawn after having been extruded from the shell of the parent oyster is wafted along with it with only just sufficient power to keep itself afloat.

61,535. Then how does the spat contrive to attach itself to the natural culsh ?—I do not think it rises far from the surface of the ground, and there being very little eddy it drifts away slowly and attaches itself to the first favourable object it meets. For instance, wherever there is a shell lying on the ground, as the tide goes over it, it makes a tiny little eddy, and you will always find the brood underneath. I believe it is this little eddy that affords the oysters the chance of settling.

61,536. Why should it not have just as good a chance of settling under the artificial obstacles as under the natural ones ?—It has a chance, but I believe that it avoids it.

61,537. That is not always the case, because we have had produced before us tiles covered with oyster spat ?—No doubt that is so occasionally. (*Mr. Smith.*) Occasionally I have seen an old shoe covered with oyster spat.

61,538. (*To Captain Austin.*) Mr. Buckland, at our last sitting, brought to us tiles actually coated with oyster spawn. If your notion is correct, how do you account for that ?—It is easily accounted for on the French coast. If the same thing were to happen there again, namely, a tremendous spat on the French coast, it

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would occur again. You must bear in mind that there is nothing but sand all round that coast, and no natural object for the spat to settle upon. The only things it meets are these tiles and artificial culsh and it settles upon them. The first thing it meets may be a tile, and it will attach itself to it. But that is not the case where there is natural culsh. For instance, in the bay of Cancale, where a large quantity of oyster brood has been obtained, there is not a tile for many miles, but there are plenty of stones and other things, and they have been found covered with spat.

61,539. Then I gather from what you have stated to us that you are of opinion that the use of artificial means on the English coast, in the localities you have been speaking of, would be superfluous?—I think so, if the oysters have natural culsh to attach themselves to. Of course I should not dream of putting down tiles or anything else on ground where there is gravel or any sort of natural culsh; but then again I should never try to breed oysters upon a sandbank, because I know, and the oyster seems to know also, that it would be certain death to him if he happened to fall upon it. If it falls upon a smooth bottom, away it goes, turning over and over until it dies; but the first obstacle, after it leaves the parent shell, that presents itself to which it can attach itself as it flies by with the tide it avails itself of.

61,540. Do you think that the spat is capable of discriminating between the under surface of a tile and the under surface of a shell, so that it would elect the one rather than the other?—No, but in the case of a tile the spat is liable to be carried away by the stronger eddy formed by the tide.

61,541. The tiles are hollow underneath, are they not?—Yes; but the spat has a less chance of attaching itself to a tile than, for instance, to a cockle shell, which just stands up on the surface of the ground with its smooth shell ready at hand.

61,542. The result of laying down tiles on the English coast has not been successful?—No. There have, I believe, been 15,000 laid down at Shoeburyness during the last two years, covering something like 15 acres of ground; and my manager tells me that not one single spat has been found there. Yet you find that upon Mr. Smith's ground, which was well prepared for the reception of spat and covered with natural culsh, he got a fair proportion of brood, both early in the year and later. There were some spat obtained, I think he said, as late as the month of September; and yet his ground is only a few miles further up the coast than the ground where this large number of tiles was laid down. The tiles failed entirely, and I believe that they have also failed on the shores of France.

61,543. Might not the failure be due to some local circumstances, such as the temperature or condition of the water, and not to the nature of the things laid down?—My own opinion is that the failure of the brood is entirely owing to the water, but I think, at the same time, that if you cannot breed oysters naturally you will never succeed in doing so artificially. I think there is no question about that. I think that one of the great necessities is a clear running stream of cool water. It must be deepish water, and also cool. In the first place it is necessary for the food of the oysters that there should be a tide-way. No oyster can live upon nothing; and as he cannot run after his food, his food must be brought to him. That is only a common-sense view of the case. There must be a motive power to bring the food to the oysters, and that motive power is the tide which brings down animalculæ and other things, which fall into the oyster's mouth. He always lies with his mouth open by which means he is able to obtain his food; then in the case of any deposit of sullage it is removed by the tide and he gets his jacket cleaned after a time. That is one reason why nature dictates to him to lie with the convex shell upwards. If he laid the other way there would be no eddy to wash the shell clean. Then again there is another thing which I think is absolutely necessary and that is the air which always exists in moving sea water. My experiments have proved that the brood will always die in still water. There are no means of keeping it alive and after a certain time an oyster which has been allowed to remain in still water will die. It goes without food and becomes gradually starved. In my aquarium I have done all I could to keep them alive without supplying fresh water, but they invariably die. M. Coste says that down in the bay of Arcachon they breed oysters on the *claires*.

61,544-5. The *claires* answer to our parks?—Yes, except that they only have fresh water once a month in the spring time. I have had still water in my aquarium without a fresh supply, and I have put in oysters ready to breed within 10 days or a fortnight, but the young never came forth at all. When I opened them, a long time after their time, I found them agglomerated in the frill of the beard. That proved to me that they must have clear water. As far as M. Coste, Mr. Buckland, and others, who think that oysters are going to breed in ponds are concerned, I believe that they err greatly. I am convinced that a constant change of water is necessary, and I think Mr. Smith will acknowledge that if his oysters were left for six weeks in a small pond where there is no fresh water, they would become worse and worse instead of showing signs of improvement. In a fishery which I have in Ireland there is a large natural pond of water at a place called Cornerow. I took very great care in having it cleaned out. Every atom of dirt and weed was removed, and I then had it lined with beautiful culsh, tiles, pebbles, and everything calculated to catch spat, but I never had a single young oyster there. But, as I expected, in the channel which ran down the shore when the sea retired, I had an immense lot of brood. That, to my mind, was a convincing proof that, in order to cultivate the oysters successfully, it was necessary that there should be a stream of running water. In the channel I had a large supply, but in the pond I did not find a single one, although I had put 10,000 oysters there.

51,546. Had the oyster pond you refer to any communication with the sea?—There was only the one inlet at high water, but there was always a depth of three feet of water in the centre where the oysters were.

61,547. The tide did not wash upon it regularly?—No. Lord John Browne, the brother of the Marquis of Sligo, did not believe in my pond, and he made one of his own, which cost him a lot of money. It was about three times the size of this room, was surrounded by masonry, and was fed from the tide by means of a large drain pipe. He laid down oysters there, and they were all breeding oysters. There was no doubt about that. Yet there was never one single spat or brood obtained from them. They were examined most closely, but there was never found the shadow of a brood there of any age. After a time the breeding oysters themselves gradually deteriorated in condition, and even when they were removed and placed on other beds they were worth very little. Indeed, most of them died in the end. I think that, together with my own experience, is a proof that oysters will not breed in still water, but that there must be a regular current of water passing over them. Further than that, I have made inquiries among the Essex men who have a large number of ponds, but I never heard any one of them state that the oysters ever breed in the ponds. They will live there, but I never heard that they will breed there. There is an immense number of ponds down at Chichester and Emsworth and all along that country. They are large dealers in oysters, and they keep them laid down in ponds, but I never heard it asserted that the oysters breed in those ponds. Under all these circumstances I think I am justified in saying that the question of breeding artificially in ponds has been proved to be untenable, but whether the oysters may not be improved by artificial means is quite another question. The Herne Bay Company propose to put down large furnaces for the purpose of warming the water, but

as far as my experience goes water artificially made hot or warmed to any temperature is almost certain death to the fish. The oyster is naturally born at the bottom of the sea where the water is rather cooler than on the surface. I found in the boat which I had sunk near the shore, that upon very hot days the brood died in two hours, when if it was a cool cloudy day they would live for some hours longer.

61,548. Has any one proposed to make the water hot for the oysters?—Yes, that was part of the Herne Bay scheme, and I believe that both Mr. Lowe and Mr. Buckland made statements in favour of that plan.

(*Mr. Lowe.*) Mr. Lowe is now present and he must at once deny the accuracy of that statement.

(*Capt. Austin.*) It was certainly my impression that that plan was supported by Mr. Lowe. I have made these remarks principally with the view of showing that oysters must have running and moving water, and that by any artificial means of breeding by which they are detained in one position, and kept in still water, they will never thrive. If you have a chart before you I should like you to refer to a place near Cape Clear, namely, Lochhyne, where there is a small bay or basin about one and a half or two miles square. It is a kind of lake in the basalt rock only wide enough for a boat to enter, and about two miles long. In this lake there are a large number of fish. I examined the lake myself. It was very deep; in some places as deep as 300 feet, and as I thought there might be oysters there, I dredged it carefully. At the outlet of this lake the water runs over a cascade, and at the bottom of that Lord Carberry has formed an oyster bed for himself, and outside of that bed, all round and on each side of the headland, there are oyster beds. These are some of the oysters which I found in Lochhyne. Some of them are 40 or 50 years old, I believe. You would see what effect still water has upon them. See how circular that oyster is. That one is 10 or 12 years old, and here is another that is perhaps 20 years old.

61,549. In what way do you estimate the age of the oyster?—From the rings on the shell. That is the only way of estimating the age.

61,550. I suppose you know that there is a difference of opinion upon that point, and that it is disputed whether the rings on the shell form any criterion?—I believe that that mode of ascertaining the age is well known. That shell (*producing an oyster shell*) I picked up below the cascade, and I caught some of Lord Carberry's oysters, but the keeper was so strict that he would not allow me to take a single oyster away from the ground. Only a mile or two further on, at a place called Ringeroager, they dredge up the largest oysters I ever saw in Ireland. The largest one I measured was as much as I could span in length—about nine inches, and as far as I could reach with two fingers across.

61,551. Do you think the size in the one case was due to the still water, and in the other to the fact that the oysters were in the regular water of the channel?—Yes; the oysters outside that part of the coast are the largest I ever saw. But if you take them from Wexford, all the way round the coast, you will find that they are a very large description of oyster, but those at this particular place are larger than they are in the Irish Channel, St. George's Channel, or anywhere else.

61,552. Is the water in the basin which you have described to us as salt as it is in the sea?—Yes, it is precisely the same. I believe that if there could have been a stream of fresh water turned on the oysters would have been better. That warm water has nothing to do with the breeding of oysters is, I think, pretty well proved by the fact that they breed regularly in Greenland, in parts of Iceland, and in Norway and Sweden, as well as in the Mediterranean, and I know that they always breed every year. I believe that the only reason we do not have a good spat every year is that the water is made muddy, and the brood, though it is actually born, dies. That, I think, is the reason of the immense loss in the oyster trade. For the last fortnight the oysters have been dying at Whitstable in large quantities.

61,553. Natives? — Yes, natives, and Scotch, Welsh, and Falmouth oysters, all alike. The reason of their dying is this:—It is not the cold that kills the oyster, but the cold has the effect of swelling it so that it cannot quite shut its mouth. The mud, and sullage, and sand then get in and the fish cannot eject them, being weakened by the frost.

61,554-5 Then in that case the death of the oyster will be the consequence of the effect produced upon it by the cold?—The cold produces the first effect, but the cold alone will not actually kill the oyster.

61,556. The cold prevents the oyster from shutting the valves of his shell, and that has the effect of exposing him to conditions which afterwards destroy him?—The only thing upon our exposed shores that we fear the frost for is that at low water they freeze, and the tide afterwards carries them away.

61,557. Would not the oyster be killed by being frozen in that way?—If he were frozen for a sufficient length of time it would kill him certainly.

61,558. (*Mr. Lefevre.*) Do you mean that the oysters are floated away with the ice?—Yes.

61,559. (*Professor Huxley.*) They will not be dead before they are floated away?—It would take some hours to do that.

61,560. It would take some hours to make ice sufficient to freeze the oysters?—Little thin cakes of ice will be enough.

61,561. But being for some hours subjected to the action of the frost, would not the oysters be dead by the time they were floated away?—No; they will bear a good deal of frost at times, but if there is a wind it will kill them. I should like now, with your permission, to say a few words with regard to the necessity of maintaining a close-season. I think there can be no question of this, that if the close-season were enforced upon the Whitstable ground it would ruin the fishery altogether. There is no question at all about that. I quite agree with what Mr. Smith said, namely, that the ground upon which freshets are constantly coming and bringing sullage with them requires to be continuously cleaned. Then again a heavy gale of wind will come on, and roll up the oysters in a ridge three feet deep. Great injury would be done to the oysters unless they were worked, and by working them in the course of a day or two they would all be spread over again. When they are spread the mud all goes away, but if they were left on that ridge the mud would settle all round them and kill them very rapidly. In the next place, that ridge, if allowed to remain, would cause an eddy and a fresh deposit of mud all round it for many yards. In the next place, it is just at that time of year that we want to work on account of the five-fingers coming upon the beds. They come like a flock of gulls and unless they were well dredged they would soon destroy the spat. There is one kind that will eat an oyster itself; yet it is a singular thing with regard to them that after they have been dredged for a time they roll themselves up and float away. So much is that the case that in places where the fishermen have caught 10 bushels of five-fingers one day they will go out the next day and not catch one. If during the close months the fishermen were unable to dredge, of course it would follow that the five-fingers would soon clear the oysters off the beds. To show the advantage of working the beds in the summer time, I may say that about four years ago, some time after the great spat in 1858, the Whitstable Company, when the oysters came, wanted more ground. There was a piece of ground about half a mile in extent lying on the east side of the regular ground, which had not been worked by the company, because they thought it was useless to work it. Well, they took it into their heads to work upon it and clean it, and it was said last year by two of the jury that since the time they had cleaned it they had sold off that piece of ground alone more than 150,000 bushels of oysters. Indeed

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that ground now is one of the best pieces of ground they have, and upon that half mile they lay their brood.

61,562. Is that ground on the east side beyond the little spit of sand which they call Whitstable Street?—No, it is above Whitstable Street. They do not lay down oysters below Whitstable Street. I think also that it is a necessity that the dredgermen should be allowed to work over the public grounds as well. I am alluding now not to the Essex ground as much as to the Whitstable ground, because there is no dredging for whelks and other things there to keep the ground clean before the spat arrives, so that when the time for the spat arrives there are no weeds or mud or anything except a bright clear bottom. The result of dredging constantly over the Essex beds is that spat falls there that would never fall if the beds were left to become swabbed up. There are a few spots round Pan sand which a few years ago they never thought of dredging, but they happened to find some whelks rather thick there and they dredged round and round until in the next year they found oyster spawn. Gradually it came more and more and now they always get a little spat there even if they do not get it anywhere else. Then those other things that eat the brood and do injury to it, such as sea anemones and sea purses, and the like, are all killed by dredging. As to whether it is more productive to keep up a continuous system of working on the beds, my opinion is that if the grounds were not worked there would be very little production of spat. No doubt if you dredge too soon you lose a certain quantity, but what do you lose? It is the opinion of most of the old experienced dredgermen that you may lose about one-fifth, but then the remaining four-fifths are saved. They are carried off to private beds where they are carefully tended and looked after. If the whole were left on the beds without being dredged the result would be a far less supply of oysters. In the first place they would become a prey to the starfish, dog whelks, and everything else, and if the close season were strictly kept and all dredging put a stop to the beds would become smothered up with dirt. Therefore upon the whole I think it of advantage, having regard to the increased supply of oysters, that the public grounds should be worked in the close season as well as the private beds.

61,563. What check would you impose in order to prevent the breeding oysters from being taken away?—They never would be taken away to eat. In point of fact you could not eat them.

61,564. But you are aware that there is a large demand for oysters all the year round?—Yes, but the oysters which are taken at that time for sale are the common oysters. I am speaking of native oysters, which are not in season although the common oysters may be. The reason of establishing a close season, in a common-sense view, is to prevent oysters from being taken for the purpose of eating at a time when they are unhealthy. That was the reason why a close season was made, but if the oysters had recovered from breeding they would be good. There are some oysters that never breed at all, and those oysters will be found as good in the middle of the summer as in November.

61,565. Do you think that the people who consume the great proportion of the common coarse oysters in London are very particular about the oysters being sick or well? Do they not go down just as well whatever their condition is?—The colour would soon undeceive anyone. With regard to legislation for the improvement of the oyster fisheries and for the preservation of the spat, you have put questions to various witnesses who have been examined before you with the view of ascertaining their opinion upon that subject; I should like to say a word or two upon the question myself.

61,566. We shall be very glad to hear any remarks you have to make.—The only benefit which we could obtain that I am aware of would be from the adoption of some measure which would ensure us a large supply of spat. But as we cannot produce that by any artificial means, the only thing we can do is to endeavour to attain that result by natural means, namely, by keeping the beds clean and in a fit state to receive and preserve the spat when it does come. In other words, we should be allowed to work in the season just before the oysters begin to breed, so that the beds may be kept clean. In that way I believe that millions of young oysters would be saved that otherwise must be lost.

61,567. Would you advocate the removal of all restriction upon the oyster fishing altogether?—So far as my experience goes it is this:—There is no spat so valuable as the Essex spat and that which is on our own coast, and which is native spat, and in dealing with that spat, so far as I have seen, a man's common-sense is quite a good enough guide without any interference on the part of the Legislature. In other cases a man's common-sense is his guide. For instance, in shrimping, without any obligation to do so they throw overboard the little shrimps which they bring up in their nets, and the same sort of thing would be done in this case. After dredging for a fortnight or ten days on the flats the experienced eye of a fisherman would enable him to perceive the presence of the young spat, and he would at once say, "We must now "knock off our work here and wait for a fortnight or "so." The boats would not go out then, and in another fortnight they would be able to resume dredging.

61,568–9. Then are you of opinion that the question is one which practically might be left to the fishermen's sense of their own interests without imposing any legislative restrictions?—That might not be the case all the year round, but generally speaking they might be left to their own regulations, as in Herne Bay and Whitstable. Although they are not interfered with by legislative restrictions in those places, they only carry on dredging when it is advantageous to do so.

61,570. If legislation can be dispensed with with regard to two of the months of the year which are at present close time, why could it not be dispensed with all the year round?—I have no desire to see any restrictions carried out at all. We never have had any upon our beds, and upon the Essex coast I believe it has been the same.

61,571. Would you leave both the public and the private beds open?—Yes. Large sums of money have been invested in property in connexion with oyster-fishing with the object of obtaining from the public and private beds a large supply of a valuable article. I believe that those who have invested this money and whose interests are at stake will among themselves take good care of those interests. Even supposing that the fishermen themselves were ignorant and persisted in going to work when it was likely that they would do mischief, that evil would soon be remedied, because their object at that time is to obtain oysters for the private beds, and the owners of those beds would refuse to buy what they dredged up. There would be a combination, in point of fact, against dredging at an improper period.

61,572–3. But how would you meet the case of the foreign buyers who are anxious to obtain oyster brood?—I believe that the provisions of the Fishery Convention Act prevent them from taking brood.

61,574. What would you do, supposing that persons from some other locality wished to form oyster beds in other parts of England; would you allow them to come and obtain brood?—Yes; I think that all of us must be allowed to compete with one another for the brood.

61,575. You would leave it open?—Yes; I do not think that restriction can possibly do any good. But there is one point which I think is a very serious one for you to consider, and I should like to make some remarks in reference to it. I refer to the Fishery Bills at present before the House of Commons; there are one or two Bills with regard to Essex which I do not intend to say anything about, but I wish to say a few words in respect to the Kentish coast. I know that what I am about to say is true. Near the Whitstable beds there is a certain piece of ground which they

call the flats; last year there were hundreds of poor fishermen working upon those flats, and it was only by so doing that they were able to support their wives and families. There (*pointing to the chart*) lies Whitstable. The oyster grounds extend as far as this point, and from there all down the coast lie what are termed the flats; it is from that ground alone that we can get native brood; we can obtain it nowhere else, and from Whitstable there are hundreds of men who are non-freemen who get a living in the slack time of the year by working on those public banks. There are also a large number of boats that come across from the Essex side, and the spat they obtain there they sell to the owners of different private grounds. It is sought by a Bill in Parliament to convert this public fishing ground into private property, yet the ground is far more extensive than could be worked by any private company. At the present moment I believe the extent of the Faversham ground is nothing like two miles square, and they do not use more than half a mile of that. The Whitstable ground is the largest and most thriving fishery ever known in the shape of an oyster fishery. The stock of the Whitstable Company was assessed last year by the old men of the jury at 400,000*l.*; I believe they were not far wrong in their calculation, for if it is considered that they can sell oysters which bring them in from 100,000*l.* to 120,000*l.* and 130,000*l.* a year, and that the oysters generally come to maturity in four years, the parent stock will be worth nearly 400,000*l.* They have in their possession three miles of ground, but they do not use two miles of it or anything like it, yet last year Parliament granted to the Herne Bay Fishery Company a piece of ground from the middle of the flats six miles square, and the very best part of the flats too. One would have thought that that was enough, but this year the Herne Bay Company are asking for more ground, and the Whitstable Company, although they cannot use all the ground they have now, ask for the whole of the ground running from their present boundary down to the Herne Bay ground, and then for the ground outside that of the Herne Bay Company. If Parliament grants to them what they are now asking for the Whitstable Company will become one grand monopoly, because if they are to have all the spat it is obvious that no one else can obtain it, and at the same time they would be unable to use the ground if they had it. With an immense stock and capital estimated to be worth 400,000*l.* they cannot use all the ground they have now, and under those circumstances what can they want with seven miles of ground more?

61,576. Do you think that their object in applying for this ground is to enable them to keep off competitors?—No doubt that is partly their object, but they have also another object. In a good spat season like that of 1858, the spat that fell upon the flats was worth at the lowest farthing 400,000*l.* or 500,000*l.* That is their real incentive for wishing to have that ground exclusively in their own possession, namely, the value of that which may not come more than once or twice in the course of six or seven years, but which when it does come is of enormous value. Then again the company's ground by the time a spat comes, may be out of native oysters the same as it is now, and see what a fortune it will be to them to be able to collect all the spat from the flats and spread it over their own beds, and keep it until it is of sufficient age to be sent to the market.

61,577. But is there not another side to the question, namely, the interest of the consumer?—I am going to refer to that. How does the case stand now? At present private owners and the Whitstable Company, and everybody who wants the spat, have to compete for it, and have also to compete in the market for the sale of oysters. But if you once place all the oysters in the hands of one great company, they will be able to ask any price they like for them. The Whitstable Company now rule the market, but they have to contend with competition. Yet, give them a monopoly, and then see what price they will ask.

61,578. Would not their stock of oysters rule the market? Would that not regulate the price of itself?—No, I think not.

61,579. If a man has a perishable article to dispose of, will he not always sell it in the market as soon as he can?—Yes.

61,580. Then will not that control the price?—No. If, for instance, Mr. Grove, the fishmonger, has the only salmon in the market, instead of selling them at 1*s.* 6*d.* a lb. he could make you pay 6*s.* or 7*s.* a pound instead. Of course he must sell them fresh, but there would be a sufficient demand to give him his price. It must also be borne in mind, that the ground which is proposed to be taken is that upon which hundreds of fishermen are in the habit of working for a livelihood at the dullest part of the year.

61,581. The argument of the other side is, that unless you give to the capitalists the privileges they ask for, there will be no one who, at the time of a great spat, will have the means of taking advantage of the spat, and the crop will be practically lost to the consumer?—That, I think, is decidedly wrong.

61,582. The argument which has been brought before us is, that unless capitalists have certain rights granted to them, it will not be worth their while to prepare the ground in order to make it ready for the reception of a good spat, and in that case when a good season comes, the spat will be lost?—Exactly. (*Mr. Smith.*) In the case of the river Roach we ask for powers to make that which does not already exist. (*Captain Austin.*) The value of the ground affected by the bills before Parliament is according to the quantity of oysters it produces, and that depends upon the amount of work to be laid out upon it. Then, who is most likely to lay out their labour upon the public grounds—the poor fishermen or the capitalists who form the private companies? A private company would view the question in this light: "It will cost us 1*l.* a boat to send out men to dredge upon this ground. We know there is nothing there worth catching. There has been no spat this year, and therefore we will not send out. Let the ground remain unworked." But in the case of the poor fishermen it is very different. The ground always gets worked by them. They must get a dinner in some way or other, and they will go out with perhaps three hands and four dredges in the hope of getting perhaps 18*d.* a-piece. A private company will not lay out a pound's worth of work in the chance of only getting 1*s.* 6*d.* or 2*s.* 6*d.* but a poor fisherman must do so or starve.

61,583. (*Mr. Lefevre*). Is not that an argument rather addressed to the particular form, and condition of the Whitstable Company?—I am speaking of that particular ground.

61,584. The rules which govern that fishery are entirely different from those which would apply in the case of a company under the ordinary influences of capital?—Yes, because they must lay out their money.

61,585. Your argument is addressed against the monopoly which would be created by putting this ground in the hands of the Whitstable Company; you would not object to place it in the hands of other people?—Yes, I would object to giving it to anybody. If it is once placed in private hands, it will never be worked except in those years in which there is an immense quantity of spat. It is an immense area of ground, but notwithstanding that fact, it will always be worked while there are public boats coming to trot for whelks and dredging for whelks and oysters over it; in point of fact men will go there in order to earn for themselves 1*s.* 6*d.*, or 4*s.* or 5*s.* a day, and in earning that they will lay out the same amount of work as would cost the company 1*l.* or 25*s.* A man who has nothing else to do will work for very little, rather than starve.

61,586. (*Professor Huxley.*) Does not that show that the condition of the labour market is such, that

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it is worth the while of the fishermen to work for that wage ?— Yes.

61,587. If there is a market for the commodities obtained by the fishermen, would it not be worth while for a company to employ the fishermen to obtain those commodities ?—If it were so much to be sold over a counter it would, but a company would refuse to send out 40 or 50 boats to work in keeping the ground clean on the chance that a spat will come. If I knew that there would be a spat I might lay out 2000*l.* or 3000*l.* or even 10,000*l.* in cleaning the ground, but on an average there is not a good spat more than once in 10 years at Whitstable; of course I mean a large remunerative spat. I think that neither I nor anybody else would be prepared to throw money in the sea in that way.

61,588. (*Mr. Lefevre.*) Did not the Herne Bay Company get their bill on the ground that they would spend a considerable sum of money on the ground in cleaning it ?—Yes, but they have not done so, nor could you ascertain what they were doing in that respect, unless you had some means of summoning the Herne Bay Company's officers and making them produce their books. It is only the people who live in the vicinity who know what work is done upon that ground, and how many oysters they have laid down. If you had any means of arriving at the real facts of the case, I believe you would see the truth of the argument I am holding. If capitalists would really expend their money in keeping the ground clean that would be another thing.

61,589. If the only object of the Herne Bay Company were to appropriate the spat which falls only once in 10 years, then your argument would be a good one, but it is alleged on the other side by the Herne Bay Company, and those persons who wish to appropriate similar ground, that it is their intention to clean the ground, and render it fit for the reception of the spat, and make use of it in the same way as is now done by the Whitstable Company ?—No private company could ever do that over such an extent of ground if they had the Bank of England at their back, because they would be required to spend 6000*l.* or 7000*l.* a year for nothing, for perhaps nine years in succession.

61,590. What is alleged to be spent by the Whitstable Company and other companies at present ?—On our private grounds we must work whether we get spat or not.

61,591. They intend to work the ground as far as we have been given to understand ?—Suppose that a small piece of ground like the Whitstable ground, requires 400,000*l.* worth of oysters to stock it, how many thousands of pounds worth of oysters would it take to cover the piece of ground six miles square, which the Herne Bay Company have ? How many square yards are there in six square miles, and how many native oysters would they require ?

61,592. But if ground is given to a company having no interest in the Whitstable Company, would they not become great competitors with the Whitstable Company, and by that means tend to reduce the price of oysters in the market ?—It never could happen in that way, because there are plenty of competitors now. There is an immense number of competitors now.

61,593. You say that the Whitstable Company rule the market ?—Yes, but that is because where Mr. Smith and others can send in one bushel of natives, the Whitstable Company can send in a thousand.

61,594. (*Professor Huxley.*) Your purpose is to show that the object of these bills for appropriating great tracts of ground, is to enable certain persons to get possession of the river bottom, so that they may be in a position to take possession of the spat when it comes ?—That is their real motive.

61,595. You are of opinion that that lies at the bottom of the matter ?—Yes, but besides that, the ground is too large for them to lay oysters upon. There is no amount of capital they could raise by which they could do that, and even if they did, they could not get sufficient oysters to enable them to do so. There is not an oyster merchant who would not, this year, have bought twice the quantity he has purchased, if he could have got them. What I say with regard to this ground is, that in the first place, you cannot get a sufficient supply of oysters to stock the ground, and in the next place, it will be impossible for the public to derive more benefit from that ground than they do at present. There would also be hundreds of poor persons thrown out of employment who are now able to get a living from this ground.

61,596. You would not have made any objection to the assignment of a reasonable space of ground ?—Not the slightest. I would give them as many acres as they could possibly cover. My only reason for bringing this question before you is that I believe the decision upon the bills now before Parliament awaits the Report of the Sea Fisheries Commission, and I want to show you the wickedness of making these extensive grants of five or six square miles when the acreage of the largest oyster beds at this moment is very limited. The largest of all is the Whitstable ground, and if measured fairly the beds will be found to lie within one and a half miles. The market ground is only a few acres in extent, and yet all that immense stock which I have mentioned to you lies there. My ground is very much less, and so are all the private grounds. (*Mr. Smith.*) The ground in the Crouch river is 17 miles in length by three quarters of a mile in width.

61,597. You look upon these bills as you would upon bills brought before Parliament to assign to railway companies 10 miles of land on each side of their line ?—(*Capt. Austin.*) Yes, precisely.

61,598. (*Mr. Lefevre.*) Am I right in understanding that under the provisions of the Herne Bay Companies Act, unless they work their ground for the purpose of cultivating, the Act is to be void ?—The Act is drawn up in such a way that you might drive all the coaches and four in London through it. The wording is something to this effect, that the Act shall remain in force provided within three or five years the said company shall produce marketable oysters to the satisfaction of the Board of Trade. Now what difficulty can there be in doing that ? They can buy, for instance, from Mr. Smith 500 or 1,000 tubs of oysters, lay them down for a year, and send them to the market in the next season. In that case they will claim to have produced marketable oysters.

61,599. (*Professor Huxley.*) Will it not be for the Board of Trade to say whether the provisions of the Act have been complied with, and if there is a *bonâ fide* supply of oysters to the market ?—All I can say is that the whole of the oysters in the United Kingdom could not supply that ground.

61,600. Is there any provision in the Act requiring them to produce so many oysters per acre ?—No; nor are they to produce oysters all over the ground.

61,601. Might not that question for the future be met by some more definite clause with regard to the cultivation of the ground—a clause, for instance, providing that in case the ground is not really stocked, the privileges of the company shall be withdrawn ? —I should like to suggest whether you can give any reason why the Whitstable Company have this year become the promoters of one of these bills ? It costs a good deal of money to go into Parliament, and fight a matter of this sort in a committee in the House of Commons. But the poor people whose interests are most concerned will have nobody to speak for them. If they said anything against the bill the Whitstable Company would never buy an oyster of them again. They would have to go somewhere else for their market, and would have to leave Whitstable too. This, as you must admit, is a case that is most glaring. There is a company who now have three miles of ground, but a large portion of it they never use at all. They do not use anything like two miles. And they have all this large sum of money invested upon it. Yet this company seek now to take possession of a piece of land extending up to that granted to the Herne Bay Company four times as large as

that which they now have. And further they propose to go outside the Herne Bay Company's ground altogether to Reculver, nearly as far as Margate.

61,602. We can understand the argument as against the Whitstable Company, but we do not understand it as against any other company being formed to appropriate the ground, provided that it intends to use the ground for the purpose of cultivating oysters in the same way that the Whitstable Company cultivate their ground?—All I wish to impress upon you is this, that there should be some sort of arrangement in this matter—something like the Lands Clauses Act, which, when a railway seeks to pass through land, gives the company what is necessary for the purpose of their railway but nothing more. That is not like the American system, where, if the line is granted, the company are allowed to take 10 or 15 miles on each side, not that they can use it, but because it tends to keep off the competition of other people.

61,603. If in the neighbourhood of Whitstable there should be ground fit for the breeding and growth of oysters, would it not be to the advantage of the public that it should be converted into private ground rather than that it should be dredged only once in 10 years, whenever a spat may happen to fall?—There must be a certain amount of public ground preserved for the benefit of private beds, and therefore it would be wrong to allow the Whitstable company, for instance, to take possession of all the ground in the immediate neighbourhood of Whitstable, and shut it up.

61,604. The quantity of spat would not be diminished; there would be as much falling as ever, and even more preserved, because more would be likely to fall upon cultivated ground and less upon uncultivated ground?—True.

61,605. Therefore a greater supply of oysters would be insured to the public if these grounds were converted into private grounds?—Yes, but my case is this, that although a large breadth of ground like this is worked as long as it remains public ground, if it were placed in private hands they would not go to the expense of working it.

61,606. You are aware that it is alleged by these private companies that they do intend to work the grounds the same as the Whitstable company?—They may tell you so, but they would not do it; it would cost too much. The ground I have now, originally belonged to the neighbouring company, who were exceedingly annoyed at its passing into my hands.

61,607. (*Mr. Lefevre.*) Did it belong to the Whitstable Company?—Yes, but I am chief owner now. Of course they were somewhat spiteful, and they worked the ground with the whole of their boats, somewhere about 100, as long as they could; in point of fact up till the clock struck 12 on the 29th of September. Yet I was able to sell in the market 1800*l.* worth of oysters which they had left. I think that proves that you cannot entirely clean the oysters from the ground

61,608. After they had cleaned it as well as they could you were still able to get 1800*l.* worth?—Yes.

61,609. (*Professor Huxley.*) Are there any further points you wish to bring before us?—That is all I have to say as regards these places.

61,610. Your objection is not to the principle of making grants to private persons or companies for the cultivation of oysters, but you insist that each grant should be moderate in extent, and that it should not be larger than can fairly be used?—Yes, and I should object to see the most valuable piece of oyster ground on our English coasts entirely swept away.

61,611. What do you mean by entirely swept away?—I mean granted out to private companies. At present it is the nursery ground that feeds certain oyster beds on the coast, and which has done so from time immemorial. It would be rather hard to see a few capitalists step in and take exclusive possession of the public ground, especially when it is impossible for them to make as much use of it as is being made at present.

61,612–3. That is the question which is disputed: it is considered by some people that by granting these grounds to a few private capitalists the public in the long run will benefit more than they do at present. You argue that that will not be so, but is not the case like that of enclosing common land? A number of poor persons may have been in the habit of obtaining advantage from it by turning their cattle upon it, but the capitalist says if you enclose it you will make it yield more food to the general public?—But in this case the capitalist says, "do so and so," which is an utter impossibility. I think therefore that what he says should be taken *cum grano salis.* I object to the granting of property of this nature with so lavish a hand. I object to take a living out of the fishermen's hands merely for the purpose of allowing the ground to lie there at the service of certain speculators for the purpose of putting a certain number of thousands of pounds in their pockets at a future time. At the present moment there is a great competition for oysters in different places. I have known brood sold at Falmouth at 1*s.* 10*d.* a tub, but this year it has been fetching 36*s.* Arklow oysters which used to be sold for 3*s.* and 4*s.* have this year been fetching 22*s.* 6*d.*

61,614. (*Mr. Lefevre.*) Are they oysters fit for laying down?—Yes, for the stock.

61,615. Of what size are they?—Of all sizes.

61,616. Going down to quite small oysters?—No, from Arklow you never have very small brood, but from Falmouth you do.

61,617. (*Professor Huxley.*) Even supposing that these great grants to private companies were contrivances merely for catching the great spat when it does come, might it not be of benefit to the public to make such grants, because so much more of the spat would be saved than under other circumstances?—I say that much less would be saved.

61,618. Why?—Because the public work would keep the ground clean, but private work will not do it.

61,619. The public work consists in working for whelks and other things?—Yes, and in dredging for oysters besides.

61,620. Do you consider that that kind of work would be sufficient to keep the ground clean?—Certainly, and a proof of that is that upon that public ground when a spat like that of 1852 comes, there is a great deal more spawn to be found on those public beds than on the private beds alongside. Although our ground is really worked there is deeper water outside, and the brood has a better chance. There is no hot water running in from the shore, and no shallow water in which the mud can accumulate, nor is the spat washed away by a flush of water along the coast; but outside it can find substances to adhere to in the stream.

61,621. Do the persons who work on the public beds get sufficient from other things besides oysters to repay them for their labour?—Yes.

61,622. Are the public grounds capable of supporting sufficient labour at a remunerative rate to ensure their being kept clean?—Yes, I think so.

61,623. Then why would not the private companies pay for the necessary labour?—Take the case of this town. A man will go out regularly on the chance of getting a job, and he will wait about all day for it, but no one would give him 5*s.* a day to be in attendance. Yet he will go out himself on the chance of getting half-a-crown or a shilling for holding a man's horse or something of that sort. A man who must have a meal finds that he must go out, but no one would pay him regularly for doing so.

61,624. The analogy you draw is hardly fair. The fishermen are a stationary population, not like that of London?—They are Whitstable men, some may come from Essex.

61,625. But practically they are a stationary population?—Yes.

61,626. So that they must be able to earn off this ground enough to keep themselves?—Yes.

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61,627. If these private persons can do that why should it not be competent for a company to employ them and pay them wages in exchange for the produce of their labour?—In the first place, a business will keep one man that will not be sufficient to keep a joint stock company. He will be able to get a living out of it where a company could not; for instance, he would go out with a couple of boys on a cold frosty morning and would dredge up perhaps ninepence worth of whelks. He may also pick up a few flounders, half a gallon of oysters, and perhaps two shillings worth of spat. He will know very well where to get rid of his whelks, and of his flounders, and of all those things, whereas a company would not be able to go out and sell a few pence worth of whelks, and two shillings worth of fish. Probably he knows that there is a boat running down from London, or one going up, which will be very glad of what he has caught, and thus he gets a market for his whelks with his neighbours, and the other things he disposes of in the same manner; thereupon it does pay him for his labour and time, although it would not pay a company.

61,628. It is the case of small holdings and spade labour against husbandry on the great scale?—Yes.

61,629. (*Mr. Lefevre.*) Your ground immediately adjoins that of the Whitstable Company?—Yes.

61,630. Do the Whitstable Company make as much of their ground as you do?—I do not think they make nearly as much as a private person would do.

61,631. The Whitstable Company is in the nature of a kind of co-operative society with an exclusive right of fishing over the ground belonging to them?—Yes.

61,632. Might more be made of it by converting it into an ordinary joint-stock company?—I think so, for this reason: if you had officers with a certain tenure, and answerable to certain persons, a great deal more might be made of the ground; but a constant change of uneducated men for officers, and a constant change of government, must be injurious. I think a great deal more would be made of the ground if there were a steady hand at the helm.

61,633. Do you think it would be undesirable to extend that principle of incorporating fishermen who have been in the habit of fishing in a particular spot and of giving them an exclusive right of fishing on the ground?—With wise rules and regulations it might be made a most advantageous thing for the fishermen, but not if you are to take the Whitstable Company as a guide in everything.

61,634. Do you think it would be better to vest the soil of a fishery in a private company?—I think so. In a case like Whitstable the men all insist on having their money, and the oysters must be pushed into the market. They will sell them whether they are fit for sale or not in order to produce cash, whereas, in many cases, if they had kept them for another season they would have been worth a great deal more.

61,635. Do you think that the constitution of the company is not such as to give capital its full advantage?—Certainly not.

61,636. Do you dredge your own ground all the year round?—The men are generally at work except possibly in the case of a large brood. If they find it falling they would certainly leave off dredging at once.

61,637. For how long?—Until the brood was large enough to be handled without danger.

61,638. How long would that be?—Perhaps it might be five or six weeks.

61,639. Do you think it would be of advantage to the public if such a restriction were generally carried out over all the public ground and the fishermen were prevented from dredging when the brood is falling?—It is very hard to speak of what the effect of a general measure like that would be, but in some cases it would do an immense deal of good.

61,640. Take the public grounds you call the flats. Is it desirable that the fishermen should be restricted from dredging during the five or six weeks when the spat is falling?—No I think not.

61,641. Would not the same rule as that carried out on your private beds be advantageous upon the public beds?—It is in reality carried out exactly the same there. The men know instantly when the spat is falling, and they know also that they cannot touch it until it is large enough to handle, knowing that it is worth so much gold in their pockets when sufficiently strong to take. I think they will not go out wilfully and disturb it.

61,642. Do you know what number of men there are at Whitstable other than those belonging to the Whitstable Company?—I should think there may possibly be 250 fishermen, but I have no certain knowledge; I judge that from the number of boats.

61,643. You have also got an oyster ground in Ireland, I believe?—Yes.

61,644. Where?—In Clew Bay.

61,645. Do you bring brood from that ground to your ground here?—Last year the ground in Clew Bay was entirely plundered. I have sent some this year as an experiment. I have sent a cargo, but I do not know what has come from it at the present time.

61,646. What sized oysters are they?—Some have been sent of that size (*exhibiting an oyster*) to try to make native spat out of that which comes from elsewhere. Some were also sent to see what the effect of a change of water would be. The shell of the Irish oyster is very bad.

61,647. Have you only sent them as an experiment?—Chiefly as an experiment, but I hope they will go to market. Nearly all the oyster proprietors on the west coast of Ireland suffered last year from a sort of madness that took possession of all the fishermen. They went in hundreds and swept all the grounds, although many of them had been private grounds for 60 or 100 years.

61,648. Was that in consequence of the Fishery Commissioner in Ireland having made some grants of fishery licences?—I believe it arose in this way. An Irish jury will not convict. Some of the fishermen were brought up once or twice, and there was no conviction, and they thought they could do just as they liked. The lawyers there are very different to what they are here. There are many of them who will take half-a-crown for defending a case in the magistrate's court, and some of that class of people told the fishermen that they would get them off.

61,649. From your observation in Clew Bay, can you say whether the regulations as to the size of the oysters dredged up there are observed?—The regulation there restricts oysters from being taken below $2\frac{1}{2}$ inches in diameter I think.

61,650. Is that regulation observed or not?—It was observed until last year, but last year I know it was not.

61,651. Have you found any difficulty in purchasing small oysters there?—I have found a great deal of difficulty, but I know that a great many have come to England.

61,652. For the purpose of being laid down on other beds?—I believe they went to Scotland.

61,653. Have any of the oyster beds been exhausted in Ireland?—Yes.

61,654. In consequence of the oysters being taken too small?—Yes, nearly all of them. The exhaustion, however, has taken place not from overworking but from the close season. The Gulf stream comes in there with such a gush of warm water that the weeds grow in a marvellously short time. A dense mass of mud and dirt accumulates, and what chance has the oyster under such circumstances?

61,655. Has your experience in Ireland extended over any number of years?—About three or four years, and I believe I have visited personally, with one or two exceptions, every oyster bed in the country.

61,656. Can you say from your own personal ex-

perience that the weeds grow in the way you have described?—Yes, I have observed it.

61,657. Then do you think that the enforcement of the close-time has operated injuriously?—Yes, in certain places, and in the Channel Islands especially it has operated injuriously.

61,658. Do you get any supply of small oysters from the Channel Islands to lay down on your beds?—No, I get no small ones. Last year there was a large supply of oysters from the Channel. They discovered some new beds.

61,659. Were they small oysters?—No, they were not brood; I never saw any brood from the Channel.

61,660. Do you think the Convention Act is strictly carried out in the Channel, and that it has entirely prevented the take of brood?—I believe the French evade the Convention Act, but not the English. I have known a case of French boats taking brood. They take the oysters very small.

The witness withdrew.

Mr. JAMES LOWE called and examined.

61,661. (*Professor Huxley.*) You are interested in the oyster-fishery question, I believe, Mr. Lowe?—I have been for a few years engaged in inquiring and examining into matters connected with oysters.

61,662. Will you be good enough to put us in possession of your views as to the points which you consider to be of importance?—In the evidence of the last witness, he introduced my name in connexion with the evidence given before the House of Commons in favour of the Herne Bay bill. Now it is quite true that I gave evidence before a committee of the House of Commons with regard to that bill, but it was against the bill; if you will permit me I will state the chief grounds upon which I opposed the passing of that bill.

61,663. Would your statement apply also to the passing of similar bills?—I think it would, and I will give as shortly as I can the result of my investigation. I may premise that I entered on the investigation at the invitation of the proprietors of a public newspaper whose attention had been called to the subject, and who desired only to see that right was done. They deputed me to go down and make an inquiry, and I went over the ground with considerable care. I spent a number of days there engaged upon what might be called a private public commission. I saw a great number of fishermen belonging to the neighbourhood from Essex and the coast of Kent.

61,664. (*Mr. Lefevre.*) Does the statement you are about to make to us call in question the propriety of granting the Act of last session?—No, I will only give such reasons as will apply to other cases. I found that upon the ground applied for by that particular company there was already existing an important public fishery. From the neighbourhood, including a distance of 30 miles, there were boats constantly fishing over the ground, not only from Whitstable, but from Faversham, Leigh, Queenborough, and all parts of the estuary. I found that a fishery existed there which was estimated to be worth from 16,000*l.* to 20,000*l.* per annum, and I found that a company was applying with a capital of 100,000*l.* for the exclusive right to a valuable fishery of that nature already existing. I found that upon this ground there fell periodically, from time to time, whenever a plentiful spat occurred, a large crop of brood, and there could be very little doubt that the majority of that spat, in fact ninety-nine hundredths of it, came from the stock of oysters belonging to the Whitstable and Faversham Companies. It was, in fact, their spat, but having fallen on common land it became public property. In the evidence of the last witness he stated that in 1858 something like 40,000*l.* worth of spat was recovered. Now the Whitstable Company told me that in that year they purchased to the tune of 73,000*l.*, and all that was recovered by the public fishermen of the estuary.

61,665. That spat would be obtained from a considerable extent of ground?—It was obtained from the ground round the flats. With regard to the flats a good deal of dispute has arisen. Geographically they extend over the whole of the estuary, but I believe that the most valuable portion of the flats, upon which the spat fell in the greatest quantity, was that which has been taken by the Herne Bay Company.

61,666. That happened to be the case in that year?—I believe it is always so whenever a spat falls. The actual fishing is confined mainly to the piece of land taken by the Herne Bay Company. Under these circumstances it appeared to me that what was being asked for was a great injustice to the public of the neighbourhood. I leave out of the question the general public of England as being only entitled to a secondary consideration. There was, however, an actual public in the neighbourhood getting a living from this ground, and I found on reading the bill that the company proposed to do a great many other things besides oyster culture. They proposed, for instance, to build piers, make a railway, and Sir Charles Fox in his evidence told us——

61,667. (*Professor Huxley.*) Allow me to interrupt you, Mr. Lowe. It is necessary for us to avoid entering into a discussion of a question which has already been settled by Parliament.—I know that, and I will try to avoid it as far as possible.

61,668. I think it would be better if you would confine what you have to say to the bills which are now before Parliament?—I will take this case. Suppose that an application of a similar kind was made, and it was known that the 100,000*l.* which the company proposed to raise is not to be spent in cleaning the ground and stocking it, but that it is the intention of the company to spend from 70,000*l.* to 80,000*l.* out of the total capital in works, such as the building of piers and railways, then I should say that the remaining 20,000*l.* would be very insufficient, after paying the expenses of the Act of Parliament, for stocking the ground, and doing the work necessary to be done upon it.

61,669. You would take that as a *primâ facie* case that the company did not intend to do what they professed to do?—Yes, they could not do it. With regard to the hot-water scheme, I always regarded that as absurd, and Mr. Croft, who was the patentee of that process, has not I believe proceeded with his patent. Indeed, I believe that part of the Herne Bay bill in the present session is to enable them to withdraw all those clauses from their scheme.

61,670. There are two bills proposed before the House now, one of which is the extension of the powers of the Whitstable Company, and another the extension of the powers of the Herne Bay Company?—Yes.

61,671. What objection have you to those bills?—I have made different inquiries with regard to them, and I understand that the Whitstable Company is applying for its bill on the ground of self-defence. The argument, and it appears to me to be well founded, is that Parliament, having sanctioned the granting to a private company of this large tract of the flats upon which the spat has hitherto fallen, and most of which must obviously have come from the Whitstable and Faversham grounds, cannot refuse the same privileges to them. Hitherto they have been compelled to buy as it were their own spat at a price which has been fixed by public competition. They have had to buy their own spat from the free fishermen in the mouth of the Thames, and the price has to some extent been kept down; but now if this common land is to be enclosed and handed over to a private company, they will be subjected to a certain extent to the monopoly of that private company, and will have to buy their own spat back from the Herne Bay Company. Therefore they say, "as Parliament

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" has sanctioned the granting of a portion of this " ground to a private company, they cannot deny us " the grant of a further portion of it." As I understand there is no intention whatever on the part of the Whitstable people to cultivate a single oyster on the ground they apply for except colourably. Indeed it would be absurd to suppose that they could do so, for it is at least a dozen miles from their own ground, and they would have to organize a fresh fleet of boats, and to take steps which it would be absolutely impossible for them to take. They are really applying for the common land in order to enable them to dredge for spat. They say " you have established this principle in the " case of the Herne Bay Company, and you cannot " deny us the same rights." It is bad in principle, but having been already recognized by Parliament I think they are right in the claim they make.

61,672. (*Mr. Lefevre.*) The two cases are somewhat different. The Herne Bay Company profess that it is their intention to cultivate the ground for oysters, but the Whitstable Company do not profess that?—The Herne Bay Company have professed a great deal, but as they have performed nothing, I think you ought to attach value to their promises in accordance with the manner in which they have performed them.

61,673. You are aware that the operations of the Herne Bay Company have been to a certain extent impeded by legal questions raised between them and the Crown as to the rent they shall pay?—I know there have been legal questions raised, but I think they have been still more impeded by want of capital.

61,674. And also by the difficulty of procuring spat to lay down?—No doubt.

61,675. So that last year would hardly be a fair year to judge of the operations of a private company of that kind?—Quite true; but if there had been any amount of spat in the market, I do not think the Herne Bay Company would have been in a position to have laid down many oysters there. The promoters of the bill declared in the House of Commons, in answer to a question put to them, that nearly the whole of the capital had been subscribed; but four months after that the directors acknowledged at the first meeting of the shareholders, that only a quarter of the capital had been subscribed. As the capital is fixed at 100,000*l.* you know what would be left for stocking the land and carrying on the works after paying the expense of promoting the bill in Parliament.

61,676. (*Professor Huxley.*) Do you object *in toto* to the principle of granting to companies rights over the fishing on certain parts of the foreshores for the purpose of cultivating oysters?—My own opinion is, that if it can be shown that a valuable public right already exists, the allegation of any private company or persons that they can do better with the land or make it more profitable should not cause that land to be confiscated.

61,677. Is not that which should rule these things, in the long run, the interest of the consumer and the general public?—Yes, within bounds. I do not think, for instance, that if a market gardener said " I can grow " more potatoes in your private ground than you can, " that would establish his right to have it handed " over to him." If it can be shown that a valuable right exists, and that the public of the neighbourhood are deriving a considerable income from it, I do not think that any argument of that kind ought to cause Parliament to hand it over.

61,678. Take the case of a common on which there are a few donkeys grazing, and where the right to the common may be worth a few shillings a year to the poor persons in the neighbourhood, and that it could be demonstrated that, by enclosure, the common would yield a considerable quantity of wheat, would not that be a ground for compensating the persons who would suffer in some fair and reasonable way, and then turning the common to account?—In the first place I do not think that that is a parallel case.

61,679. But let us have your opinion with regard to the principle first?—It would depend altogether upon the value of the common to the public. It might be that the value of the grazing of the donkeys would only be worth a few shillings, but the advantage of the common and the fresh air there might be of considerably more value to the public, so that they might have a fair right to say that it should not be enclosed.

61,680. That alters the question.—The case in this individual instance is not the case of a few shillings a year, but of a fishery worth 20,000*l.* a year to the public in the neighbourhood. It is proposed that that should be handed over to a company with only a capital of 100,000*l.* to work it with.

61,681. Is it not always possible, however much private persons may get out of a given area, whether of sea or of land, that by conferring upon a body with capital a certain right over that area, very much more might be made out of it, and more employment given to the public and more money spent among the people of the neighbourhood, so that they would become really benefited by the change?—Yes.

61,682. There is always that possibility?—Yes.

61,683. You would not in similar cases absolutely deny to Parliament the power to make a grant of such ground, but would rather require that evidence should be given to show that the ultimate benefit would make up for the loss?—It is impossible to answer a question of that nature shortly, but I will say that I think the principle, as you put it, is a mischievous one.

61,684. I wish to know if that really is so?—I think it is a mischievous one, although I do not say there might not be an infinity of exceptions.

61,685. Is not that the principle upon which all compulsory grants for railway purposes are made?—Yes, and at the beginning of the railway system no one complained more loudly of it than the landowners.

61,686. Just so, but is not that at the bottom of the granting of rights by Parliament to companies?—It is a question of degree altogether.

61,687. Not the absolute value, but the relative value?—Yes; for instance, if it were a comparison between the value to the public and the advantage obtained by the public in the way of health, then the health of the public should be supreme.

61,688. But if the Herne Bay Company or any other company are enabled to give more employment to the people of the neighbourhood than they deprive them of, would not that be a compensation?—Certainly not; for example, over the flats in Herne Bay before the passing of this bill there had been working at a moderate calculation from 200 to 300 fishing boats; each of them had a man and a boy, or a man and two boys, or two men and a boy. Those boats came from Queenborough, Whitstable, and Leigh, and all parts of the estuary, whereas a private company would at the outside employ only a dozen or 20.

61,689. (*Mr. Lefevre.*) Those boats come now only occasionally?—They come regularly all the year round. I am told that the cod fleet that fishes on the Dogger Bank buys from the fishermen of the estuary of the Thames about 8,000*l.* worth of whelks every year for the cod fishery, and I believe that the majority of those whelks are caught off this very ground.

61,690. The flats fished over extend over an immense area of ground?—Geographically speaking the flats are very large indeed, but for oyster-fishing perhaps they are very small in extent, and the most valuable part of them has been taken by the Herne Bay Company.

61,691. (*Professor Huxley.*) Supposing that the fishermen have obtained an income of say 8,000*l.* a year from the flats which are now confiscated, would it not be worth while for the Herne Bay Company, or anybody who possesses that ground, to obtain the same revenue in the same way, and to pay the fishermen equivalent wages?—I do not think they can, for the reason well stated by a former witness, that a joint-stock company would not be able to employ the same number of boats. At present there are from 200 to 300 boats working over the ground, but the Herne

Bay Company would never employ that number of boats.

61,692. (*Mr. Lefevre.*) But might they not do it in some other mode? Might they not license boats?—They never would. In the evidence of Mr. Ffennell before the committee of the House of Commons, he thought it would be improper to reserve to the fishermen of the Thames the right of trotting for whelks, on the ground that it would be injurious to the oysters.

61,693. But if there is a valuable oyster fishery established there like the Whitstable oyster fishery it would be more valuable to the public than if the ground is allowed to remain for the cultivation of whelks?—They cannot make a valuable oyster fishery there.

61,694. That I think is really the point in dispute between you and the Herne Bay Company. They say they can make a productive oyster fishery of it, and you say that they cannot. Is not that so?—That is one of the points.

61,695. Supposing that in any of these public grounds you could ascertain who the fishermen were who had been in the habit of fishing there, and could incorporate them, and make as it were the fishery a private property for that company of fishermen, would they not readily accept the change, and would it not be of more benefit to the public generally than by leaving the ground open to the public as it is now?—I think it very likely that they would accept it, and as far as my opinion goes it would be better that it should be so than that the ground should be handed over to strangers. If anybody is to benefit from a monopoly it should be the people of the neighbourhood, but I would prefer to leave it open to the public.

61,696. If that were done would there not be a larger produce from the ground?—Of course if a man had an allotment on a common he would cultivate it, and increase its value.

61,697. The result would be a larger produce from that piece of ground?—Yes.

61,698. By the cultivation of the spawn would not a great deal more be got off it than at present?—I have some doubt of that. The bill abolishes all forms of fishery but one, and I do not know whether they would be able to make 20,000*l.* a year, assuming that to be the value of the fishery at present.

61,699. Putting aside the case of the Herne Bay Company, let us take the case of that piece of ground which lies between the ground of the Herne Bay Company and that of the Whitstable Company?—That small piece of half a mile?

61,700. Yes. By converting that into a private property and cultivating it, would there not be to the public a great deal better produce than there is now?—There is a peculiarity about the Whitstable ground on one side, and the other ground on the other. Whitstable is peculiarly situated. You spoke some time ago of the spit of sand running out there. Now that is not sand, but it is a natural breakwater composed of clay, stones, and shells. It is a natural breakwater, and it shelters Whitstable Bay from the east, producing that tranquility which is essential to the successful cultivation of the oyster. As to the land to the east of Whitstable Street, which is the name of that spit, I do not believe, and it has yet to be demonstrated to my satisfaction, that it is possible to cultivate a strictly marketable oyster in the proper sense of the word on that land. You may do what you like with that ground but I do not think that you will ever get a fat marketable oyster from it; it is open to all the east winds, and it has a shifting bottom. You have only to look at the shore and the cliffs to see how the east winds which prevail silt and shoal up that loose bottom. The shore has to be protected by groins from being torn to pieces. The only oysters I ever saw dredged off that ground were poor, small stunted oysters.

61,701. Then I understand you to say that east of that spit of sand there cannot be a cultivation of oysters in the strict sense of the term?—In my opinion decidedly not.

61,702. Supposing that the cultivation were possible along that piece of ground, would it be more beneficial to the public that it should be cultivated or kept open?—That would be a question of degree. If it were shown that there was a valuable fishery open to the public and worth 20,000*l.* a year, I do not think that any calculation or advantage ought to induce Parliament to confiscate it.

61,703. (*Professor Huxley.*) Not if you could make 100,000*l.* or 200,000*l.* from it?—No, not unless you could guarantee that the men who now get their living from that ground would be compensated for their loss.

61,704. (*Mr. Lefevre.*) I suggested that by supposing there might be some incorporation of the fishermen who had been in the habit of fishing there?—They have been fishing there ever since the Conquest I believe.

61,705. I have suggested a mode of meeting that difficulty by incorporating the fishermen and giving them on that ground an exclusive right of fishing, something in the mode in which the Whitstable fishermen have a right to their ground. If that were done would there not be an advantage to the public generally?—I believe that the Whitstable fishermen derive their privilege from an ancient charter.

61,706. That amounts to the same thing as an Act of Incorporation incorporating the fishermen who have been in the habit of fishing there?—Yes.

61,707. And giving them the profits of the labour expended on the ground?—I am not going to defend the system of the Whitstable Company; I believe if their ground had been open to the neighbourhood it is possible that the oyster beds would have been got into quite as good a condition as the Whitstable Company have got them into.

61,708. Do you think that by throwing the ground open to the public generally, so that anybody might fish there, anything like the same quantity of oysters would be found?—There would not be many laid down. The same amount of stock oysters would not be purchased, but I do not know that the actual result would not have been the same.

61,709. Do you think that the prospect or possibility of getting a spat once in seven or eight years would be anything like as valuable as what is done there now?—There might not be the same amount of oysters.

61,710. (*Professor Huxley.*) Upon what principle of English law or custom would you give the inhabitants of the neighbourhood an indefeasible right to the produce of the sea in any particular locality?—I do not say that they have a complete right, but in all cases when commons have to be enclosed it is always understood that the neighbourhood should have its rights considered.

61,711. Is there anything at the present moment which prevents persons from any part of England from coming and dredging to any extent they please on these public grounds?—No.

61,712. Is it not possible for the shipowners at Hull to send vessels down to the common ground off Whitstable and dredge it as nearly bare as possible?—Yes.

61,713. So that the law admits no right on the part of the inhabitants of the neighbourhood?—But if it was proposed to enclose that ground, I apprehend that the voice of the people of the neighbourhood would be heard in preference to that of strangers.

61,714. If a man living anywhere in England, as has happened on other parts of the coast, were to send down a steam dredge, and to clear away every oyster he can find for his own purposes, he could do so?—Yes.

61,715. Then in that case he would clear away so much of the means the immediate neighbourhood have of obtaining a livelihood?—Yes.

61,716. And there is nothing to stop him either by law or by custom?—No.

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61,717. So that the law does not recognise the smallest right of property in the produce of the sea?—No.

61,718. The question is as to the general abstract rights. You are of opinion that the fishermen have a right to the foreshore for themselves and their heirs for ever. That, however, is not recognised by the English law, but the law admits that every Englishman has as much right to clear away the oysters from these particular grounds as the inhabitants of Whitstable and the neighbourhood?—That is so, but practically it would be almost impossible to do that, although there is no doubt that an oyster-bed has been dredged up and taken away. I remember an instance in the neighbourhood of Alderney in which a large oyster-bed was completely destroyed in that way in a short period.

61,719. We have had cases of that kind brought before us?—But in this case the neighbourhood practically has obtained a living off the ground and so far there has been nothing to tempt the steam dredge to come, nor could it have cleared the ground if it had come. In point of fact, it would be impossible to destroy it.

61,720. I put the case to show you that there might be a strong argument made out for giving grants to private companies in order to preserve the fisheries for a neighbourhood; that being the only means of doing it. You see it is quite possible to turn the argument round?—Yes.

61,721. Therefore we have to consider that question as well as the other which you have raised?—Yes, I should like to make an observation with regard to the French process of oyster culture of which I have seen something. The gentleman who was last-examined seems to have made some experiments in which he failed and from that he seems to have drawn the conclusion that all the different processes which have been tried are to be regarded as failures. Now I have seen them at work and successfully.

61,722. What part of France do you refer to. Do your remarks apply to the Isle of Re?—No, I did not go there. I went to the Baie de Forey, where there is a great nursery for oysters. A large oyster park has been established there at considerable expense. They rear the oysters and distribute them among the cultivators from the Isle of Re and along the coast of the Bay of Biscay. The only system in practice now in France is the tile system. All the others have been abandoned, but the tile system is largely practised in the Baie de Forey. There I saw the oysters myself. They attach themselves to the tiles which are coated with a kind of cement. The tiles are laid on that part of the shore called ebb-dry, between high water mark and low water mark; I believe they are never placed below the lowest low water mark. At the Baie de Forey a portion of the ground was exceedingly muddy when they began the experiment, but the gentleman under whose able superintendence the works were carried out, informed me that it was by the tiles themselves that the shore was cleared of mud. They were so arranged that little rills of water passed under the tiles forming a current which swept away the mud. I see from M. Coste's own report of what is going on in the Isle of Re that exactly the same thing occurred there. What would be the effect of putting the tiles below low water mark where they would be always covered with water, I do not know, but by the arrangement of the tiles as I have described, it seems that the shore may be entirely cleared of mud.

61,723. In what way were the tiles disposed?—In various ways; that depends entirely upon the configuration of the shore.

61,724. Have they no special rule upon that matter?—No, it depends entirely upon the locality itself. It may be advantageous to lay them in one way in one locality and another way in another locality.

61,725. From what you have seen are you inclined to believe that that mode of catching oyster spawn is useful and profitable?—Yes; I do not know whether it would answer in England. I saw some tiles the other day which were shown to me by Mr. Mitchell the secretary of a company in the neighbourhood of Southend, who are acting without an Act of Parliament, and I counted 16 spat on one tile.

61,726. Was it obtained in the neighbourhood?—Yes, on the Essex coast; and as this has been a very bad year for spat, I should argue that if you got tiles with spat upon them under such circumstances, in a good year you would have more success. At the same time I may say that the success of the French process has not been demonstrated, so far as I am aware of, on any part of our own coast.

61,727. Have you been as far south as the Bay of Arcachon?—No, I did not go so far as that.

61,728. (*Mr. Lefevre.*) Can you give us any idea as to any mode by which the oysters may be increased in the mouth of the Thames generally? Have you any suggestion to make on that point?—No. Assuming that the French process has succeeded it could only be carried out on the foreshore and not in deep water. It might be advisable to grant portions of the foreshore for that purpose, either to private individuals or to a company. The outlay would be exceedingly small. By that means tiles might be laid down in favourable spots which would collect spat that would otherwise be destroyed. In that way the spat instead of being destroyed would go to the enrichment of the estuary. At the same time I am not aware of any process whatever, whether by hot water or by Act of Parliament by which a spat could be created where no spat naturally exists.

61,729. Would you be in favour of granting a portion of the foreshore of the estuary of the Thames for that purpose?—Yes, on any part of the coast where the fishery would not be interfered with. If it can be shown that the French process is successful, I think that the utmost amount of encouragement should be given to individuals or to companies to adopt that process for the purpose of increasing the spat.

61,730. But you would not grant land for that purpose, where the right of public fishing already exists?—No, in that case I would leave it alone.

61,731. Would you make any regulation as to the size of the oysters to be dredged up on the flats or elsewhere?—I think that is a matter which might be left to the oyster dealers themselves. If they brought in oysters too small or too large they would not be able to make a market of them.

61,732. You do not think it desirable to require oysters of a certain size to be left on the ground for the purpose of breeding?—I think the fishermen would be the best judges of that themselves. Of course if you granted portions of the foreshore for the encouragement of oyster breeding, you would have to give a right in the oysters.

61,733. But on the public grounds would you enforce a regulation as to the size of the oysters to be dredged?—I think not; I do not see how you could enforce such a regulation.

61,734. You could enforce it, because it is enforced in the Channel now?—It may be enforced on the company's ground, for they have receivers, and when the fishermen bring their stints home they are examined, and I believe they have a kind of ring, through which the oysters are passed.

61,735. But on the flats would you restrict the taking of oysters below a certain size?—I would prefer not to answer that question; I have not thought of it.

61,736. Is there any provision in the Herne Bay Company's Act, that they shall raise a certain proportion of oysters per acre?—I am not aware of any provision of that kind.

The witness withdrew.

JONATHAN RUSSELL called and examined.

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61,737. (*Professor Huxley.*) You are the agent of Mr. Wills?—At the present moment, I am carrying on a fishery for him in the Stour.

61,738. Have you been long acquainted with oyster fishing?—Yes, all my life.

61,739. You have heard the greater part of the evidence which has been brought before us to-day?—I have.

61,740. Is there any part of that evidence which you would wish to comment upon or supplement?—There is a good deal of it from which I differ, but perhaps you will allow me to begin in my own way. I do not think it necessary to say much about the breeding question; doctors differ about that; but what I wish principally to call your attention to is the close-season. I am about to cite certain instances to you, and if you wish for further proof you can follow my statement up by evidence from the neighbourhood. The first ground I remember under the free system before the Convention Act was passed, was the ground in Langston and Chichester Harbour. In that place there were immense quantities of oysters always produced and there the fishermen had an agreement among themselves that they should cease working towards the end of May, and begin working again about the middle of July. Under that, which might be called a free system, the oysters were never known to flag, but there was always an immense quantity to be had. Half the supply that came to London of what was called Kelleys or a second sort of natives came from there, but since the Convention Act came into operation and restrictions were adopted with regard to working on the ground there have not been half so many fishermen as there were formerly, and the stock of oysters has failed entirely.

61,741. To what do you attribute that?—I attribute it to the loss of the ground, in consequence of its being over-run with vermin and covered with slob, owing to its not being worked well in summer. The same remarks will apply to Falmouth harbour and the bays of Arklow and Wexford. In those places there has been a loss of ground and oysters from the same causes, although the fishermen have increased there in number, but that has not been in consequence of any increase in the oyster fishery, but because they have gone after herrings and floating fish; in point of fact their ground has almost been lost. When first I went to Arklow to purchase oysters, I could purchase as many as I pleased for a shilling the herring barrel, holding 37 gallons; now you could not get any at any price; there is no quantity to be obtained and the stock has been dying away every year until it became almost nothing.

61,742. (*Mr. Lefevre.*) When were you last at Arklow?—Twelve months ago. The prices have greatly gone up. As I just told you, I have purchased there for a shilling a bushel many hundreds of thousands of oysters. The boats could catch 100 bushels in five hours, and now they could not catch 100 bushels in a month. The number of boats has increased there because the fishermen have turned their attention to the herring fishery. I brought about a reformation in the mode of dredging. They used formerly to dredge like the Frenchmen, by throwing the dredge overboard and allowing it to remain in the sea for an hour, bringing it up then full of oysters. I made them use a smaller dredge, after the English fashion, and they adopt that system now; but ever since the restrictions were enforced the oysters have gone away. It has been the same in the Jersey Roads on the Gorey side. Before the restriction adapted by the States with regard to the oyster fishery there was an immense amount of oysters; the fishermen used to work in all seasons except for a few months in the year, and they were able to obtain an enormous quantity, but the States passed a regulation shutting up the ground from the last day of April to the first of September, and the fishery has failed ever since. It has been the same in the Bay of Cancale. The Frenchmen tried years before there were restrictions here to restrict their own fishery. English boats used to go into the Bay of Cancale and work there, and they could get 100 or 200 bushels of oysters in a night. Whole fleets of boats worked in that place, but since the Convention Act has been enforced that fishery has nearly failed, and I attribute the failure to the oysters not being properly worked. It has been the same in the Bay of Granville, and all up and down the south coast of England. When I was young and in business there was an ample supply of oysters from one end of the kingdom to the other. Upon the grounds on the eastern shore the boats used to work for supplying private beds in different places in the summer, and there was always plenty of oysters to be had on all the spots they worked, but since the Convention those grounds have not been worked. The fishermen cannot work them in the winter, and in the summer they are not allowed to do so; the consequence has been that those grounds have been entirely lost. You could not find an oyster upon them now. The same has been the case in the Bristol channel and at Milford Haven. Those are the observations I wish to make with regard to the close time, and what I think would reinstate the oysters is to abolish the restriction altogether as to the time of working, but to put a restriction upon the selling of oysters for the market. I would require that no oysters should be brought in the summer months into the market for sale; they would only be caught then to supply the private grounds exactly at a time when they are wanted. That would keep the ground open, and it would bring the stock back to its original standard, in my opinion. As to the spawn of the oysters, one or two of our friends here have said a good deal about that question, but I would say, as the result of my own observations, that there are only 10 out of every 100 that spawn every year. If you take 100 oysters and open them, you will find that they will not average more than one in 10 in the worst milky times. If you take them all through the breeding times you will find that the average as near as you can fix it is about 10 in 100. There will be 90 oysters out of every 100 that will be as good and fit for food as ever they were, while the rest will be spawning. Mr. Smith told us that the oysters will breed when two years of age, but never in the course of my observation did I find one breeding at so young an age. (*Mr. Smith.*) I have seen the sickness coming from them at that age. (*Mr. Russell.*) As to the French, it is said that they have invented something new, but in my opinion they did not know what the system here was. All they have done has been done in England longer than the oldest inhabitant can remember.

61,743. (*Professor Huxley.*) The system of using tiles has not been tried here?—The system is simply the old mode of using culsh. We take a piece of ground, clean it, and cover it with culsh. That the Frenchmen use tiles I give them credit for, but they have not discovered any mode for the artificial breeding of oysters. The ebb-dry grounds are not as a rule good for spat, but they are very good for laying down oysters for the market. As a rule they do not produce a great number of spat. We prefer deep-water, from 10 to 18 feet, where the beds are never dry, and those beds we find the most prolific. We cover the ground well over with culsh. Upon a piece of ground covered with mud or clay we should not be able to find a spat, but when it is cleaned and covered with culsh we should. I do not believe that the French ever breed any bulk of oysters. There are many things in the book of M. Coste which I could prove exist only in his imagination. I do not believe that the French ever bred 10 tubs of oysters in their lives. We find that in the French markets there are a good many oysters sold for consumption, but they do not get them now on the coast of France. Originally they used to get them from Granville, St. Brieuc, and Cancale, but they do not get them

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now. Those grounds have failed, and have become covered with five-fingers and slob. There are no places for the oysters to settle upon now, and they have to come to England to get their stock. They are in every market in England buying their stock. If they breed the immense quantities they say they do why do they not send them to the market? Notwithstanding all M. Coste's calculations, you cannot find out where he has sold the immense supply which he pretends to have produced. If they have so great a supply there, why do they come here and pay prices that were never heard of before? They go to Arklow, to Falmouth, to Shoreham, to Newhaven, to Wexford, and other places, and they pay fabulous prices for oysters.

61,744. We are informed that they do not profess to realize more than 5,000*l.* a year by the oysters from the Ile de Re?—No. (*Mr. Smith.*) I can quite confirm your remarks in reference to the production of oysters on the French grounds. (*Mr. Russell.*) Now I could go upon any ground and pick up a piece of culsh with perhaps 50 or 60 spat on it. I might then say I have 20 acres of ground and all the stones I have on that ground are in the same state. Then I calculate how many stones I have and I take it for granted that that is the number of my stock. That is the way in which the French people have calculated. In our places here we can go upon the ground and find stones covered with almost any number of spat. Sometimes I have found spat so thickly clustered together that it would be impossible to count them unless you marked them. If I were to say I have so many stones on my ground and they are all in the same state, and if I were then to make a calculation in that way I could easily show the same figures as M. Coste, but the probability is that I might not find another stone on the ground like that one. There is a great misconception with regard to oyster dredging in France, and as to granting large tracts of the public grounds to private companies I do not object to it myself in any way except that it will destroy the fishermen. That it certainly will do if it is carried out to the same extent that it has been carried out in Herne Bay. I do not think that the Government nor any one else should restrict whelk fishing or fishing for floating fish upon those beds, because I believe that instead of lining or dredging for whelks over the oyster beds doing any injury, that it is quite the contrary. I think the fishermen at every oyster fishery should be allowed to fish for whelks so long as they do not disturb the oysters. I do not say that they should dredge, but they might use both the line and the net. If these grounds are to be made valuable, and if these private companies mean honestly they must employ fishermen to work them, and I think they ought to be required to employ a proportionate number of men to that which is now employed on the ground they desire to take; Parliament ought to lay that down as a rule.

61,745. Is it necessary that any grant should be made beyond the limits of the foreshore for the successful cultivation of oysters?—Yes, you must go into the deep water if you are going to cultivate oysters. My father's place was one of the most beautiful ebb-dry grounds in the world. It was at the head of a salt-water lake that runs towards the sea into the harbour. My father had it for many years; my brother has got it now. There were about four feet of water over it at the time he first got it, but by levelling it and improving it he got an uniform depth of two feet, and the tide runs over the ground at about three knots an hour; freshets also come down and give it just sufficient fresh water, but although 20 bushels of oysters were lying there, on the average, no spat was ever found there, but immediately below in the deep water any quantity of spat could be got.

61,746. Below that ground, was the ground public?—Yes.

61,747. Could you not get enough spat by fishing to supply it?—Yes, but it would have been very profitable if we could have extended our rights half a mile further down.

61,748. (*Mr. Lefevre.*) Where was that ground?—At Langston harbour; New Milton it was called. We were attacked there by the fishermen in a body after we had held the ground for forty years.

61,749. (*Professor Huxley.*) Were you forcibly attacked?—Yes by 200 fishermen in boats, and I want to call your attention to the inefficiency of the laws in that respect. I will do that by-and-bye. Something was said by Captain Austin about the spawn not living in stagnant water. I think he is quite mistaken, and when you are down at some of the places I am about to mention, you can verify the truth of my remarks by your own observation. You will find in the steam basin at Portsmouth, when they run the water off, the wall covered all over with oysters a foot or two below the level of the water in the basin. In Ramsgate basin the same may be observed. Now those places are stagnant; there is no current passing through them at all. At Cherbourg, and in the inner harbour at Dieppe the same may be observed. At Emsworth they supply a bath or a kind of stagnant pond with salt water; they pump the water both in and out of the bath, and yet that place is covered all round with oyster spat. You will also find a remarkably large number of oysters all under the arches of the royal dock at Grimsby. I never saw so many in any place. All the walls are built on arches, and when they run the water off you can see under them, and you see an enormous quantity of oyster shells where the boys have got down and opened them as they stuck on the walls. I have found the same thing in regard to every dock I have seen elsewhere, and that I think is a convincing proof that oysters will live in stagnant water. (*Mr. Smith.*) I can confirm the remarks made by Mr. Russell. We put them in pits in the spring, and if there happens to be no market for them until next season, when we go to them then, we find them in a much better condition. (*Mr. Russell.*) I think the facts I have mentioned form a convincing proof that oysters will breed and grow in such places. There is another place to which my attention was called in my early youth, and that is the canal that was cut from New Milton to Portsmouth, through a portion of the ground of Langston harbour. They pumped the water into the canal, and ultimately, when it was allowed to run dry, there were millions of oysters in different stages of growth found there.

61,750. Was the spat pumped up?—Yes; but the canal was a perfectly stagnant pool. Every bridge, every buttress, and every pile in the canal was covered with oysters. You may see the white shells sticking there now. There were more there than ever I saw anywhere, except at Grimsby. At Grimsby there was an immense number.

61,751. Have you any remarks to make with regard to the protection of the oyster beds?—I have experienced the want of protection two or three times in my lifetime. I have always had to do more or less with the oyster trade, and the first time I found the oyster Acts not sufficient to guard us, was upon my father's ground. He held a lease from Lord Keith. He ran out the first lease, and was into his second, when some little political difficulty arose between the then landlord, Mr. John Deverill and Mr. Hector, M.P. for Petersfield. It was enough to breed ill-blood between them. Mr. Hector used to have a good deal to say about the fishermen, and by some means a notion got out that the fishermen could come on our ground and do as they pleased; they therefore organized an attack. They gave us notice that on a certain day they would come *en masse* to try the right. We pooh poohed the idea; we could not believe in such a thing; but sure enough, on the 1st of September, they did come, 200 boats of them, with two men in each boat, and made an attack upon the beds. I was the only person there, and I managed to drive them away; they were afraid that I would shoot them, and they ran way. I then procured the assistance of

the police, and I got some of them taken before the magistrates and committed, but when the case came on for trial they said they had not acted with a felonious intent, that they only came there to try their right to the ground, and although each one loaded his boat and carried away 10 bushels of oysters before he went away, the jury would not find them guilty. They came there again two or three times, and the magistrates refused to commit. We were powerless, and they cleared out every oyster. Since then there have been attacks made in the same fashion on several other grounds. I took some ground in the Menai Straits from the Woods and Forests and I worked there for three years. There had never been such a thing as an oyster fishery there before. The Welshmen were annoyed to find that a foreigner, as they called me, could go upon their ground and make such an immense trade out of oysters. I used to send across to Arklow for oysters. I got them for a shilling a bushel, and I brought them over for another sixpence a bushel. The ground suited them very well. They came off first rate, and there was no limit to the market. I was making a very large trade there, when the Welshmen, annoyed to find that they had never known the value of the Menai Straits, although they had been living there all their lives, organized an attack. They sent round notices, and had them stuck up, that they were going to try their right to the open sea. Placards were posted in every direction. Eventually, one fine day, they did come, about 150 boats of them, with flying colours. They made an attack on the ground. I got Sir Richard Balkeley, the lord lieutenant of the county, to interfere. He ordered a lot of them to be taken up, and they were brought before himself, Colonel Pennant, and other magistrates, and committed to the assizes for trial; but at the assizes the bills were ignored against them, and they came upon the beds again and worked there until they cleared the whole of the oysters out. I got injunctions, but they worked on in spite of them, the Lord Chancellor making some excuse that it was an *ex parte* injunction. So they went on until I was entirely beaten.

61,752. Your complaint is not so much with regard to the law as in reference to the administration of the law?—It is the law I complain of. The oyster Act says that it shall be done "feloniously," and that very word condemns the whole thing. They gave notice that they intended to come and try a right, and it was held that there was no felonious intent.

61,753–4. (*Mr. Lefevre.*) Had you a grant of the soil?—I had a lease from the Woods and Forests.

61,755. If, after the right had been established, they came again, the case would have been different?—That was the result, and that is the way in which the law stands at present. It is totally powerless to protect oyster grounds.

61,756. It seems to me to be the fault of the magistrates?—No. The point upon which they got in was in having informed us that they only did it to try a right.

61,757. That may be very well the first time, but if the right was established in a court of law by an injunction, or by an action for trespass, then the next time it occured the magistrates would not be justified in refusing to commit?—They can do it every day in the week, and I could not check them on the Bangor grounds.

61,758. (*Professor Huxley.*) Did you give it up?—Yes, in the Menai Straits; but on my father's ground we managed to beat them by a side wind, and we still hold the ground; but it was only by a side wind. The law says there must be a felonious intent, and what these fellows say is, "We do not come for the sake "of the oysters, but to try our right." But they carry out their idea of trying their right until they carry away all the oysters. The ground was so exposed that a fleet of 100 boats could go upon it, and after working for three or four hours go away with a boatload each. I believe they attacked the Chieney Rock ground in the same way, and they lost an immense quantity of oysters before the depredations could be stopped. Also down at Illford they carried away an immense quantity of oysters from the ground which Mr. Tyke leased under the Duke of Leeds.

61,759. Taking your own case at Beaumaris had there been oysters laid down there before you went?—No, there never was an oyster ground there before; there was not an oyster in the river.

61,760. Then it was not known that oysters could be laid down there?—No, the Welshmen did not know that anything of the sort could be done.

61,761. They said when they saw you doing it that it was a public right?—They knew perfectly well what I was doing, but there happened to be a clever lawyer there who saw exactly how the law could be cheated and acted upon it. It is impossible under the present law to get a conviction. You may depend upon it that you are altogether as powerless as though there were no law affecting the question at all. I tried the question under a second Act of Parliament, which says, that although people may go upon the oyster beds and dredge and disturb the oysters they are not to take them away, but they proved that they did take the oysters away, and they beat me there. What I want is to see some law passed simply to meet this case. Mr. Goody of Colchester told me the other day that he is going to get up an attack upon my ground in Essex, and that some of the fishermen there are going to take all our oysters. I believe they will do it if they are bold enough, exactly the same as they have done before.

61,762. You have got a grant from the Woods and Forests of the bed of the river?—Yes, for the purpose of an oyster fishery, and there never was an oyster fishery there before. There never was an oyster fishery above Strattonness. We are, however, in a somewhat better position there as there is a guard ship which can raise force enough to capture all the fellows who come. In the other cases we were away from everybody, and could not get anyone to take hold of the mob of fellows who came upon us. At New Milton we were a mile away from any habitation, and it was not likely that a single individual could stop a mob of 400 men.

61,763. (*Mr. Lefevre.*) You are talking now of Langston Harbour?—Yes.

61,764. Are there any private beds there besides those you have been speaking of?—Yes, there are several.

61,765. Do the owners of those beds purchase oysters for fattening?—Yes, there are persons there who act as a kind of middlemen between the fishermen and the people who send to the London market. Our trade was to buy small oysters, to lay them down for one year, and then sell them to people from Whitstable and other places, who bought them to lay down for another year, after which they would go to the London market.

61,766. Has that trade been done away with in consequence of the Convention?—Yes; we used to buy and send away small oysters principally in the summer—in the close-season. Now, we have no chance of getting them, and consequently the oysters and the ground we got our stock from have perished together.

61,767. Is your trade confined to getting larger oysters, and keeping them for the market?—Yes.

61,768. Do you supply the London markets during the summer?—Yes, by rail.

61,769. So that the London markets do get supplied?—Yes, by rail.

61,770. During the whole of the year?—Yes; we buy enough in the open-season to last during the whole of the close-season.

61,771. The whole of the close-season?—Yes, and those oysters are sent to London by rail; hence they avoid the restrictions with regard to the sale of oysters in London. All the laws for London are made for oysters that come up to London by water.

61,772. Does the price vary very much from that which is paid during the winter?—There is very little difference; it is about the same.

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61,773. Of those which you send to market at that time about 10 per cent. are unfit for food?—Yes.

61,774. The rest are fit to eat?—Yes, they are as good as at any time of the year.

61,775–81. (*Professor Huxley.*) We took evidence at Arklow last year, and they made statements to us very different from those which you have made to-day. For example, one of the witnesses, Thomas Colvin, a fisherman, was examined, and this was his evidence:—"Are there plenty of oysters to be found "here?—Yes, there is a good supply indeed. Does "the supply keep up?—Yes. Is it as good now as "when you first knew it?—Yes. There has been "no falling off?—No, I do not think there has been "any falling off. Has there been any increase in the "supply?—I rather think the oysters have been "scarcer in former times than they are now." You do not agree with that statement?—No, I think it is very wide of the real facts of the case. How old was that witness?

61,782. Here is one of the first questions we put to him: "For how many years have you been fishing "here?—For about 44 years." In reply to the question: "So that you have had from 40 to 50 boats "working for 30 or 40 years, and working for every "season, and the supply of oysters has kept up?"—He said "Yes, I have seen a time when we could not "get 100 shot in a fishing, and now we get some-"times 3,000 shot." Do you agree with that?—No, I think he spoke very wide of the truth, because at one time in Arklow Bay, immediately outside the bar, I was able to take a vessel capable of carrying 800 tubs of oysters, and boats would go to work close to where the vessel was riding and would load that vessel before night. I have loaded six vessels there in a very short time.

61,783. How many years ago?—I am speaking of 1848 and 1849.

61,784. How many years ago is it since you last obtained oysters there?—The last time I fished oysters there was in 1853, and then there had been a great falling off. I used to buy them there every year for the purpose of stocking my beds in the Menai Straits. At one time I got them for a shilling a tub, and I could get as many as I liked at that price; indeed I could get more than I could lay down in 1851, 1852, and 1853. When I last bought them I gave as high as four shillings a bushel for them.

61,785. That is capable of being reconciled with the statement here, because the witness when asked how long the scarcity lasted, said he had not seen any scarcity for the last 11 years?—There is a scarcity now; you cannot buy oysters for love or money.

61,786. (*Mr. Lefevre.*) Is it not rather a question of price. The price is very high?—There are none to be had. If you had asked Captain Austin he would have told you that it was not worth while sending to Arklow, because there are no oysters to be had there. The Whitstable people would be glad to buy them there if they could get them.

61,787. They would only buy small oysters?—They would buy them big and little. If there were oysters to be had there, there would be a drain upon that place within a month of at least 700, or 800, or a thousand tons.

61,788. (*Professor Huxley.*) Colvin, in answer to my question, "Does the supply keep up?" said, "Yes." He was then asked "Is it as good now as "when you first knew it?" and he again replied, "Yes."—He is certainly wrong, there is no comparison with regard to the supply. I have seen six large vessels loaded there in six days, and now you could not load them in six months.

61,789. I pressed the man upon that very point, and I have read you what his answers were?—His statement is quite untrue.

61,790–3. Here also is the evidence of Michael Doyle:— "Did you hear what the previous witness "stated in regard to the oyster-fishing?—I did. You "heard what he said with regard to there having "been oyster-fishing with a great many boats on the "oyster beds for the last 40 or 50 years?—Yes. And "that the supply of oysters upon those beds is as "good now as ever it was?—Yes. Do you agree "with that?—Yes, I do." You see he confirms the evidence of the previous witness?—It is altogether untrue.

61,794. (*Mr. Lefevre.*) Supposing it to be the fact that the Arklow fisheries have fallen off as you say, may not that be due to the want of spat as has been the case elsewhere?—Yes, to the want of spat occasioned by the slob and by the want of working upon the beds in the summer time.

61,795. On the Essex coast there has not been a good spat for the last five or six years?—No.

61,796. That is not due to the slob?—Yes, it is. It is due to the slob all over the Channel.

61,797. On the Essex ground there has been no restriction as to dredging?—Not so much, but there has been a restriction. There has been a failure in the spat, no doubt, on all the grounds, but in consequence of the spat having failed on the Essex public grounds, it has not been worth while for the men to work, and hence they have gone away to other places. The Essex ground has not been worked as much as usual.

61,798. Then two or three bad seasons are liable to produce other bad seasons in that way?—Yes.

61,799. (*Professor Huxley.*) It is quite clear that the Arklow men were agreed as to there being a good supply of oysters there?—It is quite clear to me that there are no oysters at Arklow. I wrote down there the other day, and I was told that they were very scarce indeed, and that they really did not think it would be possible to get 1,000 tubs in the course of a month.

61,800. (*Mr. Lefevre.*) We were there last year before the open season began?—It has been vastly decreasing and falling off since 1852. They had begun to decrease before that, but they have been going off fast ever since, and the prices have been going up because the stock has decreased. When I first knew the place, a boat could load itself in five hours. I have often seen it. I have gone off there and told them over night that I should want a load by to-morrow. In the morning I have hoisted my flag to tell them I was ready. I have seen the boats then go to work, and in the course of five hours they would be alongside the vessel with enough oysters to load her. Take 1850, that was an average season; the quantity of oysters bought there would be 30,000 or 40,000 tubs. Perhaps Capt. Austin would have got 20,000 tubs, Queenborough would have got 10,000 tubs, and five or six other individuals would take altogether about 5,000 or 6,000 tubs. Then in addition to that the whole of the Arklow merchants as they call themselves were running oysters over to Beaumaris until there was not room to put down a cargo. I myself bought there as many as 10,000 bushels to lay down in the Menai Straits. We had in the Menai Straits I should suppose about 200,000 bushels and as many as 100,030 of them would come from Arklow. Now there has been no catch like that within the last two or three years. Indeed the people have knocked off from going there because they could not get enough to pay them for having their vessels lying about. I believe the Frenchmen got one cargo shipped there of about 250,000 tubs this year, but they have not been able to get any stock at Dublin for their ground, and Liverpool, which always looked for a supply from Arklow, has had none.

61,801. (*Professor Huxley.*) Here is the official report of the Board of Fisheries, after an inquiry at Arklow, which took place in 1863. It is the report of the Inspecting Commissioner and contains the following statement: "The fishery by the Arklow "boats commenced on the 14th January and ended "on the 24th of May, the total catch was 34,038 bar-"rels of which 7,988 were disposed of on the Irish "coast, chiefly Dublin station."—I have taken more than that in one season.

61,802. You call that a small catch?—Yes, that

bears out exactly what I said. In 1850 we had in the Menai Straits 200,000 which had been brought from Arklow besides 30,000 which came round by land.

61,803. The paragraph goes on to say, "2,860 on "the Welsh Coast; 2,600 in France, and the re- "mainder 20,590 at London and Kent. The total "sum realized was 10,829*l.* 16*s.*" that is nothing very extraordinary?—Nothing.

61,804. "About 6*s.* 4*d.* per barrel, the ordinary herring "barrel of 600 to 700, and weighing about $1\frac{3}{4}$ cwt. "full." You consider that that bears out your impression?—Yes; there is no doubt it is a correct statement, but that bears no proportion to what was caught years back. There was a much larger quantity of oysters caught years ago, and yet there are double as many boats at Arklow now as there were in 1847; 1847 was the first year I went to Arklow to buy oysters; it was the year of the famine, and in that year I was able to get oysters at 4*s.* a bushel. They had very few boats there then; I believe there were not more than 25 at work, but as they continued to work they got more, and I believe the boats increased in number that year. I was there for several years afterwards, and each year more oysters were caught; they found out fresh spots and caught more oysters; then bye-and-bye there was a great rush of English and other persons there because there were immense quantities of oysters to be found, and large quantities were caught and taken away; then the fishery began to fall off, and that scarcity has continued from 1851 down to the present time. I have not been buying there since 1852, but if I am rightly informed you will find that the price has gone up until it has trebled, and more than trebled, but the quantity of oysters has greatly decreased.

61,805. Would you consider 6*s.* 4*d.* a barrel an extravagant price?—Yes; I have bought them there at 1*s.* a barrel, and I never gave more than 5*s.*

61,806. And you consider 30,000 barrels a small catch?—Yes, very small.

61,807. (*Mr. Lefevre.*) When did the restriction as to close-time begin to operate there?—If I recollect rightly I believe the Convention was in 1842, but it was not carried out there until 1849. I worked there in 1847, and then we worked at any time, and in 1848 we also worked at any time, but in 1849 we were restricted. They have been exceedingly strict since then, so much so that they would not allow persons at the Pigeon House at Dublin to load their boats with shovels.

61,808. Did you go to Arklow in the famine?—Yes.

61,809. And by your encouragement the people were induced to take to oyster-fishing?—Yes.

61,810. Was that branch of fishing very little practised there before?—Yes; very little.

61,811. Was it mainly in consequence of your encouragement that they took to it?—I think it was. I went to the priest and got him to preach sermons to them.

61,812. Was that Mr. Redmond?—Yes.

61,813. We had his evidence at Arklow?—I got him to induce them to change their dredges from the large dredge to a small dredge, and they have caught a great many more oysters since.

61,814. You attribute the falling off to the enforcement of the close-time?—In all private grounds we never look to the produce from that particular place to stock it; that may be an auxiliary but we require to buy oysters to stock the ground, and if we cannot buy them then the private grounds are influenced in consequence, the ground does not get as much worked as it ought to do, and it gets covered with slob; whereas, if oysters could have been obtained from the outside, the grounds would have been constantly full of oysters and would constantly have been worked. With regard to the leasing of large tracts of ground from the public ground to private individuals I think if that is done some compensation ought to be given to the fishermen who are in the habit of fishing there. For instance, in the case of the Herne Bay ground, if they mean honestly they cannot stock that ground without employing a great amount of labour, and there might be some provision made to provide employment for the fishermen.

61,815. (*Professor Huxley.*) What do you think would be the most practical measure for the encouragement of oyster cultivation round the coast?—Upon every eligible spot of ground I would allow them to form private beds but with this restriction, that it should be worked honestly as an oyster ground.

61,816. (*Mr. Lefevre.*) What would you do with regard to the open ground?—Upon the public ground I would take off every kind of restriction. You may depend upon it that fishermen would never work it to the injury of themselves; I would take off every restriction as to close-time, but I would make one further regulation, that from May until August no oysters should be sold in the market.

61,817. (*Professor Huxley.*) Not in any market at all?—No, not for consumption.

61,818. What does it matter in the long run whether they are sold for consumption or for the private grounds?—If they were sold for consumption a vast number would be wasted, which on the private grounds would come to maturity. Ten out of every 100 spawn every year, and if they are sold they are wasted, but if they are put on the private grounds they are protected.

61,819. Are they laid down in places where they will not breed?—Not once in 100 times.

61,820. Are the grounds they are laid on for the purpose of supplying the market not breeding grounds?—They abut on grounds where they do breed. The spat runs into the sea and although it may not fall in that particular place it will run to the next place; for instance the fall of spat from the Whitstable grounds runs over on to the flats. If they have 40,000 or 50,000 or 100,000 bushels lying on that ground 10 out of every 100 of which are spawning, that spat would be saved, but if they were sent to the market then 10 in 100 would be thrown away; you cannot eat them in a milky state like that.

61,821. No native oysters are sent to the market in the close-time?—No, only common oysters.

61,822. You have had a grant from the Woods and Forests of your ground?—Yes, in the Stour.

61,823. Do you pay rent for it?—Yes, we pay a very large rent indeed for it. Mr. Wills has agreed to pay a rising rent; the first three years so much, the second three years still more, and the third three years more still, until it reaches 1000*l.* a year.

61,824. What is the size of the ground there?—It is not very large; probably about 100 acres. Upon a portion we have got below that, down as far as Harwich, there has been spat, and there would be a good deal if the five-fingers had not cleared it off. On the part we have got from Evertonness up to Strattoness there never were any oysters; they have all been eaten up by the five-fingers, slob and the like, but we got a spat there last summer.

61,825. Where there never was spat before?—Yes, but we have laid a good many oysters upon the ground there; we obtained them from Falmouth and other places.

61,826. Are there a good many spots round the coast which might be used for oyster beds?—Yes; round about Langston and Chichester harbours there are. A good many years ago we tried to get up a company like the Whitstable Company, but Squire Padwick of Hayling Island opposed us; I tried to get a local Act for it, but I could not manage it, or otherwise it would have been a splendid place as a nursery for oysters.

61,827. By dealing with the fishermen in that way and by incorporating them like the Whitstable Company you would remove the difficulty of getting rid of public rights?—That is how it should be done.

61,828. That is the only mode in which the interests of the fishermen could be protected?—Yes; the people all round there work in row-boats both in Langston and Chichester harbours. The boats are small row-

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boats. They cannot go anywhere else, but I think if these two harbours were formed into a private oyster bed under proper regulations, and the fishermen working upon it were incorporated, there would be double the number of oysters produced there, and I take it that the fisheries form the best nurseries for seamen in the world.

61,829. In consequence of the difficulty experienced in preserving a property in oysters did you go up to the Board of Trade last year?—Yes.

61,830. What measure did you propose to the Board of Trade?—I proposed the measure which I now hand in, and which is as follows:

AN ACT for the better Protection of Property in Oysters.

Whereas localities abound on the shores, estuaries, and beds of tidal rivers throughout the kingdom favourable for the establishment of oyster beds or layings, and the formation of oyster fisheries, affording possible employment to large numbers of boatmen, fishermen, and others, and advantage to the public in the greater abundance and cheapness of oysters, the supply of which has become scarce:

And whereas the establishment of oyster beds or layings, and the maintenance of oyster fisheries involves a large expenditure of capital:

And whereas it appears that such beds or layings as have heretofore been established, or attempted to be established, have been at sundry times broken in upon by fishermen, dredgermen, and others coming in force, continuing to dredge, and renewing their attacks until the whole of the oysters and oyster brood thereon have been taken and carried off from the ground, and the fishery utterly broken up and destroyed:

And whereas it appears that such attacks are made under pretence of disputing the title of the owner or owners of such oysters and oyster brood to the exclusive right of laying oysters and oyster brood upon the grounds of which he or they claim the exclusive right and possession;

Be it therefore enacted by the Queen's most excellent Majesty by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by authority of the same, as follows:

1. That where any person or persons shall, as herein-after described, mark out any grounds lying under low-water mark as oyster beds or layings, and shall give such public notice of having done so as is herein-after provided, and shall proceed to deposit oysters, oyster brood, or spat on the space so marked out, the said oysters, oyster brood, and spat, shall be his and their absolute property, and shall belong to him and them exclusively, and any person who shall take or attempt to take, carry away, or destroy them, or any of them, shall be guilty of felony, and shall be punished in the same manner as for simple larceny. And in all cases in which, whether with notice of intent, or otherwise, persons assembling in force and dredging up, carrying off, or otherwise damaging or destroying the oysters, oyster brood, or spat on such beds or layings, or attempting to do the same, such assemblies shall be held to be riotous assemblies, and shall be dispersed as such, and it shall be lawful for the Coastguard, or other duly authorized persons, or officers of justice, to warn such assemblies off such oyster beds or layings, and in case of their refusal to disperse, to capture the vessels or boats of the persons so plundering or damaging the said oyster fishery, or attempting to do the same, and the owner of every such vessel or boat shall be liable to a fine of not less than five, nor exceeding twenty pounds and to confiscation of the vessel or boat, and the dredging gear thereof, or both, or all, at the discretion of the justice or justices of the peace of the district; and the master and crew of every such vessel shall be liable to a fine of not less than one nor exceeding five pounds each person, or to imprisonment for any term not less than 14 days nor exceeding two months.

2. All such beds or layings shall be below low-water mark, and be marked out by posts, with notice boards or buoys defining the limits of the beds or layings, and at least two advertisements shall be inserted in some newspaper circulating in the locality stating that such grounds have been so marked out for oyster beds or layings, and setting forth the nature or ground of the claim or title of the person or persons who has or have so marked out such ground to the exclusive right, whether by grant, lease, immemorial, usage, or otherwise, to lay and dredge oysters, and to cultivate and own the oysters, oyster brood, and spat within such limits so marked out. Provided, nevertheless, that the right to such ground so marked out as aforesaid for the purpose of oyster beds or layings shall in nowise interfere with navigation nor prejudice, prevent, nor lessen the rights of the public of taking or fishing for floating fish in any manner, or at any seasons permitted by law.

3. In case any person or persons dispute the right or claim to such exclusive use by any such alleged owner or owners of such ground so marked out it shall be lawful for such person or persons on giving to such alleged owner or owners three days previous written notice of his or their intention, accompanied by his or their full names and addresses, to remove one of the buoys or posts by which such ground is so marked out, and such removal shall be deemed a trespass on the said beds or layings, and equivalent to a removal of oysters therefrom, and sufficient to raise the question of title, and to compel the alleged owner or owners of the ground so marked out as aforesaid, and of the said oysters, to show and establish, by civil process in one of Her Majesty's superior courts of law, his right to the said exclusive use of grounds so marked out as oyster beds or layings. And in case such process shall not be issued or commenced within three calendar months from the date of the said removal of the said buoy or post as aforesaid the said alleged owner or owners shall lose and forfeit his or their said exclusive right and title to lay oysters, oyster brood, or spat on the said beds or layings so marked out as aforesaid.

4. This Act may be cited as "The Property in Oysters Act."

5. The word oysters shall include oyster brood, spat, or spet and all the other names by which oysters are known during their growth or preparation for market.

The word grounds shall include the sea bottom under low-water mark within shore limits, the bottoms of creeks, bays, harbours, and tidal rivers, and all beds and inclosures thereon for the protection and in increase of oysters.

The word person shall include persons.

The words buoys or boards shall include every description of distinctive mark defining the bounds claimed as oyster beds or layings.

The words floating fish shall include whelks and periwinkles.

61,831. There were also some reasons drawn up in support of the bill?—Yes, as follows:

REASONS in support of the PROPERTY in OYSTERS BILL.

The supply of oysters has within the last few years greatly fallen off, and is now very far below the ordinary demand.

The increased price has not led to an increased production.

It is perfectly easy to increase the supply.

Places suitable for the establishment of oyster beds, and cultivation and increase of oysters, abound along the shores and in the tidal rivers of the kingdom.

Oysters yield an immense natural increase, estimated at from one to two millions of young for each full-grown oyster in a single season.

The establishment of an oyster fishery involves a large expenditure, both in the preparation of the bottom, and in laying down a stock of oysters to grow and spawn upon the ground.

The bottom has to be cleaned from weed, mud, and from star-fish, five-fingers, green crabs, and other creatures that prey upon the young oysters.

In many cases an artificial bottom must be formed to a considerable extent of shells, small stones, &c., that the spat or spawn may adhere to it, and so be saved from being carried out to sea.

The oyster grounds, when stocked with oysters, must be kept clean at a large expenditure in frequent dredgings.

An oyster fishery, in proportion to its extent, will cost from 5,000*l.* to 50,000*l.* to prepare and stock it, and will require at least four years to bring any considerable portion of it into working condition.

Numerous efforts have been made within the last 25 years to establish and maintain private oyster fisheries.

All have been at one time or other attacked in broad day, and plundered by fleets of boats and fishing smacks, varying in number from five or ten to 150 or 200, and which, either in a single day, or by renewed attacks, have entirely swept the ground of all oysters and oyster brood, and totally wasted and destroyed the fishery.

Notable instances of this are the Helford Harbour Fishery, Cornwall, which, in 1838, was plundered to the extent of 50,000*l.* and destroyed. It was the property of the Duke of Leeds, and had been in the undisturbed possession of his family for 200 years. The New Milford Fishery held by Mr. Russell, under a lease from Mr. J. Deverill for upwards of 40 years, and then plundered in a few days of upwards of 20,000*l.* worth of oysters and brood.

The following is a list of further devastations of the like character:—

Names.	Dates.	Owners.
Falmouth Harbour - -	1839	Various.
Jersey Roads, Goree -	1840	Estates of the Island.
Dartmouth Harbour -	1850	Corporation.
Tealm River, Devon -	„	Mr. Kinkham.
Cheiney Rocks, Kent -	„	Mr. Alston.
Thorney Creek, Hants -	1840	Mr. Craswaller.
Sinoh Lake, Hants - -	„	Mr. Padwick.
Mill Rythe, Hants - -	„	„
Bomb Retch Lake, Hants -	„	Mr. Alston.
Spider Lake, Hants -	„	„
Buildings Lake - -	„	Mr. J. Carpenter.
Bosham Holes End, Sussex	„	Mr. Martin.

The law, as it stands, affords no valid protection against this system of destructive plunder.

The men come with public notice in broad daylight in force under pretence of trying the right of the possessor of the fishery to the exclusive use of the portion of sea or river bottom held by him under a presumed title, and for which he pays frequently to an individual or the Crown a high rent.

As the attack is made to try the title, the magistrates will not convict under the 24 & 25 Vict. c. 96, s. 26.

The owner has virtually no remedy. He can recover no sufficient damages from the fishermen, who will make by their plunder from 5*l.* to 12*l.* or 20*l.* per head.

That the object of these inroads is plunder only, and not the establishment of an oyster fishery open to public use is proved by the fact that in no single instance have the persons who have pretended to dispute the right re-established the fishery; they have simply plundered and destroyed it.

It is not desired that any enactment shall be passed that shall enable individuals to appropriate rights of oyster dredging or laying open by ancient usage, or in any other manner common to the public.

What is sought is an enactment that shall protect the property in oysters, but shall leave open to trial by civil process the right to the ground or bottom upon which they are laid.

Were such a law in force oyster grounds would be speedily established on a large scale, to the employment of large numbers of the people and the general benefit of the public.

The witness withdrew, and the inquiry terminated.

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TAKEN BY

THE ROYAL COMMISSIONERS

APPOINTED TO INQUIRE INTO THE CONDITION OF

THE SEA FISHERIES OF THE UNITED KINGDOM.

NOTE.—The names in the Index represent the places at which inquiries were held.

ACTS OF PARLIAMENT (see also "Convention"):—
Polperro, 21,977–80; Mevagissey, 22,075–80, 22,082–6; Falmouth, 23,313–24, 23,867–73; Edinburgh, 26,187–91.

ADVOCATE (LORD):—
Edinburgh, 26,511–4, 26,529, 26,538–40, 26,552; Dunbar, 27,527–46.

BALTIC BLOCKADE:—
Effect of—Stornoway, 32,221–5, 32,364.

BASKET TRADE:—
Sunderland, 3894–5, 3913–4.

BIDEFORD BAY:—
Fisheries at—London, 58,753–59,022.

BOARD OF WORKS, DUBLIN (see "Irish Fisheries").

BOATS:—
Hastings, 16,839; Polperro, 21,284–91, 21,306–10; Mevagissey, 22,219–20; Falmouth, 23,063, 23,075–8; Kirkwall, 31,330–4; Howth, 36,085–8, 36,119, 36,394–7, 36,644–52, 36,692–4, 36,711–3; Dublin, 37,241–4; Arklow, 37,937, 37,957, 38,019–39, 38,362–5; Wexford, 39,062–3, 39,734–7; Dungarvan, 39,911–14, 39,978–81, 40,031–2; Kinsale, 41,191–4, 41,205–8, 41,286; Bantry, 42,423, 42,792; Dingle, 42,949–58, 43,428–33, 43,756, 43,773–4; Westport, 43,827, 43,900–5; Moville, 46,602–4, 46,718–9, 46,727, 47,014, 47,063–4, 47,076, 47,224–32, 47,270–3; Carrickfergus, 47,282–5, 47,991–7, 48,027–9; Skerries, 49,084–100, 49,164–72, 49,690–3; Fleetwood, 54,993, 54,995–6, 55,000; Tenby, 56,576–7; London, 61,169–72.

Canoes:—
Dingle, 43,421–61.

Cobles:—
Cost of—Staithes, 5175.
Increase of—Sunderland, 3935.
Number of—Cullercoats, 56–9; Sunderland, 3876–7; Staithes, 5172–4; Filey, 5678; Wexford, 38,990.
Size of—Sunderland, 2999–3000.

Cod Boats (see also "Line Boats"):—
Cost of—Hull, 7251; Dunbar, 27,487–8; Eyemouth, 28,158–164; Lerwick, 31,840–5.
Number and Description of—Hull, 7216–7; Grimsby, 15,916; Eyemouth, 27,826–9, 28,000, 28,073–4, 28,078–80; Stonehaven, 28,924–8; Kirkwall, 31,210, 31,275, 31,308–10; Lerwick, 31,760–2, 31,934–6; Stornoway, 32,273–4, 32,395–7, 32,833–7; Tarbert, 53,439–40.
Increase of—Lowestoft, 14,186; Grimsby, 15,915; Edinburgh, 26,972; Dunbar, 27,256–7; Eyemouth, 27,815; Broughty Ferry, 28,706, 28,749; Stonehaven, 28,890; Peterhead, 29,163, 29,446, 29,535, 29,559; Lerwick, 31,769.
Decrease of—Hull, 7243–9; Kirkwall, 31,311–4.
Size of—Harwich, 21,084–6; Dunbar, 27,485; Eyemouth, 28,073; Broughty Ferry, 28,706, 28,752; Stonehaven, 28,891; Lerwick, 31,770, 31,845; Stornoway, 32,836.
Depreciation in value of—Hull, 7230–1, 7238, 7240, 7244, 7256.
Profits of—Grimsby, 16,670–1; Harwich, 21,083.
Profitable when worked by owners — Hull, 7301, 7756–7.
Not owned by fishermen—Lerwick, 31,845–50.

BOATS (*continued*):—
Crab Boats (see also "Lobster Boats"):—
Torcross, 18,247; Mevagissey, 22,770.

Cutters:—
Billingsgate, 12,501–2, 12,714–9, 12,923–30; Harwich, 20,600.

Drift-net Boats (see "Herring Boats").

Foreign Boats:—
Belgian—Ramsgate, 10,563–4.
Dutch—Flamborough, 6734–6; Hull, 6984–6, 7009, 7150, 7392; Yarmouth, 11,264–7, 11,633–5, 11,694; Lowestoft, 13,813–6; Ringsend, 37,569.
English, Dutch, and French fish together—Hull, 7010–1, 7150–6, 7204; Brixham, 8352.
Flanders—Billingsgate, 13,270.
French—Cullercoats, 472–4, 569–71, 642–6; Newbiggin, 1187–9; North Sunderland, 1800–3, 1956, 2089–91, 2229–32, 2402; Holy Island, 2522, 2546, 2640–5, 3078–82; Staithes, 5129–30, 5214–9, 5346, 5490; Filey, 6265–7; Flamborough, 6488, 6736; Hull, 6987–90, 7009, 7203; Brixham, 8136–40, 8939–40; Ramsgate, 10,134–8, 10,309; Yarmouth, 11,636–7, 11,710–2, 12,011–3, 12,234–45; Lowestoft, 13,813–6; Hastings, 17,187–93, 17,224–6; Torcross, 18,560–2; Plymouth, 18,867–9; Shoreham, 25,434–40; Stonehaven, 28,923–4, 29,006–29; London, 60,945.
Increase of—Cullercoats, 470–1; Newbiggin, 1622–9; North Sunderland, 1955, 2210–1.
Disturb shoals—North Sunderland, 2403–4; Holy Island, 2645; Staithes, 5119; Flamborough, 6613.
Competition with—Cullercoats, 424–7, 482; North Sunderland, 2282–7; Stonehaven, 29,020–5.
Larger than English—Staithes, 5122–4, 5337; Filey, 6104, 6258–9; Flamborough, 6534, 6849; Yarmouth, 12,013, 12,245; Lowestoft, 13,907–9; Hastings, 17,189–90.
Encroachments by—Cullercoats, 337, 568; Newbiggin, 1180–97, 1523; North Sunderland, 1805, 2015, 2099–111, 2186–233, 2328–31; Holy Island, 2451–6, 2584–5, 2677, 2691–4; Sunderland, 3008, 3080–2; Staithes, 5118, 5120–4, 5336–9, 5463–6; Filey, 6076; Flamborough, 6480, 6599, 6730, 6848; Ramsgate, 10,139, 10,303, 10,308, 10,316–7, 10,392–4, 10,418, 10,756, 10,804–13, 10,936–42, 11,012–3, 12,239–43.
Interference by—Cullercoats, 313–39, 482, 567, 572–5; Newbiggin, 1276–80, 1465, 1492–6, 1589–600; North Sunderland, 1811–2, 1831, 1951, 2005–15, 2083–8, 2099–104, 2239–42, 2258–64, 2326–7, 2391–400; Holy Island, 2587–8, 2652–65, 2670–3; Sunderland, 2868–78, 2992–8, 3077, 3156–60; Hartlepool, 4201; Filey, 5767–70, 5943, 6074–5, 6081, 6100, 6254–6, 6273–5; Flamborough, 6479, 6598, 6728, 6730, 6736, 6847; Lowestoft, 13,907; Hastings, 17,193; Stonehaven, 28,932–42; Peterhead, 29,658–9, 29,679–82; Brightlingsea, 59,461–65 59,575–81.
Injury to nets by—Yarmouth, 12–246; Eyemouth, 28,209–16; Stonehaven, 28,932; Cromarty, 29,932–37, 30,009–15; London, 60,873–5, 60,909, 61,009.

Gun Boats (see also "Convention" and "Men of War"):—
Desirable—Lowestoft, 13,837–9, 13,916.
Duties of commanders of—Wick, 30,248–347.

BOATS (*continued*):—

Haddock Boats (see "Line Boats" and "Cod Boats").

Herring and Mackerel Boats (see also "Seine Boats"):—
Number and description of — Cullercoats, 15–17; North Sunderland, 1832–3, 2305, 2386; Hartlepool, 4181–2; Staithes, 5168; Flamborough, 6424; Yarmouth, 11,944, 11,947–9, 12,060, 12,265; Lowestoft, 13,758–9, 13,771–3, 13,787–92, 13,811, 13,869; King's Lynn, 14,724, 14,887, 15,014–5; Boston, 15,371, 15,783; Hastings, 16,839, 17,464; Brighton, 17,489, 17,845, 17,857; Plymouth, 19,329; Mevagissey, 22,196–8, 22,875–6; Penzance, 24,011–20; St. Ives, 24,748–9, 24,794–9, 24,813–21; Dunbar, 27,295, 27,438; Eyemouth, 28,000; Anstruther, 28,445–8, 28,480; Stonehaven, 28,924–8; Wick, 30,162–4, 30,539–40, 30,559–60; Kirkwall, 31,208–9, 31,544, 31,548; Stornoway, 32,212; Portree, 33,023, 33,108; Tobermory, 33,467–71, 33,507, 33,583; Campbeltown, 33,814–8, 34,196–7, 34,204; Peel, 34,279, 34,285–92; Port St. Mary, 35,042–8; Howth, 36,194–6, 36,329–37; Arklow, 38,009–13; Wexford, 38,488–94; Kinsale, 41,289–92; Dingle, 43,124–8; Galway, 45,387–92, 45,423; Inver, 46,231–4, 46,388, 46,390–4; Carlingford, 48,277–83, 48,376–7; Dundalk, 48,569–71, 49,050–3; Skerries, 49,154–9; Ardrishaig, 50,970–84, 51,763, 51,832, 51,961, 52,024–32; Inverary, 52,390–3, 52,464–8; Tarbert, 53,345–9, 53,597–600; Ballantrae, 53,820*a*; Fleetwood, 55,006–7, 55,011–12; Carnarvon, 56,404; Tenby, 56,905–7; London, 58,971, 60,821, 60,863–7.
Increase of — Newbiggin, 1107–11, 1132, 1241, 1311–4; Holy Island, 2411–8; Sunderland, 3843–4; Hartlepool, 4181–3, 4362; Filey, 5757, 5935–7, 6223, 6315–7; Flamborough, 6340–5, 6465–6, 6593; Yarmouth, 12,085, 12,384–5; Lowestoft, 13,746–7, 13,889–92; King's Lynn, 14,879, 14,887, 15,015; Boston, 15,443, 15,698; Hastings, 16,838; Brighton, 17,952–3, 17,998, 18,038; Penzance, 24,061–2; St. Ives, 24,838–40; Edinburgh, 26,951–72, 27,055; Dunbar, 27,256–7; Eyemouth, 27,815, 27,902–3; Broughty Ferry, 28,706; Stonehaven, 28,858–9, 28,890; Peterhead, 29,163, 29,446, 29,535, 29,559, 29,607; Cromarty, 29,812–3; Wick, 30,542–3; Broadford, 33,392–3; Peel, 34,297; Howth, 36,085–8, 36,865; Dunmore, 39,066–72; Ardrishaig, 52,040–4; Inverary, 52,391–3; Tenby, 56,906–7.
Decrease of—North Sunderland, 1789–90; Brighton, 17,598, 17,600–1, 17,673, 17,988–9; Kirkwall, 31,321–2, 31,447; Carlingford, 48,226–8; London, 58,971.
Follow trawl boats—Brixham, 8671–5.
Cost of—Cullercoats, 938–47; Newbiggin, 1236–40, 1429–34; North Sunderland, 1963–8; Hartlepool, 4682–8; Staithes, 5170; Yarmouth, 12,082; Lowestoft, 14,077; Penzance, 24,018–20; St. Ives, 24,831–5; Dunbar, 27,487–8; Eyemouth, 28,158–164; Campbeltown, 33,996, 34,062; Peel, 34,319–24; Ardrishaig, 51,969–83.
Capital invested in—Mevagissey, 22,273–4; Penzance, 24,021–2; Wick, 30,166; Peel, 34,324; Inverary, 52,765–6.
Size of—Newbiggin, 1314; Holy Island, 2421–3; Hartlepool, 4184–7, 4676; Yarmouth, 12,058–60; Lowestoft, 13,773, 13,893–4; Lynn, 14,885; Hastings, 16,840, 16,929–31, 16,936; Brighton, 17,682; Plymouth, 18,954, 19,327–8; St. Ives, 24,813–21; Dunbar, 27,485; Anstruther, 28,445; Broughty Ferry, 28,706, 28,752; Stonehaven, 28,858, 28,891; Peterhead, 29,198–9, 29,406, 29,611; Cromarty, 29,814, 29,920–1; Wick, 30,541, 30,612; Kirkwall, 31,212, 31,440, 31,448, 31,523; Tobermory, 33,471; Campbeltown, 33,814; Peel, 34,535; Port St. Mary, 35,070–2, 35,107; Dingle, 43,125; Ardrishaig, 50,993–4, 51,963, 52,046–51.
Decked—Filey, 6098; Yarmouth, 12,014, 12,166; Lowestoft, 13,774, 13,967; St. Ives, 24,815–6.
Undecked—Staithes, 5169; Filey, 6098; Flamborough, 6536; Lowestoft, 13,774.
Converted into trawlers—Yarmouth, 12,016.
Men per boat—Yarmouth, 11,945, 12,074; Hastings, 16,842, 16,854, 17,439; Brighton, 17,683; Cromarty, 29,924; Ardrishaig, 50,995.
Keep the sea in rough weather—Yarmouth, 12,015–6.
Time of remaining at sea — Yarmouth, 12,188–90; Lowestoft, 14,042.

Ice Boats:—
Hull, 6878–83, 7187–9, 7552, 7590–2, 7893–4, 7896–904, 7949.

Line Boats (see also "Cod Boats"):—
Number and description of—Cullercoats, 7, 108–10;

BOATS (*continued*):—

Line Boats (continued):—
North Sunderland, 1946, 2306, 2387; Staithes, 5031–3, 5070–2, 5644; Filey, 5825, 5828–31; Flamborough, 6425; Hull, 7293–4; Brixham, 8267–8; Torquay, 9618, 9845; Ramsgate, 10,975, 10,993; Yarmouth, 11,239–42; Billingsgate, 12,485–6, 12,703–4, 12,724, 12,812, 12,814–23, 13,231, 13,233, 13,237; Grimsby, 16,216; Torcross, 18,136; Plymouth, 19,000–1; Exeter, 19,649–56; Falmouth, 23,063–86; Eyemouth, 27,825–9, 28,073; Broughty Ferry, 28,749–52; Wick, 30,241; Kingstown, 35,400–1, 35,665–7; Dunmore, 39,056, 39,606–8, 39,682, 39,711–7; Bantry, 42,784–87; Westport, 43,830–3, 44,318–9; Galway, 44,617–8, 44,624–9, 44,874–9, 44,883–7, 44,919–24, 44,970–2, 45,007–9; Moville, 47,197–200; Carrickfergus, 47,425, 47,747, 48,027–9; Carlingford, 48,193–8; Dundalk, 48,505–6, 48,545, 48,550–1, 48,669, 48,837–40; Skerries, 49,084–100, 49,305, 49,423–36; London, 58,775, 61,113.
Increase of—Cullercoats, 65–7, 110; Newbiggin, 1107–11, 1235, 1241, 1308–10; North Sunderland, 1705–11, 2309; Sunderland, 2738; Hartlepool, 4061–3; Staithes, 5031–3; Filey, 5839–41, 5843–4, 5846, 5983–4, 6087–8, 6165; Flamborough, 6419–21, 6638–41; Hull, 7297; Torquay, 9977; Grimsby, 16,153, 16,637; Greenock, 50,031–5; Tenby, 56,596–9, 56,638–42, 57,100–2.
Decrease of—Hartlepool, 4051–64; Plymouth, 18,621; Exeter, 19,657–60; Kingstown, 35,406–11; Dunmore, 39,716–7; Galway, 44,871–3, 44,961–3, 45,491–2; Moville, 47,201; Carrickfergus, 47,285, 47,749–50; Dundalk, 48,510–11; Skerries, 49,432–5, 49,546–9.
Cost of—Newbiggin, 1236–8, 1423–34; Hartlepool, 4681; Staithes, 5162–3; Filey, 5833–7, 5985–8; Hull, 6922; Billingsgate, 12,738; Grimsby, 15,928–9, 15,931; Torcross, 18,144; Plymouth, 19,004–5; Penzance, 24,578; Howth, 35,996–8, 36,130; Galway, 44,921–39; Greenock, 50,350–1.
Can be employed as trawl boats—Hull, 7512; Billingsgate, 12,813.
Men per boat — Brixham, 9151; Grimsby, 16,046–9, 16,219.
Size of—Newbiggin, 1111; Staithes, 5035, 5075, 5155–7; Hull, 7295; Brixham, 8266; Yarmouth, 11,241; Plymouth, 19,003; Galway, 44,884–6, 44,917, 45,297; Moville, 47,197; Dundalk, 48,548 Skerries, 49,306–8, 49,425.
Cost of working—Billingsgate, 12,865–6.
Cannot keep the sea in winter—Hull, 7135, 7505.
Decked — Staithes, 5069–72, 5159; Filey, 5827; Yarmouth, 11,239; Eyemouth, 28,073.
Improvement in—Staithes, 5084, 5114, 5292–3; Filey, 6180–2.
Not mortgaged—Filey, 5845, 5989.
Profitable—Billingsgate, 12,720; Grimsby, 15,940, 16,066, 16,210, 16,435–8, 16,529, 16,608–9, 16,650–3.
Not profitable—Grimsby, 15,938, 16,028, 16,063, 16,447–50, 16,506–9, 16,523–4.
Line and trawl fish on same ground—Hull, 7000, 7304–7, 7310, 7982–3.

Lobster Boats (see also "Crab Boats"):—
Grimsby, 16,257; Mevagissey, 22,770; Bantry, 42,682; Inver, 46,311.

Mackerel Boats (see "Herring Boats").

Mussel Boats:—
Boston, 15,375–6.

Oyster Boats:—
Brixham, 8318; Grimsby, 16,759; Harwich, 20,961, 21,027–8; Falmouth, 23,065–72; Shoreham, 25,276, 25,407–14, 25,482–90, 25,649–55, 25,799–803; Arklow, 38,009–18, 38,110–12, 38,148–53; Wexford, 38,514–22, 38,757; Dunmore, 39,454–6; Kenmare, 41,870–1; Westport, 43,931–2, 44,081, 44,149–50, 44,241–4, 44,267–72; Moville, 46,798, 46,818–24, 47,132, 47,139; Carrickfergus, 47,428–9, 47,722–5, 48,028; Carlingford, 48,112–5, 48,117–23, 48,240–1, 48,463–4; Carnarvon, 56,404–7, 56,424–8; Tenby, 56,639–42; Swansea, 57,146–53, 57,345–9, 57,607–20, 57,648, 57,742–5, 57,852–9; London, 60,366, 60,423–32, 60,552.
Increase of—Wexford, 38,755–6; Moville, 47,133–6; Carlingford, 48,103–4, 48,371; Tenby, 56,665, 56,930, 57,019; Swansea, 57,607–9, 57,615, 57,853–4.
Decrease of—Grimsby, 16,796–7; Wexford, 38,510; Dunmore, 39,456–7.
Profits of—Grimsby, 16,800.
Prohibited fishing on French coast—Shoreham, 25,246.

BOATS (*continued*):—

Oyster Boats (continued):—
Seized by French authorities—Shoreham, 25,492–8.
Jersey boats—Shoreham, 25,654–5; Carnarvon, 56,400–8, 56,442–7.

Pleasure Boats:—
Brighton, 17,489, 17,779–81, 17,787–90, 17,952–3.

Row Boats:—
Westport, 43,829–30.

Sand Boats:—
Bantry, 42,731–41, 42,743–51, 42,754–55.

Seine Boats (see also "Herring and Mackerel Boats"):—
Number of—Brighton, 17,607; Torcross, 18,139; Penzance, 24,218–26.
Increase of—Brighton, 17,752; Torcross, 18,146.
Decrease of—Exeter, 19,585–7.
Size of—Exeter, 19,588.
Cost of—Torcross, 18,143; Mevagissey, 22,025–31.

Shrimp Boats (see also "Trawling for Shrimps"):—
Hull, 7638; Lynn, 14,793, 14,797; Boston, 15,226, 15,631–5; Brighton, 18,026–7; Dumfries, 53,845–9, 54,083–5, 54,276, 54,408–9,; Morecambe, 54,571–80, 54,746–8, 54,750–5, 54,904–6; Liverpool, 55,665–7, 56,191–2; Whitstable, 58,695; Brightlingsea, 59,813–4; London, 61,106–10, 61,117, 61,202, 61,233.
Small fish caught by—Hull, 7639–43, 7921; Brighton, 18,096–9.
Small fish thrown overboard—Hull, 7657–8, 7922–3.

Smacks:—
Brixham, 8348–50; Carlingford, 48,226–35; Tenby, 56,867, 57,141; Brightlingsea, 57,355, 59,202–3, 59,534.

Sprat Boats:—
Hull, 7646–54, 7926; Boston, 15,266–7, 15,399; Hastings, 17,051; Exeter, 19,537; Inver, 46,122–26, 46,147, 46,508–9; Brightlingsea, 59,626; London, 61,270.

Sprit Boats:—
Number of—Dingle, 42,949, 43,125–6, 43,195–6, 43,316–9, 43,763.

Stow Boats:—
Number of—Lynn, 14,674, 14,676, 15,008–9; Brightlingsea, 59,362, 59,616.
Decrease of—Ramsgate, 11,060.
Increase of—Lynn, 14,736, 15,009; Boston, 15,657–8.
Small fish taken by—Ramsgate, 10,873–6, 10,882, 10,900.

Trammel Boats:—
Dungarvan, 39,936, 40,733, 41,064; Kinsale, 41,395–6.

Trawl Boats:—
Number and description of—Cullercoats, 12; Hartlepool, 4789; Flamborough, 6737–43; Hull, 6869, 7232–5; Brixham, 8029, 8073, 8076, 8455, 8540, 8964, 8974–9, 9070, 9356, 9359–62; Ramsgate, 10,086, 10,098, 10,264, 10,268, 10,349, 10,486, 10,507; Yarmouth, 11,087–9, 11,091, 11,884, 12,274, 12,276; Billingsgate, 12,418–22, 12,703–4, 12,809–11, 13,231–3, 13,237; Lowestoft, 13,887; Grimsby, 16,071, 16,073, 16,217; Hastings, 16,846–7, 16,851, 16,964, 17,150, 17,226; Brighton, 17,489; Torcross, 18,297; Plymouth, 18,625, 18,690, 18,693–5, 19,116–7; Exeter, 19,377, 19,409–13, 19,423–5, 19,517; Wyke Regis, 20,024, 20,026, 20,475; Harwich, 20,535–50; Kingstown, 35,402, 35,426, 35,480–2, 35,504–7; Howth, 36,180, 36,256, 36,362–4; Ringsend, 37,371–7; Arklow, 38,323–5; Wexford, 38,458–81, 38,700–3; Dunmore, 39,053–7, 39,406; Dungarvan, 40,734, 41,157; Kenmare, 41,758, 41,889, 41,929–42; Bantry, 42,561, 42,637, 42,640; Dingle, 43,034–39, 43,076, 43,104, 43,698, 43,704, 43,764; Galway, 44,496–7, 44,638–9, 45,192, 45,393, 45,474, 45,906–7, 46,009–25; Moville, 46,634, 46,780–1, 46,864–72; Carrickfergus, 47,556, 47,644–7, 47,679–81, 47,726, 48,027; Carlingford, 48,195; Dundalk, 48,989–90; Skerries, 49,231, 49,316–9, 49,325–8, 49,382–97, 49,627–31, 49,710; Balbriggan, 49,770, 49,825–52; Liverpool, 55,665–7, 55,834–8; Carnarvon, 56,389, 56,426–8; Tenby, 56,583–5, 56,612–20; Swansea, 57,260–71, 57,974–6; London, 58,773–4, 58,920–6, 58,955–7, 60,920, 60,947, 61,077, 61,112.
Increase of—Sunderland, 3283–4; Hartlepool, 4789, 4834–40; Filey, 6051, 6055, 6200, 6206, 6311; Hull, 6868–9, 6928–31, 7128, 7241, 7433, 7469, 7699; Brixham, 8038–9, 8072, 8354, 8375, 8450, 8555–8, 8691, 8770–2, 8903–4, 8976–7, 9363, 9380; Ramsgate, 10,268, 10,502, 10,635, 10,714, 10,726, 10,851; Yarmouth, 11,090–5, 11,367, 11,629–32, 11,745–53; Lowestoft, 14,186–93, 14,230; Boston, 15,218–23; Grimsby, 16,073, 16,077, 16,152, 16,212–3, 16,326, 16,637–40; Hastings, 17,142–8, 17,227–8; Brighton, 17,494, 17,952–3; Torcross, 18,296, 18,299–303, 18,399, 18,406–7, 18,443, 18,506; Plymouth, 18,622, 18,691–2, 19,125–7, 19,129, 19,224; Wyke Regis, 20,312, 20,481–507; Kingstown, 35,426, 35,504, 35,607–8; Ringsend, 37,382–3, 37,518; Wexford, 38,724–6; Dunmore, 39,086–93, 39,323–5, 39,521–3; Dingle, 43,077–8, 43,086, 43,103, 43,345–7, 43,378–80; Galway, 45,473, 45,730, 45,932–9, 46,067–8; Carrickfergus, 47,383–5; Skerries, 49,133–9; Greenock, 49,920–1; Fleetwood, 55,068–71; Liverpool, 55,838, 55,989; Tenby, 56,691, 56,806; London, 58,948, 58,956.
Decrease of — Galway, 45,483–7; Carrickfergus, 47,485–9, 47,557–8; Skerries, 49,653–6, 49,694; Balbriggan, 49,725–7, 49,772–4; Fleetwood, 55,077–80.
Cost of—Sunderland, 3272–3, 3981; Hull, 6915–17; Brixham, 8051–2; Yarmouth, 11,251; Billingsgate, 12,739; Plymouth, 18,699–702; Ringsend, 37,378–81; Dungarvan, 40,058, 40,881–5; Dingle, 43,134–5; Galway, 45,909; Carrickfergus, 47,728; Fleetwood, 55,329–30.
Size of—Sunderland, 3286–93, 3475; Flamborough, 6738; Hull, 6870; Brixham, 8031–4, 8681, 8959–62, 9168, 9364; Ramsgate, 10,493, 10,718; Yarmouth, 11,097, 11,100, 11,619, 11,723, 11,811; Billingsgate, 12,410; Grimsby, 16,139, 16,143, 16,170; Hastings, 17,218; Plymouth, 18,696–8, 18,889, 19,115, 19,224; Exeter, 19,378, 19,414, 19,517–9; Wyke Regis, 20,027; Kingstown, 35,404; Wexford, 38,450–7, 38,691–5; Dunmore, 39,054, 39,070–1; Dungarvan, 40,735–7; Kinsale, 41,272–4, 41,481, 41,566–71; Kenmare, 41,760, 41,887; Bantry, 42,569, 42,638–42, 42,654–57; Dingle, 43,035–36, 43,129, 43,132–33, 43,296–97, 43,784; Galway, 44,640–41, 45,003–4, 45,698, 45,903, 45,941–43, 46,012–13, 46,065–66; Inver, 46,169, 46,173–74; Moville, 46,779, 46,867; Carrickfergus, 47,678; Carlingford, 48,196–98; Dundalk, 48,619–20; Skerries, 49,297, 49,658; Fleetwood, 55,066–7; Liverpool, 55,719–21; Swansea, 57,853–8; London, 58,940–6, 60,929.
Increase in size of—Hull, 6870, 7129–30; Brixham, 8035–6, 8682, 8957, 9134, 9168, 9364; Ramsgate, 10,087, 10,099–100, 10,104–5, 10,241, 10,269, 10,490, 10,535; Yarmouth, 11,097, 11,250, 11,485; Hastings, 17,141, 17,149; Dunmore, 39,070–2, 39,086–93, 39,521–2; Fleetwood, 55,176; Liverpool, 55,660, 55,715, 55,950–1, 55,979.
Increase in value of—Brixham, 8041–3, 8047, 8067; Dungarvan, 40,887–9.
Decrease in value of—Hull, 7232–7; Torcross, 18,506.
Cost of working—Billingsgate, 12,865–6.
Assist vessels in distress—Hull, 7003–6, 7172–3, 7504, 7613–8; Brixham, 8156–8, 8797, 8802; Yarmouth, 11,528; Billingsgate, 12,898–9; Fleetwood, 55,226–31.
Mortgaged — Hull, 7232, 7237; Brixham, 9380–4, 9388.
No inspection of — Billingsgate, 12,909–10, 13,170, 13,205; Fleetwood, 55,369.
Remain at sea in all weathers—Brixham, 8143; Ramsgate, 10,367; Yarmouth, 11,328, 11,526; Billingsgate, 13,280–4; Plymouth, 18,842.
Restriction as to size would be injurious—Plymouth, 18,945–8.
Seizure of—Dingle, 43,233.
Crews of—Galway, 45,905, 46,059–60; Moville, 46,868; Carrickfergus, 47,485–88; Carlingford, 48,197–98; Skerries, 49,296, 49,301–3, 49,326, 49,707–9; Balbriggan, 49,777–83.
Capital invested in—Sunderland, 3981–9; Hull, 6927, 6932–4, 7090–4, 7236, 7475–8; Brixham, 8041–7.
Men per boat—Grimsby, 16,221; Hastings, 16,848, 17,437; Liverpool, 55,720–1.
Improved machinery of—Brixham, 9168–9.

Well Smacks:—
Billingsgate, 12,819–21; Lowestoft, 14,191–3; Fleetwood, 55,301–2.

BOSTON CORPORATION:—
Jurisdiction of—Boston, 15,824, 15,841–93.

BOUNTY ON FISHING:—
Mevagissey, 22,132–3; St. Ives, 24,916–8; Kirkwall, 31,201–4; Dungarvan, 40,023–6; Skerries, 49,333–53, 49,376–80; Balbriggan, 49,729–36.
Objectionable—Dublin, 37,345–6.

Branding of Herrings (see also "Trade Marks"):—
Branding—Edinburgh, 26,180, 26,254–81, 26,917–22, 26,926–30, 26,946; Dunbar, 27,664–6, 27,721–32, 27,754; Eyemouth, 27,767–84. 27,872–77, 27,927–52, 28,016, 28,021–9; Anstruther, 28,580–608, 28,615–22, 28,644; Stonehaven, 29,116–28, 29,136–41; Peterhead, 29,165–86, 29,209–11, 29,245–9, 29,253–68, 29,280–94, 29,301–21, 29,383–401; Wick, 30,419–20, 30,428–42, 30,740–71, 30,802, 30,810–7, 30,842–6, 30,851–3, 30,856, 30,917–20, 30,927–31, 30,948–68, 30,987–9, 30,991, 31,036, 31,080–93, 31,148–64; Kirkwall, 31,347–59, 31,365–8, 31,502–12, 31,733–7; Lerwick, 31,782–5, 31,911–5, 32,102–19, 32,116–39; Howth, 36,762, 36,771.
Unbranded Herrings — Yarmouth, 11,955–6, 11,972, 12,372–3; Anstruther, 28,609–14; Stonehaven, 29,123–8; Peterhead, 29,178–86; Wick, 30,848–50, 31,169–70; Stornoway, 32,309–20, 32,430.
Branding unnecessary — Stornoway, 32,450, 32,637–40, 32,772–6; Greenock, 50,186–90, 50,410–11, 50,869–74, 50,935–44.

Close Time (see "Herrings," "Shell-fish," "Oysters," and "Trawling for Shrimps").

Coastguard:—
Insufficiency of — Carrickfergus, 48,021–25, 48,065; Skerries, 49,609–10, 49,621–24.
Number of—Carrickfergus, 48,015–16, 48,019; Carlingford, 48,191; Skerries, 49,620.
Reports of—Galway, 45,488–90, 45,702–4.
Supervision by—Kenmare, 42,331; Westport, 43,933–39, 44,022–25, 44,122–23, 44,217–30, 44,236, 44,274–312, 44,320–26; Galway, 45,705; Moville, 47,146–57, 47,161, 47,172–84; Carrickfergus, 47,385–93, 47,667, 48,006–14; Carlingford, 48,129–30, 48,184–85, 48,192, 48,210–12, 48,480; Dundalk, 48,584–85; Skerries, 49,604–08, 49,680, 49,698–706; Fleetwood, 55,263–6, 55,369; Tenby, 56,670–81, 56,684–5; Swansea, 57,191–31, 58,008–11.
Stations of—Skerries, 49,613, 49,617–19.
Threats against—Galway, 45,325–27.

Coast Volunteers:—
Ramsgate, 10,395–7; Anstruther, 28,631–4.

Commissions on the Herring Fishery—Edinburgh, 26,173–86, 26,523.

Convention (see also "Legislative Restrictions" and "Regulations"):—
Articles of, enforced—Torquay, 9446–57, 9488; Polperro, 21,807–17; Shoreham, 25,172–6, 25,226; Edinburgh, 26,295–300, 26,458, 26,461–74, 26,477, 26,480–2.
Articles of, not enforced—Staithes, 5419–21; Filey, 5777–9; Hull, 7021, 7036, 7371, 7826–8; Brixham, 9414–21; Torquay, 9484, 9586–9, 9607–8, 9611–5; Ramsgate, 10,218–38, 10,446–8, 10,472, 10,476, 10,952–3; Yarmouth, 11,214; Brighton, 17,791–2; Plymouth, 18,724, 19,214; Polperro, 21,479–83, 21,562–7, 21,589–91; Falmouth, 23,340–5; Shoreham, 25,710; Edinburgh, 26,475; Eyemouth, 27,832–9; Wick, 30,282, 30,285, 30,289–92, 30,325–37; London, 60,874, 60,890–4, 60,904.
Ignorance of — Sunderland, 2935–7, 3322–4, 3365, 3530–1; Hartlepool, 4244, 4427–32; Staithes, 5224–40, 5500; Filey, 5776, 6125, 6251–3, 6285–86; Flamborough, 6545; Hull, 7530–1; Ramsgate, 10,944; Stonehaven, 29,001–2.
Report of Board of Trade in reference to—Torquay, 9489–97.
Refusal of Board of Trade to prosecute for breach of—Falmouth, 23,141–2, 23,357–8.
Drift and Trawl Boats—Sunderland, 3365–74; Staithes, 5400; Mevagissey, 22,322–4.
Bratt Nets—Sunderland, 2933–8; Hartlepool, 4234–54; Staithes, 5237–40, 5500.
Decked and Undecked Boats — North Sunderland, 2187–93; Holy Island, 2680–3; Sunderland, 3188; Staithes, 5226–7; Filey, 6286–94; Torquay, 9614; Stonehaven, 28,949–56; Wick, 30,301–10, 30,339–43; London, 60,868–72, 60,878–83.
Sunday Fishing—North Sunderland, 1822–5, 2022–3; Holy Island, 2465–8, 2546; Sunderland, 2887–8, 3032–3, 3095–9; Hartlepool, 4367–71, 4381; Dunbar, 27,513–5; Eyemouth, 27,852–4, 28,222–3; Wick, 30,344–7; Arklow, 38,434; Skerries, 49,245–7, 49,252–6, 49,599–601.
Lights in Drift Boats—Hartlepool, 4425–32; Staithes, 5499, 5414–21; Filey, 6110–15; Flamborough, 6541–4; Hull, 7534; Ramsgate, 10,587, 10,954–61, 11,029–32; Yarmouth, 11,551–4; Torcross, 18,450; Polperro, 21,560–7, 21,734–6, 21,853–91, 21,904–6; Mevagissey, 22,309–11, 22,335–46; Penzance, 24,095–6; Edinburgh, 27,109–16; Dunbar, 27,502–5; Eyemouth, 27,845–9; Anstruther, 28,362–5; Stonehaven, 28,960–7; Peterhead, 29,486–96, 29,685, 29,762–7; Cromarty, 29,900–11; Wick, 30,282, 30,332, 30,534–8, 30,933; Kirkwall, 31,261–5; Lerwick, 32,091–3; Ardrishaig, 52,081–3; London, 60,884–9.
Three-mile Limit (see also "Foreign Boats, encroachments by")—North Sunderland, 2194, 2329; Holy Island, 2649, 2666; Sunderland, 3203; Hartlepool, 4400–3; Staithes, 5401, 5408; Flamborough, 6481–6; Hull, 7039, 7165, 7394, 7398, 7525–42, 7692–3; Lowestoft, 13,910–3; Hastings, 16,909–12, 16,948–50, 17,187–8, 17,196–7; Brighton, 18,041–3; Plymouth, 19,216; Falmouth, 23,345, 23,910–3; Penzance, 24,561–2; Edinburgh, 26,460–2; Dunbar, 27,319–23, 27,519; Stonehaven, 28,864–5, 28,931, 29,014–5; Peterhead, 29,416, 29,660–3, 29,688; Cromarty, 29,938–41; Wick, 30,189, 30,265, 30,278; Kirkwall, 31,266–70; London, 60,876, 60,896–9, 60,905–8, 61,009–14, 61,020–3.
Regulations as to shooting nets—North Sunderland, 1817–21, 1854–9, 1957–8, 2024–6, 2074–8; Holy Island, 2457–64, 2674–6; Sunderland, 2889–92, 3019–31, 3166–70, 3190–1; Hartlepool, 4304–9; Staithes, 5125–6, 5139–47, 5341–5, 5464, 5487–8; Filey, 5771–5, 6085–6, 6170, 6229–30; Flamborough, 6489, 6496–8, 6601–4, 6726; Mevagissey, 22,355–9; Edinburgh, 27,076–80, 27,089; Dunbar, 27,363–74, 27,510–2, 27,660–2*a*; Eyemouth, 27,840; Anstruther, 28,317–31; Stonehaven, 28,877–84, 29,026–35; Peterhead, 29,423–33, 29,540–4, 29,648–57; Cromarty, 29,912–6; Wick, 30,184, 30,261, 30,293–7, 30,516–23, 30,660–6, 30,717–29; Kirkwall, 31,461–5; Lerwick, 32,062–8; Howth, 36,159–67, 36,309–15, 36,633, 36,671–2, 36,899–902; Dublin, 37,147–50; Arklow, 38,297–304.
Numbering—Sunderland, 2968–72, 3351–5, 3967*a*–71; Ramsgate, 10,606, 10,613–8, 10,814–5, 10,818–23, 10,825–9, 10,933–4, 10,963–6; Torcross, 18,284; Plymouth, 18,737–8; Wick, 30,251, 30,257–60, 30,262, 30,315–8, 30,320–3; Ringsend, 37,737–40.
Penalties—Sunderland, 3197–202.
Vanes — Holy Island, 2712–5; Sunderland, 2960–3, 3299–304; Hartlepool, 4411–20; Staithes, 5228–32; Hull, 7111–2, 7413–6; Brixham, 8344–7, 8666–8; Torquay, 9610–3; Ramsgate, 10,467–72; Polperro, 21,570; Edinburgh, 27,123–8; Dunbar, 27,506–9, 27,692; Eyemouth, 27,842; Stonehaven, 28,957–8; Peterhead, 29,694–8; Wick, 30,289–92; London, 60,904–5.

Coopers:—
Edinburgh, 26,383, 26,390–400.

Corallines:—
Fleetwood, 55,165–6.

Cornwall (Duchy of):—
Mevagissey, 23,035.

Curing and Packing of Fish:—
Filey, 6234–5; Yarmouth, 11,957–62, 11,973, 11,979–80, 12,190–204, 12,350–3, 12,358–60, 12,367–71; Lowestoft, 13,847; Edinburgh, 26,923–25, 26,932–45; Dunbar, 27,667–77, 27,707, 27,710–20; Eyemouth, 27,777–80, 27,880; Anstruther, 28,529–32, 28,552–4, 28,641–6; Stonehaven, 29,129–34; Peterhead, 29,176, 29,187–92, 29,271–321; Cromarty, 30,147–9; Wick, 30,242; Kirkwall, 31,472, 31,495–6; Lerwick, 31,924–6; Stornoway, 32,453; Broadford, 33,353–6; Dublin, 37,092–101; Ringsend, 37,887–918; Wicklow, 38,202–4; Westport, 43,906–10, 43,993–4; Inver, 46,271; Greenock, 50,375–8.
Inspection of cured fish—Wick, 30,414–8, 30,421–7.
Proportion of cured fish to fresh—Dunbar, 27,306–8, 27,701–4; Eyemouth, 28,017; Stonehaven, 29,100–3.
Opinion of curers—Greenock, 49,971–3, 50,101–2; Ardrishaig, 51,860.

Drift Nets (see "Herring Nets").

Dues:—
Harbour dues on trawlers abroad—Ramsgate, 10,574.
Harbour licence dues—Dunbar, 27,467–74; Anstruther, 28,658–75, 28,688–90.
Effect of dock charges on price of fish—Hull, 6942–3.
Foreign duties—Ramsgate, 10,560–1, 10,568–72; Hastings, 16,953–5, 16,958–62, 17,485; Edinburgh, 26,324–35; Wick, 30,370–2, 30,821–6.
Import duties injurious—Lerwick, 32,094–100, 32,141–8.

Fish:—
Supply of—Kenmare, 41,721; Westport, 43,868–9; Galway, 45,268, 45,587–90, 45,608–16, 45,827–8; Carrickfergus, 47,874–7; Dundalk, 48,853–5; Skerries, 49,438; Balbriggan, 49,800–3; Greenock, 50,391,

FISH (*continued*) :—
50,393, 50,396; Ballantrae, 53,820*a*; Liverpool, 55,625–56, 55,920–1, 56,304, 56,316–9; Tenby, 56,491–2, 56,500, 56,714–6, 56,814, 56,865.
Increase in supply of—Cullercoats, 75–6; Sunderland, 3231, 3275–6, 3278, 3446–52, 3470, 3771–8, 3904; Hartlepool, 4538–42, 4763–6, 4841–7, 4914–5; Staithes, 5587; Hull, 6935–6, 7337–46, 7433, 7437–8, 7450, 7482, 7548–52, 7628, 7668–76, 7795–803, 7808, 7834–7, 7954, 8003; Brixham, 9134–9, 9149, 9167; Torquay, 9620; Ramsgate, 10,111–17, 10,274–80, 10,287–96, 10,345, 10,500, 10,504, 10,532, 10,632–40, 10,730, 10,787, 10,848–53; Billingsgate, 12,481–2, 12,537, 12,568–71, 12,602–4, 12,611, 12,668–71, 12,830–1, 13,016–8, 13,135, 13,174, 13,245, 13,295, 13,489–91; Lowestoft, 13,886–94; Grimsby, 15,941–3, 16,598; Plymouth, 18,786–98, 19,011, 19,135–7, 19,233, 19,284–8; Edinburgh, 26,301–10, 26,311, 26,879, 27,163–67; Stonehaven, 28,894–7; Lerwick, 31,401; Inver, 46,352–4; Carrickfergus, 47,280; Dundalk, 49,023; Greenock, 50,025–6; Fleetwood, 54,992, 55,051, 55,178, 55,470; Liverpool, 55,656; London, 58,842–3, 60,772–5, 60,926, 60,993, 61,025.
Decrease in supply of — Cullercoats, 40, 86–96, 99–107, 118–20, 237–40, 535–8, 818–24, 881–8, 1025–50; Newbiggin, 1118–27, 1316–30, 1390–5, 1550–5, 1560–78, 1679–80; North Sunderland, 1704, 1714, 1989–92, 2082; Holy Island, 2424–7, 2566–7; Sunderland, 2740–1, 2911–4, 3049–53, 3124–9, 3864–8, 3925–6, 3934–6, 4042; Hartlepool, 4065–7, 4318–29, 4457–61; Staithes, 5029–30, 5037–47, 5055, 5059–60, 5279, 5440, 5512–3, 5590, 5624, 5655; Filey, 5683–6, 5881–3, 6008, 6037–8, 6144, 6193, 6205, 6237; Flamborough, 6428–32, 6588–9, 6645, 6818; Hull, 7267; Brixham, 8087, 8169, 8377–80, 8441, 8693–6, 8703, 8835–6, 8868, 8872–3, 8986, 8990–3, 8997, 9005; Torquay, 9687–8, 9953, 9994; Torcross, 18,148–9, 18,192–202, 18,390–1, 18,417, 18,575–84, 18,601; Plymouth, 18,611, 18,645–52, 18,667, 19,060, 19,095; Exeter, 19,429–30, 19,508, 19,591–4, 19,718–9, 19,768–70, 19,957; Mevagissey, 23,011; Penzance, 24,327–8, 24,495; Edinburgh, 26,958–92, 27,169; Dunbar, 27,251–3, 27,261, 27,437, 27,441; Anstruther, 28,251, 28,394–400; Broughty Ferry, 28,754–8, 28,787; Ringsend, 37,456–8, 37,703–8; Arklow, 38,097; Wexford, 38,470–6, 38,718, 38,834–6, 38,839, 39,002–3; Dunmore, 39,094–106, 39,117–22, 39,136, 39,504–14, 39,637–9, 39,674, 39,682, 39,719–23, 39,743–55, 39,826; Dungarvan, 40,029–30, 40,037, 40,046–9, 40,071–80, 40,182, 40,284–304, 40,480–93, 40,592, 40,665–8; Kinsale, 41,579–82; Kenmare, 42,054, 42,066–68, 42,103, 42,164, 42,170–71; Bantry, 42,441–43, 42,446, 42,464, 42,571, 42,617, 42,652; Dingle, 43,307, 43,483, 43,554, 43,586–90, 43,609–11; Westport, 43,949, 43,951–52, 43,970; Galway, 44,973–74, 45,162–63, 45,412–13, 45,480–82, 45,513–14, 45,617–18, 45,870; Moville, 46,612–14, 46,619–21, 46,632–33, 46,680–81, 46,956–58, 47,019, 47,204–05, 47,258–63, 47,267–68; Carrickfergus, 47,286, 47,474, 47,751–2, 47,760, 47,837–41, 47,878–80, 47,890, 47,925–29, 47,957; Carlingford, 48,159–61; Dundalk, 48,522–23, 48,535, 48,540–3; Skerries, 49,436, 49,550; Greenock, 49,887–8, 49,954–60, 50,094, 50,475–7; Inverary, 52,272–8; Dumfries, 53,822–47, 54,140–51; Liverpool, 55,583–6, 55,724, 55,751, 55,777, 55,988, 55,996–8, 56,054, 56,271–87; Tenby, 57,117–23; Swansea, 57,235–56.
Fluctuations in supply of—Edinburgh, 21,333; Peterhead, 29,158–62, 29,216, 29,329; Wick, 30,690; Galway, 44,911–5; Moville, 47,064–7.
Decrease of, co-incident with trawling—Filey, 5706–12, 5722–31, 5738–47, 5893–9, 5959–63, 6009–10, 6145–53, 6327; Flamborough, 6443, 6590, 6646–51, 6654–7, 6819–23, 6826; Brixham, 8386, 8697–700; Torcross, 18,199, 18,421; Liverpool, 55,996–9.
Cause of decrease—Exeter, 19,496–7, 19,598–9, 19,663–7, 19,671–81, 19,788, 19,896, 19,917–8, 19,932, 19,947; Penzance, 24,328; Wick, 31,122; Kenmare, 42,167; Dingle, 43,484–503, 43,555–56, 43,618–19; Westport, 43,950, 43,956; Moville, 46,622, 47,020, 47,207–10; Skerries, 49,432; Dumfries, 53,844–7; Liverpool, 55,587, 55,675–6, 55,792.
Destroyed by suckers and other fish—Cullercoats, 366, 671–2, 1046; Newbiggin, 1253, 1381–7; Holy Island, 2533–44; Sunderland, 2916–20; Wick, 31,124–5.
Destroyed by moss—Edinburgh, 27,170–200.
Destroyed by coal tar—Swansea, 57,541–4.
Destroyed by manufactories—Swansea, 57,389, 57,541–4.
Supply of not decreasing—Hull, 7404–5; Plymouth, 18,817, 18,916, 19,059, 19,061–2, 19,068, 19,090–1, 19,095; Peterhead, 29,217; Wick, 30,895–7;

FISH (*continued*) :—
Kingstown, 35,592, 35,956, 35,969; Dunmore, 39,266–75, 39,680, 39,834–7; Dungarvan, 41,065, 41,069; Westport, 43,858–9, 43,864–7, 43,871–2; Skerries, 49,355–6; Fleetwood, 55,111, 55,124–5 Liverpool, 56,133, 56,136–41; Carnarvon, 56,429.
Demand beyond supply—Billingsgate, 13,131.
Demand met by supply—Billingsgate, 12,858, 13,156–8.
Foreign supply—Billingsgate, 12,451–4, 12,560–3.
Demand for small fish—Liverpool, 56,125–7.
Injured by use of small mesh—Liverpool, 55,931–3, 55,968–71.
Small, destruction of—Brixham, 8095–9, 8254–5, 8281–2, 8403, 8717, 8730–4, 8842, 8925–6; Lynn, 14,540; Hastings, 17,017–23, 17,384–93; Brighton, 17,513–4, 17,519, 17,529–30, 17,929, 17,931, 18,101; Torcross, 18,171, 18,177–8, 18,186, 18,457–8; Exeter, 19,379, 19,388–400, 19,457, 19,462–3, 19,470, 19,528–9, 19,545, 19,556–60, 19,788, 19,812–8, 19,838, 19,842–3, 19,850, 19,933, 19,964, 19,967; Harwich, 20,537–42, 20,551, 20,988, 21,003; Dungarvan, 40,244, 40,668; Liverpool, 55,931–3, 56,158–72.
Small, not taken in deep water — Brixham, 8103–6, 8396, 8719, 8732, 8843.
Small, sold for manure—Staithes, 5611; Hull, 7369; Brixham, 8388–92; Ramsgate, 10,874, 10,886–9; Lynn, 14,473, 14,690, 14,692; Mevagissey, 22,630–2, 22,964–5; Penzance, 24,305–7; Galway, 45,762–7.
Small, sold for bait—Harwich, 20,541, 20,554–61.
Proportion of large and small — Grimsby, 16,570–3, 16,576, 16,579–82; Brighton, 17,531–41, 17,691–2, 17,860, 17,916–8, 18,123.
Proportion of trawl and line for London market—Billingsgate, 12,862, 12,867–9, 13,499.
Condemned—Sunderland, 3329–34; Hartlepool, 4917, 4974–81; Hull, 7186, 7419, 7422–3, 7910–7; Carrickfergus, 48,069–73.
Quality, no falling off in—Hull, 7055, 7085, 7147, 7347–8, 7444, 7815, 8004; Plymouth, 18,638.
Quality, falling off in—Exeter, 19,432–4.
Comparative condition of trawled and line fish—Cullercoats, 240–7, 303, 488–9, 746–7, 839–43; Sunderland, 3255–6, 3259–61, 3335–9, 3549–66, 3593–631, 3794–8, 3811–8, 3927–8; Hartlepool, 4490–1, 4572–91, 4940–3, 4982, 4987–92, 4993–5000; Filey, 5676, 5909–21, 5973–6; Brixham, 8121, 8574–9, 9144–5; Billingsgate, 12,496, 12,822, 13,305–9; Lowestoft, 14,213–8; Grimsby, 15,934–6; Plymouth, 18,766–71, 18,776, 18,785, 19,139–47; Dunbar, 27,403–4; Eyemouth, 27,963–6.
Sent to market by railway — Cullercoats, 717–9; North Sunderland, 2360–3; Sunderland, 3992–4; Lowestoft, 14,389–401; Torcross, 18,330–3, 18,377; Edinburgh, 26,313; Peterhead, 29,152; Morecambe, 54,987; Tenby, 56,579–81.
Sent inland—Billingsgate, 12,567, 12,572–4, 12,583–7, 13,115–20; Brighton, 17,515, 17,958–61; Tenby, 56,572–5.
Advantage of selling fish in French ports — London, 60,940–4, 60,999–61,001, 61,036–7.
Offal fish—Hull, 7462, 7867–9; Yarmouth, 11,522–4, 11,851–3; Billingsgate, 12,548–58; Grimsby, 16,084, 16,095, 16,103.
Salted—Staithes, 5621–4; Kinsale, 41,279–80; Kenmare, 41,837.
Bait for—Cullercoats, 44–7; North Sunderland, 1746; Holy Island, 2556; Sunderland, 2755; Staithes, 5091–104; Filey, 5886–9, 6127–9; Flamborough, 6559–68, 6754; Hull, 7740, 7746–8; Billingsgate, 12,946–50, 13,451–2; Grimsby, 16,036–7; Plymouth, 19,018–9; Harwich, 20,541, 20,554–61, 20,618–20; Edinburgh, 26,671, 26,768, 26,848–51, 27,048–51; Dunbar, 27,396–402, 27,432–5; Eyemouth, 27,824–5, 28,099, 28,105, 28,107–20, 28,181–8; Anstruther, 28,341–7, 28,416–9; Broughty Ferry, 28,736, 28,788–90; Stonehaven, 28,987–93; Peterhead, 29,357, 29,472, 29,476–9, 29,563–7, 29,587–90, 29,642–6, 29,713–5, 29,731–50; Cromarty, 29,820–37, 29,976–81, 30,007–8; Wick, 30,177, 30,213, 30,225, 30,483, 30,609–10; Kirkwall, 31,197, 31,246, 31,300–1; Lerwick, 31,772–6, 31,795–7, 32,032–5, 32,054–5; Stornoway, 32,375–7, 32,564–5, 32,571–5, 32,742, 32,793–4, 32,862; Broadford, 33,383; Tobermory, 33,569; Campbeltown, 33,663–7, 33,753–4, 34,048, 34,096, 34,138, 34,173; Peel, 34,615; Kingstown, 35,721–6, 35,781–3; Howth, 36,024, 36,071; Dublin, 37,229–31; Ringsend, 37,921; Dungarvan, 40,001–5, 40,192–6, 40,257–60, 40,442–52; Kinsale, 41,473, 41,505–7, 41,667–71, 41,712–13; Westport, 43,973–4; Moville, 46,728–9, 47,214–8; Carrickfergus, 47,368–71, 47,772–5, 47,888; Carlingford, 48,205–7; Dundalk, 48,603–5, 48,770–73, 48,819–

FISH (*continued*):—

22; Skerries, 49,418–22, 49,429–31, 49,462–67, 49,484–88, 49,499–501, 49,514, 49,552–3, 49,570–1; Balbriggan, 49,854–5; Greenock, 50,109–25, 50,247–56, 50,518, 50,699–701, 50,754–64; Ardrishaig, 51,828, 51,846–7, 52,103–8, 52,133, 52,234–40, 52,247–9; Tarbert, 53,407–12, 53,414–19; Ballantrae, 53,820*a*; Dumfries, 53,904; Morecambe, 54,807–11; Tenby, 56,993–7, 57,124–7; Swansea, 57,785; London, 61,689.

Price of—Cullercoats, 304; Sunderland, 3906–9, 4025–6; Hartlepool, 4468–76, 4592, 4843, 4907–13, 4950, 4982; Billingsgate, 12,457–8, 12,464–7, 12,558, 12,663–6, 12,835, 12,870–2, 13,020, 13,177–85, 13,493; Yarmouth, 11,316–20, 11,322–3, 11,688–9; Grimsby, 16,056–9, 16,062, 16,078–82, 16,088–92, 16,654–8; Hastings, 16,894, 17,038–40, 17,255; Torcross, 18,523–7; Plymouth, 18,885–7, 19,153–6, 19,166–7; Stonehaven, 29,114–5; Ringsend, 37,617–23, 37,625–30; Dungarvan, 41,012–14; Kinsale, 41,583–4, 41,673–5; Dingle, 43,539–45; Galway, 45,129–31, 45,989–96; Inver, 46,273; Moville, 46,675–79*a*, 46,963–64, 47,001–5; Carrickfergus, 47,372–74; Dundalk, 48,859–66; Greenock, 49,924; Ardrishaig, 51,214–5, 51,342–55, 51,401–8; Liverpool, 55,686–91, 55,991–2.

Increase in price of—Cullercoats, 111, 764–6; Newbiggin, 1396–7, 1510, 1689–92; North Sunderland, 1900–9, 1974–5, 1989, 2166–72; Holy Island, 2440–6; Sunderland, 2748, 3277–8, 3862–4, 3929–33, 4042–3; Hartlepool, 4077, 4339, 4374–8; Staithes, 5048, 5053–4, 5562–3, 5567–71, 5619; Filey, 5759–63, 5788–9, 5816–7, 5954, 6176; Flamborough, 6507–15, 6770; Hull, 6937, 7267; Ramsgate, 10,388; Plymouth, 18,679–80, 18,890, 19,081–9, 19,093–4, 19,159, 19,191–6, 19,234–41; Exeter, 19,428, 19,435–6, 19,958; Harwich, 21,165; Poiperro, 21,755; Edinburgh, 26,881, 26,953–4; Anstruther, 28,268, 28,564; Peterhead, 29,218–20, 29,538; Lerwick, 31,927–9; Kingstown, 35,603–6; Dunmore, 39,516–8; Kenmare, 42,104–5, 42,155–6, 42,163–5, 42,171; Bantry, 42,536; Westport, 43,979–81; Moville, 47,264–5; Carrickfergus, 47,660–1; Dundalk, 48,544; Balbriggan, 49,752–4; Greenock, 50,394–8; Dumfries, 53,867; Fleetwood, 55,481.

Decrease in price of—Staithes, 5573–5; Filey, 5940–2, 6231; Hull, 7439; Brixham, 9080; Billingsgate, 12,457–8, 12,464–7, 12,663–6; Grimsby, 16,089; Carrickfergus, 48,043–6, 48,074; Fleetwood, 55,478–80; Liverpool, 56,302.

Price dependent on catch—Flamborough, 6516; Hull, 7106; Billingsgate, 12,873–9; Plymouth, 18,885, 19,153, 19,166–7.

Price highest in Catholic countries—Ramsgate, 10,561, 10,566.

Comparative price of line and trawl fish—Filey, 5805–15, 5904, 5907, 5911, 5916; Flamborough, 6546–51; Hull, 7083, 7198–202, 7231, 7286–9, 7876–85.

Effect of trawling on price of—Filey, 5806–9, 5998–600, 6093–6.

Effect of American War on price of—Filey, 5803, 5818; Hull, 7439; Liverpool, 55,687–9.

Effect of railways on price of—Cullercoats, 114–5; North Sunderland, 1848, 1905–6, 2175–7, 2257, 2276; Hull, 6937, 6971–2, 7435, 7852; Brixham, 8170–7, 8503–4; Ramsgate, 10,381–4, 10,656–8; Hastings, 16,987, 17,040–2, 17,459–62; Wick, 30,892–4.

FISH, various kinds of:—

Basse:—
Swansea, 57,470.

Blewitt:—
Morecambe, 54,812–3.

Bloaters:—
Increase of—Billingsgate, 13,078–9.
Mode of curing—Stonehaven, 29,107–13.

Bream:—
Increase of—Hastings, 16,879–82.

Brill:—
Hull, 6893, 7068; Ramsgate, 10,505; Bantry, 42,646; Dingle, 43,496; Ballantrae, 53,820*a*; Fleetwood, 55,193, 55,476.
Decrease of—Torcross, 18,432–5; Liverpool, 56,286.
Price, increase of—Grimsby, 16,088.

Buckies:—
Campbeltown, 33,753–4, 33,865; Peel, 34,575–7, 34,977–8; Greenock, 50,699; Ballantrae, 53,820*a*.

Coal Fish, Glassen, or Black Pollack:—
Kirkwall, 31,422–6; Peel, 34,983–4, 34,989; Inver, 46,256, 46,266, 46,571–2; Ardrishaig, 51,660, 51,669; Tarbert, 53,619–20.

FISH (*continued*):—

Cod and Ling (see also "Ling"):—
Take of—Yarmouth, 11,235, 11,656; Filey, 5683, 5692, 6327–8; Hull, 6893, 7067, 7266, 7286; Boston, 15,677; Grimsby, 15,906–7, 15,948, 16,038, 16,460–6, 16,490, 16,557–8, 16,574–6, 16,600–1, 16,603, 16,605; Hastings, 17,070–1, 17,080; Edinburgh, 26,739–45; Eyemouth, 27,919–22; Anstruther, 28,270–6; Peterhead, 29,230–2; Kirkwall, 31,315; Lerwick, 31,888–93, 31,924–52, 32,007–13; Stornoway, 32,264–70, 32,461, 32,694–6, 32,784, 32,803, 32,875, 32,944; Portree, 33,020, 33,097; Tobermory, 33,439; Campbeltown, 33,684–7; Peel, 34,759; Kingstown, 35,442, 35,511, 35,883–7; Dingle, 43,764–5; Moville, 46,711, 46,716; Carrickfergus, 47,914–7; Skerries, 49,538–40, 49,545; Tarbert, 53,436–44; Ballantrae, 53,820*a*; Dumfries, 53,840; Fleetwood, 55,052–5, 55,196–200, 55,474.

Increase of—Grimsby, 15,898, 15,917–8, 15,972, 15,978–80, 16,070, 16,282, 16,296, 16,642; Harwich, 20,771–80, 20,793–6, 20,805–6, 20,881; Anstruther, 28,296–7; Wick, 30,478, 30,877; Lerwick, 31,930–3, 32,038–40; Stornoway, 32,393–4, 32,561–3, 32,796–9, 32,807–8; Tobermory, 33,440; Westport, 43,847; London, 60,793–7.

Decrease of—Cullercoats, 218, 240, 751–4; Newbiggin, 1131, 1684; North Sunderland, 2319–21; Holy Island, 2430–1, 2567; Sunderland, 2766, 3052; Hartlepool, 4076, 4464; Staithes, 5046–7, 5280, 5350–61; Filey, 5882–3, 6145, 6196; Flamborough, 6433, 6436; Torquay, 9941–2; Ramsgate, 10,976, 10,984–5; Grimsby, 15,914, 15,944–54; Brighton, 17,678, 17,763; Dunbar, 27,254, 27,597; Eyemouth, 28,128–33; Anstruther, 28,557; Broughty Ferry, 28,769–70; Peterhead, 29,629–30, 29,751; Kirkwall, 31,271–9, 31,292–5, 31,602–7; Lerwick, 31,974; Portree, 33,099, 33,202–5; Campbeltown, 33,760, 33,795, 33,863, 33,933, 34,145; Peel, 34,392; Kingstown, 35,443–4, 35,716; Howth, 36,016–21; Ringsend, 37,407; Wexford, 38,499, 38,990; Dunmore, 39,439; Dungarvan, 40,438–41, 41,066; Kinsale, 41,324; Westport, 44,429–31; Inver, 46,359–61, 46,548–50; Moville, 46,612–4, 46,726, 46,734, 46,966, 47,034, 47,057; Carrickfergus, 47,840–2, 47,869–71, 47,912–8; Dundalk, 48,634–6, 48,712–3, 48,719, 48,793, 48,968–9; Skerries, 49,447–50, 49,545; Ardrishaig, 51,837–8; Tarbert, 53,436–44; Dumfries, 53,822–4, 54,100–11; Morecambe, 54,827–8; Tenby, 56,493, 56,497–8, 56,961, 56,971–2; London, 60,790–1.

Decrease in size of—Cullercoats, 240, 751–63, 892–3, 1036; Newbiggin, 1685–7; North Sunderland, 1715–7; Holy Island, 2432, 2569–74; Hartlepool, 4075; Staithes, 5056–8, 5281–2, 5285–6, 5560, 5592; Flamborough, 6434, 6591; Dunbar, 27,405.

Caught too small—Grimsby, 16,460–71, 16,483–5, 16,528, 16,531–2, 16,534–44, 16,566; Brighton, 17,783, 17,826, 17,864; Lerwick, 32,043–8; Carrickfergus, 47,410–4; Carlingford, 48,305; Dundalk, 48,683–9.

Eaten by dog-fish—Grimsby, 16,384–9, 16,615–23.

Season for—Staithes, 5350–3, 5364–5; Grimsby, 15,924, 16,379, 16,559–60; Kirkwall, 31,298; Lerwick, 31,748–9; Dungarvan, 40,728; Carrickfergus, 47,918; Tenby, 56,959–60; London, 60,931–2.

Markets for—Kirkwall, 31,302–4; Lerwick, 31,777–81; Dungarvan, 40,729–30; Moville, 46,817, 47,008–10.

Price of—Grimsby, 16,654–8; Wick, 30,604–5; Kirkwall, 31,280–1, 31,318; Lerwick, 31,916–20; Stornoway, 32,367–9, 32,463; Campbeltown, 33,762; Kingstown, 35,866–9; Dublin, 37,359; Moville, 47,003–7, 47,059.

Fishing capable of increase—Kirkwall, 31,297, 31,398–406.

Interference with fishery—Cromarty, 29,806–8; Lerwick, 31,762–7, 31,995, 32,003.

Depredations by French fishermen—Harwich, 20,882–5, 21,267–9.

Fishing injured by loss of herring bait—Stornoway, 32,810–2, 32,861; Portree, 33,252; Campbeltown, 34,199–201.

Fishing a losing trade—Hull, 7216, 7218–25, 7229, 7251–60.

Trawled better than hooked—Ringsend, 37,619, 37,637.

Crab-fish:—
Dumfries, 54,389.

Crake-herring:—
Inver, 46,244–8.

FISH (*continued*):—

Cross-fish (see also "Five Fingers"):—
Morecambe, 54,809.

Cuddies:—
Ardrishaig, 52,086.

Dabs:—
Flamborough, 6754; Torquay, 9978–85; Kenmare, 41,775; Fleetwood, 55,479.

Dog-fish:—
Destruction caused by—Cullercoats, 364–8, 673, 863–9; Newbiggin, 1251–6, 1381–5; North Sunderland, 1894–9, 2073, 2133–7; Holy Island, 2530–2; Sunderland, 2916–20; Hartlepool, 4383–5; Filey, 6134–8; Flamborough, 6623–5, 6630; Yarmouth, 11,854–9; Grimsby, 16,384–9, 16,615–23; Polperro, 21,359–60; Peterhead, 29,499; Broadford, 33,366–8; Moville, 47,207–10, 47,252–4; Dundalk, 48,654, 48,677, 48,735–7, 48,947–9, 48,974–84; Greenock, 50,203–5; Ardrishaig, 51,088, 51,661–2, 52,227–30; Tarbert, 53,460–3; Ballantrae, 53,820*a*.
Attracted by refuse from French vessels—Holy Island, 2646–8; Flamborough, 6613–5.
Caught for consumption—Morecambe, 54,815–22, 54,831.
Decrease of—Grimsby, 16,423, 16,430; Inverary, 52,769–70.

Eels (*Conger*):—
Billingsgate, 13,067–77; Lynn, 14,783–8; Plymouth, 18,996–7; Polperro, 21,353–4; Peel, 34,787–93; Kingstown, 35,713–5; Ringsend, 37,602; Dunmore, 39,438; Kinsale, 41,461–6; Skerries, 49,474, 49,551; Ardrishaig, 51,828–9.

Eels (*Lampern*):—
Filey, 6129.

Eels (*Lampreys*):—
Exeter, 19,376.

Eels (*Sand*):—
Moville, 47,036, 47,039–41.

Five-Fingers (see also "Star Fish"):—
Destroy mussels—Billingsgate, 13,443; Westport, 44,096–8.

Flat Fish:—
Harwich, 21,243–52; Campbeltown, 33,699–701; Dingle, 43,304–05; Carrickfergus, 47,475–76, 47,730; Carlingford, 48,098–100; Dundalk, 48,649–54, 48,741, 48,997–98; Balbriggan, 49,745; Dumfries, 53,845–66, 53,870–6; Morecambe, 54,884.

Flounders (see also "Trawling for Flounders"):—
Exeter, 19,783–6, 19,810, 19,819–20, 19,828–31, 19,841, 19,888–91, 19,904, 19,907, 19,930–2, 19,943; Wyke Regis, 20,449; Broughty Ferry, 28,698; Moville, 46,884, 47,056–60; Greenock, 49,910; Inverary, 52,274; Dumfries, 53,822–30, 53,837–9, 53,845–66, 53,877–83, 53,907–9, 53,940–3, 53,946–57, 54,055–9, 54,082, 54,170, 54,182–3, 54,339–52, 54,391–7; Morecambe, 54,623–8, 54,741–5, 54,756–9; Fleetwood, 55,436–7; Carnarvon, 56,458–9; Tenby, 56,527–31, 56,723–4; Swansea, 57,541.

Flukes (see also "Trawling for Flukes"):—
Moville, 46,610; Morecambe, 54,615*a*–17; Fleetwood, 55,037, 55,479.

Gurnard:—
Brixham, 8478, 8570; Dungarvan, 41,067–8; Fleetwood, 55,096–7, 55,476, 55,479; Tenby, 56,501–10, 56,722.

Haddock:—
Number of—Filey, 5683, 5692; Hull, 6893, 7068, 7764; Yarmouth, 11,235; Dunbar, 27,587–9; Eyemouth, 28,009, 28,125; Stonehaven, 28,906, 28,998, 29,038–42, 29,050–3; Arklow, 38,094–5; Ballantrae, 53,820*a*; Tenby, 56,523–6.
Increase of—Hull, 6947, 7056, 7168–71, 7350, 7487, 7495, 7567, 7742; Yarmouth, 11,232, 11,455; Billingsgate, 12,433–5, 12,495, 12,537–43; Edinburgh, 26,966–72; Dunbar, 27,455–7; Eyemouth, 27,816, 27,890–2, 28,031; Anstruther, 28,261–6; Stonehaven, 28,895–7; Peterhead, 29,627–8; Campbeltown, 33,869; Dundalk, 48,792, 48,967, 48,970, 49,011; London, 61,031.
Decrease of—Cullercoats, 240, 751–2, 824–7; Newbiggin, 1128–300, 1680; North Sunderland, 1715–22, 2308–18; Holy Island, 2427, 2567; Sunderland, 2744–7, 3841; Hartlepool, 4119, 4320–2; Staithes, 5060, 5283; Filey, 5882, 6196; Flamborough, 6435–6, 6591; Brixham, 8472, 9007, 9043–8; Ramsgate, 10,097, 10,189–94, 10,401–2, 10,688; Brighton, 17,671; Falmouth, 23,820–1; Edinburgh, 27,061; Dunbar, 27,251, 27,578; Broughty Ferry, 28,698*b*–9; Peterhead, 29,340–2, 29,446, 29,511–3, 29,714–19; Cromarty, 29,861–2, 29,959–63; Wick, 30,352, 30,463–5, 30,576–82, 30,873; Kirkwall, 31,179–82, 31,563, 31,654; Stornoway, 32,282–5, 32,576–8; Campbeltown, 33,691–2, 34,147–8; Peel, 34,392; Ringsend, 37,405, 37,449–52, 37,518–9, 37,579–81, 37,784–9, 37,866–78; Wexford, 38,499–503, 38,990; Dunmore, 39,361–7; Kinsale, 41,327–33, 41,339–46, 41,420–4, 41,547–8, 41,563–5; Dingle, 43,285–6; Westport, 43,971, 44,429–31; Galway, 44,776–8, 45,800; Inver, 46,355–8, 46,543–5; Carrickfergus, 47,328, 47,580–1; Dundalk, 48,630–3, 48,681, 48,734, 48,788; Skerries, 49,101, 49,268–76, 49,439–41, 49,443–6, 49,680–4; Balbriggan, 49,742–3; Greenock, 49,889–92, 50,676, 50,697–8; Ardrishaig, 51,833–5; Tarbert, 53,400–5; Dumfries, 53,833–6; Tenby, 56,588–92.
Disappeared altogether—Portree, 32,998, 33,001; Peel, 34,586–9; Kingstown, 35,433–4, 35,465–8, 35,508–9, 35,526, 35,542, 35,657–8, 35,795; Howth, 35,985–8, 36,014–5, 36,022–7, 36,392–3; Dungarvan, 40,434–7, 40,575–9, 40,656–62, 41,070; Inver, 46,189–91, 46,258–9; Moville, 47,246; Dumfries, 53,834–6; Fleetwood, 55,117–8, 55,202–7; Liverpool, 55,585, 55,624, 55,778, 56,135, 56,285.
Quantities taken formerly—Westport, 43,839–41; Galway, 45,165; Moville, 47,248–9; Carrickfergus, 47,582–3; Dundalk, 48,636–7, 48,733, 48,965; Skerries, 49,271, 49,533–6; Balbriggan, 49,816–19.
Size of—Newbiggin, 1129–30; Sunderland, 3054; Hull, 7052–4; Yarmouth, 11,229–30, 11,373, 11,454; Grimsby, 16,455–7.
Decrease in size of—Cullercoats, 111–3, 240, 751–2, 824–7, 891, 1037–8; Newbiggin, 1681–3; North Sunderland, 1926, 1994, 2316; Holy Island, 2428–9, 2569–74; Sunderland, 2742–3; Hartlepool, 4070–4, 4323, 4462–6; Staithes, 5059, 5283, 5514, 5518–9, 5560, 5592; Grimsby, 15,905.
Variation in size of—Eyemouth, 28,055–7; Peterhead, 29,577.
Fishing capable of extension—Kirkwall, 31,408–9.
Season for—Grimsby, 16,369; Cromarty, 29,773; London, 58,784–1.
Quality of—Peterhead, 29,618, 29,621–2; London, 60,850–2, 60,857–62.
Smoked—Billingsgate, 13,080–3; Grimsby, 16,058, 16,091.
Markets for—Eyemouth, 28,036; Stonehaven, 29,067–9.
Price of—London, 60,853.
Mode of curing—Eyemouth, 27,977–86; Stonehaven, 29,054–59, 29,070–1; Cromarty, 29,803–5.

Hake:—
Brixham, 8084, 8473, 9048, 9262, 9266; Falmouth, 23,820; St. Ives, 24,856–60; Ringsend, 37,468–9, 37,602; Wexford, 38,505–7; Dunmore, 39,421–33, 39,438; Dungarvan, 40,711–5, 40,731, 40,800–10, 40,922–7, 41,163–5; Kinsale, 41,195, 41,231–3, 41,386–7, 41,405–8; Bantry, 42,537–8, 42,709; Dingle, 43,673–9; Inver, 46,206; Greenock, 50,049; Tarbert, 53,406.
Decrease of—Polperro, 21,710–6; Dunmore, 39,443, 39,601–5, 39,609; Dungarvan, 40,467–75; Kinsale, 41,209–10, 41,261–2, 41,315–22, 41,398–400, 41,425, 41,578; Bantry, 42,527–8, 42,613–4, 43,650–2; Inver, 46,197.
Increase of—Dingle, 43,509, 43,735–8.

Halibut:—
North Sunderland, 1994; Staithes, 5062–3; Filey, 5692; Hull, 6893; Anstruther, 28,431–2; Inverary, 52,274.
Decrease of—Staithes, 5063, 5531–3; Filey, 5698, 6196.
Kept alive in open boxes—Grimsby, 16,000.

Herrings (see also "Trawling for Herrings"):—
Take of—Yarmouth, 11,951, 12,049, 12,123–7, 12,265–73; Lowestoft, 14,318–22; Wick, 31,106–9; Stornoway, 32,212–4, 32,501, 32,688, 32,755, 32,944; Kingstown, 35,449; Galway, 45,022–5, 45,685; Ardrishaig, 50,961–2, 51,486, 52,033–6; Inverary, 52,317; Ballantrae, 53,820*a*; Morecambe, 54,682; Fleetwood, 55,495–9; Tenby, 56,914; London, 60,812–4, 60,823–5.
Large quantities caught formerly—Kenmare, 41,784–5, 42,112; Bantry, 42,603, 42,649, 42,798, 42,808–9, 42,817, 42,895–6; Westport, 44,417; Galway, 45,132–3; Inver, 46,375–8; Moville, 46,642, 47,082–5; Carrickfergus, 47,338, 47,780–1, 47,823, 47,893.

Fish (*continued*):—

Herrings (continued):—

Large quantities could be caught—Bantry, 42,624; Westport, 44,463–5; Moville, 46,646–7, 46,816.

Increase of—Staithes, 5539–40, 5542, 5600, 5624; Flamborough, 6596–7; Ramsgate, 11,007–8; Yarmouth, 11,914, 12,010, 12,133–5, 12,383; Billingsgate, 13,023–37; Lowestoft, 13,697, 13,784, 14,211–2; King's Lynn, 14,447, 14,719–20; Boston, 15,695; Exeter, 19,727–8; Dunbar, 27,630–1; Peterhead, 29,157–8, 29,375–6; Kirkwall, 31,553; Tobermory, 33,582; Campbeltown, 33,653, 33,737, 33,813, 34,144; Peel, 34,531; Howth, 36,047–52; Dingle, 43,122–3, 43,510, 43,746; Westport, 43,942; Galway, 44,690–2; Inver, 46,132, 46,199, 46,391; Carlingford, 48,452–5; Dundalk, 49,009–13, 49,034, 49,037–8, 49,042–7; Skerries, 49,106–9, 49,259–61; London, 58,994, 60,809–12.

Habits of—Tarbert, 53,204–15.

Decrease of—Cullercoats, 200–8, 222–5, 467–9, 480–1, 564–6, 655–6, 695–705, 1042–3; Newbiggin, 1132–9, 1334–40, 1607–14; North Sunderland, 1788, 1947–54, 1996, 2082, 2237–9, 2390–1; Holy Island, 2447–50, 2577–9, 2667–9; Sunderland, 2833–54, 3075–6, 3140; Hartlepool, 4188–92, 4204–11, 4361; Staithes, 5114–7, 5333–5, 5451, 5456–9; Filey, 5754–5, 5764, 5931–4, 6030–1, 6039–42, 6164; Flamborough, 6712–6, 6841–2; Brixham, 9048–9, 9094, 9121–2; King's Lynn, 14,585, 14,588–9, 14,732, 14,735–6, 14,801–3, 14,923–30; Boston, 15,269, 15,271–2, 15,355, 15,388, 15,393, 15,397, 15,437, 15,444, 15,453, 15,592, 15,595, 15,682, 15,780; Hastings, 16,835, 16,837, 16,918–9, 17,332–4, 17,344, 17,350–5, 17,374; Brighton, 17,574–5, 17,720, 18,033; Wyke Regis, 20,250; St. Ives, 24,874–5; Edinburgh, 26,950, 26,952; Dunbar, 27,291–4, 27,354; Eyemouth, 27,795–8; Anstruther, 28,252, 28,304, 28,438, 28,484; Peterhead, 29,534, 29,558; Cromarty, 29,846–65, 29,943–9, 30,140–1; Wick, 30,246–7, 30,351, 31,106–9, 31,117, 31,127–31; Lerwick, 31,909, 32,060–1, 32,151; Broadford, 33,195, 33,239–45; Tobermory, 33,431–3; Peel, 35,027; Kinsale, 41,347–50; Kenmare, 42,054, 42,172–3; Bantry, 42,454–6, 42,602, 42,730, 42,752, 42,797, 42,831–2; Dingle, 43,636–42, 43,743; Westport, 43,977, 43,995–9, 44,001–3, 44,410, 44,435–8; Galway, 44,534, 45,377, 45,748; Inver, 46,193–4, 46,537; Moville, 46,641, 47,035; Carrickfergus, 47,335–7, 47,447, 47,777, 47,781, 47,892, 47,909; Dundalk, 48,553, 48,661–2; Greenock, 50,317–8; Inverary, 52,797–803; Tarbert, 53,587; Swansea, 57,323, 57,411–5, 57,417.

Fluctuation in quantity—North Sunderland, 2182; Lynn, 14,485; Edinburgh, 27,056–7; Eyemouth, 28,088; Broughty Ferry, 28,704; Stonehaven, 28,841, 29,106; Peterhead, 29,157, 29,277, 29,330, 29,404; Wick, 30,357–8, 31,096–7; Kirkwall, 31,443–5, 31,501, 31,726–8; Ardrishaig, 51,479–85; Dumfries, 54,032–40, 54,143–51; Morecambe, 54,674–81, 54,948–9; Fleetwood, 55,001–5, 55,559–64; Tenby, 56,494–5; London, 58,968–70, 58,972–3, 58,999.

Condition of—Torquay, 9781–93; Ramsgate, 10,663–6; Lowestoft, 13,849, 14,172–6; Lynn, 14,750–2; Boston, 15,738–41; Hastings, 16,922; Plymouth, 18,983–6; Dunbar, 27,352; Stonehaven, 28,976–7; Peterhead, 29,372–4, 29,500; Wick, 30,201, 30,227–30, 31,056; Kirkwall, 31,668–75; Arklow, 38,054–6, 38,071–8, 38,080, 38,186–99; Wexford, 38,649–53; Kinsale, 41,255–7, 41,353–5, 41,365, 41,367–73; Bantry, 42,810, 42,813, 42,819, 42,826; Dingle, 43,145–6, 43,149, 43,153; Inver, 46,298, 46,402; Moville, 46,693–6; Carrickfergus, 47,910–11; Carlingford, 48,382–3, 48,394; Dundalk, 48,555; Skerries, 49,199, 49,576–7; Greenock, 49,935–53, 49,996–9, 50,239–46, 50,296–314; Inverary, 52,353–8, 52,990, 53,030–61, 52,659–66; Tarbert, 53,118, 53,123; London, 58,981–7.

Interference with shoals of—Ardrishaig, 51,788–94; Inverary, 52,331–44, 52,629, 52,904; Tarbert, 53,217–8, 53,362, 53,485–95, 53,508–11.

Destroyed by sprat fishing—Edinburgh, 26,701–5.

Gut-pock herrings—Peel, 35,012–4; Greenock, 50,268.

Harvest herrings—Torquay, 10,033–9.

Caught by hooks—Tarbert, 53,713–21.

Seasons—Cullercoats, 562–3, 654, 735; North Sunderland, 1949; Filey, 5683, 6064, 6247; Flamborough, 6469–73; Torquay, 9639, 9732–5, 9778–80, 9788, 9995–9; Ramsgate, 10,662, 10,667–9, 10,707, 10,712; Yarmouth, 11,915–7, 11,931, 12,018; Lynn, 14,751;

Fish (*continued*):—

Herrings (continued):—

Boston, 15,270, 15,363, 15,496, 15,509, 15,538; Polperro, 21,380–84; St. Ives, 24,867–9; Edinburgh, 27,029–34; Dunbar, 27,349–51, 27,356–8; Anstruther, 28,282–3, 28,286, 28,301; Broughty Ferry, 28,791–6; Stonehaven, 28,849–50, 29,090; Cromarty, 29,773, 29,886–91, 29,899; Wick, 30,194–7, 30,204–7, 31,049; Kirkwall, 31,216, 31,435–7; Lerwick, 31,824–8, 32,057–9, 32,074, 32,157–9, 32,161–2; Stornoway, 32,560, 32,565–70, 32,724, 32,949; Peel, 34,412–6; Howth, 36,062–9, 36,114–6, 36,783–94, 36,803; Arklow, 38,052–3, 38,063–70; Wexford, 38,656–61, 38,671–8; Dunmore, 39,225; Kinsale, 41,184–6, 41,352; Bantry, 42,820–8, 42,888–90; Dingle, 43,150–1; Galway, 45,170–1, 45,839; Inver, 46,134, 46,293–7, 46,392, 46,402; Moville, 46,689–92; Carrickfergus, 47,894, 47,902; Carlingford, 48,169, 48,379, 48,456, 48,457; Dundalk, 48,563–5, 48,672; Skerries, 49,192–3, 49,578; Ardrishaig, 50,963–8, 51,068–74, 51,430–46; Inverary, 52,454–62; Carnarvon, 56,466–8; Tenby, 56,989–90; London, 58,982, 58,987, 58,992, 60,804–8, 60,826–8, 60,831–40.

Close-time for—Cullercoats, 523–7, 919–20; Newbiggin, 1177–9; Lowestoft, 13,955–9, 14,010–22, 14,270, 14,292–4, 14,386*a*; Edinburgh, 26,187–91, 26,361–3, 26,524, 26,767–75, 26,845, 26,850–1, 26,857–68, 26,904–16; Peterhead, 29,359–60; Wick, 30,198–201, 30,636–8, 30,737–8, 30,792–2*a*, 30,879, 30,914–6, 30,979–81, 31,044–8, 31,055, 31,062–8; Stornoway, 32,408–11, 32,439, 32,536–7, 32,624, 32,683–4, 32,893–903, 32,914; Broadford, 33,305–8; Tobermory, 33,627–9; Campbeltown, 33,808–10, 34,161–2, 34,242; Greenock, 50,247–56, 50,699, 50,754–64; Ardrishaig, 51,274–7; Inverary, 52,758–64; Tarbert, 53,771–2; Ballantrae, 53,820*a*.

Breaches of close-time—Stornoway, 32,414–24, 32,760–64, 32,765–71, 32,851, 32,906–17; Portree, 33,260, 33,267–73, 33,275; Campbeltown, 33,872–5, 33,890–9, 33,907–29, 34,026.

Injurious effect of close-time—Edinburgh, 26,361–3, 26,767–7, 26,845–51; Wick, 30,737–8, 31,062–8; Stornoway, 32,229–51, 32,371–88, 32,526, 32,624–5, 32,732–3, 32,741–51, 32,906; Portree, 33,173–6; Broadford, 33,365–6; Tobermory, 33,551; Campbeltown, 33,956, 33,960–2, 34,126–35; Greenock, 49,977–91, 50,023, 50,046–9, 50,052–6, 50,109–12, 50,518; Ardrishaig, 51,821, 51,828, 51,949, 52,181–6; Tarbert, 53,117–23, 53,758.

Close-time (regulations as to) enforced—Ardrishaig, 52,088–102.

Close-time (quality and price of fish caught in)—Ardrishaig, 51,645–9, 51,917–24, 52,250–67; Inverary, 52,762–4; Tarbert, 53,421–5, 53,699–702, 53,760–70.

Close-time should be altered—Wick, 31,055; Stornoway, 32,388, 32,446–49, 32,531, 32,542, 32,613–5, 32,685; Portree, 33,185–8; Broadford, 33,301–2; Tobermory, 33,566, 33,573–6; Campbeltown, 33,848–9, 33,955, 34,041–2; Peel, 34,345; Greenock, 50,750–3, 50,950–3; Ardrishaig, 51,283–92, 51,464–74, 51,587–92, 51,721–9, 51,997–2002; Inverary, 52,376–83, 52,718–21, 52,950–64; Tarbert, 53,412–3, 53,421; Ballantrae, 53,820*a*.

Close-time (obtaining bait in)—Ardrishaig, 51,846–7, 52,103–18, 52,128–32; Tarbert, 53,407–19; Ballantrae, 53,820*a*.

Close-time necessary—Lowestoft, 13,955, 14,010–22; Wick, 30,914; Stornoway, 32,327–44; Tobermory, 33,591, 33,627–9; Campbeltown, 33,808–10, 34,161–2; Peel, 34,340, 34,354, 34,471, 34,548–58, 34,698, 34,828–35, 34,950; Greenock, 50,103–9, 50,258–62, 50,332–48, 50,950–3; Inverary, 52,430–7, 52,976–80; Tarbert, 53,791–4.

Close-time opposed by fishermen—Stornoway, 32,908–10, 32,927–9, 32,931, 32,935, 32,951–8, 32,968; Portree, 32,988, 33,028, 33,041; Broadford, 33,397–9; Peel, 34,754; Tarbert, 53,792–4.

Close-time, objected to—Lowestoft, 14,269–73; Stornoway, 32,901, 32,937–43; Tobermory, 33,543; Campbeltown, 33,663–72; Greenock, 50,022, 50,047; Ardrishaig, 51,921–4, 52,232; Tarbert, 53,546–54.

Close-time (kinds of fish caught in)—Ardrishaig, 51,830.

Report of Sheriff of Skye in reference to close-time—Portree, 32,976.

Size of—Staithes, 5561; Ramsgate, 11,054; Lowestoft, 13,862–3, 13,985–6; Lynn, 14,454, 14,649*a*, 14,726; Boston, 15,355–9, 15,362, 15,364–8, 15,504, 15,512–3, 15,692–3, 15,734–7; Lerwick, 31,834–7, 32,069–73, 32,154–6.

FISH (*continued*):—

Herrings (continued):—

Sold as sprats—Torquay, 10,025–6, 10,030, 10,040–3.
Sold for manure—Staithes, 5202; Yarmouth, 11,921, 11,986, 12,307–14; Billingsgate, 13,105; Lowestoft, 13,728, 13,799–80, 14,045, 14,047–9, 14,053–7, 14,147–9, 14,302–5, 14,369–71; Lynn, 14,418, 14,486, 14,489, 15,002–3.
Used for bait—Lowestoft, 14,177–80, 14,249–68, 14,339–48, 14,360–8, 14,376–9, 14,382–4; Brighton, 17,866; Campbeltown, 33,754–5; London, 60,799–800, 60,934.
Irish sold as Loch Fyne—Howth, 36,767–8.
Quality inferior—Billingsgate, 13,024, 13,035; Lowestoft, 13,981, 13,985; Stornoway, 32,444; Portree, 33,199–201; Campbeltown, 33,659, 33,773–6, 33,886, 34,045, 34,126, 34,151, 34,162.
Spent—Yarmouth, 11,918, 11,921, 11,986, 12,033–6, 12,255–7; Billingsgate, 13,105; Lowestoft, 14,313–5; Plymouth, 18,967–76, 18,978–81; Campbeltown, 33,774; Arklow, 38,189–90.
Taken too small—Lynn, 14,435, 14,457, 14,484, 14,715, 14,727, 14,813, 14,816; Brighton, 17,621–2, 17,826, 17,860, 18,052–3, 18,058, 18,076; Anstruther, 28,307–11; Inver, 46,442–6, 46,516–22; Inverary, 52,371.
Markets for — Yarmouth, 11,962, 11,981, 12,050, 12,092–5, 12,341–2; Lowestoft, 13,778–81, 13,846, 13,853–6, 14,400–1; Boston, 15,693; Hastings, 16,939; Brighton, 18,056; Arklow, 38,205–14; Wexford, 38,680–1; Greenock, 50,439–41; Ardrishaig, 52,204–7.
Proportion sent to market — Yarmouth, 11,981; Lowestoft, 13,851–2.
Exportation of — Yarmouth, 11,964–71, 12,096–7, 12,208, 12,325–49; Edinburgh, 26,316; Peterhead, 29,378–81; Wick, 30,244–5, 30,362–9; Lerwick, 31,901–5; Stornoway, 32,321, 32,635–6; Greenock, 50,409.
Importation of foreign—Greenock, 49,973–4, 50,181–5, 50,463–6.
Barrelled—Yarmouth, 12,029–30, 12,354–5; Edinburgh, 26,243; Wick, 30,743–52; Stornoway, 32,648.
Price of—Yarmouth, 12,122–8, 12,136–60, 12,205–6, 12,356–7; Lowestoft, 13,877; Lynn, 14,723; Hastings, 16,944; Stornoway, 32,358–63, 32,455–6; Campbeltown, 34,162; Peel, 34,446, 34,561, 34,934–41; Port St. Mary, 35,102; Howth, 36,769–70, 36,805–7; Kenmare, 42,179–80; Bantry, 42,839–42; Galway, 44,537–9, 45,665; Greenock, 49,939–53, 50,067, 50,296–314; Ardrishaig, 51,214–15, 51,342–55, 51,401–8; Inverary, 52,386–8, 52,667–74, 53,023–4; Ballantrae, 53,820*a*; London, 60,812.
Increase in price of—Cullercoats, 706–21, 1039; Newbiggin, 1511–3; North Sunderland, 2173–4, 2253–7, 2265–75; Sunderland 3140–6; Eyemouth, 27,801–8; Peterhead, 29,244; Greenock, 49,974; Fleetwood, 55,013–6.
Decrease in price of—North Sunderland, 1908, 2000; Yarmouth, 12,207, 12,344; Lowestoft, 13,777–80.
Stationary in price—Sunderland, 2846–54; Lowestoft, 13,776, 13,782–3.
Buyers — Lowestoft, 13,874; Stornoway, 32,608–12, 32,632.

Spring Herring Fishery:—

Yarmouth, 11,917–30, 11,986, 12,024–8, 12,098–9, 12,307, 12,380; Liverpool, 56,355–72.
Commencement and duration of—Lowestoft, 13,715–6, 13,743–4, 13,978–9, 14,071–3.
History and produce of—Lowestoft, 13,722–7, 13,900, 14,165.
Does not damage autumn fishing—Yarmouth, 11,930, 12,052–3, 12,100, 12,391.
Damages summer fishing — Yarmouth, 11,935–41, 12,170–9, 12,291–300; Lowestoft, 13,748.
Does not damage summer fishing—Lowestoft, 13,989–91.
Does not pay — Lowestoft, 13,738, 13,742, 13,745, 13,857–60.
Does pay—Lowestoft, 13,970–7, 14,049–51, 14,092–4, 14,246–9, 14,275–7, 14,294–300.
Restriction of, necessary — Yarmouth, 12,119–21, 12,301–5; Lowestoft, 13,764–9, 13,809, 13,865–6, 13,956–60, 14,011, 14,017–20.

Summer Herring Fishery:—

Interval between spring and summer — Lowestoft, 13,750.

FISH (*continued*):—

Summer Herring Fishery (continued):—

Falling off in—Yarmouth, 12,287–90; Lowestoft, 13,753–6, 13,760, 13,762–3, 13,900, 13,939–41, 13,997–9.
Smaller boats employed in—Lowestoft, 13,757.
Summer herrings can be salted—Lowestoft, 14,026.
Summer herrings not full—Yarmouth, 12,102–3.
Summer herrings sold as bloaters—Lowestoft, 14,385–6.
Most profitable — Anstruther, 28,300; Stonehaven, 28,851.

Autumn Herring Fishery:—

Yarmouth, 11,931, 11,942, 11,950, 12,101, 12,180–1; Lowestoft, 13,826–9.
Increasing—Lowestoft, 13,770–1, 13,902, 14,002–5.
The most valuable — Lowestoft, 13,785–6, 14,278, 14,381.

Winter Fishing:—

Lynn, 14,447, 14,450, 14,650, 14,652, 14,723; Dunbar, 27,351–6; Broughty Ferry, 28,791; Stonehaven, 28,850; Peterhead, 29,233–7, 29,361–7, 29,439–43, 29,563–7; Cromarty, 29,950–51, 30,128–35; Wick, 30,171–89, 30,222, 30,242–3, 30,373–5, 30,384–8, 30,500–3, 30,590, 30,655–8, 30,693–8, 30,796–8, 30,857–8, 30,887–9, 30,971, 31,069–73; Stornoway, 32,252–63, 32,405–7, 32,482, 32,756; Portree, 33,061, 33,179; Tobermory, 33,545–8; Campbeltown, 33,659, 33,728, 33,782–6, 34,178–80, 34,190, 34,244; Howth, 36,066–7; Arklow, 37,983; Wexford, 38,646–8; Inver, 46,293–8; Carrickfergus, 47,902–8; Carlingford, 48,379–82; Dundalk, 48,672.

Ling (see also "Cod and Ling"):—

Filey, 5692; Hull, 6893; Edinburgh, 26,739–45, 26,768, 26,845–7, 26,852–7; Anstruther, 28,295–9; Kirkwall, 31,545–7; Lerwick, 31,786–8, 31,792–4, 31,911–22, 31,968–73, 32,028–31; Stornoway, 32,264–70, 32,461, 32,694–6, 32,784, 32,803, 32,875, 32,944; Portree, 33,020, 33,095; Tobermory, 33,439; Campbeltown, 33,684–7; Dingle, 43,765; Westport, 43,837, 43,914; Inver, 46,256, 46,266; Skerries, 49,511; Greenock, 50,394, 50,398; Ballantrae, 53,820*a*.
Increase of—Anstruther, 28,296–7.
Decrease of—Staithes, 5280, 5536; Filey, 6196; Anstruther, 28,557; Broughty Ferry, 28,769–70; Peterhead, 29,473; Lerwick, 31,974; Portree, 33,099; Greenock, 50,674–6.
Average catch per day—Brixham, 8481.
Fishery, capable of improvement—Lerwick, 31,963–4; Portree, 33,101.
Stationary—Lerwick, 31,768.
Season for—Lerwick, 31,789–91, 31,965–6.
Price of—Lerwick, 31,916–20; Stornoway, 32,367–9, 32,463; Campbeltown, 33,762.

Lythe:—

Inverary, 52,274.

Mackerel:—

Cullercoats, 649–50, 950–3; Newbiggin, 1140, 1503–6; North Sunderland, 1771–3; Holy Island, 2575–6; Sunderland, 2798–810; Hartlepool, 4140–5, 4349–51; Filey, 5923–8, 6068–70; Flamborough, 6517–9, 6676–8; Brixham, 8234, 8864–72; Torquay, 9654, 9739–43, 9879–82; Yarmouth, 12,077–8, 12,381; Billingsgate, 12,894, 12,985–7; Lowestoft, 13,881–2; Brighton, 17,628–9, 17,722–3, 17,854–6, 17,907–10, 17,982–7, 17,990, 17,997; Plymouth, 19,123–5, 19,257–61, 19,321; Exeter, 19,731–4, 19,945–6; Wyke Regis, 20,022, 20,144, 20,255; Mevagissey, 22,478–83; Penzance, 24,415–23; Eyemouth, 28,122; Peel, 34,613, 35,003–7; Kingstown, 35,451; Howth, 36,097–9, 36,236–8, 36,719; Dunmore, 39,223–4; Dungarvan, 40,833–4; Kinsale, 41,181, 41,215, 41,323, 41,588–91; Ardrishaig, 51,659; Tarbert, 53,611–7, 53,729–54; Carnarvon, 56,413–5, 56,432; Tenby, 56,881–2; Swansea, 57,416.
Increase of—Hastings, 17,336–9; Brighton, 18,115–6; Exeter, 19,734, 19,739–40; Kinsale, 41,210.
Decrease of — Brixham, 9048–9, 9093; Ramsgate, 10,769, 10,986, 10,991–2, 11,009, 11,078; Yarmouth, 12,226–33, 12,281–6, 12,386–8; Lowestoft, 13,697–9, 13,702–4, 13,711–4, 13,717–20, 13,879, 13,961–2, 14,281; Hastings, 17,045, 17,047, 17,176, 17,230, 17,332–4, 17,341–3, 17,374; Brighton, 17,624–5, 17,703–4, 17,852, 17,995–6; Mevagissey, 22,479–80; Falmouth, 23,822; Penzance, 24,001, 24,419; Kenmare, 42,175; Bantry, 42,611.
Mode of catching—Torquay, 9879–80; Ramsgate, 10,770–2; Yarmouth, 12,077–8; Hastings, 17,094–5, 17,179, 17,362; Wyke Regis, 20,023, 20,241, 20,277; Kingstown, 35,452–5; Dingle, 43,003,

FISH (*continued*):—

Mackerel (continued):—
43,289–90; Inver, 46,282–86; Carrickfergus, 47,332; Carlingford, 48,166–67; Dundalk, 48,882–84; Ardrishaig, 51,659; Tenby, 56,881.
Markets for—Hastings, 16,956; Wyke Regis, 20,223–5.
Season for—Filey, 5928; Ramsgate, 10,710, 10,773, 10,969; Yarmouth, 11,993, 12,282; Lowestoft, 13,700, 13,880; Hastings, 17,346; Torcross, 18,292–3; Wyke Regis, 20,252–3; Polperro, 21,311–22.
Condition of in November—Yarmouth, 12,083.
Spring, catch of, injures summer catch—Yarmouth, 12,170, 12,389–90.
Taken too small—Hastings, 17,378–81; Brighton, 17,507–8, 17,548, 17,753–4, 17,783, 17,822, 17,862, 18,117–20.
Small sold for bait—Hastings, 17,067; Brighton, 17,866.
Small thrown away—Brighton, 17,724–5, 17,863.
Price, decrease in—Brighton, 17,650; Wyke Regis, 20,227.
Might be sold in France—Hastings, 17,201, 17,481.
Injured by trawlers—Polperro, 21,907–9.
Scarcity of—Brighton, 17,574–5, 17,624–7, 17,851–3.
Injured by seine fishing — Exeter, 19,932–4, 19,937, 19,947; Polperro, 21,451–6.

Marylugs:—
Carrickfergus, 47,930–8.

Marysoles:—
Brixham, 9007; Plymouth, 19,301, 19,361.

Megrims:—
All left the coast—Brixham, 9007, 9050–1.

Mullets:—
Brighton, 17,755, 17,763, 17,783, 17,864, 17,914, 18,077–8; Torcross, 18,374–6; Wyke Regis, 20,147–8, 20,427; Carrickfergus, 47,333; Dundalk, 48,708; London, 58,792–5.

Pilchards:—
Brixham, 8234; Billingsgate, 13,123; Torcross, 18,269–70; Plymouth, 18,920, 19,125; Polperro, 21,907–14, 21,972; Mevagissey, 21,995, 22,012, 22,232–9, 22,498–568, 22,610–5, 22,939–42; Falmouth, 23,722–5, 23,918; Penzance, 24,230, 24,257–62, 24,311–2; St. Ives, 24,646–51, 24,907–10, 24,919–23; Edinburgh, 26,439; Wexford, 38,998; Dunmore, 39,238–40; Kenmare, 42,054, 42,833–4, 42,836; Westport, 44,435; Tenby, 56,888.
Increase of—Brixham, 8239; Torquay, 9726–7; Penzance, 24,062.
Decrease of—Plymouth, 18,920, 18,927, 19,248–56.
Demand for—Mevagissey, 22,245–51, 24,927.
Injured by trawlers—Torcross, 18,409–10; Polperro, 21,907–14.
Difference between pilchards and sardines — Polperro, 21,398–9.
Fishery a bad property—Plymouth, 18,929.
Fishery given up—Brixham, 9099–103, 9109–10.
Largest quantity in one seine—Mevagissey, 22,087–91; Penzance, 24,333.
Markets for—Plymouth, 19,016–7.
Season for—Polperro, 21,328–9, 21,378; St. Ives, 24,678–80.
Value of as food—Mevagissey, 22,095–6, 22,467–70; Falmouth, 23,914.
Regulations as to—Polperro, 21,426.
Price of—Polperro, 21,692–9; Mevagissey, 22,137–9.

Plaice:—
Filey, 5692; Flamborough, 6580–3; Hull, 7068; Ramsgate, 10,121; Billingsgate, 12,436–7, 12,538; Hastings, 16,869–72, 17,275–9; Kingstown, 35,637–8, 35,873; Ringsend, 37,470–1, 37,554, 37,591–2, 37,930; Wexford, 38,924; Kenmare, 41,775, 41,908–13, 41,957, 42,070, 42,090, 42,157–8; Dingle, 43,496; Moville, 46,611; Dundalk, 48,703–6, 48,718, 48,732, 48,739, 48,744–6, 48,775–81, 48,794, 48,826–31, 48,925–30, 48,950; Skerries, 49,518; Balbriggan, 49,760–61, 49,785–89, 49,835–41; Greenock, 49,908–9; Ballantrae, 53,820*a*.
Increase of—Hull, 7487, 7495; Billingsgate, 13,135; Hastings, 16,835, 16,872, 17,279–80, 17,283–5, 17,411–2.
Decrease of—Flamborough, 6579; Brighton, 17,679.
Mode of catching—Ramsgate, 10,285.
Taken too small—Ramsgate, 10,118–21.
Taken by seine-nets—Brighton, 17,773, 17,822–5.
Price of—Ramsgate, 10,389.

FISH (*continued*):—

Pollack:—
All left the coast—Brixham, 9007, 9053; Kenmare, 42,055; Inver, 46,256, 46,266.

Porpoises:—
Ballantrae, 53,820*a*.

Rays:—
Brixham, 8484–7; Polperro, 21,358–60; Morecambe, 54,812–3, 54,826; Liverpool, 55,745.

Razor-herrings:—
Ardrishaig, 51,734.

Saithe:—
Stornoway, 32,287, 32,696–8; Portree, 33,221, 33,234–5; Ardrishaig, 51,659; Tarbert, 53,618–20, 53,731–55.

Salmon:—
Exeter, 19,457, 19,499, 19,968–9; Stornoway, 32,286, 32,678–80; Peel, 34,847; Dundalk, 48,908–11; Tarbert, 53,464; Tenby, 56,909–10; Swansea, 57,227–30, 57,537; London, 58,773–7, 58,800–10, 58,860–89, 58,912–8.

Salmon Trout:—
Torquay, 10,072; Brighton, 17,828; Tarbert, 53,465.

Scad:—
Plymouth, 19,264–6.

Sewin:—
Dundalk, 48,708; Swansea, 57,227–34, 57,539–40; London, 58,852.

Sharks:—
Inver, 46,197–8.

Shell Fish:—

Cockles:—
Lynn, 15,040; Boston, 15,336; Exeter, 19,400, 19,450, 19,487; Dumfries, 54,124–37; London, 61,131.
Markets for—Lynn, 15,038; Boston, 15,337.
Quality, decrease in—Exeter, 19,488–9.
Restriction as to size desirable—Exeter, 19,490–1; London, 61,133–4.
Used for manure—Lynn, 14,630.
Price of—Lynn, 15,039.

Crabs (see also "Lobsters"):—
North Sunderland, 1781–2; Filey, 5683, 5693, 5944–51; Flamborough, 6453–7; Brixham, 8334, 8338; Billingsgate, 13,095; Torcross, 18,239–66; Plymouth, 18,756–7; Harwich, 20,621; Edinburgh, 26,737–8, 27,022; Dunbar, 27,416–25, 27,618–9; Anstruther, 28,350–3; Kirkwall, 31,227–31, 31,704; Stornoway, 32,298; Peel, 34,596; Inver, 46,324; Carlingford, 48,203, 48,216; Skerries, 49,226–8.
Increase of—Flamborough, 6701.
Decrease of—Cullercoats, 49–50, 343–51, 969–78; Holy Island, 2551–3; Hartlepool, 4149–52; Staithes, 5107–12; Flamborough, 6680–5; Torquay, 9675–6, 9878; Exeter, 19,971; Wyke Regis, 20,065–6; Polperro, 21,641–3, 21,921–6, 21,977; Mevagissey, 22,781, 22,795–8; Penzance, 23,989, 24,504–9; Dunbar, 27,620–4; Stonehaven, 28,917–9.
Injured by trawlers—Torcross, 18,258, 18,264, 18,266, 18,538–9, 18,551–3, 18,592–3; Polperro, 21,922, 21,932; Mevagissey, 22,868–71; Falmouth, 23,790–3, 23,807.
Injured by drift-nets—Penzance, 24,509–18.
Mode of catching — Flamborough, 6688–91, 6792, 6798–801, 6804, 6809; Brixham, 8334–8; Ramsgate, 10,697–8; Torcross, 18,259, 18,533–5.
Markets for—Torcross, 18,244–5.
Small, taken in pots—Flamborough, 6801, 6810–4.
Small should be thrown back—Flamborough, 6692–9.
Small, penalty for taking—Flamborough, 6699.
Size should be fixed—Flamborough, 6686–7, 6692, 6696, 6705; Torcross, 18,568–9; Polperro, 21,653–5; Penzance, 24,520–4.
Crabs, hermit—Galway, 45,671–9.

Flitters:—
Staithes, 5091; Filey, 5886.

Limpets:—
Staithes, 5104.

Lobsters (see also "Crabs"):—
Cullercoats, 970–6, 983–92; North Sunderland, 1777, 2116–24, 2128–32; Hartlepool, 4162–3, 4358–60; Staithes, 5107–12; Filey, 5683, 5694, 5944–50; Flamborough, 6453; Billingsgate, 13,124–7, 16,232–75; Wyke Regis, 20,064–8; Harwich, 20,854–64, 20,886; Edinburgh, 26,722–35; Kirkwall, 31,220–4, 31,706–16; Stornoway, 32,294, 32,598–601, 32,652, 32,702, 32,716, 32,853; Portree, 33,090–4, 33,256–8;

FISH (*continued*):—

Shell Fish—Lobsters (continued):—

Tobermory, 33,429, 33,497–515, 33,610–20; Campbeltown, 33,718–21, 34,210–11; Peel, 34,591, 34,877*a*; Tarbert, 53,757; London, 60,972–4, 60,981–9.

Increase of—Flamborough, 6701; Kirkwall, 31,369–71, 31,677–89, 31,739–42; Stornoway, 32,295–7, 32,651, 32,706; Kinsale, 41,190, 41,468–72, 41,708–11; Dingle, 43,804–5; Moville, 46,659; Dundalk, 48,594, 48,600, 48,879–80.

Decrease of—Cullercoats, 49–50, 343–51, 964–76; Newbiggin, 1198–1201; North Sunderland, 1776–9, 2115; Holy Island, 2747–8; Sunderland, 2813–4, 3055; Hartlepool, 4149–52, 4352; Staithes, 5107–12; Filey, 5946, 5953; Flamborough, 6457–8, 6460–2, 6680, 6682–5; Torquay, 9675; Billingsgate, 13,092–3; Grimsby, 16,234, 16,247–9; Torcross, 18,251; Exeter, 19,971; Wyke Regis, 20,065–6; Polperro, 21,645, 21,656–60, 21,921–7, 21,943; Mevagissey, 22,781, 22,797–8, 22,809; Falmouth, 23,790–3, 23,809–12; Penzance, 23,989, 24,043, 24,516–8; Dunbar, 27,627; Portree, 33,153–4; Tobermory, 33,618–20, 33,638–9; Campbeltown, 33,719, 34,205; Kingstown, 35,446–7, 35,859; Dunmore, 39,241–9; Dingle, 43,399, 43,407, 43,795–7, 43,802; Inver, 46,212–4; Moville, 46,986–8; Carrickfergus, 47,544; London, 60,959–60.

Overfished — Holy Island, 2549–50; Billingsgate, 12,683; Inver, 46,299, 46,309–10.

Season—Brixham, 8311; Grimsby, 16,253–4; Kirkwall, 31,743; London, 60,970–80.

Close season—Grimsby, 16,274–5; Stornoway, 32,350–2, 32,587–97; Campbeltown, 34,208; Dunmore, 39,250; Inver, 46,316–9.

Injured by chemical refuse and ballast—Cullercoats, 346–50; Sunderland, 2814–31, 2974–9, 3056–61; Hartlepool, 4153–61, 4353–4, 4404–6.

Injured by trawlers—Polperro, 21,921, 21,932; Mevagissey, 22,867; Howth, 36,940.

Injured by drift nets—Penzance, 24,509–18.

Mode of catching—Flamborough, 6688–91, 6792, 6798–801, 6804, 6809; Brixham, 8310, 8338; Ramsgate, 10,694–5; Grimsby, 16,263–73; Stornoway, 32,581–3; Tobermory, 33,643–7; Peel, 34,593; London, 60,961–3.

Markets for—Grimsby, 16,237–40, 16,252; Stornoway, 32,659–71; Tobermory, 33,510.

Small taken in pots—Flamborough, 6801, 6810–4; Wyke Regis, 20,067.

Small should be thrown back—Flamborough, 6692–9.

Small, penalty for taking—Flamborough, 6699.

Size should be fixed—Flamborough, 6686–7, 6692, 6696; Penzance, 24,520–4; Wexford, 38,958–60, 38,990.

Price of—Grimsby, 16,255; Stornoway, 32,717–20; Tobermory, 33,526.

Mussels:—

Cullercoats, 46; North Sunderland, 1747, 1879–85, 1910–4, 1938, 1940, 1976–8, 2150–8, 2331–54; Holy Island, 2556; Sunderland, 2756; Hartlepool, 4165, 4279; Staithes, 5091–104; Filey, 5887–9, 6127; Flamborough, 6559–68; Hull, 7740, 7746–8; Billingsgate, 13,443; Lynn, 14,625–7, 14,946–50, 14,964, 14,970–5, 14,981, 15,087–93, 15,103–18, 15,121; Boston, 15,167, 15,190, 15,199, 15,328–31, 15,341, 15,347, 15,597–8; Hastings, 17,066; Exeter, 19,409, 19,483; Edinburgh, 26,671–4; Kenmare, 41,858–63; Moville, 46,660–2; Dumfries, 54,123–32, 54,174–7; Morecambe, 54,646–7, 54,661–4, 54,760–2, 54,881–3; Fleetwood, 55,036, 55,356–63, 55,406, 55,413–29; Carnarvon, 56,457; Swansea, 57,419–27.

Beds exhausted—Lynn, 14,492, 14,980, 15,078–81; Boston, 15,173, 15,315–6, 15,385, 15,583, 15,701–3.

Beds, private—Lynn, 14,554–7, 14,567–70, 14,740.

Growth of—Lynn, 14,982–5; Boston, 15,311–4, 15,757–61, 15,810–20.

Markets for—Lynn, 14,936–45, 14,950, 14,955–7, 14,961–2, 14,967, 15,058, 15,070; Boston, 15,202, 15,374, 15,427–9, 15,460, 15,462–3, 15,466, 15,523, 15,545; Fleetwood, 55,412.

Increase of—Hartlepool, 4173–9, 14,858, 15,026; Boston, 15,181–3, 15,205, 15,458–9, 15,468–9, 15,561, 15,717; Exeter, 19,486, 19,691; Morecambe, 54,652–6, 54,658–60, 54,841–5; Whitstable, 58,364–5.

Decrease of—North Sunderland, 1748–54, 1762, 1939, 2148; Lynn, 14,495, 14,562, 14,851, 14,953–4, 14,978, 15,027, 15,071, 15,085; Boston, 15,200, 15,572, 15,596, 15,700.

FISH (*continued*):—

Shell Fish—Mussels (continued):—

Regulations respecting—Cullercoats, 54–5; North Sunderland, 2159–65; Holy Island, 2595–607; Hartlepool, 4167, 4266–93, 5005–22; Boston, 15,175, 15,321–8, 15,404–9, 15,597–600, 15,756, 15,804–8.

Riddled—Boston, 15,209–10, 15,213–5, 15,303–10, 15,417, 15,423, 15,519–21, 15,542, 15,569, 15,711, 15,726–8, 15,762–7.

Season for—Boston, 15,373–4, 15,613–4, 15,746–53; Morecambe, 54,649–50.

Size of—Lynn, 14,547, 14,553, 14,588, 14,617, 15,084; Boston, 15,343, 15,582, 15,729–30, 15,758–69.

Sold for bait—Lynn, 14,594, 14,599, 14,745, 14,952; Boston, 15,177, 15,184–6, 15,202–3, 15,400–3, 15,427, 15,517–9, 15,544, 15,714; Grimsby, 16,351–2; Exeter, 19,409; Peterhead, 29,729; Kirkwall, 31,248–50; Ardrishaig, 52,133; Inverary, 52,757.

Sold for manure—Filey, 6131; Lynn, 14,419, 14,491–2, 14,544–5, 14,595–6, 14,598–600, 14,604–12, 14,614–6, 14,742–4, 14,746–7, 14,968–9, 14,973, 15,088, 15,093–5; Boston, 15,177, 15,184–6, 15,192–8, 15,206, 15,208, 15,211–2, 15,216, 15,295–8, 15,300, 15,302, 15,387, 15,563–4, 15,703, 15,713, 15,754, 15,768–73; Dumfries, 54,167; Morecambe, 54,667–72, 54,767.

Spawn of—Filey, 5887.

Price of—Lynn, 14,597–600, 14,957–62, 15,065–8, 15,122–3; Boston, 15,376–81, 15,383–4.

Oysters (see also "Convention" and "Boats—oyster boats"):—

Beds—Holy Island, 2556; Brixham, 8315; Billingsgate, 13,358, 13,379–81, 13,409–10; Lynn, 14,630; Boston, 15,275–6, 15,488; Grimsby, 16,677–96, 16,713–48, 16,763, 16,768–9, 16,777, 16,802; Hastings, 16,915, 17,467; Brighton, 17,652; Torcross, 18,348–55; Exeter, 19,500–4, 19,565–7, 19,601–6, 19,611–2, 19,624, 19,628; Wyke Regis, 20,099–103, 20,112–3, 20,237–9, 20,516–8; Harwich, 20,645–79, 20,688–94, 20,740–8; Falmouth, 23,163–81, 23,212–25, 23,395; Shoreham, 25,259, 25,367–9, 25,424–30, 25,617–30, 25,642–8, 25,656–70; Edinburgh, 26,983–8, 27,206; Kirkwall, 31,232–40; Lerwick, 31,859–60; Stornoway, 32,299–308, 32,353–7, 32,481, 32,700, 32,712–5; Portree, 32,996, 33,080–4; Broadford, 33,339–41; Tobermory, 33,458, 33,532; Peel, 34,877–92; Kingstown, 35,470; Arklow, 38,101–5, 38,313, 38,351, 38,406–13; Wexford, 38,511–3, 38,583–6, 38,762–5, 38,786–8, 38,843, 38,871–3, 38,876–7, 38,969–72, 39,020–1, 39,024; Dunmore, 39,451–3; Dungarvan, 41,160–2; Kinsale, 41,679–88, 41,702–5; Kenmare, 41,864–9; Bantry, 42,661–70; Dingle, 43,770–2; Westport, 43,876–80, 44,004–7, 44,034–112, 44,343–56, 44,365–85; Galway, 45,885; Inver, 46,326–7; Moville, 46,650–1, 46,786–92, 46,799–806, 46,813–4, 46,846–9, 46,855–62, 47,124–8; Carrickfergus, 47,341–60, 47,514–22, 47,530–2, 47,535–7, 47,699, 47,703–5; Carlingford, 48,094, 48,124–8, 48,131–4, 48,143–55, 48,163–5, 48,256, 48,311–44, 48,372–3; Skerries, 49,216–24; Liverpool, 56,321–8; Carnarvon, 56,384, 56,391–400, 56,441; Tenby, 56,918–21, 56,939, 57,039–54; Swansea, 57,154–65, 57,167–9, 57,213–5, 57,285–7, 57,311, 57,622–8, 57,977–82; Whitstable, 58,056, 58,113–5, 58,232–3, 58,267, 58,297–304, 58,411, 58,438, 58,446, 58,470, 58,545, 58,548, 58,598, 58,678–80, 58,707, 58,743; Brightlingsea, 59,168, 59,170, 59,186–9, 59,335, 59,378, 59,408, 59,466–9, 59,476, 59,482–5, 59,499–506, 59,521–3, 59,533, 59,541, 59,544–8, 59,565–8, 59,573, 59,644, 59,665–6, 59,678, 59,700, 59,709–10, 59,718, 59,723, 59,768, 59,772; London, 61,136–8, 61,291, 61,294–7, 61,299, 61,319–20, 61,326–30, 61,371, 61,562, 61,595, 61,643–4, 61,658, 61,722, 61,727, 61,741–3, 61,749–50.

Exhaustion of beds—Whitstable, 58,267, 58,297–304; Brightlingsea, 59,394, 59,479–87, 59,579, 59,741–3; London, 60,352–60, 60,380, 60,384–93, 60,420, 60,436–7, 60,461, 60,522, 60,633, 61,653–4, 61,740–3.

Beds, how stocked—Whitstable, 58,078–9, 58,103, 58,108–10, 58,116–19, 58,130, 58,133–4, 58,184, 58,199, 58,205, 58,268, 58,273; Brightlingsea, 59,144–50, 59,261, 59,314–18, 59,370–1, 59,549, 59,743.

Protection of beds—Edinburgh, 26,992–7001; Brightlingsea, 59,116; London, 61,460–86, 61,751–61, 61,830.

Depredations on private grounds—Westport, 44,386; London, 60,478–9, 60,485–9, 61,645–8, 61,748, 61,751–61.

Seizure of oysters—Westport, 44,285–96.

Advantage of working beds of private companies—London, 61,301, 61,314, 61,457–60, 61,488–98,

FISH (*continued*):—
Shell Fish—Oysters (continued):—
61,574–7, 61,580–613, 61,617–28, 61,634–5, 61,662, 61,666–709, 61,720, 61,744, 61,814.
Beds covered with water—Grimsby, 16,808; Westport, 44,077; Moville, 46,849; Whitstable, 58,822–33.
Breeding places of—Exeter, 19,547–8, 19,561–3, 19,619–22, 19,703, 19,976; Carlingford, 48,154–5; Whitstable, 58,090–1.
Feeding grounds—Billingsgate, 13,376, 13,396; Shoreham, 25,968–72; Galway, 45,886; Swansea, 57,880–902.
Beds undeveloped—Edinburgh, 26,746–65, 26,776–87; Lerwick, 31,859; Dublin, 37,330–1; Wexford, 38,990; Bantry, 42,663; Inver, 46,326–7; Moville, 46,814.
Beds require rest—Wexford, 38,632–8; Kinsale, 41,683–4, 41,699; Westport, 44,242.
Removed in order to be laid down on other beds—Billingsgate, 13,371, 13,394–5; Grimsby, 16,697, 16,763–4; Exeter, 19,401–2, 19,695–9, 19,974–6; Harwich, 20,624, 20,682–5, 20,763; Arklow, 38,130–1, 38,169, 38,310–12, 38,351, 38,389–93; Wexford, 38,543–5, 38,610–4, 38,773–4, 38,814–6, 38,858–9, 38,865–70, 38,974–81, 39,029–30; Bantry, 42,665–7; Westport, 43,889, 43,928, 44,027–31, 44,040–1, 44,058, 44,118, 44,133, 44,178, 44,181–2, 44,327–32; Galway, 45,886; Moville, 46,833; Carlingford, 48,190, 48,316–9; Fleetwood, 55,040–6, 55,429–35, 55,503–55; Liverpool, 56,320–55; Carnarvon, 56,398–403, 56,437–40; Swansea, 58,013–25; Whitstable, 58,111–12, 58,130–4, 58,208–13, 58,248, 58,267–75, 58,414–21, 58,429, 58,456–9, 58,480–2, 58,492–505, 58,545–7, 58,603–5, 58,609, 58,682; Brightlingsea, 59,120, 59,190–3, 59,263–73, 59,522–3, 59,530–2, 59,599–60, 59,604, 59,667, 59,675; London, 59,941, 60,033–5.
Age of oysters—Billingsgate, 13,378; Penzance, 24,389; Shoreham, 26,040–4; Brightlingsea, 59,402–7, 59,526; London, 59,945–52, 59,971–2, 60,002–5, 60,444, 61,347–60, 61,364–8, 61,411–4, 61,548–51.
Size of when taken—Exeter, 19,409; Harwich, 20,682; Falmouth, 23,127–35, 23,255–9, 23,326, 23,413, 23,607; Shoreham, 25,190, 25,705–9; Edinburgh, 27,132–3; Dublin, 37,174–8; Arklow, 38,113–17, 38,252–6, 38,272–81, 38,314–6, 38,351, 38,395–6; Wexford, 38,618–22, 38,789–803, 38,806–11, 38,820–4, 38,852, 38,860–4; Kinsale, 41,597–8, 41,700–1, 41,707; Westport, 43,891–6, 44,121–4, 44,386–7; Moville, 46,834–46; Carrickfergus, 47,551, 47,706–9; Carlingford, 48,128–30, 48,139; Liverpool, 56,336, 56,343–8; Carnarvon, 56,435–7; Tenby, 56,540–3, 56,655–62, 56,922; Swansea, 57,172, 57,660–4; Whitstable, 58,201, 58,207–9, 58,271, 58,406, 58,490, 58,588–9, 58,627, 58,742; Brightlingsea, 59,118, 59,239, 59,507–8, 59,526; London, 60,201–12, 60,293–6, 60,433–4, 60,440–2, 60,605, 60,670–4, 60,694–7, 60,729–34, 61,649–50.
Small should not be removed—Exeter, 19,547, 19,549, 19,859; Wyke Regis, 20,109–11; Falmouth, 23,260–1; Wexford, 38,933–8; Kinsale, 41,706; Westport, 43,895, 43,898–9, 44,022–5; Carlingford, 48,424–6, 48,429, 48,445, 48,464, 48,468; London, 61,334–44, 61,369–70, 61,499–500.
Culling of, Regulations as to—Westport, 43,891, 44,299.
Culling of, observed—Westport, 43,890, 43,898, 44,022, 44,141–2, 44,145, 44,174, 44,186–7, 44,216; Moville, 46,825–7, 47,131; Carrickfergus, 47,714; Carlingford, 48,186, 48,430–1, 48,464; Tenby, 56,923–7.
Culling of, not observed—Westport, 44,101, 44,147; Carnarvon, 56,436.
Preservation of spat and brood—Whitstable, 58,092–5; Brightlingsea, 59,143–5, 59,157, 59,395–8, 59,719–25, 59,729–30; London, 59,922–3, 61,566, 61,641, 61,722, 61,725, 61,743.
Spat and brood where obtained—London, 61,415–21, 61,665, 61,745–9.
Growth of spat—Whitstable, 58,179–80, 58,236–8, 58,353–9, 58,541, 58,735; Brightlingsea, 59,399–401.
Weather favourable for spat—Brightlingsea, 59,132–9, 59,558–61.
Failure of spat—London, 60,063–4, 60,078, 60,121, 60,220, 60,251–3, 60,271, 60,286–92, 60,411.
Bad seasons for spat—Whitstable, 58,059–61, 58,125–7, 58,172, 58,222–5, 58,466, 58,474, 58,624; Brightlingsea, 59,218, 59,389, 59,449, 59,517; London, 61,310–3, 61,331, 61,526–7.
Injury to spat—London, 61,298, 61,318.
Good spat required—Billingsgate, 13,421; Harwich, 20,660–1; Falmouth, 23,436, 23,765.

FISH (*continued*):—
Shell Fish—Oysters (continued):—
A good spat—Arklow, 38,171–2; Westport, 44,151–2; Moville, 46,851; Carlingford, 48,423; Swansea, 57,208–13, 57,868–70; Whitstable, 58,060, 58,124, 58,486, 58,610; Brightlingsea, 59,104–7; London, 60,071–3, 61,664.
Spawning season of—Billingsgate, 13,406; Exeter, 19,977–82, 19,986, 19,995; Wyke Regis, 20,119; Harwich, 20,662, 20,976–7; Shoreham, 25,515–20, 25,689; Arklow, 38,126–7; Westport, 44,060; Whitstable, 58,084–5, 58,195–8, 58,320–1, 58,444, 58,488, 58,655; Brightlingsea, 59,152–3, 59,369, 59,556–63; London, 59,884–5, 60,303–4, 60,312, 60,634–5, 61,508–9.
Spawning in docks—Grimsby, 16,803–4, 16,824–6; London, 61,749–50.
May, advantage of, as an open month—Shoreham, 25,214–19, 25,470–3, 25,521–3, 25,689–91, 25,864–6, 25,873, 25,998; Edinburgh, 27,009; Arklow, 38,223–4, 38,353–6, 38,370–5, 38,384.
May should be included in close-time—Wexford, 38,547–8, 38,933, 39,022–3, 39,027; Carrickfergus, 47,543.
Condition of, in month of May—Wexford, 38,536–43, 38,768–73, 39,027; Carrickfergus, 47,542.
Artificial culture—Billingsgate, 13,373; Wexford, 38,961–73, 38,982–5; Moville, 46,803; Carrickfergus, 47,347; Carlingford, 48,145–8, 48,311–42; Whitstable, 58,305–10, 58,553–7; London, 59,848–922, 59,934–5, 59,941–87, 60,007, 60,016–49, 60,056–61, 60,071–2, 60,124–33, 60,245–56, 60,158–63, 60,189, 60,327, 60,332–5, 61,372–8, 61,394–7, 61,544–8, 61,720–9, 61,743–4.
Artificial culture successful—Dublin, 37,206–9; Whitstable, 58,610.
Artificial culture not successful—Billingsgate, 13,401; Falmouth, 23,461–2, 23,478; Dublin, 37,203; Moville, 46,803–6; Carrickfergus, 47,347–53; Whitstable, 58,658–64; Brightlingsea, 59,706–11; London, 60,272–7.
Ground adapted for beds—Dublin, 37,205, 37,323–9; Fleetwood, 55,520; Whitstable, 58,518–21; London, 61,406–10, 61,561, 61,826.
Ground fit for spat—Wyke Regis, 20,114–16; Harwich, 20,666–7; Shoreham, 25,499–504, 25,509–14, 25,671–7, 25,685; Whitstable, 58,665; Brightlingsea, 59,161–4.
Fecundity of oysters—London, 60,213–5, 60,462–6, 60,468–74.
Trawling injurious to (see "Trawling").
Spat and small oysters destroyed—Exeter, 19,476, 19,705–6, 19,851, 19,879–80, 19,988–90; Wyke Regis, 20,079, 20,117, 20,392–8; Harwich, 20,966–79, 21,214–40; Falmouth, 23,771–2; Wexford, 38,878–9; Kinsale, 41,603; Westport, 44,210, 44,231, 44,239, 44,457–60; Moville, 46,855; Carlingford, 48,107; Whitstable, 58,176–8, 58,200, 58,331–4, 58,427–8, 58,464, 58,606, 58,617–18; Brightlingsea, 59,159–60, 59,747–9, 59,758; London, 60,078–112, 60,121, 60,606–9, 60,699, 60,709, 60,712, 61,510, 61,543, 61,552–62, 61,740–1, 61,824.
Ground worked all the year—Harwich, 20,742–3.
Ponds and storing places—Shoreham, 25,192–209*a*, 25,316, 25,818–23, 25,837–51, 25,880–976; Westport, 44,068; Carlingford, 48,140–1, 48,479–81; Swansea, 57,727–41, 57,878, 57,994–6, 58,003–7; London, 59,954–80, 59,984–8, 60,018, 60,025, 60,036–49, 61,379–89.
Fresh water, effect of—Arklow, 38,134–6, 38,412–3; Westport, 44,071–3.
Effect of gale of wind on—Moville, 46,860–2; Carlingford, 48,358–65, 48,446–7.
Destroyed by five-fingers—Westport, 44,096–8; Whitstable, 58,103, 58,200, 58,397–402, 58,464, 58,606, 58,617–8; Brightlingsea, 59,160, 59,747, 59,758; London, 61,561–2, 61,824.
Indigenous—Exeter, 19,563–4, 19,854.
Close-time observed—Wyke Regis, 20,073–5; Shoreham, 25,853–63; Edinburgh, 27,006–9; Arklow, 38,128–9, 38,220–5; Wexford, 38,631; Kenmare, 41,868; Dingle, 43,771; Westport, 43,883–5, 44,018–21; Moville, 46,793–5; Carrickfergus, 47,538, 47,546–8, 47,669–71, 47,701; Carlingford, 48,105–10, 48,153, 48,176–83, 48,261–73, 48,410–20, 48,478; Carnarvon, 56,434; Tenby, 56,550–5, 56,653–4, 56,929; Swansea, 57,191–3, 57,301–2; Whitstable, 58,062–75, 58,281, 58,314; Brightlingsea, 59,175–6, 59,195–201, 59,213, 59,472–3; London, 60,616–20, 60,626, 60,646–64, 60,696–9, 61,502–5, 61,561–4, 61,740, 61,821.

FISH (*continued*):—
Shell Fish—Oysters (continued):—
Close-time should be enforced—London, 61,816.
Close-time not observed—Grimsby, 16,699; Exeter, 19,974, 19,995; Shoreham, 25,222–5; Kinsale, 41,605–9; Liverpool, 56,324.
Close-time beneficial—Falmouth, 23,226–32; Arklow, 38,352–4, 38,372–84; Wexford, 38,546–7, 38,874, 38,943–8; Carlingford, 48,420, 48,468–71; Swansea, 57,665–78; Whitstable, 58,275–9.
Close-time injurious—Harwich, 20,698–719; Shoreham, 25,181; Carlingford, 48,104, 48,335; Carnarvon, 56,449; Whitstable, 58,283; Brightlingsea, 59,204, 59,365–8; London, 61,816, 60,352–60, 60,466, 61,814.
Extension of close-time—Falmouth, 23,401–7, 23,548–50, 23,597, 23,769–70; Edinburgh, 27,008; Dublin, 37,167–72; Wexford, 38,874; Carlingford, 48,107, 48,176–83; Swansea, 57,199–207; Brightlingsea, 59,693–4.
Extension of open months—Shoreham, 25,370–1; Brightlingsea, 59,203, 59,374, 59,384, 59,411–5, 59,449–52, 59,608–14, 59,690–2, 59,799–806; London, 60,191–94, 60,222–41, 60,283, 60,301, 60,305, 60,396–400, 60,542, 60,579, 60,632, 60,644, 60,740, 61,561–2, 61,566, 61,571, 61,639–40, 61,654–7, 61,794, 61,816.
Mode of dredging—Shoreham, 25,571–600.
Kind of dredge—Shoreham, 25,277–9, 25,292, 25,300–1; Arklow, 38,262; Carrickfergus, 47,707, 47,716–21; Tenby, 56,953; Swansea, 57,175–86.
Cost of dredge—Shoreham, 25,295; Arklow, 38,257.
Number of dredges lost—Shoreham, 25,586–8.
Dredging season for—Arklow, 38,106–9; Wexford, 38,523–7, 38,609–10, 38,827.
Night-dredging—Shoreham, 25,291, 25,449–53, 25,680, 25,812–3; Arklow, 38,413–7, 38,421, 38,433; Westport, 44,236–8, 44,334–6; Carlingford, 48,500–1.
Dredging by strangers—Torcross, 18,359–63; Wyke Regis, 20,072, 20,076–81, 20,104, 20,237, 20,417–20, 20,452–7, 20,461–4; Harwich, 21,215–24, 21,256; Arklow, 38,142–7; Wexford, 38,755, 38,949–57.
Dredging prohibited in month of May—Wexford, 38,534, 38,775–9, 38,847–51.
Byelaw permitting dredging in month of May—Wexford, 38,528–33, 38,887–90.
Unrestricted dredging—Wexford, 38,618, 38,623–30.
Dredging by steamboats—Shoreham, 25,262–6; Dunmore, 39,457–63; London, 60,652, 60,664.
Dredging injurious to—Torcross, 18,355–63; Falmouth, 23,529–44, 23,771–2; Penzance, 24,390, 24,392–6; Wexford, 38,852–6, 38,949; Swansea, 57,640–8, 57,866–7, 57,870; London, 60,414, 60,577, 60,589, 60,592–4, 60,601, 60,613–14, 60,622–5, 60,640–2, 60,658, 60,666–7, 60,352–60.
Dredging not injurious to—Brightlingsea, 59,294–300.
Dredging advantageous to—Grimsby, 16,781–2; Harwich, 20,700–702; Shoreham, 25,833–6; Arklow, 38,351, 38,441; Moville, 46,859–60; Swansea, 57,311–2; Whitstable, 58,099–101; Brightlingsea, 59,475–81, 59,756–8, 59,762–5.
Arrangement as to shares—Shoreham, 25,565–70.
Decrease in supply of—Brixham, 9262; Torquay, 9668, 9865–70; Billingsgate, 13,348–9, 13,366–8, 13,397–8; Boston, 15,274–80, 15,489, 15,718–25; Brighton, 17,652–6; Torcross, 18,356; Exeter, 19,406, 19,611–3, 19,695, 19,704, 19,851, 19,879–80, 19,996, 20,005; Wyke Regis, 20,071, 20,391, 20,423–5; Harwich, 20,697–8, 20,738–9; Falmouth, 23,098–100, 23,382, 23,436, 23,645–6, 23,780–1; Shoreham, 25,181, 26,017–23; Dublin, 37,179–92; Wexford, 38,550, 38,587–94, 38,603–9, 38,846, 38,928–32; Kinsale, 41,596–603; Westport, 44,116–8, 44,131–7, 44,208–10, 44,231–2; Moville, 46,813, 46,852–60; Carlingford, 48,236–9, 48,245–9, 48,450–1; Liverpool, 56,320; Tenby, 56,532–9, 56,546, 56,600–1, 56,917, 56,933, 57,009–13, 57,085–6; Swansea, 57,629–38, 57,864; Whitstable, 58,059–61, 58,124–8, 58,171–2, 58,222, 58,245, 58,267, 58,289–95, 58,466, 58,469, 58,474, 58,553–7, 58,624; Brightlingsea, 59,097–103, 59,109–10, 59,113, 59,122–9, 59,167, 59,325, 59,394, 59,482–4, 59,504, 59,517, 59,525, 59,606, 59,703–7; London, 60,323–4, 60,367, 60,564–70, 60,767–8, 61,166, 61,799–800, 61,804.
Increase in supply of—Brixham, 9262; Harwich, 21,045, 21,051–3; Shoreham, 25,365–9, 25,641, 25,801–2; Edinburgh, 27,010–13; Arklow, 38,118–23, 38,307–8, 38,439–41; Wexford, 38,754–5, 38,843–5; Kenmare, 41,869; Westport, 43,882, 43,894, 44,017, 44,065, 44,161–3; Moville, 46,798–9, 47,114–6, 47,125; Carrickfergus, 47,343, 47,360, 47,515, 47,531, 47,699; Carlingford, 48,110, 48,356–8, 48,369–70, 48,408, 48,439; Swansea, 57,167–9, 57,311.
Supply of ought to be increased—Stornoway, 32,476; Portree, 33,171; Tobermory, 33,535–7; Kinsale, 41,700.
Fishing profitable—Shoreham, 25,373.
Fishing not profitable—Tenby, 57,015, 57,089–90.
Supply of formerly—Arklow, 38,119–23, 38,217–19, 38,307–8, 38,439–41; Westport, 44,017; Carrickfergus, 47,530; Carlingford, 48,449; Carnarvon, 56,444; London, 60,691–2, 61,782–3, 61,788, 61,800–2, 61,804.
French competition for—Billingsgate, 13,383–8, 13,414; Exeter, 19,404–6, 19,476, 19,851; Shoreham, 25,530–8; Wexford, 38,974–81, 39,029–30; Liverpool, 56,347–8; Whitstable, 58,567–83, 58,595; Brightlingsea, 59,595.
Increased demand for — Brightlingsea, 59,346–54, 59,386–8, 59,769; London, 60,677, 61,595, 61,786–7.
Best means for increasing supply—London, 60,669, 60,734–9, 60,741, 60,757–64.
Sold out of season—Whitstable, 58,087, 58,267, 58,276, 58,284, 58,628–43; London, 60,495–505, 60,753–5, 61,564, 61,771.
Produce of French beds—London, 60,024.
Produce of English beds—London, 60,299.
Price of — Billingsgate, 13,348, 13,354–5, 13,386; Grimsby, 16,793; Exeter, 19,401–6, 19,473, 19,609, 19,695–8, 19,859; Harwich, 20,758–60, 21,026; Falmouth, 23,192–5, 23,451–2, 23,780–1; Shoreham, 25,237–45, 25,343–53, 25,537–8, 25,903–7; Arklow, 38,166, 38,173–81, 38,309, 38,436–8; Wexford, 38,596; Westport, 44,091–5, 44,153–9, 44,177; Moville, 46,809–10, 47,117–121; Carrickfergus, 47,523–5; Carlingford, 48,288, 48,366–7, 48,486; Fleetwood, 55,535, 55,543; Liverpool, 56,339–41; Tenby, 56,544–5, 56,946–7; Swansea, 57,214–6, 57,903–6, 57,992–3; Whitstable, 58,214, 58,227–30, 58,263, 58,296, 58,407–9, 58,556, 58,582–7, 58,595–6; Brightlingsea, 59,112, 59,424–31, 59,783; London, 60,006, 60,012–5, 60,020–4, 60,031, 60,299, 60,313, 60,446–50, 61,613, 61,784–5, 61,804–5.
Brood, cost of—Whitstable, 58,342–6, 58,561; London, 60,682–6, 60,689, 61,664.
Quality of — Stornoway, 32,479, 32,713; Portree, 33,014; Broadford, 33,329–32, 33,409–26; Kinsale, 41,696; Moville, 46,913–6; Carrickfergus, 47,540–2; Carlingford, 48,319–20, 48,415–7; Liverpool, 56,336–7; Swansea, 57,194–8; Whitstable, 58,122–3, 58,231, 58,269–70, 58,447–55, 58,461–3, 58,511–12, 58,534–40, 58,548, 58,646–8, 58,651, 58,737–41; Brightlingsea, 59,183, 59,453–4, 59,551–5, 59,731, 59,768, 59,772; London, 60,196–201, 60,216, 60,302, 60,310–2, 60,314–18, 60,475–7, 60,577–8, 60,584, 60,587, 61,426, 61,773–4.
Unfit to eat in spawning season—Grimsby, 16,785–92; Exeter, 19,995.
Convention, operation of—(see "Convention").
Devon (Earl of), rights of—Exeter, 19,601–4, 19,611–2, 19,617, 19,623–4, 19,628–33.
Memorial to Board of Trade—Shoreham, 25,747.
Opinion of law officers as to Act in reference to—Falmouth, 23,329.
Kinsale Local Act—Kinsale, 41,676–8, 41,687–95.
Ipswich (Corporation of), rights of—Harwich, 21,014–73, 21,220–1.
Whitstable (rights of freemen)—Billingsgate, 13,362–5.
Jersey fisheries, failure of—Harwich, 20,703, 20,736–8; Shoreham, 25,656–70.
Deep sea fishery for — Shoreham, 25,182–8, 25,626–30, 25,642–8.
Fishing on the French coast—Shoreham, 25,742–6.
Licences for removal of—Falmouth, 23,332.
Order of Council as to removal of, on private beds—Falmouth, 23,326–31.
Licences for beds—Dublin, 37,193, 37,211–19; Kinsale, 41,679–82; Bantry, 42,668; Westport, 44,036, 44,349, 44,356–64, 44,369–72; Carrickfergus, 47,346; Carlingford, 48,147.
Licences refused—Kinsale, 41,682.
Inspection of — Falmouth, 23,409–10; Wexford, 38,851–3; Westport, 43,930–9, 44,022–3, 44,105–6, 44,119, 44,223–4, 44,273–340; Carlingford, 48,184, 48,480, 48,501; Swansea, 58,008–11.
Encouragement to the formation of beds — Tenby, 57,020–7.
Inspection of, evaded—Wexford, 38,981; Westport, 44,216–7, 44,224, 44,227–8, 44,304–7, 44,311–2.

FISH (*continued*):—

Shell Fish—Oysters (continued):—

No inspection of—Shoreham, 25,302–3, 25,772–5.

Regulations necessary—Torquay, 9871–3, 9882–5; Exeter, 19,409, 19,474–81, 19,881, 19,991; Falmouth, 23,239–49; Kinsale, 41,706–8; Westport, 44,232–3; Carlingford, 48,413–5, 48,464.

Regulation of fishing—Shoreham, 26,059; Edinburgh, 26,989–90, 27,005–9.

Regulations a dead letter—Westport, 44,252–3.

Regulations and legislation injurious—Carlingford, 48,433–4; Brightlingsea, 59,510–15, 59,542–3, 59,640–57, 59,659–63, 59,673–84, 59,695–9, 59,733–40; London, 60,373–80, 60,387–91, 60,415–8, 60,466, 60,506–13, 61,569–70, 61,740–2, 61,766, 61,814.

Markets—Billingsgate, 13,382–96; Grimsby, 16,729; Arklow, 38,396–404; Wexford, 38,611, 38,804, 38,817–20; Westport, 43,927–32, 44,183; Moville, 46,810; Swansea, 57,280–7; Whitstable, 58,360–1, 58,366–9, 58,567–81; Brightlingsea, 59,316, 59,416–23, 59,432–4, 59,550–1, 59,595–8, 59,619, 59,768, 59,773; London, 60,299, 60,452–4, 60,491, 60,517, 60,595, 60,604, 60,700–1, 60,760–2, 60,766, 61,768–9.

Foreign markets for—Billingsgate, 13,383–8, 13,414; Boston, 15,722; Falmouth, 23,436; London, 60,583.

Oyster Companies:—

Number of—Brightlingsea, 59,601–2.

Advantage of letting public grounds to private companies—London, 60,714, 60,750.

Injury to fishery by letting public grounds to private companies—London, 60,182–3.

Colchester (Corporation of), rights of—Brightlingsea, 59,024–5, 59,032–8.

Rules of—Brightlingsea, 59,042–59.

Colne Oyster Company, stock of—Billingsgate, 13,358–9; Brightlingsea, 59,809–11.

Rights of—Brightlingsea, 59,026–31.

Power of members to borrow money—Brightlingsea, 59,062–7, 59,073–9.

Profits, how divided—Brightlingsea, 59,081–88, 59,229–33, 59,435–7.

Regulate quantity of oysters taken—Brightlingsea, 59,224–8, 59,237, 59,242–4.

Number of apprentices—Brightlingsea, 59,249–52.

Power to dredge in close season—Brightlingsea, 59,209–12, 59,214–6, 59,254.

Number of dredgers licensed by—Brightlingsea, 59,032, 59,040–1.

Faversham Oyster Company—Whitstable, 58,705, 58,746.

Herne Bay Oyster Company, 60,152–3.

Whitstable Oyster Company—Billingsgate, 13,356–65; Whitstable, 58,026–57; London, 61,574, 61,591.

Profits of—Whitstable, 58,135–51.

Number of boats—Whitstable, 58,041.

Size of boats—Whitstable, 58,043.

Powers of—Whitstable, 58,390–6.

Number of members—Whitstable, 58,033, 58,046, 58,153, 58,297.

Grounds, extent of—Whitstable, 58,051–3, 58,254–7.

Protect oyster beds—Whitstable, 58,383–8, 58,397–403.

Partons (see "Crabs"):—

Kirkwall, 31,227, 31,704–5.

Periwinkles:—

Billingsgate, 13,423–31, 13,437; Exeter, 19,408–9; Portree, 33,144–51.

Prawns (see also "Shrimps," and "Trawling for Shrimps"):—

Billingsgate, 13,462–3; Boston, 15,615; Exeter, 19,525; Liverpool, 56,181, 56,194–5; Carnarvon, 56,420; London, 58,790.

Scallops:—

Wyke Regis, 20,358–9, 20,387–8; Carrickfergus, 47,365–7; Ardrishaig, 51,839.

Shrimps (see also "Trawling for Shrimps" and Prawns"):—

Brixham, 8298, 8320–2, 8341–2; Ramsgate, 10,674–8, 10,783, 10,910–1; Billingsgate, 13,342, 13,431–40, 13,443; Lynn, 14,496, 14,659; Boston, 15,244–50, 15,615; Brighton, 18,013–32; Plymouth, 18,913–4, 19,029–30; Harwich, 20,644, 20,831–53, 21,058–66, 21,093–163; Inver, 46,325; Dumfries, 53,845–66, 53,980–90, 54,220–34, 54,270–300, 54,402–7; Morecambe, 54,597–600, 54,846–8, 54,873–80; Liverpool, 56,175–7; Tenby, 57,031–8; Swansea, 57,551–4; Whitstable, 58,694–7; Brightlingsea, 59,807–39; London, 61,206–8, 61,220–38, 61,257, 61,266–8, 61,287–90.

FISH (*continued*):—

Shell Fish—Shrimps (continued):—

Increase of—Lynn, 14,504–17, 14,790–800; Morecambe, 54,587–9; Brightlingsea, 59,815, 59,833; London, 61,166, 61,180.

Decrease of—Lynn, 14,910–1, 14,931–2; Boston, 15,247, 15,627–30; Brighton, 18,013; London, 58,790, 58,923, 61,201–3.

Sale of potted—Morecambe, 54,921–4.

Destruction of—Hull, 7657–8, 7922–3; Boston, 15,251–4; Morecambe, 54,735–6; Brightlingsea, 59,823, 59,836–9; London, 61,184–6, 61,194–200, 61,221–7.

Hot weather destructive to—Morecambe, 54,601–10.

Price of—Dumfries, 54,279; Morecambe, 54,593–6.

Close-time not enforced—London, 61,176–7.

Supply equal to demand—Billingsgate, 13,432.

Shrimp-fishing neglected—Lynn, 14,592.

Shrimp-fishing injurious—Torquay, 9536, 9985–7.

Markets for—Dumfries, 53,897–8, 54,398–400, 54,512–16; Morecambe, 54,635, 54,769–74.

Whelks:—

Hull, 7746–8; Billingsgate, 13,445–8, 13,451–8; Grimsby, 16,332–48, 16,356, 16,710–1, 16,809–23; Hastings, 17,068–9; Kirkwall, 31,690–3, 31,717–22; Morecambe, 54,809; Tenby, 56,993–7, 57,124–7; Whitstable, 58,685–7, 58,690.

Decrease of—Kirkwall, 31,694–8.

Sile:—

North Sunderland, 2042–71, 2141–7; Sunderland, 3848–52; Ardrishaig, 51,659.

Sillocks:—

Kirkwall, 31,617–44, 31,631–52; Lerwick, 31,866–81.

Skate:—

Filey, 5683, 5692; Hull, 6948, 7632; Billingsgate, 12,692–5; Hastings, 16,869–72; Kingstown, 35,514; Ballantrae, 53,820*a*; Morecambe, 54,813, 54,826.

Average take per day—Brixham, 8486–7.

No falling off in—Brixham, 8803; Hull, 7630–1; Fleetwood, 55,201.

Scarcity of—Sunderland, 2767, 3948–50, 4044; Hartlepool, 4121–2, 4258, 4945–7.

Smelts:—

Torquay, 10,073–9; Lynn, 14,427–9, 14,432–8, 14,445; Boston, 15,457, 15,618–21; Edinburgh, 26,224; Swansea, 57,468.

Decrease of—Lynn, 14,783–8; Boston, 15,410–6, 15,457, 15,622–6.

Soles:—

Cullercoats, 10–1, 123–31, 781–92, 802–12, 894–7; Newbiggin, 1143, 1472–7; Sunderland, 2778, 3090–1, 3279–82; Hartlepool, 4127–9, 4784–5; Filey, 5683, 5692, 5922; Flamborough, 6769; Hull, 7068, 7100–2; Brixham, 8466–8; Yarmouth, 11,870–1; Lynn, 14,427, 14,497, 14,501, 14,631; Boston, 15,525; Grimsby, 16,043–4, 16,103, 16,120, 16,126–7, 16,129; Hastings, 16,869–78; Kingstown, 35,513, 36,248; Howth, 36,408; Ringsend, 37,409–10, 37,469, 37,552–4, 37,599, 37,930–2; Dunmore, 39,417–19; Kinsale, 41,486–91; Kenmare, 41,741, 41,794, 42,070–2, 42,090–1, 42,136, 42,140–4, 42,157–8, 42,267; Bantry, 42,582, 42,598, 42,636; Dingle, 43,188–9, 43,359–59*a*, 43,464, 43,466, 43,496, 43,508, 43,561–4, 43,585–91, 43,647–9, 43,672, 43,739–42, 43,753–4, 43,764–5, 43,776; Westport, 43,914–5; Galway, 44,499–500, 44,848, 45,713–16, 45,755–56, 45,769, 45,780–87, 45,795–7, 45,870–1; Inver, 46,183–5; Moville, 46,611, 46,884, 46,891–4, 46,899–902, 46,933, 46,938–9, 46,980; Carrickfergus, 47,330–31; Dundalk, 48,655–8, 48,735, 48,738, 48,915–22, 48,950; Skerries, 49,469–70; Balbriggan, 49,762–3, 49,785–9; Inverary, 52,275; Dumfries, 53,843; Fleetwood, 55,108–10; Tenby, 56,511–5, 56,716–8; Whitstable, 58,698; London, 58,847–8, 58,910–11.

Decrease of—Sunderland, 2779–80; Filey, 5702; Flamborough, 6770; Hull, 7354–8, 7488, 7844–5; Brixham, 8087, 8169, 8377–80, 8386, 8441, 8580–1, 8695–700, 8722–3, 8929, 8951–2; Lowestoft, 14,221–4; Lynn, 14,634, 14,861, 14,909, 14,913–4; Boston, 15,217–29, 15,441–2, 15,473, 15,552, 15,591, 15,639–40, 15,645; Brighton, 17,678, 17,904–5; Harwich, 21,243–52; Broughty Ferry, 28,771–4; Wexford, 38,471; Liverpool, 55,583–6, 55,751, 56,277, 56,284, 56,287; Carnarvon, 56,385, 56,408; London, 58,818, 58,823–5.

Increase of—Hull, 7144; Ramsgate, 10,281, 10,348, 10,537–9, 10,727–9; Billingsgate, 12,245–6, 12,426–7, 12,545–6, 13,247–9; Grimsby, 16,085, 16,103,

FISH (*continued*) :—

Soles (continued) :—
16,127 ; Fleetwood, 55,050–1, 55,181–4, 55,471–3 ; Liverpool, 56,295–7.
Destruction of—Lynn, 14,634 ; Boston, 15,230–4, 15,244, 15,480, 15,585.
Sent to Paris—Billingsgate, 12,736–7, 12,743–62, 13,253–4.
Taken too small—Boston, 15,228, 15,246, 15,473, 15,481, 15,586–90 ; Hastings, 16,892, 16,895, 16,900–1, 16,970–2, 16,990–1, 17,290–2 ; Brighton, 17,823–5, 17,911, 17,966, 17,979.
Small, thrown overboard—Boston, 15,241, 15,585 ; Hastings, 17,237–41, 17,244.
Small, sold for manure—Hastings, 17,401–4.
Price of—Ramsgate, 10,384 ; Boston, 15,474, 15,479 ; Grimsby, 16,078–82, 16,088 ; Hastings, 16,894, 16,899 ; Brighton, 17,968 ; Ringsend, 37,626–8 ; Liverpool, 56,298–300 ; Tenby, 56,516.

Sperlings :—
Broughty Ferry, 28,697 ; Fleetwood, 55,400.

Sprats :—
Cullercoats, 618–26, 794–801, 914–17, 980–2 ; Newbiggin, 1142 ; Brixham, 9219–20 ; Torquay, 9654–64, 9713–25, 9772, 9860 ; Ramsgate, 10,670, 11,019 ; Yarmouth, 12,104 ; Billingsgate, 13,042–66, 13,315–25 ; Lowestoft, 14,149 ; Boston, 15,670, 15,674–7 ; Plymouth, 19,174–5, 19,348–53, 19,366 ; Edinburgh, 26,211, 26,504–8, 26,549 ; Dunbar, 27,744–6 ; Cromarty, 29,982 ; Ringsend, 37,886 ; Dunmore, 39,233–7, 39,421–2 ; Dungarvan, 40,839–41, 40,856–8 ; Kinsale, 41,200 ; Kenmare, 41,786–90, 42,054–57, 42,069, 42,111–8, 42,257–59 ; Bantry, 42,543, 42,620–1, 42,624, 42,710, 42,797, 42,835 ; Inver, 46,129–30, 46,139, 46,337–8, 46,362–7, 46,440–2, 46,527–30 ; Ardrishaig, 52,247–9 ; Tarbert, 53,773 ; Swansea, 57,513–6, 57,765–8 ; Whitstable, 58,692–3 ; London, 61,271.
Increase of—Ramsgate, 11,066 ; Billingsgate, 13,325 ; Brighton, 59,361–4, 59,618.
Decrease of—Lynn, 14,591, 14,673 ; Boston, 15,257–60, 15,262, 15,265, 15,268, 15,397–9, 15,650–2, 15,659–62 ; Brighton, 18,073 ; Exeter, 19,720–1 ; Dunbar, 27,747–8 ; Kinsale, 41,375–9.
Are not young herrings—Lowestoft, 14,152.
Cheapest fish—Billingsgate, 13,326–39.
Eaten by mackerel—Torquay, 10,058–9.
Mode of catching—Ramsgate, 11,014.
Remunerative—Torquay, 9654–64, 9713–25, 9772, 9860 ; Kinsale, 41,383–4.
Season for—Ramsgate, 10,704, 10,712 ; Billingsgate, 13,038–41 ; Lynn, 14,490, 14,673 ; Boston, 15,261, 15,366–7 ; Brighton, 59,359–60.
Sold for manure—Brixham, 9218 ; Torquay, 9664, 9723–4 ; Ramsgate, 11,017 ; Billingsgate, 13,335–8 ; Lynn, 14,676–8, 14,825–8, 14,834–6, 14,839, 14,842, 15,006–7, 15,029–34 ; Boston, 15,666–9 ; Brighton, 59,620.
Sold for bait—Brighton, 17,866.
Laws and regulations respecting—Edinburgh, 26,203–9, 26,214–8, 26,221, 26,511, 26,515–20, 26,532–40, 26,705–12, 26,716–21, 27,025–8 ; Dunbar, 27,738, 27,749–51.
Regulations for fishing necessary—Edinburgh, 26,221–3.
Price of—Lynn, 14,830–3, 14,835 ; Boston, 15,775–6.
Herring sprats—Exeter, 19,720, 19,722, 19,724, 19,760–5.

Starfish (see also " Five-fingers ") :—
Ballantrae, 53,820*a*.

Stenlock :—
Greenock, 50,558 ; Ardrishaig, 51,659–60, 52,227–30 ; Ballantrae, 53,820*a*.

Sturgeon :—
Swansea, 57,248.

Thornback :—
Filey, 5692 ; Yarmouth, 11,860–2 ; Falmouth, 23,795.

Toad fish :—
Dumfries, 54,389 ; Morecambe, 54,615.

Turbot :—
Brixham, 8467–91 ; Sunderland, 3034–8 ; Staithes, 5061 ; Filey, 5683, 5692 ; Hull, 6893, 7068, 7075–6 ; Yarmouth, 11,658–60 ; Anstruther, 28,287–9*a* ; Peterhead, 29,636–40 ; Portree, 33,074 ; Kingstown, 35,512 ; Dublin, 37,313–6 ; Ringsend, 37,443–4, 37,594 ; Kinsale, 41,456–60, 41,485 ; Bantry, 42,646 ; Dingle, 43,496, 43,766 ; Westport, 43,915–20 ; Galway, 45,056–59, 45,164, 45,167, 45,788–90, 45,797–98, 46,109 ; Inver, 46,291–92 ; Moville, 46,609, 46,612–

FISH (*continued*) :—

Turbot (continued) :—
14, 46,720–22, 46,885, 46,974–77, 47,219 ; Carrickfergus, 47,329, 47,576, 47,785–86, 47,999–8000 ; Dundalk, 48,714–16, 48,795, 48,874–75, 48,949–51 ; Skerries, 49,468, 49,516 ; Balbriggan, 49,746–50, 49,756–57 ; Inverary, 52,274 ; Ballantrae, 53,820*a* ; Dumfries, 53,841–2 ; Fleetwood, 55,192 ; Tenby, 56,520, 56,719–20.
Increase of—Hull, 6945, 7143–4, 7351 ; Ramsgate, 10,282–3, 10,505 ; Billingsgate, 13,153–4 ; Grimsby, 16,085 ; Hastings, 16,872 ; Fleetwood, 55,476 ; Tenby, 56,521–2.
Decrease of—Newbiggin, 1328 ; North Sunderland 1724–9, 1926–7 ; Sunderland, 2771, 4011 ; Hartlepool, 4078–82, 4329–31 ; Staithes, 5064, 5086–9, 5183, 5288–91 ; Brixham, 8115 ; Ramsgate, 10,149–50 ; Brighton, 17,678, 17,763 ; Liverpool, 56,285.
Taken too small—Ramsgate, 10,882.
Taken by seine-nets—Brighton, 17,773, 17,822–5, 17,914.
Nursery for—Plymouth, 18,914.
Quality not fallen off—Hull, 7353.
Price of—Dublin, 37,359–61 ; Tenby, 56,519.

Tusk :—
Lerwick, 31,786–8, 31,792–4, 31,963–73, 32,028–31, 32,038–40 ; Stornoway, 32,288–93, 32,694 ; Dingle, 43,765.

Veeskaddin :—
Peel, 34,619–22.

Whale :
Fishery in Shetland—Lerwick, 31,882–7.
Decrease of—Lerwick, 32,178–82.

Whitebait :
Torquay, 10,059 ; Exeter, 20,007–16 ; Carnarvon, 56,469–70 ; Tenby, 56,895–7.

Whiting :—
Filey, 5683 ; Torquay, 9806–7 ; Yarmouth, 11,235 ; Plymouth, 18,640–3 ; Liverpool, 56,073–84, 56,127–32.
Increase of—Torquay, 9701–4 ; Ramsgate, 10,505, 10,515–7 ; Billingsgate, 13,224–5 ; Hastings, 16,835, 16,861 ; Galway, 44,768–75, 45,829 ; Inver, 46,260–3.
Stationary—Torquay, 9943, 9994.
Decrease of—Brixham, 8084 ; Torcross, 18,432–5 ; Wyke Regis, 20,033, 20,051, 20,367–9 ; Polperro, 21,372–4 ; Saint Ives, 24,857 ; Kenmare, 42,298 ; Greenock, 49,889–91, 50,036, 50,674 ; Ardrishaig, 51,833–5 ; Tarbert, 53,400–4 ; Liverpool, 55,692–9, 55,779, 56,285 ; Tenby, 56,593–5.
Follow herrings—Wyke Regis, 20,367.
Mode of catching — Brixham, 9258 ; Hastings, 16,880, 16,998, 17,429 ; Greenock, 50,042–5.
Markets for—Hastings, 16,951–2.
Price of—Liverpool, 56,075–6.
Taken too small — Brixham, 9031 ; Wyke Regis, 20,094.
Small sold for bait—Wyke Regis, 20,096.

Whiting Pouting :—
Mevagissey, 22,458–9.

FISHERIES :—
Government protection of (see also " Coast Guard ") — Newbiggin, 1351–2 ; North Sunderland, 1830 ; Holy Island, 2586, 2683 ; Sunderland, 3150–5 ; Staithes, 5132–38 ; Flamborough, 6486–7.
Government protection, absence of—Cullercoats, 333–5, 427–34, 576, 628–41 ; Newbiggin, 1350, 1356–9, 1464, 1597–600 ; North Sunderland, 1809, 2016–21, 2028–9, 2101, 2191–2, 2287–94, 2401 ; Holy Island, 2450–1, 2498, 2657, 2694 ; Sunderland, 2879–86, 3002–10, 3083–7 ; Filey, 6116–9, 6262, 6278–9 ; Flamborough, 6488, 6605–7, 6853 ; Hull, 7041–3.
Government supervision of—Newbiggin, 1172 ; Holy Island, 2511–7 ; Sunderland, 3534–45 ; Edinburgh, 26,479.
Government supervision, absence of—Cullercoats, 594, 921–2 ; Newbiggin, 1171–3, 1175, 1361 ; Holy Island, 2561–4 ; Sunderland, 2895, 3545–7 ; Hartlepool, 4214–5 ; Filey, 5777–8, 6107–9, 6228 ; Flamborough, 6539–40 ; Lowestoft, 13,835 ; Torcross, 18,282–3 ; Plymouth, 18,718–9, 18,736, 18,945, 18,961–2, 19,212–5, 19,335 ; Lerwick, 32,192–205.
Supervision required — Flamborough, 6709–11, 6856 ; Brixham, 9225 ; Torquay, 9670–6.
Instructions to suspend execution of—Torquay, 9486–7, 9493.
Government supervision, insufficiency of—Carrickfergus, 48,021–5, 48,065 ; Skerries, 49,609–10, 49,621–4.
Carried on by fishermen from a distance—Carnarvon, 56,407, 56,465.

FISHERMEN :—
Number and description of—Cullercoats, 109–10; Filey, 5680, 5847; Flamborough, 6635; Brixham, 8049, 8142; Ramsgate, 10,089, 10,107; Yarmouth, 11,098, 11,101–4, 12,245, 12,276–9; Billingsgate, 12,705–8, 12,740; Lynn, 14,513, 14,769, 15,052–3; Boston, 15,371; Grimsby, 16,045, 16,219–20; Brighton, 17,490–3, 17,921–2, 18,050–1; Torcross, 18,129–34; Plymouth, 19,109–10; Exeter, 19,782; St. Ives, 24,653–75, 24,748, 24,897–9, 25,088; Edinburgh, 26,591; Dunbar, 27,301–5, 27,438; Broughty Ferry, 28,693; Cromarty, 29,810; Stornoway, 32,216; Kingstown, 35,461–3, 35,732, 35,786; Dublin, 37,232; Arklow, 37,986, 38,420–7; Wexford, 38,990, 39,019; Dunmore, 39,294; Kinsale, 41,672; Bantry, 42,903–8; Dingle, 43,445; Westport, 43,824–6; Galway, 44,630–33; Inver, 46,122–5, 46,553–4; Moville, 46,996–8; Carrickfergus, 47,425–6, 48,030–1; Inverary, 52,384–5; Tarbert, 53,439–44; Ballantrae, 53,820*a*; Dumfries, 53,907–9, 53,984–5, 54,447–51; Morecambe, 54,749–50, 54,834–9; Fleetwood, 55,130–1, 55,444; Carnarvon, 56,477; Tenby, 56,951; Swansea, 57,859–61; Whitstable, 58,746; London, 58,766–74, 60,937, 60,947, 60,956–7, 61,118–21, 61,642.
Increase of—Cullercoats, 110, 1107–14, 1234; Newbiggin, 1308–14; North Sunderland, 1723; Holy Island, 2419; Staithes, 5328–9, 5639–42; Filey, 5681, 6337; Flamborough, 6636–7; Brixham, 8050, 8887–8; Ramsgate, 10,785–6, 10,846; Boston, 15,371, 15,792; Grimsby, 16,637–40; Hastings, 16,842–3, 17,286–7; Brighton 17,634, 18,050; Torcross, 18,327; Plymouth, 19,225–6; Wyke Regis, 20,139–40, 20,197–9, 20,201, 20,311, 20,382, 20,437; Shoreham, 25,165, 25,361–4; Edinburgh, 26,666, 26,675, 26,951; Dunbar, 27,256; Eyemouth, 27,882; Anstruther, 28,267; Broughty Ferry, 28,749; Stonehaven, 28,859, 29,077; Kirkwall, 31,450; Lerwick, 32,041; Moville, 47,061–2; Carrickfergus, 47,281; Dundalk, 48,717, 48,785, 48,986–7, 49,049; Skerries, 49,204–7; Ardrishaig, 51,840; Morecambe, 54,652–6; London, 58,958, 60,776–7, 60,996–7, 61,168.
Decrease of—Ramsgate, 10,778; Boston, 15,641–3; Plymouth, 18,620; Exeter, 19,509–12, 19,576–84, 19,660–1, 19,867–73; Kirkwall, 31,384, 31,522; Dublin, 37,232–40; Dunmore, 39,707, 39,772, 39,786, 39,803, 39,831; Dungarvan, 39,912–16, 39,988; Bantry, 42,534, 42,616; Dingle, 43,198, 43,811; Galway, 44,630–6, 45,300, 45,314–6; Inver, 46,236–7, 46,570; Moville, 46,597–600, 46,736–8; Carrickfergus, 47,748; Dumfries, 53,889.
Condition of—Cullercoats, 61–4, 1052–63, 1072–97; Newbiggin, 1204, 1662–71; North Sunderland, 1845–7; Staithes, 5647; Filey, 5822–4, 5955–8, 6179, 6238–9, 6354–6; Hull, 7292, 7298, 7574–6, 7619–21; Brixham, 8559–60; Lowestoft, 13,729–31; Lynn, 14,515–7, 14,946; Grimsby, 16,649; Brighton, 17,631–3; Torcross, 18,237–8; Exeter, 19,589–90, 19,635, 19,641–7; Mevagissey, 22,572–600; Peterhead, 29,196, 29,336–9; Wick, 30,454, 30,611, 30,616–20; Kirkwall, 31,453–5, 31,663–7; Lerwick, 31,958–9; Campbeltown, 33,766; Portree, 33,063–9; Peel, 34,912–8; Arklow, 37,937–9, 37,971, 37,974–5; Wexford, 39,028–9; Dunmore, 39,366–7, 39,395–6, 39,400–4, 39,772, 39,787–8, 39,809, 39,892–3; Dungarvan, 39,984–8, 40,006–13, 40,028, 40,564–9, 41,066, 41,148–52; Kinsale, 41,216–28, 41,592–3; Kenmare, 41,833, 41,836; Bantry, 42,622; Westport, 43,844–56, 43,862–63, 43,873–74, 43,953–54, 43,957–59, 43,982–85; Galway, 44,579–81, 44,892–96, 45,135–61, 45,169, 45,221–27, 45,294–95, 45,299, 45,302–3, 45,418–65, 45,477, 45,525–83, 45,594–604, 45,634–43, 45,656, 45,682–83, 45,687–96, 45,818–26, 45,843–58, 46,084–5; Inver, 46,121, 46,238–41, 46,565–66, 46,578–91; Moville, 46,605–8, 46,895–8, 47,069–74, 47,274–77; Carrickfergus, 47,375–81; Carlingford, 48,293; Dundalk, 48,606–7, 48,659–60, 48,802–7, 48,885–94, 49,053–65; Balbriggan, 49,862–7; Ardrishaig, 52,037; Inverary, 52,386; Tarbert, 53,587, 53,785–8, 53,795–7; Liverpool, 56,143; London, 58,800–5, 58,810, 59,009.
Earnings of—Cullercoats, 117, 444–7, 998–1007, 1064–72; Newbiggin, 1202–21, 1241–50, 1281–3, 1398–1412, 1460–1, 1579–82, 1631–9; North Sunderland, 1849–51, 1972–3, 1997–9; Holy Island, 2545; Sunderland, 2749–51, 2842–5, 3140–2, 3276, 3285, 3471–4; Hartlepool, 4494–502, 4560–1, 4790, 4800, 4905–6; Staithes, 5048–52; Brixham, 8159–64, 8458–60, 8943–4, 8949, 9146–8, 9152–3, 9246–7, 9253–7; Yarmouth, 11,997, 11,999, 12,006–9, 12,159, 12,259; Lowestoft, 13,732–4; Lynn, 14,642, 15,098–102; Hastings, 16,864–5, 17,012–6, 17,173–4; Torcross, 18,325; Plymouth, 18,681; Harwich, 20,917–24, 21,083, 21,156–61; Polperro, 21,464–9, 21,690–1; Mevagissey, 22,199–200, 22,210, 22,221; St. Ives, 24,652–75, 24,897–8; Eyemouth, 27,990, 27,997; Stonehaven, 28,860, 29,092–5; Wick, 30,566–74, 31,139–46; Stornoway, 32,212–14, 32,494–9; Portree, 33,283; Peel, 34,349–51; Kingstown, 35,733–41, 35,798–802, 35,858, 35,903–8; Howth, 36,737; Ringsend, 37,712–6, 37,759–62; Dunmore, 39,666–9; Dungarvan, 40,059–70; Bantry, 42,774, 42,904–7; Dingle, 43,199–200, 43,395; Westport, 44,201–3; Galway, 44,517–23, 44,526–27, 44,607–13, 44,644–45, 44,808–11, 44,903–10, 45,684, 45,728, 45,910–14, 45,929–31, 46,027–35, 46,077–83, 46,092; Inver, 46,400–1; Carrickfergus, 47,919–21, 48,080–82; Carlingford, 48,374, 48,459–61; Dundalk, 48,937–42; Skerries, 49,181–91, 49,298–300, 49,582–91, 49,713; Balbriggan, 49,764–67, 49,821–24; Greenock, 49,902, 50,354–5; Ardrishaig, 51,454–5, 52,181–6; Inverary, 52,931–3; Tarbert, 53,670–86; Ballantrae, 53,820*a*; Dumfries, 54,258–65, 54,452–76, 54,515–7; Morecambe, 54,868–71; Fleetwood, 55,284–6, 55,556; Liverpool, 55,788–9, 56,257–60; Carnarvon, 56,464; London, 58,827–8, 58,830–1, 58,951, 59,016, 61,172–5.
Number per boat—Cullercoats, 95, 142; Newbiggin, 1112; North Sunderland, 1713; Holy Island, 2420; Sunderland, 3417–8; Hartlepool, 4711; Filey, 5678, 5849; Hull, 6871; Plymouth, 19,002, 19,331; Polperro, 21,282–3; Cromarty, 29,924; Dingle, 42,425.
Arklow fishermen, character of—Arklow, 37,939–42, 37,944–50, 37,976–81.
Complaints against fishermen — Howth, 36,776–82, 36,822–35, 36,895–7; Kenmare, 41,804–6; Bantry, 42,489, 42,549; Dingle, 43,042, 43,252; Galway, 45,722; Inver, 46,171, 46,195–6.
Complaints by — Kenmare, 42,013–5; Westport, 44,105–6.
Other occupations of—North Sunderland, 1852–3; Kirkwall, 31,323–5; Lerwick, 31,838–9; Portree, 33,035, 33,284; Peel, 34,694; Kingstown, 35,459, 35,728–32, 35,749–55, 35,833; Dublin, 37,247–50, 37,344, 37,356; Dunmore, 39,295–300; Dungarvan, 39,984–8; Kenmare, 41,983; Bantry, 42,452; Westport, 43,834–5; Inver, 46,128, 46,235; Moville, 46,698–9; Skerries, 49,408–11; Balbriggan, 49,739–40, 49,790; Ardrishaig, 51,458; Inverary, 52,374–6; Tarbert, 53,694–7; Dumfries, 54,212; Carnarvon, 56,472–7.
Mode of remuneration — Cullercoats, 144–51, 1005; Hartlepool, 4562–4, 4809–27; Hull, 7622–3; Brixham, 8765–8, 8815; Yarmouth, 11,105, 11,462–4, 11,714; Billingsgate, 12,483, 13,005–9; Lowestoft, 14,078–86, 14,329–39; Hastings, 17,371–3, 17,432–6, 17,438–41; Brighton, 17,711–9 :Torcross, 18,318, 18,322–3; Plymouth, 18,682, 18,839, 18,841; Mevagissey, 22,384–9, 22,598–609; Cromarty, 29,791; Wick, 30,443–52, 30,563–5, 30,699–704; Lerwick, 31,956–7; Howth, 36,907; Fleetwood, 55,321; Liverpool, 55,909–10; Tenby, 56,856–8; Swansea, 57,998, 58,002.
Advances to system of—Kirkwall, 31,325–8, 31,360–4, 31,513–21; Dublin, 37,091–3.
Owners of boats—Filey, 5851–67, 5990–2, 5994–5, 6323, 6337–8; Hull, 7624–7, 7682, 7791–4; Brixham, 8059–66, 8162–4, 9385; Ramsgate, 10,271, 10,484; Billingsgate, 13,604; Lowestoft, 14,033–7; Grimsby, 16,610–4; Plymouth, 18,820–1, 18,830–4, 19,076–9, 19,228–31; St. Ives, 24,843–6; Peel, 34,540–2, 34,656; Dingle, 43,097–101; Ardrishaig, 51,450; Morecambe, 54,914–5; Fleetwood, 55,283, 55,331–8; London, 61,172–3.
Not owners of boats—Hull, 7300; Lerwick, 31,845–50; Tenby, 56,854–5.
Many drowned—Moville, 47,036–44.
Subsist on fish and seaweed—Portree, 32,986, 33,118–26; Broadford, 33,318; Campbeltown, 33,666.
Incompetent, improvident, and unenterprising—Dunmore, 39,789, 39,803–9, 39,831; Kinsale, 41,219, 41,228; Kenmare, 41,834; Carnarvon, 56,389, 56,464–5.
Intimidating witnesses—Galway, 45,892–4.
Cut away drift-nets—Campbeltown, 34,022, 34,055.
Outbreaks among — Dublin, 37,074–9; Ardrishaig, 52,213–4.
Enmity between seine and drift-net fishermen—Polperro, 21,496.
French :—
Sale of fish to—Newbiggin, 1612, 1640–4; Brixham, 8365–71; Peterhead, 29,214; Wick, 30,935.
Sale of fish by—Hastings, 17,482–5.
Throw offal overboard — North Sunderland, 1815, 2008–9, 2092–8, 2138–40, 2195–7, 2262, 2295–300,

FISHERMEN (*continued*):—
French (continued):—
2403–4; Holy Island, 2457, 2519–21, 2592–4, 2645–8, 2661, 3161–5; Flamborough, 6613–5; Peterhead, 29,410–3.
Interference with fishing by—Filey, 6254–81; Eyemouth, 28,090–4; Anstruther, 28,452–62; Stonehaven, 28,861–3, 28,866–70, 29,006–13; Peterhead, 29,205–8; Lerwick, 31,854–6; Brightlingsea, 59,474–5, 59,488–96, 59,584, 59,588–92.
Shoot nets earlier—Filey, 6173; Flamborough, 6499, 6531, 6726.
Shoot nets on Saturday and Sunday—Staithes, 5148–51.
Oyster Dredgers:—
Westport, 43,940–41, 43,963–66, 43,986–90, 44,008–16, 44,032–33, 44,391–408, 44,440–52, 44,457–61; Moville, 46,700–02, 46,811, 47,122–23; Carlingford, 48,118–19, 48,274–77, 48,422; Whitstable, 58,158–65, 58,348, 58,700; Brightlingsea, 59,032, 59,040–1, 59,111, 59,221–3, 59,249–52, 59,536–9; London, 60,019, 60,024.
Complaints of oyster dredgers—Westport, 44,393–408, 44,441–52; Carlingford, 48,104, 48,480–5, 48,487; Carnarvon, 56,449.
Decrease of dredgers—Brightlingsea, 59,753; London, 60,555, 60,560.
Earnings of—Whitstable, 58,167–8; Brightlingsea, 59,246–8, 59,519, 59,783, 59,790–8.
Trawlers (see also "Trawling"):—
Difficulty of identifying and dealing with offenders—Flamborough, 6829, 6832–5; Hull, 7456; Torcross, 18,275–7, 18,448, 18,543–4; Polperro, 21,745, 21,843, 21,847.
Punished sometimes—Staithes, 5399; Brixham, 9186.
Prosecution of—Ringsend, 37,502, 37,508–13; Ardrishaig, 52,064–71.
Penalties against—Brixham, 2226–34; Polperro, 21,903–4.
Warned by Coastguard—Brixham, 8123–6; Torquay, 9464–8, 9537–45; Ringsend, 37,742.
Refuse to obey Coastguard—Torquay, 9469–72, 9504, 9541–5.
Could keep clear of drift boats—Ramsgate, 10,587–9.
How paid—Kingstown, 35,625–7; Ringsend, 37,520, 37,854–5.
Prevented from fishing—Galway, 44,554–75, 44,710–37, 45,102–17, 45,172–74, 45,343–66, 45,669–70, 45,925–27, 45,950, 45,953–54, 46,075–76, 46,091, 46,111–12; Carnarvon, 56,395.

FISHERY BOARD, DUBLIN (see "Irish Fisheries, Account of").

FISHERY BOARD, EDINBURGH:—
Functions of—Edinburgh, 26,070–88.
Confined to Scotland, 26,074–90.
Expenditure of, 26,094–116.
On harbours, 26,099–158.
Results, 26,162–7.
Not extending to England or Ireland, 26,169–72.
Clears herring vessels but not boats, 26,226–9.
Supervises the curing of white herrings and regulates branding, 26,231–68.
Organization of, 26,364–70.
Circumstances under which formed, 26,371.
Governing body, officers, and salaries, 26,375–406.
Maintained by public grants, 26,407–12.
Jurisdiction and limitation of, 26,413–17.
Grants bounties and regulates curing and packing, 26,423–5.
Acts relating to, 26,364, 26,420–1, 26,432, 26,444–7.
Regulative and police functions, 26,449–51.
Power to make byelaws, 26,487–502.
Report to Parliament annually, 26,541–2.
Tendency of to relax restrictions, 26,555.
Collects statistics of cured fish, 26,562.
Grants money only to places where a proportion is raised locally, 26,603–19.
Duties of fishery inspector—Eyemouth, 27,832–65, 27,870–1; Kirkwall, 31,410–7.

FISHING:—
Increase of—Billingsgate, 13,160–2; Grimsby, 16,635–6, 16,662; Dundalk, 48,693–4, 48,788.
Decrease of—Grimsby, 16,310, 16,313–20; Kenmare, 41,717–18, 42,035; Bantry, 42,446, 42,524–26; Galway, 45,198, 45,472, 45,876–78; Inver, 46,202, 46,274, 46,555–65; Moville, 46,595–96.
Change in mode of—Cullercoats, 497–507; Sunderland, 2778, 2783–5; Hartlepool, 4226–33.

FISHING (*continued*):—
Influence of weather on—Cullercoats, 97–9; Newbiggin, 1161–70, 1348–9, 1615; North Sunderland, 1740–4, 1929, 1935, 2030–3; Holy Island, 2590–1; Sunderland, 2906–10; Kirkwall, 31,579–84; Lerwick, 32,152; Tenby, 56,829–32, 56,862–5.
Injured by steamboats—Ramsgate, 11,074–7; Edinburgh, 26,678–9; Peterhead, 29,582; Kingstown, 35,953–4, 35,972; Dunmore, 39,367–9; Greenock, 50,478–9; Inverary, 52,982–4.
Improved system of—Staithes, 5084.
No improved system of—Filey, 6087, 6089–92.
Profitable—Edinburgh, 26,872, 26,889; Broughty Ferry, 28,783; Wick, 30,545–7; Kirkwall, 31,385; Tenby, 56,643.
Not a paying business—Billingsgate, 12,763–77.
Prosecuted with skill—Wick, 30,271.
Advances injurious to fishermen—Kirkwall, 31,386–93.
Over-fishing—Cullercoats, 667–71; Newbiggin, 1201, 1648; North Sunderland, 1778–80; Holy Island, 2549–50, 2618–9; Hartlepool, 4355–7.
Drift-net Fishing (see also "Herrings" and "Herring-nets"):—
Mevagissey, 22,072–3; Penzance, 24,002, 24,092–4, 24,109, 24,147–53, 24,213, 24,246–7, 24,301, 24,399–402, 24,494, 24,586, 24,602; St. Ives, 24,747, 24,958–64; Greenock, 50,789, 50,876–7; Ardrishaig, 51,002–39, 51,180–8; Inverary, 52,470–85, 52,743–4, 52,747–52.
Improved by stoppage of trawling—Galway, 44,694–95, 44,707, 44,709, 45,017–18, 45,026, 45,029, 45,276–78, 45,281, 45,304, 45,645, 45,717–18, 45,814; Inver, 46,182; Greenock, 50,653*a*.
More profitable than trawling for herrings—Ardrishaig, 51,149–59; Inverary, 52,860–1.
Hand-line Fishing:—
Hull, 7315–25, 7986–9; Billingsgate, 12,826, 12,939–45, 12,973, 13,301; Grimsby, 16,632; Polperro, 21,305–10; Lerwick, 31,753; Dungarvan, 39,921–4, 39,989, 40,394–402, 40,549–54, 40,722–6, 40,784–91, 41,030–3; Greenock, 50,692.
Long-line Fishing:—
Cullercoats, 27–31, 352–8; Newbiggin, 1151–9, 1222–8; North Sunderland, 1701*a*, 1712; Holy Island, 2407; Sunderland, 2760–5; Flamborough, 6620–1; Brixham, 8265, 8283–7, 9310–17; Yarmouth, 11,768–86; Grimsby, 16,383, 16,402; Brighton, 17,871–2; Harwich, 20,773–803; Edinburgh, 26,657–65, 27,046–7; Dunbar, 27,327–30, 27,335–6; Eyemouth, 28,082; Anstruther, 28,567; Peterhead, 29,475; Cromarty, 29,789, 29,925; Kirkwall, 31,205–7, 31,241–5; Ringsend, 37,463–5, 37,590–1; Arklow, 38,086–96; Wexford, 38,496, 38,727–30; Dungarvan, 39,990–40,000, 40,015–20, 40,187–9, 40,346–55, 40,387–9, 40,521–7, 40,545–7, 40,646–52, 40,727–8, 40,843–4; Kinsale, 41,187–8, 41,258–60, 41,268, 41,439–40; Kenmare, 41,740–45, 41,753, 41,808–11, 41,957, 41,985–86, 42,259–62; Bantry, 42,778, 42,853–54; Dingle, 42,953–54, 43,253–6, 43,416, 43,448–9, 43,465–75, 43,565–68, 43,713–8, 43,748–50; Westport, 44,421; Galway, 45,012; Inver, 46,131, 46,136–37, 46,339–47; Moville, 46,995, 47,107–09; Carrickfergus, 47,287–89, 47,753–60, 47,767–69; Carlingford, 48,350–52; Dundalk, 48,538–39, 48,646–48, 48,676, 48,706, 48,720–21, 48,768–69; Skerries, 49,266, 49,287–88, 49,331, 49,405–07, 49,509–13, 49,696–97; Greenock, 50,030–5, 50,056; Dumfries, 53,890–4; Morecambe, 54,798–808, 54,832–9, 54,892–3; Carnarvon, 56,415; Tenby, 56,993, 57,029–30; Swansea, 57,776–85, 57,966–9.
Want of bait for—Wick, 30,213, 30,598–9, 30,609–10; Ardrishaig, 52,133, 52,234–40; Inverary, 52,756–7.
Increase of—Billingsgate, 12,440, 12,489; Lowestoft, 14,213; Plymouth, 18,752, 19,006, 19,247; Anstruther, 28,253–9, 28,420; Peterhead, 29,463–4, 29,641.
Decrease of—Sunderland, 3112–5, 4044; Filey, 5695–6; Ramsgate, 10,646; Polperro, 21,301–5, 21,331; Mevagissey, 22,441–9; Penzance, 24,039–41, 24,073, 24,571–2; Peterhead, 29,344, 29,532; Cromarty, 29,783–6; Kirkwall, 31,177–8; Kenmare, 42,036, 42,162, 42,295–99; Bantry, 42,462, 42,615, 42,780, 42,852, 42,855, 42,859–60; Dingle, 43,655; Inver, 46,252–53; Carrickfergus, 47,321, 47,433–38, 47,882–84; Carlingford, 48,156–7, 48,303–04; Skerries, 49,069, 49,174–77; Greenock, 49,889–99, 50,384, 50,675, 50,718; Tarbert, 53,400.
Cause of decrease—Bantry, 42,615, 42,780–81, 42,861–66; Inver, 46,254; Dundalk, 48,536–37.
Season for—Hull, 7326–7, 7736; Ramsgate, 10,970;

FISHING (*continued*):—

Long-line Fishing (continued):—

Grimsby, 16,380; Polperro, 21,329, 21,502–06; Galway, 45,519; Carrickfergus, 47,817–19; Skerries, 49,489, 49,494, 49,498–99; Tenby, 57,104.

Objections to long-line fishing—St. Ives, 24,995, 25,004; Dungarvan, 39,994–40,000, 40,189–90, 40,389–90, 40,976–82, 41,023–5.

Kinds of fish caught by—Bantry, 42,851, 42,856–57; Dingle, 42,964–77, 43,120–21, 43,361–61*a*; Westport, 43,819, 44,423; Inver, 46,348–51, 46,542; Carrickfergus, 47,403–5, 47,694–97; Carlingford, 48,299–302; Dundalk, 48,525; Skerries, 49,267, 49,489–97; Balbriggan, 49,832–33.

Profitable—Sunderland, 2834; Hartlepool, 4049–50; Staithes, 5025–8.

A bad speculation—Hull, 7259–62.

Length of lines—Grimsby, 16,401; Anstruther, 28,404; Stonehaven, 28,892; Wick, 30,530.

Seine Fishing (see also "Trawling for Herrings"):—

Exeter, 19,793, 19,832–4; Mevagissey, 22,032–60, 22,585–92; Wexford, 38,509; Kinsale, 41,640–2; Bantry, 42,671, 42,837, 42,877–8, 42,921; Dingle, 42,980, 42,994–6; Westport, 43,820; Inver, 46,327–30; Carnarvon, 56,479–80; Tenby, 56,880.

Decrease in—Polperro, 21,699–702, 21,833–8; Mevagissey, 21,991–4; Penzance, 24,003, 24,276–8; Bantry, 42,922–5.

Custom as to "turns" and "stems"—Mevagissey, 22,413–6, 22,947–52; Falmouth, 23,680–93; Penzance, 24,113–7, 24,168–88; St. Ives, 24,691–733, 24,756–9.

Injurious effects of seining—Lynn, 14,695; Brighton, 17,517, 17,549–50, 17,630, 17,764, 17,776, 17,934; Exeter, 19,441, 19,950; Wyke Regis, 20,047–51; Mevagissey, 22,412, 22,966; Falmouth, 23,620–1, 23,732–3, 23,828; Kingstown, 35,692, 35,776–80.

Injured by drift-net fishing—Polperro, 21,456; Penzance, 24,110; London, 58,963–5.

Capital required for—Mevagissey, 22,424, 22,927; St. Ives, 24,773.

Not profitable — Mevagissey, 22,393–400, 23,002, 23,018; Penzance, 24,342, 24,497–8.

Regulations as to—Mevagissey, 22,370–2, 22,643–73, 22,685–704, 22,830–2, 22,904–12, 22,998–70, 23,006, 23,024.

Men employed in, chiefly landsmen — Penzance, 24,313–4.

Objections to small seines—Mevagissey, 22,834–56, 22,883, 22,892–902; Penzance, 24,118–36, 24,189–207, 24,372–6.

Disputes between owners of large and small seines—Mevagissey, 22,914–20; Falmouth, 23,874–85; Penzance, 24,208–12, 24,315–21.

FISHING COMPANIES AND CLUBS:—

Cullercoats, 577–91; Hull, 7251; Brixham, 8022–68; Plymouth, 19,034–75; Ringsend, 37,533, 37,911–5; Dunmore, 39,813–5; Dingle, 43,775; Galway, 46,015–23, 46,087, 46,098–106; Carrickfergus, 47,569, 47,601–09, 47,740–42; Liverpool, 55,704.

FISHING GROUNDS:—

Cullercoats, 247, 508–11, 667, 1008, 1018–22; Newbiggin, 1418–22, 1529–33; Sunderland, 2896–905, 3266, 3285, 3431–4, 3894, 3959–61; Hartlepool, 4212, 4363, 4697–9; Staithes, 5041, 5073–7, 5265–75; Hull, 6887, 7496–9; Ramsgate, 10,539–45, 10,557–9; Billingsgate, 12,433, 13,159–61, 13,190; Edinburgh, 26,681; Dunbar, 27,335–6, 27,553; Anstruther, 28,543–50, 28,556; Broughty Ferry, 28,700–1, 28,759–67; Peterhead, 29,448, 29,568–9, 29,608–10, 29,612–7, 29,706, 29,718–20; Cromarty, 29,777–81, 29,863–6; Wick, 30,193, 30,233–8, 30,466–71; Kirkwall, 31,183–4, 31,396, 31,446, 31,610; Lerwick, 31,755, 31,802–9, 31,851–2, 31,981–7; Howth, 36,261; Ringsend, 37,384–6, 37,421–9, 37,465–9, 37,504–7, 37,521–40; Dunmore, 39,083–6, 39,631–6, 39,663–5; Kinsale, 41,334–8; Kenmare, 41,899–905, 41,949–53, 41,989–96, 42,002–3, 42,184–209, 42,233–5, 42,242, 42,266–8, 42,270–2, 42,319–21; Bantry, 42,508–12, 42,574–80, 42,583, 42,791, 42,793; Dingle, 43,040–41, 43,208–10, 43,219–20, 43,238–43, 43,372–78, 43,381–89, 43,592–601, 43,784–87; Westport, 43,913; Galway, 44,576–8, 45,037–46, 45,066–67, 45,282–89, 46,041–43, 46,117–19; Inver, 46,225–26; Moville, 46,615–35, 46,706–26, 46,745–49, 46,873–78, 46,903–11, 46,966–72, 47,192–6, 47,220–3, 47,233–41; Carrickfergus, 47,311–20, 47,501, 47,577–8, 47,662, 47,929–30, 47,939–56, 47,972–85; Carlingford, 48,158–62, 48,292; Dundalk, 48,528, 48,952–65, 48,992–3; Skerries, 49,309, 49,631; Balbriggan, 49,845–9; Liverpool, 55,668–72, 55,754–60, 55,961–6,

FISHING GROUNDS (*continued*):—

56,004–9, 56,048, 56,193–5; Carnarvon, 56,388–9; Tenby, 57,109–10, 57,131–5.

Continuance on — Sunderland, 3383–96, 3495–504; Hartlepool, 4848–51; Brixham, 8078.

Comparative advantages of—Cullercoats, 247; Sunderland, 3227–9, 3235–8, 3380–2, 3433–9, 3780–2.

Not over-fished—Hull, 7162, 7501–2, 7561, 7595, 7934, 7956; Ramsgate, 10,350–1; Yarmouth, 11,289–91, 11,739, 11,741, 11,845–7; Billingsgate, 12,860–1, 13,262; Lowestoft, 14,207–9; Grimsby, 16,128, 16,320.

Require protection—Plymouth, 18,611.

Fished according to season—Hull, 7447; Yarmouth, 11,307.

As productive as ever—Hartlepool, 4847–51; Hull, 6910–13; Billingsgate, 12,695; Hastings, 16,900, 17,054, 17,154–5, 17,269, 17,336; Liverpool, 56,145–6.

Less productive—Sunderland, 3959; Staithes, 5066, 5073–6, 5655–72; Filey, 5705–8, 5714–28; Flamborough, 6651–8; Hull, 6903–5; Billingsgate, 13,469; Grimsby, 15,914–5, 15,949–55, 16,455–6; Plymouth, 18,611–82, 18,920, 19,249, 19,297–300; Harwich, 20,566–9; Broughty Ferry, 28,766–9; Moville, 46,614; Greenock, 50,522–7.

Limitation of—Cullercoats, 418, 929–34; North Sunderland, 2280–1; Sunderland, 2950–3, 3138; Staithes, 5259; Filey, 6298–9; Plymouth, 18,852–6; Mevagissey, 22,968–84, 23,006–7, 23,023–34; Penzance, 24,147–53; Edinburgh, 26,204–23; Howth, 36,222, 36,264–74, 36,404; Dublin, 37,110–33; Ringsend, 37,470–2; Arklow, 38,378; Dungarvan, 40,111; Kenmare, 41,994, 42,002–3, 42,183–209, 42,232–5, 42,243, 42,250, 42,291–92, 42,365–69, 42,376–77; Bantry, 42,584–94, 42,631–33, 42,697, 42,701, 42,789, 42,847, 42,867–69, 42,873–76, 42,899–901, 42,910; Dingle, 43,062–75, 43,079–85, 43,207, 43,218, 43,221–23, 43,257–58, 43,264–7, 43,348–9, 43,519–28, 43,777; Galway, 44,472–77, 44,646–52, 44,850–57, 45,707–11, 45,860–61, 45,917–21, 46,048–53; Inver, 46,166, 46,177–79; Moville, 46,910; Carrickfergus, 47,490–91, 47,843–45, 47,847–49; Carlingford, 48,213, 48,397–98; Skerries, 49,117–21, 49,480, 49,606; Tarbert, 53,228–32; Liverpool, 55,682.

Aberdeen Bay:—

Peterhead, 29,528–30, 29,761.

Achill Sound:—

Westport, 43,858, 43,867, 43,891, 43,913–4.

Aldborough Bay:—

Harwich, 20,581.

Anascaul:—

Dingle, 43,203, 43,481–2, 43,784.

Ardglass:—

Howth, 36,503; Arklow, 37,987, 38,069.

Arklow:—

Howth, 36,777–93; Arklow, 37,933–38,441; Wexford, 38,680–3.

Arran Islands:—

Ringsend, 37,526; Galway, 44,474, 44,683, 44,812, 44,821–5, 45,006, 45,029, 45,033, 45,049, 45,281, 45,632, 45,749, 45,807–12, 45,920, 45,986.

Back Knoll:—

Billingsgate, 13,189.

Ballantrae:—

Ballantrae, 53,820*a*.

Bantry Bay:—

Kinsale, 41,569–70; Bantry, 42,409–942; Galway, 44,548–53, 46,042.

Barnstaple Bay:—

London, 58,753, 59,022.

Barra:—

Harwich, 20,881; Portree, 33,062, 33,095–113; Tobermory, 33,447.

Beachy Head:—

Hartlepool, 4697; Brighton, 17,803–10; Shoreham, 25,415–25, 25,637–9, 26,020–2.

Belfast Lough:—

Carrickfergus, 47,278–48,089.

Berwick Bank:—

Holy Island, 2472–6, 2616–22; Grimsby, 16,555–9.

Blackrock:—

Polperro, 21,486.

Blacksod Bay:—

Westport, 43,891.

Blackwater:—

Billingsgate, 13,409; Harwich, 20,864, 21,147; Shoreham, 25,706; Brightlingsea, 59,023, 59,839.

FISHING GROUNDS (*continued*):—

Blackwater:—
Wexford, 38,569–75, 38,688–90.

Bolt Head:—
Polperro, 21,340.

Boston Deeps:—
North Sunderland, 1747–59; Staithes, 5093; Filey, 6131; Flamborough, 6558, 6568; Hull, 7647, 7926; Lowestoft, 14,052; Lynn, 14,402–15,155; Boston, 15,156–893; Grimsby, 16,331, 16,347–8, 16,466.

Botany Gut:—
Hull, 6887, 7311, 7745; Yarmouth, 11,128–30, 11,133–4, 11,506; Billingsgate, 12,815; Harwich, 20,881.

Bray Head:—
Kingstown, 35,464; Ringsend, 37,929.

Bridlington Bay:—
Filey, 6122; Flamborough, 6470, 6668–9; Hull, 7102, 7597–9.

Brightlingsea:—
Shoreham, 25,486; Brightlingsea, 59,023–59,839.

Bristol Channel:—
Brixham, 8547, 8965–7; Ringsend, 37,765; Tenby, 56,699–700; London, 58,753–59,022.

Brixham Bay:—
Brixham, 8079, 8444–7, 8704, 8740–9.

Brown Bank:—
Ramsgate, 10,791–4, 10,802; Yarmouth, 11,438–9, 11,443; Billingsgate, 12,840; Harwich, 20,881.

Burgh Head:—
Cromarty, 29,927–8.

Butt of Lewis:—
Harwich, 20,881; Stornoway, 32,275–7, 32,440, 32,487.

Caldy Island:—
Tenby, 56,647, 56,769, 56,811–5, 56,828, 56,869, 56,988, 57,039, 57,045; Swansea, 57,223.

California Bank:—
Flamborough, 6776–82, 6827–40; Hull, 6901–7, 7596–9.

Campbeltown Loch:—
Campbeltown, 33,677; Skerries, 49,281; Greenock, 49,904, 50,029, 50,036–9, 50,126–7, 50,388.

Cape Rock and Cape Wrath:—
Harwich, 20,881; Edinburgh, 26,724; Kirkwall, 31,610–2; Stornoway, 32,440, 32,487.

Cardigan Bay:—
Liverpool, 55,741, 55,746, 55,754–64, 55,915; Carnarvon, 56,418–23; Tenby, 56,820.

Carlingford Lough:—
Carlingford, 48,090–501; Dundalk, 48,666, 48,957–60.

Carmarthen Bay:—
Tenby, 56,706–13, 56,811–5; Swansea, 57,163, 57,223.

Carn:—
Harwich, 21,134.

Carnarvon Bay:—
Liverpool, 55,741–6, 55,754, 55,961, 55,982; Carnarvon, 56,382–488.

Cawsand Bay:—
Plymouth, 18,611.

Channel, the:—
Cullercoats, 420; Ramsgate, 11,058; Billingsgate, 13,158, 13,188, 13,195–6; Lowestoft, 14,344; Hastings, 17,080, 17,224; Brighton, 17,987; Plymouth, 18,608–11; Harwich, 20,745–6; Mevagissey, 22,481; Penzance, 24,581; Shoreham, 25,185–90, 25,210–1, 25,220–5, 25,305–6, 25,415–42, 25,499–505, 25,636–49, 25,693, 25,794–809, 25,878–9, 26,019–28.

Cherbourg:—
Shoreham, 25,743, 25,749–51.

Clew Bay:—
Howth, 36,443; Dublin, 37,216; Ringsend, 37,533–5; Westport, 43,813–44,466.

Clogher Head:—
Howth, 36,457; Dundalk, 48,503–5, 48,533, 48,666; Skerries, 49,120, 49,282, 49,491, 49,631, 49,637–46, 49,666, 49,703.

Cobbler's Bay:—
Plymouth, 18,615.

Colne:—
Harwich, 21,134; Shoreham, 25,706; Brightlingsea, 59,023–59,839.

Cookhaven:—
Kinsale, 41,274.

Copinsha:—
Kirkwall, 31,175, 31,185–7.

FISHING GROUNDS (*continued*):—

Courtmacsherry:—
Kinsale, 41,266, 41,398–400, 41,666.

Cowan:—
Harwich, 21,132.

Cromer:—
Flamborough, 6792–3, 6808; Billingsgate, 12,479; Lowestoft, 14,237; Grimsby, 15,906–14, 15,924, 16,323, 16,378, 16,394, 16,418–20, 16,590–1, 16,618; Harwich, 20,906.

Cuxhaven:—
Billingsgate, 13,187.

Davis Straits:—
Lerwick, 31,814–22.

Deadman's Point:—
Polperro, 21,486; Mevagissey, 22,453, 22,707, 23,008; Falmouth, 23,629.

Dieppe:—
Shoreham, 25,418.

Dingle Bay:—
Howth, 36,443; Ringsend, 37,521; Dingle, 42,943–43,812; Galway, 44,524, 46,041.

Dogger Bank:—
Cullercoats, 237, 274–7, 402, 419, 448–56, 490, 681–3; Sunderland, 2951–2, 3475–82; Hartlepool, 4777–86; Staithes, 5041, 5309, 5423–7, 5529, 5655–72; Filey, 5713–23, 6145; Flamborough, 6651–8; Hull, 6907–13, 7158, 7275, 7311, 7496–9, 7551–8, 7562, 7580, 7582–3, 7672, 7731, 7801, 7840; Brixham, 8356; Ramsgate, 10,791; Yarmouth, 11,112–30, 11,146–58, 11,268–71, 11,494–8, 11,501, 11,509–16, 11,598–612, 11,734, 11,739–40; Billingsgate, 12,452, 12,613, 12,840–9, 13,243, 13,260; Lowestoft, 14,217; Grimsby, 16,071, 16,394, 16,455–60, 16,471–75, 16,492, 16,627; Harwich, 20,881, 20,906, 21,271; London, 60,829–30.

Donegal Bay:—
Inver, 46,120–591.

Dowsings:—
Boston, 15,690; Grimsby, 16,577, 16,770.

Drake's Island:—
Plymouth, 18,615.

Drogheda Bay:—
Ringsend, 37,757.

Dublin Bay:—
Kingstown, 35,411–4, 35,453, 35,611, 35,659, 35,692, 35,896; Howth, 36,006, 36,069; Ringsend, 37,385, 37,470; Arklow, 38,069; Carrickfergus, 47,335.

Dundalk Bay:—
Howth, 36,955; Ringsend, 37,470; Carlingford, 48,397–8; Dundalk, 48,502–49,066; Balbriggan, 49,845–8.

Dundrum Bay:—
Dundalk, 48,667–72.

Dungarvan Bay:—
Dungarvan, 39,908–41,713.

Dungeness:—
Billingsgate, 13,434; Hastings, 17,262–8, 17,272.

Dunmore:—
Kingstown, 35,520; Dunmore, 39,045–907.

Dutch Coast:—
Hull, 7151–7, 7494–5; Brixham, 8351, 8356–82, 8752; Yarmouth, 11,159–73, 11,185–6, 11,635–46, 11,676–81, 11,839–42, 11,868; Billingsgate, 12,435, 12,444–52, 13,271; Lowestoft, 14,211; Grimsby, 16,105, 16,117, 16,630–1.

East Hole:—
Hull, 7741.

Emmanuel Head:—
Newbiggin, 1268–72; Holy Island, 2657.

Eriskay Bank:—
Portree, 33,137.

Everton Ness:—
Harwich, 20,651.

Exmouth:—
Exeter, 19,371–20,016.

Eyemouth:—
Edinburgh, 26,955–7; Eyemouth, 27,915–8, 28,058–63.

Faroe Islands:—
Cullercoats, 510; Kirkwall, 31,342; Lerwick, 31,755, 31,802–6, 31,851, 31,888–94, 31,981–2, 31,992, 32,007, 32,015, 32,023.

Falls Bank:—
Ramsgate, 10,142–54, 10,505–17.

FISHING GROUNDS (*continued*):—

Falmouth Harbour:—
Falmouth, 23,043–960.

Fern Islands:—
Sunderland, 3118; Lowestoft, 14,235; Harwich, 20,881.

Firth of Forth:—
Sunderland, 3322–30; Billingsgate, 13,319; Edinburgh, 26,203, 26,627–30, 26,661, 26,692, 26,957; Dunbar, 27,038–45, 27,251–64.

Flamborough Head:—
Sunderland, 3528; Filey, 5959, 6327; Flamborough, 6413–6859; Hull, 6888–9, 6892, 7447; Yarmouth, 12,013–8; Lowestoft, 14,234–43; Grimsby, 16,109, 16,193, 16,298–300; London, 60,968.

Flemen Isles:—
Harwich, 20,881.

Fowey River:—
Exeter, 20,012; Mevagissey, 22,450.

Gabbards, the:—
Lowestoft, 13,828, 14,008–9.

Gairloch:—
Stornoway, 32,513–20.

Galloper, the:—
Ramsgate, 10,168–74; Yarmouth, 11,868; Harwich, 21,264–70.

Galway Bay:—
Kingstown, 35,623; Howth, 36,443, 36,982; Ringsend, 37,521–33; Dublin, 37,110; Ringsend, 37,535–7, 37,831–4; Dingle, 43,780; Galway, 44,467–46,119.

Gare Loch:—
Greenock, 49,913–4, 50,000, 50,041.

Greatman's Bay:—
Galway, 44,537, 44,867, 45,037–9, 45,049, 45,176, 45,382–4, 45,498, 45,749.

Grimsby:—
Grimsby, 16,104, 16,286–92, 16,381–3, 16,554.

Gull Stream:—
Ramsgate, 10,526.

Haddock Bank:—
Cullercoats, 277, 288.

Hague, the:—
Billingsgate, 12,904.

Handford Water:—
Harwich, 20,624, 20,766, 20,769, 20,863, 21,146.

Helensburgh:—
Greenock, 49,914–8.

Helmsdale to Wick:—
Cromarty, 29,967–73.

Helvick Head:—
Kingstown, 35,483–93; Howth, 36,503; Dunmore, 39,532, 39,537; Dungarvan, 39,967, 40,095, 40,120, 40,312, 40,399, 40,613, 40,679, 40,694, 40,824.

Hinder Bank:—
Ramsgate, 10,542–6.

Hope Cove:—
Brixham, 9103.

Howth:—
Peel, 34,710–4; Howth, 35,978–36,987; Arklow, 37,987; Skerries, 49,480, 49,491, 49,523, 49,629.

Humber, the:—
Cullercoats, 1420; Sunderland, 2896; Hull, 7362; Grimsby, 16,107–8, 16,189–91, 16,205; Harwich, 20,881.

Huntley Foot:—
Hartlepool, 4188.

Iceland, Coast of:—
Cullercoats, 510; Hull, 7326, 7984–5; Harwich, 20,881; Lerwick, 31,755, 31,945.

Inishbofin:—
Westport, 43,856, 43,900, 43,911, 43,915–7; Skerries, 49,344–8, 49,367.

Inishtrahal or Hoyle Bank:—
Dublin, 37,313; Moville, 46,615, 46,706–26, 46,966–71, 46,976–8.

Inverness Forth:—
Cromarty, 29,953–8.

Ireland's Eye:—
Howth, 36,565, 36,876.

Jersey:—
Plymouth, 19,217; Falmouth, 23,440; Harwich, 20,735–6, 20,741; Shoreham, 25,506, 25,656–60, 25,665–85; Brightlingsea, 59,580–5.

FISHING GROUNDS (*continued*):—

Kenmare River:—
Kinsale, 41,187; Kenmare, 41,714–42,408.

Kentish and Essex Coasts:—
Brixham, 8542; Torquay, 9575; Harwich, 20,740; Shoreham, 25,706.

Kentish Knock:—
Hull, 7660; Ramsgate, 10,109, 10,121, 10,716–37; Billingsgate, 13,135.

Kilbrannan:—
Greenock, 50,045, 50,056.

Killery Bay:—
Westport, 43,872.

Kinsale Harbour:—
Howth, 36,097–9, 36,236; Ringsend, 37,856; Wexford, 38,509; Kinsale, 41,178–713.

Kyles of Bute:—
Greenock, 49,926, 49,942, 50,060, 50,083, 50,142, 50,266, 50,420, 50,541–672.

Lambay:—
Kingstown, 35,464, 35,532–4; Howth, 36,565, 36,876; Ringsend, 37,929.

Largs:—
Edinburgh, 26,627; Greenock, 50,029, 50,673–742.

Leman, the:—
Billingsgate, 12,653, 12,847; Grimsby, 16,115.

Lewis Isles:—
Harwich, 20,881; Edinburgh, 26,658–61; Stornoway, 32,206–969; Tobermory, 33,447.

Lincolnshire Coast:—
Billingsgate, 12,479; Lowestoft, 14,052, 14,147–9.

Liverpool:—
Fleetwood, 55,072, 55,174, 55,183–4, 55,217, 55,349; Liverpool, 55,579–56,381.

Loch Broom:—
Edinburgh, 26,813; Stornoway, 32,481; Tobermory, 33,560–5; Greenock, 50,363.

Loch Dunvegan:—
Broadford, 33,297.

Loch Fyne:—
Greenock, 49,885–50,957; Ardrishaig, 50,958–52,267; Inverary, 52,268–53,061; Tarbert, 53,062–53,820.

Loch Hourn:—
Greenock, 50,132, 50,154.

Loch Long:—
Greenock, 50,000, 50,003, 50,040–1, 50,522–7.

Loch Slapin:—
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Loch Strivan:—
Greenock, 50,531, 50,601.

Looe:—
Polperro, 21,315, 21,624, 21,630.

Lough Foyle:—
Moville, 46,592–47,277.

Lough Larne:—
Carrickfergus, 47,753–8.

Lough Swilly:—
Moville, 46,910, 47,167.

Lowestoft:—
Brixham, 8764.

Lundy Island:—
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Maldon:—
Harwich, 20,864; Shoreham, 25,714.

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St. Ives, 25,036, 25,105; Campbeltown, 33,815; Peel, 34,273–35,037; Port St. Mary, 35,038–261; Kingstown, 35,788; Howth, 36,872; Ringsend, 37,426, 37,469, 37,504–7; Arklow, 37,987, 38,058; Morecambe, 54,707, 55,072, 55,174, 55,183, 55,217, 55,237, 55,349, 55,564; Liverpool, 55,740–1, 55,961–6, 56,133, 56,286.

Marr Bank:—
Harwich, 20,881; Dunbar, 27,279.

Menabilly:—
Plymouth, 18,920.

Mersea:—
Shoreham, 25,706.

Mevagissey Bay:—
Plymouth, 18,811, 19,297–303; Mevagissey, 21,984–23,042.

Minard:—
Dingle, 43,203, 43,570, 43,784.

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Minch, the:—
Stornoway, 32,440–1, 32,506, 32,874, 32,944–50; Broadford, 33,353–9.
Minehead:—
Dungarvan, 39,926, 39,971, 40,138–41, 40,761, 40,964; London, 58,975–81.
Moray Firth:—
Peterhead, 29,550.
Morecambe Bay:—
Dumfries, 54,510, 54,517*a*–21; Morecambe, 54,569–987.
Mountain's Foot:—
Kingstown, 35,483–93; Ringsend, 37,466.
Mount's Bay:—
Hastings, 17,345; Penzance, 23,961–24,604.
Mull (Isle of):—
Tobermory, 33,427–33,647.
New Ground Bank:—
Ramsgate, 10,142–52.
Newport Bay:—
Westport, 43,894, 43,942.
New Ridge:—
Brixham, 8430–2.
North East Knoll:—
Yarmouth, 11,236.
North Foreland:—
Hartlepool, 4767; Hull, 7057, 7064; Ramsgate, 10,109, 10,121, 10,167–74, 10,339–59.
North Sea:—
Hartlepool, 4637–9, 4697–700, 4768–72; Staithes, 5309; Flamborough, 6732; Hull, 6887, 7110; Brixham, 8902; Ramsgate, 10,175–85, 10,255, 10,279, 10,336–42; Billingsgate, 12,815, 13,312; Lowestoft, 13,747; Penzance, 24,045–7; Harwich, 20,881.
North Sunderland:—
Hastings, 17,345, 17,348.
Nymph Bank:—
Dunmore, 39,254–88, 39,506, 39,585–8; Kinsale, 41,268.
Old Head:—
Kinsale, 41,197, 41,316, 41,458.
Orfordness:—
Billingsgate, 13,259, 13,434, 13,473, 13,502; Harwich, 21,132–4; Lowestoft, 14,234*a*.
Orkney Islands:—
Grimsby, 16,310–3; Harwich, 20,881; Kirkwall, 31,172–743.
Orwell:—, 20
Harwich ,537, 20,955, 21,039–73, 21,144, 21,223–6.
Otter Point:—
Ardrishaig, 51,046–9, 51,085–6, 51,709–14.
Pentland Firth:—
Grimsby, 15,944–5, 16,030; Harwich, 20,881.
Peterhead:—
Grimsby, 15,952–3, 16,322; Peterhead, 29,402–766.
Plymouth Sound:—
Brixham, 9103; Torquay, 9559–67; Brighton, 17,983–6; Plymouth, 18,611, 18,704–6, 19,243–9.
Polperro Point:—
Polperro, 21,340.
Ramsgate:—
Hull, 7124; Ramsgate, 10,081–11,078.
Ratrie Brigs:—
Harwich, 20,881.
Redwharf Bay:—
Liverpool, 55,638, 55,754, 55,917–22, 55,982–3.
Ridge, the:—
Hull, 7957–64, 7972–8; Hastings, 16,928.
Rockall:—
Lerwick, 31,983–92.
Rothesay Bay:—
Greenock, 50,530.
Roundstone Bay:—
Galway, 45,032.
Royal Sovereign Shoals:—
Hastings, 16,270.
Rye Bay:—
Hartlepool, 4767; Hull, 7057, 7934; Brixham, 8730–1; Torquay, 9575; Ramsgate, 10,139, 10,334–5, 10,813, 10,989, 11,012; Grimsby, 16,106; Hastings, 16,869, 16,873–5, 16,966, 16,981, 17,052–4, 17,064, 17,261–9; Brighton, 17,638; Plymouth, 18,862.

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Salmon Pool:—
Exeter, 19,375–7, 19,457.
Saltee Islands:—
Dunmore, 39,276–9.
Sandy Pool Bay:—
Tenby, 57,096.
Scapa Flow:—
Kirkwall, 31,175, 31,185–7, 31,491, 31,571.
Scarborough:—
Grimsby, 16,110, 16,193; Brighton, 17,857; London, 60,770–61,041.
Schelling and the Texel:—
Hartlepool, 4700; Yarmouth, 11,506, 11,842; Billingsgate, 12,478.
Scilly Islands:—
Penzance, 24,603*a*–4.
Shaldon:—
Exeter, 19,425.
Shannon (The):—
Billingsgate, 13,068–72.
Shetland:—
Harwich, 20,881; Edinburgh, 26,660, 26,695, 26,739; Lerwick, 31,744–32,205.
Shiant East Bank:—
Portree, 33,135–7.
Shotley:—
Harwich, 20,679–81, 20,694–6.
Silver Pits:—
Cullercoats, 237, 247, 288, 420; Sunderland, 3479, 3894, 3986; Hartlepool, 4700, 4917; Hull, 6887–900, 7158, 7447, 7844–5; Brixham, 8356, 8902; Ramsgate, 10,415, 10,486–7, 10,578–82, 10,790–3, 10,797–800, 10,802; Yarmouth, 11,131, 11,153, 11,506, 11,843–4, 11,870–1, 12,013; Billingsgate, 12,840, 12,932; Grimsby, 16,071, 16,103, 16,108, 16,114, 16,125; Harwich, 20,881.
Skerries Bay:—
Kingstown, 35,415, 35,534, 35,613; Howth, 36,552, 36,607; Ringsend, 37,757; Skerries, 49,067–715; Balbriggan, 49,716–884*a*.
Skerries, the:—
Kirkwall, 31,194–6.
Skye (Isle of):—
Edinburgh, 26,524, 26,776–87; Portree, 32,970–33,290; Broadford, 33,291–426; Tobermory, 33,516.
Slyne Head:—
Galway, 45,805–6, 45,815.
Smallworth Sands:—
Wyke Regis, 20,085, 20,155, 20,307.
Smith's Knoll:—
Ramsgate, 10,793, 10,802; Yarmouth, 11,334–51, 11,436–7, 11,502–5, 11,570–80; Billingsgate, 12,653–5; Lowestoft, 14,221; Grimsby, 16,116; Harwich, 20,881.
Solway Firth:—
Dumfries, 53,821–54,568.
Southampton River:—
Exeter, 20,012.
South Souter:—
Cromarty, 29,777–8.
South Uist:—
Portree, 33,135.
Spurn Point:—
Filey, 5705–7; Hull, 7311; Grimsby, 16,382, 16,464, 16,677.
Stack and Skerry:—
Harwich, 20,881.
Start Bay:—
Brixham, 8092, 8859, 9103; Torcross, 18,124–606.
Start of Lopness:—
Kirkwall, 31,194–6.
Stornoway:—
Wick, 30,194, 30,513–4; Stornoway, 32,206–969; Portree, 33,045, 33,186–7; Greenock, 50,205; Ardrishaig, 52,021.
Stour:—
Harwich, 20,537, 21,144–6.
St. Alban's Head:—
Wyke Regis, 20,086–7.
St. Andrew's Bay:—
Cullercoats, 496; Edinburgh, 26,627,27, 212; Broughty Ferry, 28,725, 28,748, 28,766–9.

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St. Austell's Bay:—
Mevagissey, 23,009.
St. George's Channel:—
Ringsend, 37,473; Arklow, 38,226–7; Greenock, 50,218.
St. Ives Bay:—
Billingsgate, 13,187; Plymouth, 18,920; St. Ives, 24,605–25,155.
St. Kilda:—
Portree, 33,135; Tobermory, 33,539.
St. Patrick's Head:—
Skerries, 49,120, 49,216, 49,480, 49,523, 49,629–31, 49,635–49, 49,703.
Stronsa:—
Kirkwall, 31,489.
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Billingsgate, 13,135–48.
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Swansea, 57,143–58,025.
Swarte Bank:—
Billingsgate, 12,840.
Tarbert:—
Campbeltown, 33,781; Greenock, 50,056, 50,215, 50,274.
Thames (The):—
London, 61,042–290.
Torbay:—
Sunderland, 3359–64; Hartlepool, 4637; Brixham, 8022–9440; Torquay, 9441–10,080; Billingsgate, 13,206–12; Hastings, 16,981.
Tory Island:—
Dublin, 37,312.
Ventry Bay:—
Dingle, 43,363*a*, 43,366*a*, 43,641.
Well Bank:—
Sunderland, 3788, 3819; Hull, 7447, 7561, 7745; Ramsgate, 10,582; Yarmouth, 12,236; Billingsgate, 12,815; Grimsby, 16,208–9; Harwich, 20,881.
West Bay:—
Wyke Regis, 20,290, 20,347.
Wexford Bay:—
Kingstown, 35,532; Howth, 36,276, 36,371–2; Ringsend, 37,500, 37,752; Wexford, 38,442–39,044.
Weymouth Bay:—
Wyke Regis, 20,017–527.
White Bank:—
Billingsgate, 12,840.
White Oyster Ledge:—
Swansea, 57,625, 57,977–80.
Whitesand Bay:—
Plymouth, 18,633, 18,642, 18,656, 18,806–10, 18,911–3, 19,256; Polperro, 21,487.
Whiting Bank:—
Cullercoats, 237, 274–7, 286.
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Harwich, 20,675, 20,741; Shoreham, 25,714; Whitstable, 58,026–58,752.
Woodbridge:—
Harwich, 20,765, 20,859, 21,134.
Worm's Head:—
Tenby, 56,769, 56,828, 56,869; Swansea, 57,154–63, 57,223, 57,622–3, 57,874.
Wrinkle:—
Plymouth, 18,914; Polperro, 21,487.
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Inquiry into fisheries by corporation of Waterford—Dunmore, 39,689.
Fisheries greatly neglected—Kingstown, 35,950–2.

KILMORE FISHERY:—
Wexford, 38,989, *et seq.*

KING'S LYNN:—
Acts of Parliament relating to—Lynn, 14,534, 14,538.
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Corporation, action of—Lynn, 14,403–575, 14,578–81, 14,700, 14,707–8.
Report of committee—Lynn, 14,459.

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Cullercoats, 68–71, 312–3, 592; North Sunderland, 1842–4, 1961–2; Sunderland, 2894; Brixham, 9186–239; Dublin, 37,224–7; Whitstable, 58,068–9, 58,185, 58,316; Brightlingsea, 59,205–7, 59,301–2, 59,509; London, 60,640, 61,572, 61,660, 61,740, 61,766, 61,807.

MAN, ISLE OF:—
Local regulations—Peel, 34,310, 34,325, 34,431, 34,461–7, 34,486–509; Port St. Mary, 35,198–208.
Observed by foreign boats—Peel, 34,475–7.
Tynwald, authority of—Peel, 34,450–60, 34,969.
Tynwald Court, report from in reference to Manx fisheries—Peel, 34,878.
Admiral, duties of—Peel, 34,489–518.
Difficulties with strangers—Peel, 34,519–27.
Increase in fishery—Peel, 34,444–5, 34,531, 34,573, 34,842–3, 34,909, 34,928, 35,015–6.
Decrease in herrings—Peel, 35,027.
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MARFIRE:—
Hartlepool, 4297–303.

MARKETS:—
Cullercoats, 216, 487; Sunderland, 3294–8, 3856–9, 3894–6; Hartlepool, 4372–3, 4477–87, 4665–8, 4702–6, 4751, 4773–6, 4932–5; Staithes, 5543–53; Filey, 5751–3, 5781–6, 5790–803, 5912–4, 5917; Flamborough, 6504, 6546; Hull, 6968, 7570–1, 7852–4; Brixham, 8275–8, 9065, 9074; Ramsgate, 10,179–82, 10,187, 10,279–80, 10,603; Boston, 15,484; Plymouth, 18,799–803, 19,169–72; Exeter, 19,494, 19,595–7, 19,741, 19,959–60; Harwich, 20,586–9, 20,606–7, 20,640, 20,771–2, 20,881; Eyemouth, 27,831;

MARKETS (*continued*):—
Peterhead, 29,221–6; Wick, 30,774–83; Kirkwall, 31,456; Stornoway, 32,624, 32,627–31; Peel, 34,377–9; Kingstown, 35,445, 35,888; Howth, 36,754, 36,800; Dublin, 37,305–7, 37,350–3; Arklow, 38,205–14; Dunmore, 39,126–30, 39,520, 39,888–90; Kenmare, 41,837, 41,958, 42,109; Bantry, 42,626–30, 42,767; Dingle, 43,185–88, 43,360–60*a*, 43,546–52; Westport, 43,991–2; Galway, 45,414–17, 45,742–5, 45,757–79, 45,957–9; Inver, 46,186–88; Moville, 46,891, 46,982–3, 47,030–3; Carrickfergus, 47,889; Dundalk, 48,643–5, 48,700–1, 48,843–7, 48,869–70, 48,901–4, 48,913–14, 49,000–2; Skerries, 49,233, 49,393; Balbriggan, 49,797–9; Ardrishaig, 52,204–7; Dumfries, 53,872–6; Fleetwood, 55,317–9, 55,367–8; Liverpool, 55,810–12, 56,223–8, 56,305–11; Tenby, 56,570, 56,579–81.
Effect of railway on—Staithes, 5317–9, 5572, 5578–9; Flamborough, 6505–6, 6771–2; Tenby, 56,579–81.
Extending rapidly—Hull, 7103–4.
Facilities for getting to—Hull, 7120, 7122–3.
How sent to—Brixham, 8144–6, 9066, 9072, 9156–60; Ramsgate, 10,362–5, 10,369, 10,524.
Inspectors of fish in—Hull, 7417–26, 7910–7; Billingsgate, 12,589–96.
Badly supplied—Filey, 6059–62.
Quantity sent to—Brixham, 9073, 9079, 9136, 9161–7; Torquay, 9944.
Could not be supplied by long-lines—Hull, 7906–7.
Could not be supplied without trawlers—Hull, 7105, 7905.
Salesmen, increase of—Billingsgate, 13,286–91.
Supplied all the year round—Hull, 6976.
Supplied chiefly by trawlers—Hull, 7084.
Supply meets demand—Hull, 7109–10.
Supply of soles dependent on trawlers—Hull, 7909.
Supply of small fish sent to—Hull, 7932.
Proportion of kinds sent to—Hull, 7855–64.
Trawled fish preferred in—Hull, 6968–70, 7078–82.

MEN OF WAR (see also "Coastguard," "Gun Boats," "Fisheries," and "Convention"):—
Edinburgh, 26,451; Stonehaven, 29,036; Campbeltown, 33,828–32.

MINES:—
Destructive to fishery—Arklow, 38,006–8, 38,137–8, 38,351; Swansea, 57,273–9.

NETS:—
Boulters:—
St. Ives, 24,996, 25,008.

Bow Nets:—
Boston, 15,286–9; Dundalk, 48,729–30; Liverpool, 55,731–9, 55,867–9, 55,871–6, 55,934–6, 56,050, 56,181.

Bratt Nets:—
Staithes, 5181–7.
Carried away by trawlers—Staithes, 5184–7.
Not carried away by trawlers—Hull, 7049.

Capelin Nets:—
Exeter, 19,533.

Circle Nets (see also "Seine Nets"):—
Bantry, 42,605–10, 42,807; Greenock, 50,888–98; Inverary, 52,819–40.

Cod Nets:—
Ballantrae, 53,820*a*.

Crab Nets:—
Edinburgh, 27,099–105.

Cuddie Nets:—
Tarbert, 53,276, 53,741–4.

Drag Nets:—
Brixham, 8294–7, 8386–8; Lynn, 14,893–900, 14,903; Boston, 15,286–7; Torcross, 18,150–1; London, 58,813–20, 58,822–9, 58,837, 58,853–60.
Memorial respecting prohibition of in summer—Torcross, 18,366.

Draw Nets:—
Hastings, 17,377–81; Swansea, 57,337.

Drift Nets (see "Herring Nets").

Drum Nets:—
Inver, 46,304–5.

Ebbing Nets:—
Falmouth, 23,496–7, 23,732–6, 23,826–31.

Flounder Nets:—
London, 61,051–60.

Fluke Nets:—
Exeter, 19,787–8, 19,839, 19,844.

NETS (*continued*):—
French Nets:—
Cullercoats, 572, 646; North Sunderland, 1812; Holy Island, 2451–5; Ramsgate, 10,311.

Hand Nets:—
Exeter, 19,375; Dumfries, 54,198–205; Morecambe, 54,778, 54,968–73; Carnarvon, 56,420; Tenby, 57,031–8; Swansea, 57,396–8; London, 58,898–904.

Herring Nets (see also "Trawling for Herrings" and "Drift Net Fishing"):—
Cullercoats, 208–9, 646–7; Newbiggin, 1116–7; Staithes, 5188–94; Filey, 6039–40, 6140; Brixham, 9274, 9277, 9337; Ramsgate, 11,038; Yarmouth, 12,070–5; Lowestoft, 13,704–10, 13,824–5, 13,832–3, 14,023, 14,097; Hastings, 17,439–49; Torcross, 18,267–72; Plymouth, 18,955–7; Mevagissey, 22,271–3; Falmouth, 23,347; Penzance, 24,102; Edinburgh, 27,091; Cromarty, 29,858; Stornoway, 32,841–3; Campbeltown, 33,680, 33,821, 33,861, 33,948–53; Peel, 34,430–5, 34,960–5; Arklow, 38,040–51; Bantry, 42,415–6, 42,457–60, 42,623, 42,816; Dingle, 42,953–5, 43,251; Westport, 43,821–3, 44,254–5, 44,262–5, 44,411–4; Galway, 44,926–8; Inver, 46,413–8; Carlingford, 48,391–3; Dundalk, 48,572–3, 48,588–91; Skerries, 49,147–51, 49,240–4; Balbriggan, 49,858–61; Inverary, 52,547–56; Ballantrae, 53,820*a*; Carnarvon, 56,482–4.
Size and length of—North Sunderland, 1834–41; Holy Island, 2486–91; Brixham, 9336–8; Yarmouth, 12,042–4, 12,061–5, 12,070, 12,085–8, 12,248; Lowestoft, 13,904; Lynn, 14,464–70. 14,474–9, 14,563–6, 14,571–6, 14,649; Torcross, 18,268; Dunbar, 27,490–501; Wick, 30,360; Broadford, 33,394; Peel, 34,565–9; Port St. Mary, 35,109–13, 35,219; Howth, 36,046, 36,092–3; Arklow, 38,040–1, 38,045–6, 38,227–49, 38,282–94, 38,366–8, 38,386–7, 38,431–3; Westport, 44,256–61; Inver, 46,395–8; Dundalk, 48,586–7; Ardrishaig, 50,996–51,001, 51,149–59, 51,966–83; Inverary, 52,348–51, 52,467–8, 52,851–4; Tarbert, 53,704–10; Morecambe, 54,690–1, 54,911, 54,977–9; Fleetwood, 55,018; London, 60,910–5.
Size of mesh—Cullercoats, 592–616; North Sunderland, 1783; Holy Island, 2490–2; Sunderland, 2985–91; Hartlepool, 4421–4; Staithes, 5195–204, 5206–9; Filey, 6120–4; Flamborough, 6489, 6491–3, 6522–9, 6706–8, 6724–5, 6854; Ramsgate, 11,023–5, 11,027, 11,035, 11,040; Yarmouth, 12,037–41, 12,108–15, 12,248–9, 12,398–400; Lowestoft, 13,706–8, 13,721, 13,817–23, 13,836, 13,987, 14,024, 14,098, 14,100–3, 14,113; Lynn, 14,474–7; Polperro, 21,677–8; Mevagissey, 22,313–7; Falmouth, 23,348–51; Penzance, 24,102–3; St. Ives, 24,806–7; Edinburgh, 26,426–35, 27,117; Dunbar, 27,492–501; Stonehaven, 28,945, 28,980–6; Peterhead, 29,482–4, 29,664–73, 29,769–70; Cromarty, 29,859, 29,879; Wick, 30,186–7, 30,298–300, 30,736; Kirkwall, 31,257–60, 31,458–60, 31,468–71; Lerwick, 32,088–90, 32,186–91; Stornoway, 32,841–3; Campbeltown, 33,821–4; Howth, 36,146–7, 36,152; Arklow, 38,047–51; Westport, 44,256–61; Dundalk, 48,586–7; Greenock, 50,154–8, 50,263–7, 50,812–7, 50,878–80; Ardrishaig, 51,103, 51,426–7; Inverary, 52,545–6, 52,851–4; Morecambe, 54,907–10.
Injured by trawlers—Staithes, 5394; Brixham, 8211; Ramsgate, 10,158–63, 10,229–31, 10,594–7, 10,925–34, 10,943, 11,002–6; Lowestoft, 14,126–33; Grimsby, 16,173, 16,188; Torcross, 18,271–81, 18,399; Inverary, 52,693.
Injured by sinking—Cromarty, 29,993–30,002.
Injury done by—Ardrishaig, 52,224–30.
Cost of—Hastings, 17,446–7; Mevagissey, 22,069–70; Howth, 36,145, 36,748; Dingle, 42,956, 43,138.
Increase of—Exeter, 19,894; Eyemouth, 28,168–9; Stonehaven, 28,859; Dingle, 43,137.
Decrease of—Brixham, 9122.
Fleet of—Dunbar, 27,490; Peterhead, 29,406*a*; Cromarty, 29,815, 29,917–9; Wick, 30,544, 30,551–4; Kirkwall, 31,441; Arklow, 38,040, 38,227.
Improvement of—Peterhead, 29,200–42, 29,334.
Illegal use of, prevented—Edinburgh, 26,282–5.
Regulations, absence of—Cullercoats, 593–616; Flamborough, 6489; Lowestoft, 13,904–5; Mevagissey, 22,318–20.
Regulations required—Newbiggin, 1362–6; Flamborough, 6706–8, 6854.
Regulations not required—Lowestoft, 13,906.
Shrinking of—Lowestoft, 13,830–1, 14,023, 14,108–12, 14,286–91; Edinburgh, 26,285.
Shooting of (see also "Convention," "Sunset Regula-

NETS (*continued*):—

Herring Nets (continued):—
tions")—Cullercoats, 1077; Newbiggin, 1177–8, 1497–502; North Sunderland, 1826–8; Hartlepool, 4216–20; Staithes, 5341–5; Stonehaven, 28,872–6; Ardrishaig, 51,002–14, 51,020–38; Inverary, 52,486–501.
Grounded — Dunbar, 27,344, 27,376–9, 27,390–2, 27,641–59.
Not grounded—Howth, 36,111–3, 36,158.

Herring Trawl Nets (see "Seine Nets").

Horse Trawl Nets:—
Brixham, 8298, 9206–13, 9215–17; Torquay, 9678–83, 9881–95.

Hurdle Nets:—
Morecambe, 54,637–42.

Kettle Nets:—
Hastings, 17,087–90, 17,092, 17,096, 17,106–11, 17,137, 17,471.
Increase in—Hastings, 17,178.
Cost of—Hastings, 17,100–2, 17,113.
Fish caught by—Hastings, 17,115.
Mesh, size of—Hastings, 17,091, 17,124–6.
Losses by—Hastings, 17,099, 17,120.
Profits by—Hastings, 17,116–9, 17,138.

Launce Nets:—
Torcross, 18,335.

Mackerel Nets:—
Brighton, 17,604–19.
Destroyed by trawlers—Brixham, 8788–95; Torquay, 9448–55.
Size of — Ramsgate, 11,040; Yarmouth, 12,080; Brighton, 17,700–2; Wyke Regis, 20,182–3, 20,210–6; Polperro, 21,915–6.
Increase of—Wyke Regis, 20,191–6.
Number of—Exeter, 19,944; Wyke Regis, 20,191–3.
Cost of—Wyke Regis, 20,189.
Mesh of — Yarmouth, 12,079; Brighton, 17,604, 17,609–12, 17,619–20, 17,700; Plymouth, 19,323; St. Ives, 24,822–8.

Peedle Nets:—
Dumfries, 53,965.

Pilchard Nets (see also "Seine Nets"):—
Plymouth, 18,925–6, 18,955–7; Polperro, 21,324–7, 21,535–49, 21,674–6, 21,696; Mevagissey, 22,211–8, 22,225–36; Falmouth, 23,347, 23,674–8; Penzance, 23,994–8.
Length of—Polperro, 21,915–6.
Mesh, size of — Brixham, 9348, 9352; Plymouth, 18,960.
Size of—St. Ives, 24,800–5.
Not improved for 600 years—Wexford, 38,996–7.

Pope Nets:—
Dumfries, 53,963, 53,966–76.

Salmon Nets:—
London, 58,861–2.

Scringe Nets (see also "Circle Nets" and "Seine Nets"):—
Tobermory, 33,478–91.

Seine Nets (see also "Pilchard Nets," "Circle Nets," "Scringe Nets," "Mackerel Nets," and "Tuck Nets"):—
Sunderland, 3848–50; Brixham, 8212–21, 8225–9, 8244–7; Torquay, 9618, 9653–62; Brighton, 17,503–6, 17,509–12, 17,528, 17,544–7, 17,688, 17,693, 17,808–15, 17,919–20, 17,925–6, 17,999, 18,002; Torcross, 18,152, 18,156, 18,162–3, 18,167–9, 18,187, 18,249; Exeter, 19,379, 19,671–2, 19,735–8, 19,927–9; Wyke Regis, 20,037, 20,049, 20,082; Mevagissey, 21,990–1, 21,994–6, 22,042–58, 22,193, 22,685–709; Falmouth, 23,048–9, 23,674–8, 23,952–60; Penzance, 23,994–8, 24,033–5, 24,167–71; St. Ives, 24,612–7, 24,681–8, 24,733–40, 24,880, 25,021–9; Kirkwall, 31,614–6; Arklow, 37,993, 38,004; Kinsale, 41,616–32; Bantry, 42,544–46, 42,798–807, 42,812, 42,818–19, 42,838, 42,909; Dingle, 42,981–85, 42,989–93, 42,997; Inver, 46,143–46, 46,148–49, 46,211, 46,267–70, 46,275, 46,331, 46,511–15; Moville, 46,939–48; Dundalk, 48,709–10; Balbriggan, 49,872–884*a*; Greenock, 50,809–13; Ardrishaig, 51,423, 51,765–6, 51,774–84, 51,966–83; Tenby, 56,903, 56,911–3, 56,977–8.
Cost of—Mevagissey, 22,002, 22,031, 22,889; Penzance, 24,137–8; St. Ives, 24,681–2, 24,773, 25,083; Inver, 46,513–4; Ardrishaig, 51,795–8, 51,970–83; Tenby, 56,977–8.
Mode of using—Brighton, 17,525–7, 18,010, 18,111; Torcross, 18,152, 18,155, 18,187; Exeter, 19,394,

NETS (*continued*):—

Seine Nets (continued):—
19,397–8, 19,708–13, 19,796–9, 19,950; Polperro, 21,439, 21,448; Mevagissey, 22,042–54, 22,693–9; Falmouth, 23,678–9; Penzance, 24,267; St. Ives, 24,628–45, 24,760–7; Tenby, 56,979–80.
Length of—Brighton, 17,702, 18,110; Torcross, 18,153; Mevagissey, 22,033, 22,041, 22,055, 22,686; Falmouth, 23,676–7, 23,959; Penzance, 23,996, 24,168, 24,179, 24,322–6, 24,382–5; St. Ives, 24,616–20.
Mesh of—Brixham, 8222–4, 8249–51; Brighton, 17,501, 17,542, 17,551–2, 17,555, 17,689, 17,726, 17,829–30, 17,936, 17,944–50, 18,006, 18,062–70, 18,094–5; Torcross, 18,154, 18,340–1; Exeter, 19,382; Wyke Regis, 20,053–63; Mevagissey, 22,035–9, 22,283–4, 22,688; Falmouth, 23,318–22, 23,675, 23,958; Penzance, 24,304; St. Ives, 24,621; Kirkwall, 31,614; Inver, 46,331; Ardrishaig, 51,376–82, 51,767, 51,925–7, 51,990, 52,019–23, 52,072–8, 52,233; Tarbert, 53,265–70, 53,469–74, 53,535–46; Tenby, 56,889–95.
Destroy small fish and spawn—Sunderland, 3912; Brixham, 8252–4, 8293, 9025, 9031, 9113–8; Brighton, 17,507–8, 17,520–4, 17,579–86, 17,773, 17,783, 17,818, 17,859–64, 17,911, 17,913, 18,071–2, 18,113; Wyke Regis, 20,038–41, 20,047–9, 20,091–5, 20,400; Mevagissey, 22,393–7, 22,402–12, 22,716–8; Penzance, 24,036–8*a*, 24,350; St. Ives, 24,888–92, 24,939, 25,062–73; Inver, 46,275–9; Balbriggan, 49,877–80, 49,884*a*; Tenby, 56,893–9.
Complaints of Coastguard against—Falmouth, 23,316–20, 23,350.
Fish not injured by—Bantry, 42,811, 42,813.
Refusal of Board of Trade to prosecute—Falmouth, 23,320–3.
No inspection of—Penzance, 24,106–8.
Injurious to drift nets—Edinburgh, 26,788–90.
Kinds of fish caught by—Brixham, 8236–8, 8240, 8248; Torquay, 9654–65, 9749–69, 9809, 9860, 10,017–24; Exeter, 19,730, 19,804–10; Mevagissey, 22,700–6; Dingle, 42,986–8; Moville, 46,940–6; Balbriggan, 49,882–3; Tenby, 56,556–61.
Owned by fishermen—Ardrishaig, 51,453, 51,796–7.

Set Nets (see also "Trammel Nets"):—
Wyke Regis, 20,096–7; Ballantrae, 53,820*a*.

Shrimp Nets (see also "Trawling for Shrimps," "Bow Nets," and "Hand Nets"):—
Brixham, 8321–5, 8327–33, 8339; Lynn, 14,481, 14,643–4, 14,656–8, 14,660, 14,716–8; Boston, 15,244–5, 15,256; Brighton, 18,022–5, 18,104–5; Exeter, 19,527; Morecambe, 54,937; Liverpool, 55,731–9, 55,867–76, 55,934–6, 56,050–2, 56,181; Carnarvon, 56,420; London, 61,093–8.
Destroy small fish—Ramsgate, 10,680–3, 10,865–71, 10,917–21; Lynn, 14,643; Brighton, 18,014, 18,021; Plymouth, 19,029.
Size of—Lynn, 14,528; Brighton, 18,103, 18,107; Liverpool, 55,735–9, 55,870.
Mesh, size of—Brixham, 8326; Morecambe, 54,938–9, 54,944–6; Brightlingsea, 59,819; London, 61,090–1.

Smelt Nets:—
London, 61,070–3.

Sole Nets:—
Lynn, 14,480, 14,653–5; Boston, 15,235–40, 15,526, 15,532; Morecambe, 54,888, 54,901–3.
Fish injured by—Lynn, 14,634.

Sprat Nets:—
Torquay, 9749–76; Ramsgate, 11,023–6; Exeter, 19,531–3, 19,553–6; Inver, 46,413–8, 46,476–9, 46,490; Swansea, 57,794–805, 57,830–3.

Stake Nets:—
Dumfries, 53,877–88, 53,915–28, 53,945, 54,007–15, 54,153–64, 54,184–7, 54,236–8, 54,494; Fleetwood, 55,019, 55,387–403; Swansea, 57,329, 57,335–7, 57,400–10.
Destruction of fish by—Dumfries, 53,929–39, 54,410–14; Swansea, 57,333–7.
Not as profitable as trawling—Dumfries, 54,417–22.

Stop Nets:—
Swansea, 57,762–4, 57,939, 57,942–3.

Stow Nets:—
Ramsgate, 10,865, 10,894, 10,897–8; Lynn, 14,815.
Increase in—Lynn, 14,576–7, 14,736; Boston, 15,395, 15,534.
Fish caught in—Lynn, 14,680, 14,684–9.
Destroy spawn—Ramsgate, 11,057.
Mesh, size of—Ramsgate, 10,875–6, 10,896; London, 61,085–6.
Should be abolished—Lynn, 14,698.

NETS (*continued*):—

Taaf Nets:—
Portree, 33,225–33.

Team Nets (see also "Seine Nets"):—
Wyke Regis, 20,158–81, 20,402, 20,443–4, 20,446–9.

Trammel Nets (see also "Set Nets"):—
Arklow, 37,992–38,000; Dungarvan, 39,931–7, 39,946–57, 40,033–5, 40,089–111, 40,328–9, 40,338–9, 40,422–33, 40,528–36, 40,559, 40,707–9, 40,716–22, 40,726, 40,737, 40,765–9, 40,890–906, 40,950, 41,028–9, 41,060–4, 41,121–3; Kinsale, 41,196–7, 41,235–6, 41,300–7, 41,557; Kenmare, 41,723, 41,731, 41,735, 41,739, 41,747, 41,800, 41,845, 41,855, 41,857, 41,880, 41,884, 41,963–69, 41,972, 41,990, 42,004, 42,011–2, 42,050, 42,056, 42,108, 42,125, 42,192–93, 42,250, 42,254, 42,279, 42,290, 42,307, 42,312, 42,316–17, 42,320, 42,323–24, 42,327, 42,330–36, 42,344, 42,347, 42,356–8, 42,360–2, 42,371, 42,375, 42,397–8, 42,401–2; Bantry, 42,420–2, 42,424–29, 42,448–51, 42,469, 42,475–76, 42,481, 42,485, 42,494–5, 42,497, 42,499–501, 42,503–04, 42,506–07, 42,549–52, 42,650–51, 42,696, 42,726, 42,790; Dingle, 42,960–63, 43,007–8, 43,010–11, 43,013–18, 43,027–28, 43,390–93, 43,416, 43,446–47, 43,478–82, 43,667, 43,718; Inver, 46,150–51, 46,160–65, 46,207–9, 46,369, 46,432–35, 46,455, 46,460, 46,464–74, 46,480, 46,486–89, 46,494–506; Greenock, 50,710; Ardrishaig, 52,240–7; Swansea, 57,329.
Injurious effects of—Dungarvan, 39,923–5, 39,939–42, 40,080–8, 40,115–34, 40,197–200, 40,202–26, 40,244, 40,261, 40,315–24, 40,340–5, 40,404–6, 40,414–5, 40,418–9, 40,516–7, 40,534–6, 40,597, 40,612–25, 40,663–4, 40,668–71; Kinsale, 41,237–42, 41,269; Kenmare, 42,377; Bantry, 42,505, 42,619, 42,684, 42,725–8, 42,928–9; Dingle, 43,019–20, 43,276–7; Inver, 46,210, 46,370–4, 46,411, 46,420, 46,481–5.
Cost of—Dungarvan, 40,941, 41,064; Kenmare, 41,856.
Prohibited—Dungarvan, 40,111–2.
Increase of—Dungarvan, 40,500–1, 40,530–3, 40,636–8, 40,772–7, 40,952–7, 41,091; Kinsale, 41,393; Kenmare, 42,399.
Decrease in — Bantry, 42,445, 42,531–3, 42,648; Dingle, 43,204–5.
Fish caught in, not equal to line fish—Dungarvan, 39,949–57, 40,089–91, 40,420–33.
Regulations with regard to—Dungarvan, 40,111–2, 40,171–6, 40,233–8, 40,373–9, 40,504–11, 40,640–3, 40,672–9, 40,984–6, 40,993–41,001, 41,112–21; Kinsale, 41,403–4, 41,451–3.
Mode of setting — Dungarvan, 40,330–3, 40,381–5, 40,502–3, 40,512–5, 40,810–3, 40,850–1, 40,958–75, 41,070, 41,096–7, 41,115–6; Kinsale, 41,308–10.
Owned by farmers—Kinsale, 41,244.
Not injurious — Dungarvan, 40,738–9, 40,743–53, 40,759–60, 40,792–4, 41,035, 41,052–9, 41,067, 41,070, 41,097–101, 41,124–6; Kenmare, 41,754–5, 42,056, 42,060; Bantry, 42,704–6, 42,881–4.
Beneficial effects of—Dungarvan, 40,559–63, 40,770–1, 41,036–8, 41,045–7, 41,066, 41,081–90, 41,169–71.
Kinds of fish caught by—Kenmare, 41,722, 41,736–37, 41,873–77, 41,963–64; Bantry, 42,433–38; Dingle, 43,009.
Seizure of—Kenmare, 41,846–8, 41,970, 42,219–20, 42,294, 42,338–43, 42,348–9; Bantry, 42,483–4, 42,553; Dingle, 43,026.
Injured by trawlers—Kenmare, 41,795–800, 41,822, 41,854–5, 41,965, 42,019–20, 42,401–2; Bantry, 42,493, 42,496, 42,547, 42,552, 42,698; Dingle, 43,278, 43,306, 43,533, 43,653, 43,700–3.
Season for using—Bantry, 42,513–5; Dingle, 43,282–3, 43,451–4.
Differences between trammel-net fishermen and trawlers—Kenmare, 42,208–10, 42,264, 42,289–93.

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Campbeltown, 33,993.

Trawl-nets (see also "Trawling"):—
Length of beam—Cullercoats, 375, 390–1; Sunderland, 3305–12, 3490–4; Staithes, 5158; Flamborough, 6743; Hull, 6873, 7014, 7019–22, 7457–9, 8011–8; Brixham, 8178–81, 8195–8, 8628–30, 8685–9, 8782–3; Torquay, 9582–5, 9600–6, 9690, 9821, 9898; Ramsgate, 10,088, 10,101–2, 10,104–6, 10,195, 10,203, 10,430, 10,492, 10,830, 10,834–9; Yarmouth, 11,211–3, 11,301–2, 11,409, 11,488–90, 11,620–4, 11,724–9, 11,812–9; Billingsgate, 12,412, 12,908, 13,171–2, 13,203–4, 13,273–6; Grimsby, 16,140, 16,143, 16,167–9, 16,172; Hastings, 16,849–50; Brighton, 17,802; Plymouth, 18,710–4, 18,720–3; Exeter, 19,379, 19,415; Campbeltown, 33,703–6; Kingstown, 35,494–5; Ringsend, 37,387–90; Wexford, 38,693; Kenmare, 41,763–4, 41,890–1; Galway, 45,005; Moville, 46,777; Carrickfergus, 47,677; Skerries, 49,659; Dumfries, 54,374–83; Fleetwood, 55,047–9, 55,127–9, 55,132–7, 55,258–62; Liverpool, 55,661, 55,716–8, 55,839, 55,896–7, 56,020–2, 56,211–9; Tenby, 56,682–3, 56,765–8; Swansea, 57,219; London, 58,941, 60,918–19, 61,076.
Head irons—Cullercoats, 376–80; Sunderland, 3314–5; Hull, 7030–4; Brixham, 8182–3, 8199, 8365, 8635–46, 864–9; Ramsgate, 10,450–4; Grimsby, 16,144–5; Plymouth, 18,942–4; Kenmare, 41,897–8; Fleetwood, 55,142–3, 55,271–6.
Size of Nets—Hull, 6874, 7372; Brixham, 8957; Yarmouth, 11,099, 11,408–9, 11,486–90; Hastings, 16,913–4, 17,034–5, 17,294, 17,316, 17,320–1, 17,324–9, 17,425–7; Ringsend, 37,566–7; Wexford, 38,578–82; Dungarvan, 40,152–61; Kenmare, 41,765–67; Skerries, 49,594–96; Dumfries, 53,986–8; Liverpool, 55,951; London, 61,075–8.
Broken away from beam when a heavy catch—Billingsgate, 13,219–21, 13,226, 13,242.
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Ground rope—Sunderland, 3315*a*–21; Brixham, 8192–4, 9014–5, 9055–9; Yarmouth, 11,218–21; Kenmare, 41,896; Fleetwood, 55,277–80; Liverpool, 55,899–902, 56,211–9.
Regulations not enforced—Hull, 8011–8; Brixham, 8122–3, 8128, 8201, 8607–8, 8617–19, 8624; Ramsgate, 10,217–9; Yarmouth, 11,299.
Regulations required—Brighton, 17,977; Exeter, 19,441, 19,458–61, 19,533–4, 19,538–9, 19,545–6, 19,556, 19,950; Liverpool, 55,679–85, 55,885–95.
Regulations not required—Hull, 7196, 7371–4; Yarmouth, 11,301–2, 11,472–3; Liverpool, 56,123–4, 56,150–4, 56,199–200, 56,211–9.
Regulations of mesh injurious—London, 58,800–10, 58,821, 58,851, 58,995–7, 59,004–12, 59,019–22.
No inspection of—Hull, 7022; Ramsgate, 10,220, 10,465, 10,599–60; Tenby, 56,726.
Illegal—Torquay, 9484; Brighton, 17,589–90, 17,659–65, 18,030; Exeter, 19,438–9, 19,458.
Memorial respecting prohibition of in summer—Torcross, 18,366.
Manufacture of, suspended in consequence of the issue of this Commission—Brixham, 8588–90, 8592, 8605–6, 8616.
Ordered to be destroyed by Board of Trade—Brixham, 9186–96.
Destroyed — Howth, 36,488–9; Wexford, 38,906–8; Dunmore, 39,161.

Dutch Trawls:—
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Trim Nets:—
Lynn, 14,663, 14,688, 14,775–9, 14,873, 14,889, 14,891–2, 14,903.

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Harwich, 20,533.

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Flamborough, 6688–91, 6751–9, 6773–4, 6791–808.

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Brixham, 8861–3, 8889; Torcross, 18,150, 18,159–61, 18,166, 18,176–9, 18,181–6.
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Turbot Nets:—
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Appearance of—Cullercoats, 170–3, 369–74, 398–400, 1008; Sunderland, 3401–4, 3641–59, 3830–8; Hartlepool, 4253–6, 4435–7, 4599–601, 4659–64, 4738–45, 4878–83; Kenmare, 41,778–80.
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Torquay, 9578-9, 9911.
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Decrease of take by—Harwich, 20,566–81; Kingstown, 35,427, 35,500, 35,508, 35,516–22, 35,543–53; Wexford, 38,472–6, 38,704–8, 38,718–23, 38,832–6; Kenmare, 41,943, 42,038, 42,049, 42,061, 42,073, 42,136, 42,152–54, 42,388–91; Dingle, 43,269–73, 43,295, 43,298–300; Galway, 44,498, 44,503–05, 44,990–91, 45,476, 45,729, 45,805; Moville, 46,881–84; Carrickfergus, 47,623; Skerries, 49,394; Swansea, 57,226–7, 57,235–46, 57,599.
Injurious effects of—Cullercoats, 113, 285–8, 420, 657–62, 732–43; Newbiggin, 1340–1; North Sunderland, 1731–9, 1932–3; Sunderland, 2856–7, 3130–2, 3138–9, 3846–7, 4001; Hartlepool, 4192–200, 4258–61, 4324–30; Filey, 5688, 5964, 6173–5, 6206; Flamborough, 6440, 6559–61, 6746, 6778, 6827, 6843; Torquay, 9473–8, 9482, 9533–5, 9550, 9744, 9748, 9945, 9947; Ramsgate, 10,241–2, 10,989; Torcross, 18,199, 18,402–5, 18,409, 18,425, 18,503–5, 18,590; Polperro, 21,762, 21,773–83; Penzance, 24,331; Edinburgh, 26,341–4, 26,560, 26,626–9, 26,642, 26,974–80, 26,833–5, 27,061–68; Dunbar, 27,262, 27,281–4, 27,328, 27,342–3, 27,405–7, 27,444–54, 27,458–9; Eyemouth, 27,909; Anstruther, 28,488–98, 28,520–4; Broughty Ferry, 28,712–25; Kingstown, 35,676, 35,716–20, 35,756–8, 35,826–8, 35,890, 35,963, 36,029, 36,243, 36,391, 36,564–9, 36,898, 36,933–9; Wexford, 38,551–2, 38,732–7; Dunmore, 39,154, 39,183–210, 39,312–21, 39,370–89, 39,413–4, 39,475, 39,570–8, 39,625–7, 39,660–2, 39,756–60, 39,764–70; Dungarvan, 40,139–44, 40,147–50, 40,201–2, 40,253–5, 40,262–5, 40,304–6, 40,356–70, 40,684–700, 41,140–5; Kinsale, 41,492–8, 41,477; Kenmare, 41,756–7, 41,787–9, 41,820–2, 42,024–6, 42,062, 42,106, 42,110; Bantry, 42,517, 42,832, 42,885–7, 42,938; Dingle, 43,557, 43,620, 43,635, 43,653–4, 43,671, 43,692–5; Galway, 44,490–5, 44,602–6, 44,804–13, 44,861–9, 45,010, 45,087–94, 45,215–9, 45,629, 45,712, 45,736, 45,749–93; Inver, 46,175–6; Dundalk, 48,529, 49,024–31, 49,044–8; Skerries, 49,115–27, 49,143, 49,237–9, 49,554–7, 49,634–45; Liverpool, 55,675–6; Tenby, 56,786–90.
Small fish and spawn caught and destroyed by—Cullercoats, 240–8, 251–2, 258–73, 369–74, 395–401, 412–14, 676–9, 846–55, 935–7, 1008; Newbiggin, 1340–1, 1645–9, 1693–7; Sunderland, 3063–7, 3073–6, 3132–7, 3248–54, 3443–5, 3575–95, 3641–712, 3754–6, 4001–5; Hartlepool, 4129, 4549, 4555–9, 4644–8, 4967; Staithes, 5078–9, 5307, 5471–2, 5485–6; Filey, 5676, 5687–8, 5743, 5896, 5964, 6013, 6023–5, 6043; Flamborough, 6450, 6551, 6844; Hull, 6959–62, 6971–3, 6981, 6991–2, 7138, 7142, 7362–4, 7377–9, 7493, 7587, 7660; Brixham, 8090–7, 8100–12, 8272, 8394–5, 8495–6, 8706, 8715–8, 8840–2, 8874–5, 8908–13, 8922–8, 9014–15, 9035–42, 9278; Torquay, 9474–9, 9482, 9511–28, 9533–5, 9693–7, 9800–5, 9825–39, 9854–8, 9906, 9950–2, 9984–6; Ramsgate, 10,123–30, 10,297–302, 10,399, 10,721, 10,743–7; Torcross, 18,199, 18,221, 18,230, 18,315–6, 18,337, 18,425, 18,436–8, 18,468, 18,595; Plymouth, 18,611, 18,660–4, 18,808–11, 18,853, 18,882–3, 18,982, 19,025, 19,177–8, 19,268, 19,272, 19,282–3, 19,289–91, 19,297–8; Exeter, 19,425–7; Harwich, 20,552–81; Mevagissey, 22,305, 22,957–60, 22,988–91; Penzance, 24,332, 24,424–30, 24,448–59; Edinburgh, 26,342–53, 26,652, 26,835, 26,978, 27,228–33; Dunbar, 27,284–90; Anstruther, 28,500–19; Campbeltown, 33,711, 33,798; Peel, 34,678, 34,682–5; Kingstown, 35,558–65, 35,567–8, 35,681–3, 35,762–70, 35,803; Howth, 36,032–4, 36,245–6, 36,371–4, 36,424–35, 36,446–57, 36,547–51, 36,573, 36,589; Ringsend, 37,482, 37,678–83, 37,836–41; Wexford, 38,552, 38,563–6, 38,709–17, 38,990; Dunmore, 39,106–16, 39,475, 39,555–62, 39,620–2, 39,642–51; Dungarvan, 40,245–52, 40,364–70, 40,453–6, 41,143; Kenmare, 41,770–3, 41,947, 42,043–5,
Trawling (Beam) (*continued*):—
42,074–7, 42,089, 42,100–3; Bantry, 42,596–601; Dingle, 43,163–4, 43,167–72, 43,224–30, 43,534, 43,537, 43,625–32, 43,694, 43,764; Galway, 44,478–89, 44,507, 44,541–3, 44,587–601, 44,667–70, 44,675–84, 44,696–701, 44,704–6, 44,745–60, 44,798–9, 44,820–5, 44,837–47, 44,860–1, 44,976–89, 45,001–2, 45,030, 45,206–13, 45,264–6, 45,336–41, 45,369, 45,398–410, 45,623–7, 45,663, 45,700–1, 45,724, 45,750–4, 45,809–11, 45,815–6, 45,863–5, 46,044–7; Moville, 46,767–74; Carrickfergus, 47,297–305, 47,308–11, 47,394–402, 47,484, 47,504–12, 47,599–600, 47,611–2, 47,624–33, 47,958–64, 48,049; Dundalk, 48,608–10, 48,623, 48,752–65, 48,812–3, 49,009, 49,015–18; Skerries, 49,207–12, 49,290–2, 49,358, 49,554–62, 49,673–9, 49,684–6; Balbriggan, 49,804–15; Liverpool, 55,806–9, 55,820–30, 56,085–90, 56,107, 56,167–8, 56,238–46; Tenby, 56,838–43.
Spawn and small fish not destroyed by trawling—Cullercoats, 896; Sunderland, 3246–7, 3399–404, 3440–1, 3509–10, 3694–7, 3764–6; Hartlepool, 4135, 4859–62, 4884, 4922; Hull, 6992–4, 7136–7, 7190–3, 7359, 7446, 7489–90, 7700, 7841; Ramsgate, 10,305; Yarmouth, 11,276–81, 11,389–95, 11,665, 11,849; Billingsgate, 13,200, 13,202; Plymouth, 18,780–4, 18,812, 18,982, 19,119–21; Falmouth, 23,640; Kingstown, 35,567–9; Howth, 36,499–502; Wexford, 38,482–4, 38,555–62; Bantry, 42,599–600; Dingle, 43,169, 43,173, 43,371, 43,778; Liverpool, 56,099–106, 56,111; Tenby, 56,733, 56,843–4; London, 60,796.
Fish injured by — Sunderland, 3458–64, 3584–7, 3603–6, 3621, 3714–22, 3807; Hartlepool, 4543–52, 4574–7, 4641–3, 4853–8, 4919; Staithes, 5260–4, 5469–77, 5503, 5558–9, 5627; Filey, 5677, 5900–2, 5978–9, 6016–22, 6027, 6047–8, 6209–18, 6242, 6244, 6309, 6361–5, 6384–91, 6396, 6401–9; Flamborough, 6553; Hull, 6884, 6955–6, 6958, 7360, 7491–2, 7584, 7701; Billingsgate, 12,728–31, 13,197–9; Boston, 15,218–9; Torcross, 18,219; Polperro, 21,761–2; Dunbar, 27,403–4; Galway, 44,488, 44,779–80, 45,028, 45,584, 45,652.
Fish not injured by—Hartlepool, 4716–9; Hull, 7141; Yarmouth, 11,225, 11,297–8, 11,388, 11,664; Billingsgate, 12,499, 13,199; Grimsby, 16,154; Plymouth, 19,148–51; Dungarvan, 41,128; Dingle, 43,310–4, 43,362–9.
Fish frightened by — Galway, 44,544, 44,662, 44,862, 45,047–50, 45,385, 45,720, 45,879 83; Skerries, 49,140.
Fish not frightened by—Bantry, 42,742; Dingle, 43,176–82, 43,765.
Injury to drift-net fishing by—Newbiggin, 1478–86, 1541–3; Sunderland, 2771–5, 2863; Hartlepool, 4078–118; Filey, 6168*a*; Brixham, 8788–95; Torquay, 9448–55, 9631, 9641–5, 9737, 9946; Lowestoft, 14,115–8; Torcross, 18,271–3, 18,278, 18,281, 18,447; Plymouth, 18,743–4, 18,870–1; Polperro, 21,507, 21,597–606, 21,731, 21,737, 21,848, 21,851; Dunbar, 27,516, 27,695; Eyemouth, 28,189–98; Peel, 34,667–79; Howth, 36,059–61, 36,169–79, 36,211–25, 36,240, 36,378–82, 36,458–61, 36,868; Ringsend, 37,486–91, 37,692–9, 37,798–804; Wexford, 38,781–3; London, 61,019–23.
Injury to lobster and crab pots—Torquay, 9456–7, 9546; Torcross, 18,258, 18,264, 18,266, 18,538–49, 18,551–3, 18,592–3; Falmouth, 23,640.
Injury to oysters—Torquay, 9670–2; Wexford, 38,878–9.
Injury by, denied—Yarmouth, 11,292, 11,530–1, 11,762–7; Howth, 36,498, 36,503–8; Wexford, 38,552–4; Moville, 46,740, 46,744.
Injury to long-line fishing—Cullercoats, 133–41, 185–92, 684–8, 874–5; Newbiggin, 1147–51, 1231–3, 1292–5, 1516–8; Sunderland, 2863–6, 3340–50, 3375–9, 3485, 3972–5, 4008–11; Hartlepool, 4569–71, 4865–6; Staithes, 5042, 5083, 5375–7; Filey, 5967–71, 6154–60, 6303–8; Flamborough, 6445, 6520–1, 6577, 6622, 6668–9, 6776*a*, 6782–3, 6824, 6828, 6831; Brixham, 8290–2; Torquay, 9698; Torcross, 18,602–6; Plymouth, 18,617; Polperro, 21,376–7, 21,799; Dunbar, 27,333–4, 27,342; Eyemouth, 27,960–2, 28,070–1; Broughty Ferry, 28,829–36; Campbeltown, 33,710; Peel, 34,761; Kingstown, 35,574–600, 35,696–710, 35,771–5, 35,801, 35,837–57, 35,882–5, 35,936–42; Howth, 36,435–8, 36,552–6, 36,574–9, 36,656–69; Ringsend, 37,684–9, 37,790–7; Kenmare, 42,022, 42,027; Dingle, 43,531, 43,569–81, 43,684–9; Galway, 45,217, 45,495, 45,997–9, 46,227–8; Carrickfergus, 47,687, 47,764, 47,986–8; Dundalk, 48,533, 48,724–8, 48,747–51, 48,817, 48,943, 49,010, 49,455–61, 49,507–8; Greenock, 50,677, 50,694–5, 50,719, 50,723;

Trawling (Beam) (*continued*):—
Tenby, 56,786–90, 56,845–9, 56,958–68, 57,055–65, 57,067–74, 57,096–9, 57,113–6.
Long-line fishing not injured by—Newbiggin, 1487–8; Sunderland, 3267–71, 3397–8, 3488; Hartlepool, 4863–73, 4938–9; Hull, 6997–8, 7048, 7174–6, 7308–9, 7466, 7774; Brixham, 9150; Billingsgate, 12,491, 12,721; Grimsby, 15,957–71, 16,406–10, 16,562–3, 16,596–7; Hastings, 16,878, 16,981–2, 17,184; Plymouth, 18,996; Kingstown, 35,592–9; Howth, 36,498; Dungarvan, 41,127; Kenmare, 41,816–8; Moville, 47,049–53; Carrickfergus, 47,850–67; Fleetwood, 55,208–16.
Beneficial effect of—Sunderland, 3452–3, 3905–6, 4847; Hull, 7064, 7304, 7739, 7763, 7887; Brixham, 8101; Ramsgate, 10,373, 10,532, 10,748; Yarmouth, 11,582; Billingsgate, 12,415, 12,441; Plymouth, 18,817; Tenby, 56,866–7.
Continuous on same ground not injurious—Hull, 7060–6; Brixham, 8427–30; Torquay, 9548–9, 9555–64; Ramsgate, 10,509–13; Hastings, 17,058–63; Kingstown, 35,531–38; Kenmare, 42,256–7; Bantry, 42,569, 42,595.
Profitable—Filey, 6376; Hull, 7334–5, 7431, 7443, 7469, 7482–6, 7588–9, 7683, 7794–5, 7809–10, 7871, 7873, 7954; Brixham, 8393, 8773, 8812, 8822, 8829–33, 8896–7, 8998, 9004, 9081–8, 9364–73, 9386–7; Grimsby, 16,134–8, 16,443–6, 16,666–9; Plymouth, 19,112; Dingle, 43,096, 43,102, 43,111–13, 43,201; Galway, 44,807, 45,901, 45,924, 45,928, 45,951, 46,063, 46,069, 46,096; Skerries, 49,285–86, 49,695; London, 60,782, 60,922–5, 60,949.
Not profitable—Hull, 7236, 7242; Brixham, 8692, 8774, 9105; Torquay, 9479; Ramsgate, 10,256–8, 10,404–8; Plymouth, 18,823–6, 18,838–41; Dunmore, 39,131, 39,503–4,; Galway, 44,998–9, 45,011, 45,318, 45,697, 45,731; Carrickfergus, 47,477–83, 48,002–4; Skerries, 49,161; Liverpool, 55,978.
If prohibited, fish would become scarce—Hull, 7072–4; Torquay, 9553, 9746–7; Billingsgate, 12,638–46; Ringsend, 37,588; Dungarvan, 41,169–71.
If prohibited, drift-boats would have a monopoly—Hull, 7724.
Small fish, sale of—Sunderland, 3951–7, 3995–4000; Hartlepool, 4553, 4760–2, 4917, 4958–64, 7142; Kingstown, 35,565; Tenby, 56,735–40.
Quantity of fish caught by—Cullercoats, 249–50, 296–301, 402, 748–50; Newbiggin, 1620–1; Sunderland, 3243–4, 3253, 3447, 3548, 3581–2, 3772–6, 3799–801; Hartlepool, 4536, 4777–89; Yarmouth, 11,110–12, 11,114, 11,369–72, 11,483, 11,755, 12,280–1; Plymouth, 18,652, 18,888, 18,892, 19,013; Kingstown, 35,500–57; Ringsend, 37,445–7, 37,674–7, 37,842–3; Kenmare, 41,960; Dingle, 43,159–60; Galway, 44,524; Moville, 46,783–5; Carrickfergus, 47,665, 51,115–47; Liverpool, 55,948; Tenby, 56,698, 56,744–51.
Steam trawling—Dunbar, 27,272, 27,314–16; Dunmore, 39,175–210, 39,372–89, 39,412–4, 39,475, 39,547, 39,573–4, 39,764–70, 39,811–2, 39,816–9, 39,838–78, 39,886–7, 39,904.
Inshore trawling, its effects—Cullercoats, 856–9, 1023; Sunderland, 2780–1, 2860–1; Hartlepool, 4928–31; Staithes, 5081; Filey, 6201–3; Flamborough, 6571, 6671; Torquay, 9473, 9550, 9744, 9748, 9945, 9947, 9985–6; Ramsgate, 10,124–7; Brighton, 17,666, 17,972–5, 17,979; Torcross, 18,210, 18,261–6, 18,311–6, 18,444–7; Plymouth, 18,615–7, 18,627, 18,633–5, 18,804–7, 18,903, 18,949; Harwich, 20,543–6; Polperro, 21,801–5, 21,956–63; Edinburgh, 26,628–55, 27,269, 27,600; Campbeltown, 33,712–7; Kingstown, 35,436–7, 35,439, 35,636, 35,640–2, 35,804–10, 35,891–5, 35,911–3, 35,918–31; Howth, 36,404, 36,497, 36,949–55; Dublin, 37,106–38; Wexford, 38,919; Dunmore, 39,169–74, 39,491–8, 39,618, 39,623–4, 39,652–9; Dungarvan, 39,969–71; Galway, 45,185–91, 45,242–8, 46,003–5, 46,048–51; Carrickfergus, 47,307, 47,733–37, 47,742, 48,034–35; Skerries, 49,122–5, 49,481–5, 49,524–6, 49,668–70, 49,687–89; Balbriggan, 49,719–21, 49.748–51.
First commenced—Cullercoats, 153–69; Newbiggin, 1342–7; Sunderland, 3068–72, 3880; Hartlepool, 4488–9; Kingstown, 35,411–4, 35,477–9; Howth, 36,008; Dunmore, 39,075–9.
Close season for—Dublin, 37,138–43; Ringsend, 37,439–40, 43,236; Dingle, 43,259–63, 43,779–83, 43,808; Galway, 46,115–6; Moville, 46,759–63, 46,912, 46,923–32, 47,167; Carrickfergus, 47,322–26, 47,584–90, 47,613–7; Liverpool, 55,594, 56,091–3.
Absence of—North Sunderland, 1930–4, 2322–3; Holy Island, 2471–5; Edinburgh, 26,629–32; Eyemouth, 27,911–4, 28,064–9; Anstruther, 28,368–71, 28,387–91; Stonehaven, 28,910–1, 29,081; Peterhead, 29,527–31, 29,760–1; Cromarty, 29,929; Wick, 30,189–90, 30,311–13, 30,474, 30,584–6; Kirkwall, 31,339; Lerwick, 31,810–1, 31,895; Arklow, 38,099.
Increase of—Cullercoats, 282, 494, 1018–9; Sunderland, 3283–4, 3777–8, 3784–5, 3976–90; Hastings, 17,251–2; Brighton, 17,880–2; Torcross, 18,180; Plymouth, 18,611, 19,200; Kingstown, 35,504, 35,607–8; Wexford, 38,724–6; Dunmore, 39,309–12, 39,520–2, 39,678–9.
Decrease of—Cullercoats, 495–6; Brighton, 17,669, 17,676–7, 17,761; Harwich, 20,531–3, 20,566–94; Dunbar, 27,265, 27,324–7; Wexford, 38,838–9; Dunmore, 39,675–6.
Not allowed with drift nets—Hull, 7044, 7400, 7402, 7409–10.
Instrument used in, for cutting drift nets—Lowestoft, 13,926–39, 14,126–31, 14,198–200.
Dead bodies brought up by—Hartlepool, 4512–6, 4892–7, 4936–7; Hull, 7712–4; Plymouth, 19,245–6.
Dead bodies not brought up by—Hull, 7464.
Sand taken up by—Sunderland, 3510–5, 3602.
Stones taken up by—Sunderland, 3412–4, 3419–26, 3602; Yarmouth, 11,891.
Hookers employed in trawling—Wexford, 39,081–3; Bantry, 42,563–6.
Best depth for—Yarmouth, 11,429–31; Grimsby, 16,112–3; Hastings, 16,868–70; Plymouth, 18,878–9; Harwich, 20,592–4, 20,635–40; Ringsend, 37,473; Kenmare, 42,386; Dingle, 43,357–8; Inver, 46,224; Skerries, 49,363–6, 49,453, 49,657–64; Balbriggan, 49,722–3.
Byelaws restricting—Kingstown, 35,439; Howth, 36,226–9; Dublin, 37,257–64; Ringsend, 37,472, 37,501; Wexford, 38,745, 38,894–910, 38,914–16; Dunmore, 39,141–51, 39,159, 39,327, 39,410–2.
Effect of prohibition—Dublin, 37,265–71, 37,623; Liverpool, 55,744–6, 56,208–9.
Interfered with—Cullercoats, 193, 305–6, 340, 410; Newbiggin, 1160, 1515; Hartlepool, 4262–3; Hull, 7096, 7517–26, 7684–90, 7805–7, 7887, 8002.
Regulation of, necessary—Cullercoats, 418–20, 927–34; Newbiggin, 1538–40; Sunderland, 2895, 2973, 3516–22; Hartlepool, 4336–7, 4612–8; Staithes, 5153, 5259, 5320–1, 5349; Filey, 6280–2, 6299; Brixham, 8130–5, 8204–8, 8288–9, 8413–22, 8660–5, 8723–6, 8735–7, 8845–52, 8914–5, 8931–4, 9175–84, 9239–40; Torquay, 9882–6, 9945–50; Ramsgate, 10,243–51, 10,318–31, 10,375–7, 10,576, 10,739–42, 10,990; Hastings, 16,886–92, 17,158, 17,235, 17,398–400, 17,416–22; Torcross, 18,513–5; Plymouth, 18,611, 19,032, 19,102, 19,182–4, 19,273–7, 19,954; Harwich, 20,976; Polperro, 21,458–62, 21,608–23; Penzance, 24,461–8; Kingstown, 35,943–5, 35,960–2; Howth, 36,212–25, 36,410–15; Dublin, 37,154–7; Wexford, 38,990, 39,328, 39,492–8; Liverpool, 56,091–3, 56,208–9.
A nursery for seamen—Hull, 7002–3, 7506–8, 7617; Billingsgate, 12,894–902.
Carried on all the year—Hull, 6976–9; Kenmare, 42,078–80.
Not carried on all the year—Kenmare, 41,921–6, 42,082–4; Bantry, 42.674–78, 42,766, 42,912–19; Dingle, 43,115–16, 43,235, 43,560; Galway, 46,014; Moville, 46,750–51, 46,756–58, 46,866; Dundalk, 48,742–43, 48,766; Skerries, 49,476, 49,665–67; Balbriggan, 49,754, 49,868–70.
Effect of eating fish caught by—Sunderland, 4027–34; Hartlepool, 4517–24, 4593–8, 4651–8, 4753–9, 4887–92, 4956–7.
Gall bladders burst by—Sunderland, 3632–40; Hartlepool, 4952–5; Staithes, 5261–4.
Gall bladders not burst by—Hull, 6964, 7365–6; Plymouth, 18,773–5.
Complaints of fishermen against—Filey, 5676, 5687; Lowestoft, 13,918–9, 13,922, 13,944–7, 14,202–3, 14,205–6; Kingstown, 35,439; Kenmare, 42,406.
Memorial against—Kenmare, 42,223–31; Galway, 45,075–86.
Protection against insufficient—Staithes, 5403–5, 5410; Ramsgate, 10,236–8.
Regulations in respect of, not enforced—Hull, 7044, 7453, 7526, 7719; Ramsgate, 10 236–8; Falmouth, 23,340–1.
Regulations in respect of, not required—Yarmouth, 11,473; Billingsgate, 13,171, 13,203–4; Ringsend, 37,723–32, 37,844–51; Moville, 46,929–31.
Regulations in respect of, if enforced, would be a hardship—Hull, 7047, 7409, 7723; Dundalk, 48,515–21, 48,622, 48,796–801; Skerries, 49,116, 49,367.
Fleets engaged in—Billingsgate, 12,924–7, 13,263–7.
How commanded—Billingsgate, 12,926–7, 13,263–4 13,277–9.

Trawling (Beam) (*continued*):—
Competition of, with line-fishing—Cullercoats, 210–15, 421–3; North Sunderland, 2036–7; Sunderland, 2954–8, 2964, 3325–8, 3415–6, 3465–9, 3809–10, 3860–2, 3915–21, 4006; Hartlepool, 4332–3, 4503–8, 4568, 4619–27, 4704–8, 4729–37, 4746–54, 4884–6, 4944–51; Hull, 7944; Yarmouth, 11,274–5, 11,895–8.
Advantageous to line-fishing—Grimsby, 16,293–6.
Not injured by line-fishing—Billingsgate, 12,825.
Inferior to line-fishing—Dungarvan, 40,551–4.
Line-fishing more profitable than—Yarmouth, 11,795–6; Grimsby, 16,429, 16,433; Skerries, 49,405–6.
Line-fishing less profitable than—Carrickfergus, 47,682–5.
Cannot go on with line-fishing—Staithes, 5254; Filey, 6300–2.
Carried on with line-fishing—Hull, 7769–73; Torquay, 9630, 9840, 9846.

Trawling for Flukes and Flounders:—
Greenock, 50,719, 50,723; Dumfries, 53,900–2, 54,312–4, 54,417–22; Morecambe, 54,571, 54,617–9, 54,745; Whitstable, 58,698.
Successful—Dumfries, 54,481–93.

Trawling for Herrings (see also "Seine Fishing"):—
Prohibited—Edinburgh, 26,192–7, 26,452; Greenock, 49,962–5; Ardrishaig, 52,054–67.
Effect of prohibition—Campbeltown, 33,675–83, 33,738, 33,780, 33,837–9, 33,882–3; Greenock, 50,422–4, 50,492–3, 50,590–5, 50,653*a*, 50,746–50, 50,766–83, 50,912–6; Ardrishaig, 51,178–9. 51,537–54, 51,984–8; Inverary, 52,309–14, 52,404–5; Tarbert, 53,063, 53,351–9, 53,499–7, 53,611–7, 53,726–8; Ballantrae, 53,820*a*.
Breach of prohibition—Ardrishaig, 52,217–22.
Complaints against—Tobermory, 33,587; Campbeltown, 33,767–70; Greenock, 50,604–8, 50,955; Ardrishaig, 51,385–9; Inverary, 52,612–811.
Effect of in glutting the market—Greenock, 50,066–7, 50,904–7.
Opinion of curers as to—Greenock, 49,971–3, 50,101–2; Ardrishaig, 51,860.
Destroys spawn and young fish—Campbeltown, 33,798; Peel, 34,974; Greenock, 50,078–86, 50,417, 50,619, 50,704–5, 50,732–8, 50,806–8, 50,817–8; Ardrishaig, 51,253–73, 51,571, 51,752; Inverary, 52,361–70, 52,614–28, 52,651–8, 52,821–30, 52,885–900, 52,910–15; Tarbert, 53,255–65; Ballantrae, 53,820*a*.
Does not destroy spawn and young fish—Greenock, 49,929–31; Ardrishaig, 51,415–7; Tarbert, 53,280–1, 53,531–4.
Injurious effects of—Dunbar, 27,540–5; Campbeltown, 33,854, 33,940–3, 33,965–8, 34,021, 34,054–81, 34,073, 34,114–21, 34,251–9; Greenock, 49,899–907, 50,278–95, 50,385, 50,449–59, 50,590–5, 50,642–7, 50,739–41, 50,784–8, 50,794–803, 50,806–8, 50,817–8, 50,834–44, 50,885–90, 50,899–900; Ardrishaig, 51,123–39, 51,514–30. 51,555–63; Inverary, 52,308–16, 52,318–44, 52,398–400, 52,410–15, 52,594–611, 52,629, 52,724–26, 52,821–40, 52,904; Tarbert, 53,781–4; Ballantrae, 53,820*a*.
Not injurious—Ardrishaig, 51,624–33.
Quality and condition of trawled herrings—Greenock, 49,935–53, 50,233–46, 50,296–314, 50,376–81, 50,498, 50,658–60, 50,821–33, 50,901–32; Ardrishaig, 51,126, 51,634–9, 51,673, 51,679–708, 51,860, 51,878; Inverary, 52,339–40, 52,872–8; Tarbert, 53,066–190, 53,282–9, 53,569–84, 53,777–81.
Injurious to white fishing—Greenock, 50,681–7; Inverary, 52,284–8.
Large takes of fish by—Ardrishaig, 51,624–33, 51,675–7; Inverary, 52,781–5, 52,834–40, 52,865–71; Tarbert, 53,291–304, 53,624–48.
Advantages of—Campbeltown, 33,686, 33,981, 34,005; Greenock, 49,967–70, 50,484–8, 50,509; Ardrishaig, 51,609–17, 51,853–6; Inverary, 52,704–5, 52,943–8; Tarbert, 53,180–90, 53,307–15, 53,320–33, 53,360, 53,386–98, 53,518–31, 53,722–5, 53,802.
Advantage of carrying both trawl and drift nets—Ardrishaig, 51,667–9, 51,800–1; Tarbert, 53,195–203.

Trawling for Herrings (*continued*):—
Profitable—Greenock, 49,923–4; Ardrishaig, 51,249–50; Tarbert, 53,320–33, 53,360, 53,386–93, 53,722.
Carried on inshore—Campbeltown, 34,089; Inverary, 52,734–42; Tarbert, 53,512.
In deep water exceptional—Tarbert, 53,568.
Absence of—Kirkwall, 31,420.
Fish injured and destroyed by—Ardrishaig, 51,205–13, 51,216–58, 51,323–35, 51,494–513, 51,555–64, 51,571–3, 51,785–7; Inverary, 52,318–30, 52,675–92; Tarbert, 53,452–5, 53,624.
Injurious to drift-net fishing—Greenock, 50,216, 50,503, 50,649–52, 50,804; Ardrishaig, 51,051–67, 51,075–87, 51,189–204, 51,365–75, 51,390–400, 51,514–30; Inverary, 52,569–81, 52,583–93, 52,706–17, 52,936.
Not injurious to drift-net fishing—Ardrishaig, 51,861–4; Tarbert, 53,798–9.
Difficulty of carrying out police regulations in regard to —Ardrishaig, 52,146–63, 52,172–9.
No objection to regulation of—Ardrishaig, 51,800–2, 51,865, 51,874–7, 51,992–4.
Commencement of—Inverary, 52,293–307.
Inferior mode of fishing to drift-net fishing—Inverary, 52,442–4.
Price of trawled herrings—Greenock, 50,087–91, 50,161–74, 50,191, 50,297; Ardrishaig, 51,673, 51,679–708; Tarbert, 53,066–190, 53,299, 53,569–84, 53,644.
Ought to be stopped—Campbeltown, 33,948, 34,095, 34,250; Peel, 34,976.
Seizure of nets—Ardrishaig, 52,140–2.
Improvement in mode of, impossible—Greenock, 50,789.
Demoralization of fishermen engaged in—Greenock, 50,093.
Decrease of fish not ascribed to—Greenock, 49,966.

Trawling for Shrimps:—
Dumfries, 53,979–82, 54,225; Morecambe, 54,571–86; Liverpool, 55,665–7, 55,870, 55,940–1, 56,051–2, 56,181–4, 56,191–2, 56,249.
Close-time for — Dumfries, 54,069–70, 54,353–67, 54,522–5, 54,539–44; Morecambe, 54,603, 54,733–7, 54,781–4, 54,857–9, 54,875–9, 54,927–32.
Injurious — Dumfries, 53,845–66, 53,905–6, 53,990, 54,190–6, 54,302–11; Morecambe, 54,615–22, 54,859–65; Fleetwood, 55,436–42; Liverpool, 55,587, 55,729–33, 55,844–62, 56,044–8, 56,190, 56,233–4.
Not injurious — Dumfries, 54,550–63; Morecambe, 54,698, 54,789, 54,951, 54,955; Fleetwood, 55,086.
Season for—Dumfries, 53,903.
Objections to limitation of — Morecambe, 54,733–7, 54,917.
Proposal for gradual abolition of—Fleetwood, 55,445–64.

Weirs for Fishing:—
Carnarvon, 56,469–70, 56,485–8; Swansea, 57,432–56, 57,476–95, 57,530–6, 57,931.
Destructive—Swansea, 57,237–59*a*, 57,333–7, 57,339–86, 57,416, 57,558–66, 57,687–705, 57,755–61, 57,767–74, 57,807–10, 57,986.
Not destructive—Swansea, 57,523–9.
Kinds of fish caught by—Swansea, 57,458–60, 57,585–89.
Decrease in fish caught by—Swansea, 57,387, 57,498–503, 57,753–4, 57,928.
Possibility of rendering weirs less destructive—Swansea, 57,577, 57,713–5, 57,789–90.
Not profitable — Swansea, 57,469, 57,568–71, 57,810, 57,818, 57,986.
Large take by—Swansea, 57,513–6.
Ought to be abolished—Swansea, 57,517–20, 57,706–7, 57,791–3.
Expense of—Swansea, 57,504–5, 57,507–10.

Wyke Regis:—
Breakwater injures fishery, 20,155–7, 20,315–20, 20,352, 20,431–2, 20,437–9.
Wrecks interfere with fishery, 20,262–8, 20,329–36, 20,471–3.
Private fishing grounds should be opened, 20,512–9.

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